Rotberg: A Talk on the Borrowing Side

by Ellen Tillier

The Bank's World interviewed Eugene H. Rotberg, Vice President and Treasurer, on the Bank’s new borrowing techniques and the reasons for implementing them.

Q Mr. Rotberg, why is the Bank using new borrowing instruments, particularly short-term borrowings or floating rate notes?

A. First, given the size of the Bank's lending program, we need to tap size or access than the fixed rate markets that are less restricted in borrowing techniques and the reasons for implementing them.

Q. What are the risks that cause you to doubt the size of and access to the fixed rate markets?

A. First, experience has taught us that we don't have guaranteed access to medium- and long-term markets — in any currency. Countries can have balance-of-payment difficulties. Their savings rates can decline. In response to inflationary pressures or to weakness of the exchange rate, savings can shift out of fixed rate markets into shorter term instruments. Also, governments often find they must restrict access to their markets only to themselves or to domestic borrowers as a result of large government deficits or competing domestic priorities. And markets can become saturated with the obligations of one issuer, particularly if the market is not growing.

Over the past 10 years, there has been minimal, if any, growth in corporate and foreign borrowings in the U.S. fixed rate bond market. The World Bank’s first bond issue in 1947 in the United States was about the same size as its most recent issues.

The facts are that inflation — or the expectation of inflation — the fear of loss of capital and a preference for liquidity cause individuals and institutions to place resources in the many money market instruments now available — bank deposits, savings and loan association deposits, and floating rate notes — which give high rates of return, liquidity and no capital risk. With a Bank borrowing and lending program 10 times larger than 10 to 15 years ago, it just isn't wise to plan on financing that program solely in the fixed rate markets — whose size remains virtually unchanged for corporate and foreign borrowers.

Q. Are there any other reasons for using short-term instruments?

A. Yes. Size. The shorter term markets are now about $700 billion in the United States. As you may know, when the economic environment is difficult, shorter term markets expand and it is the medium- and long-term markets that become uncertain and vulnerable. Finally, short-term instruments are often, if not usually, much less costly.

It comes down to a rather simple principle. The Bank can support an expansion of its lending program by borrowing modest amounts through instruments such as floating rate notes, the Central Bank Facility, discount notes and similar instruments which attract a broader base of funds, are more reliable, less readily saturated and provide a diversified maturity structure.

Q. Can you put the whole program into context?

A. At year-end FY84, we will have...
about $46 billion in debt outstanding, of which only about $3 billion will be in short-term obligations, that is, with a maturity of less than one year. Longer dated obligations carrying floating rates reset periodically during the year will account for another $500 million at most. This means that less than 8% of the Bank's debt includes instruments whose costs can change within a given year. I do not think this is an imprudently large proportion of variable rate or short-term debt.

Q. Can you describe these new instruments more specifically?

A. The short-term obligations are called discount notes. They are obligations with a maturity that can range from a few days to almost a year, similar to a U.S. Treasury bill. They are sold, like U.S. Treasury bills, at a discount from par which represents the return on the instrument. Discount notes appeal to corporations, money market funds, commercial banks, savings and loan associations and institutions whose cash management objectives require highly liquid funds with minimal risk of capital loss in the short term.

A floating rate note has a longer maturity—five, 10 to 15 years. The interest rate is reset every three to six months and is priced at a spread over the prime rate, LIBOR (London Inter-Bank Offered Rate), or the three-month U.S. Treasury bill. We could tap this market—which is more costly than discount notes—for substantial amounts. Our program, here too, is rather modest, but it would permit, along with the other new instruments, an expansion of Bank lending.

Finally, we offered a new one-year facility to central banks in January 1984. We reset the interest rate every month based on the yield of new one-year U.S. Treasury bills as a pricing benchmark. We offer the central banks the right to receive back their investment before a year expires, at par, on two days' notice. It is an attractive and fair instrument which we think will command the attention and support of a broad base of central banks.

Another useful instrument—more a methodology than a borrowing instrument—is the swap transaction. It has provided a way of obtaining Swiss francs, Deutsche mark or guilders without entering the market in those currencies. A swap is simply a transaction where we might issue, say, U.S. dollar obligations, and the other party issues—or has already issued—say, a Swiss franc obligation. Both parties remain obligated to the respective buyers of their bonds. We sign separate agreements—called forward contracts—stipulating that we will supply the Swiss francs to the other party as its obligations to its bondholders come due and it, in turn, will supply us the dollars as our obligations to our bondholders come due. Each of the parties may have a comparative advantage as a lower cost borrower in one market rather than the other, or we both may wish to avoid market saturation—and thereby avoid jeopardizing our standing in a particular market.

Swap transactions create a forward exchange market for five to 10 years, a favorable development that facilitates trade since it provides a method for hedging long-term currency or interest rate risk through the execution of long dated forward contracts. So far, the Bank has done $3 billion in currency swaps. It has had a particularly favorable effect in substantially lowering the Bank's cost of borrowing and therefore its lending rate to the developing countries.

Q. Why didn't the Bank use these instruments before?

A. First, because we didn't need to. Our borrowing program wasn't all that large. Second, it was thought imprudent to finance ourselves, even in small amounts, with liabilities sensitive to interest rates because our

‘We don't have guaranteed access to medium- and long-term markets.’

‘At year-end FY84, we will have about $46 billion in debt outstanding.’

‘Swap transactions create a forward exchange market for five to 10 years.’
loans were at fixed rates— even though we had sizable and volatile short-term assets on our books.

In any event, following a change in 1982, the charges the Bank levies on its borrowers are reset every six months based on the average cost of a pool of outstanding debt. The pool is quite stable because (a) it contains many currencies, (b) it includes a wide range of maturities, (c) it reflects the Bank’s borrowing costs over a long period of time, and (d) it is quite large. Costs of marginal borrowings, whether fixed or floating, are therefore diluted and volatility minimized.

Once a borrowing is made, however, it stays in the pool until repaid. That is one of the reasons why we are reluctant to rely exclusively on fixed rate medium- and long-term borrowings— particularly if they carry high nominal costs.

Let me also mention that the changing cost of the pool from new borrowings has been less volatile than would have been the case in the private sector or under the old IBRD interest rate system. To recap, the new instruments have given us— and through us, the developing countries— increased flexibility. It has provided less costly loans and, more important, a more assured access to funding for the present and projected lending program.

Q. Are there limits on these borrowing techniques?
A. We can never be sure where the limits are. All we know is that if we reach the limit— in any market, fixed or otherwise, we have gone too far. The market will perceive that we have overextended ourselves. That is why it is so crucial to diversify into a wide variety of different instruments. It’s too late to diversify after a market has been overtaxed.

Market participants are sophisticated. They do not take well to issuers who seek their support in time of need— particularly through new instruments unveiled, for the first time, during a difficult period. New instruments and market support must be developed before they are needed or required— when they are recognized as an option, a choice, a part of a program of diversification— not as a last resort.

Q. How does the idea of the “Bank’s bank” come into the picture?
A. If you agree that we will have to finance new lending through instruments of the sort we have been talking about, a question arises as to the most appropriate vehicle for the financing. Some believe it should be done within the Bank proper. Others think it would be more efficient and effective to do it through an affiliate institution.

Those who support the latter approach make two points: First, since most of the borrowing to finance a lending program greater than current levels will have to be in the short-term or variable rate markets, it doesn’t make sense for governments to provide a one-for-one capital guarantee to providers of those funds. Commercial banks obtain that kind of money in volumes 20 or 30 times their capital.

Second, a lending institution that seeks to attract increased participation from the private sector, and to encourage joint operations as a means of increasing lending to developing countries, is better placed to perform that function if it finances itself with a financial structure similar to that of institutions with whom it expects to do joint operations.

The opposite view holds that, first, we should simply give a full one-to-one guarantee under the Bank’s traditional capital structure to the providers of the short-term or variable rate resources. Then, we should go out and borrow the resources in the short-term or variable rate market to finance the lending permitted under the new authority. After all, the argument goes, it doesn’t really cost the member governments anything because guarantees aren’t “real” money. Second, we don’t need an affiliate to attract the private sector into co-financing arrangements. The Bank has gained a great deal of experience in this area and is presently conducting a pilot program to identify ways in which our co-financing program can be further enhanced.

Q. How does a capital increase fit into the picture?
A. An increase in the Bank’s capital, of course, doesn’t address the issues. Nagging questions remain: What kind of financing will be nec-
essary to fund increased lending and what is the appropriate institutional vehicle to tap those markets? I just don’t believe the fixed rate bond market can be prudently relied on to provide the answer. And I believe that we should not and need not provide a one-to-one guarantee for short-term or variable rate funds. And, if not, it behooves us to debate and then decide how and where we will finance an expanded lending program and through what kind of institution—leveraged or not leveraged.

Q. Are the new instruments sufficient to permit an expansion of Bank lending?

A. Yes, I think any reasonable increase in lending expansion can be accommodated by the techniques already implemented. Indeed, I think any reasonable increase in lending can be accommodated by keeping these new instruments at a fairly low percentage of outstanding debt. No great innovations are needed beyond those already implemented.

Q. Let me go back to the basic question: Is there any possibility that the fixed rate markets could finance a substantially expanded lending program?

A. Sure. It’s possible that global inflationary expectations will disappear; that the U.S. will have stable growth financed through increased fixed term savings; that governments will spend only within their means; that the funding techniques of the world’s commercial banks will change as savings move into the long-term fixed rate markets; that liquidity will command no premiums; that fear of capital loss will no longer address the attention of investors; and that balance-of-payments, exchange rates and flight of capital will no longer be concerns of public policy makers.

In that environment, one might envision a growing and vibrant long-term fixed rate bond market to which The World Bank would have unfettered access.

Complaints Plunge as Travel Operation Improves

All Aboard for Better Travel Service

by Mary Lou Ingram

The second floor of the A, B and C buildings has a new look that will mean a great deal to staff who travel. The Travel Office has moved into expanded quarters with more room for personnel and new equipment to make your travel planning quicker, easier and more efficient.

"We are now completing a series of improvements begun a few years ago," says Elie K. Hawie, Chief of the Travel and Shipping Division, Administrative Services Department. "The biggest advantage resulting from these changes is that it will help our customers and all staff who travel, giving them access to the best possible service."

Few people realize the enormity of the travel operation in the Bank, which is probably the largest centralized operation of its kind in the world. In FY83, for example, some 23,000 trips were arranged for staff. Despite the increasing amount of travel, Mr. Hawie says, "there is no doubt that improvements in the systems used by the Travel Office are making travel planning more efficient. Complaints have decreased steadily since 1981," he notes, "when the American Airlines computerized Sabre reservation system was introduced, transforming the whole operation from a manual to an automated one. There were 120 complaints in 1980 and 16 in 1983. In the first quarter of this year, we received two complaints."

American Express, which handles travel operations for the Bank, is pleased with the Sabre system, but has continued to study possible improvements. Under the guidance of the Travel Office, American Express managers have developed ways of

The Sabre computer system contains the data in the two books Susan M. Smith, a travel counselor, holds. Looking over her shoulders are (left) Cyril Lloyd, Senior Travel Officer in the Bank, and James Kenjesky, Manager of The World Bank American Express Unit.
streamlining the hotel reservation service, computerizing passport-visa requirements, customizing the Travel Order and Itinerary (TOI) form and generally pleasing more of the people more of the time, says Mr. Hawie.

**On-Line Tracking**

Coping efficiently with the staggering 207,000 room-nights per year needed by traveling staff is the problem American Express confronted most recently. It has installed a new Hotel Reservation System, especially designed to meet our needs, to facilitate telex operations for reservations and allow for on-line tracking of the status of all reservations.

With its expanded data base of hotel information, on about 2,200 hotels in more than 200 cities, the new system will be able to do a computerized consolidation of requests and changes and then generate telexes in a compiled form, eliminating duplication and speeding up the process.

An electronic “interface” is also being installed to link the Sabre system used by travel counselors with the computer used by the Hotel Reservation Unit. This automated connection allows for the transfer of hotel requests and changes from Sabre into the hotel system immediately following the travel planning appointment, thus eliminating transcription delays and errors.

An added advantage of the hotel system is its capacity to store and organize data for the production of management reports used in negotiations with the hotels. Through these reports, managers will have at their fingertips analyses of hotel utilization by country, city and hotel chain, as well as assessments of how effectively the existing communication system is working.

Daniel Goren, Director of the Bank’s Business Travel section for American Express, emphasizes how useful this new ability to keep track of operations will be. “Here in the Bank,” he says, “we have an operation that is 98% international and much of that involves countries where it is not always easy to communicate. Even getting some hotels to confirm bookings can sometimes be a problem.”

To handle last-minute requests for airline reservations, the Travel Office is using a “Switch” computer connection developed by American Express in conjunction with American Airlines to provide direct access to the reservation systems of participating airlines, including TWA, British Airways, Eastern Airlines and KLM.

The Switch facility allows the user to put information into the computer using the Sabre computer language and to have it translated into the other air carrier’s language automatically. For the busy travel counselor, suddenly confronted with a complicated itinerary tagged “URGENT,” this device provides the ability to tap directly into the systems of participating airlines and take their last available seat.

In September 1983, the Agency Data System (ADS) came on-line, easing the previous manual preparation of the customized Travel Order and Itinerary form. The Travel Office produces some 1,800 of these every month. ADS provides all data elements for travel itineraries, including detailed accounting codes, customizing the information to the format needed in the Bank.

**Data Base on All Staff**

Completing these changes is the Passport Visa Computer System introduced in 1982 to process some 21,000 transactions per year. It maintains a data base on all staff, containing pertinent document information. The system replaces much of the manual renewal process for laissez-passer, national passports and G-IV visas, so that staff members are automatically notified when it is time to renew these documents.

No area of operations is being overlooked for potential improvement. At the rate desk, the eight employees, who have a total of 75 years’ experience, guard against overspending of Bank funds on the myriad air fares of individual airlines. Since January this year, these specialists have had access to the Airline Tariff Publishing Company terminal which carries the latest information on airline fares. It can give the rate desk a 24-hour lead on air fare changes, allowing employees to plan accordingly. Such extra care may result in reductions of 10% on the cost of Bank tickets. Considering the amount of travel, this can be a significant saving, notes Mr. Hawie.

In addition, the travel counselors will provide Bank employees and managers with information on cost-saving measures, helping travelers to plan the most reasonably priced itinerary. Planning by staff to make use of this information will enable each division to cut costs and stretch travel budgets.

**Steady Courier Service**

Another operation of the Travel Office has also been reorganized. James Kenjesky, Manager of The World Bank American Express Unit, explains that “until recently ticket production was done by an American Express office on Connecticut Avenue, resulting in a steady courier service between the office and Bank Headquarters, and, of course, some delays.

“The new commercial American Express Office located in the H building, with its entrance on F Street, has taken over printing the tickets,” he says, “moving the production much closer to home. The new facility also offers an expanded personal travel service to Bank and IFC staff.”

Of course all these changes have been prepared and implemented gradually over the last three years to minimize disruption of normal operations, for as Mr. Hawie observes, “Staff are traveling every day of the year and we have to provide them the services they need.”
Van Pools Take the Hassle Out of Going to and from Work

Contested Commuters

by Jill Roessner

It's 7:25 a.m. and "The Blue Marble" is about to roll. Anne Jansen from the International Monetary Fund and Carolyn Johnson, East Asia and Pacific Country Programs, climb into the van where Pam Severski, Loan Department, already sits at the wheel. Five minutes later they pull into Springfield's Olde Keene Mill Shopping Center where they are joined by eight other passengers; at the next pick-up point four more complete the group.

There's music on the radio and the passengers lean back and relax, some chatting, one sleeping and another hard at work, using his portable, personal computer. "I can get nearly an hour's work done," says Carl Dahlman of the Development Research Department. "When I drove myself, I arrived at work feeling drained. Now I avoid all that hassle and I can read or use my computer. Pam's a very good driver and I'm quite content to leave the driving to her."

15 Minutes to Get Coffee

At 8:15 a.m. the van pool pulls up at the Bank's "flag" entrance, leaving the passengers 15 minutes to get coffee before their work day begins.

"It's wonderful being dropped at the door," says Noella Edwards, Western Africa Projects, a passenger in "The New Hampshire Express." "Parking used to take me up to 12 minutes. It's more economical and less stressful this way."

Van poolers frequently echoed those sentiments. It saves time, it saves money and it's a far more pleasant way to start and end the day than fighting the traffic or waiting for a bus.

"It's such a terrific arrangement, why aren't there more van pools around the Bank?" Jim Edmonds of the Parking Office, Security Division, explains that staff members initially resist van pooling because of their own scheduling difficulties. The likelihood of being away on mission or leave and the need to work late on occasion make it difficult for some staff members to commit themselves to a van pool. However, experience shows that once the staff member joins a van pool, the difficulties disappear. Existing van pools usually have back-up riders to fill the vacancies so that passengers are reimbursed when they are unable to participate.

Free Parking Available

Bank parking is at capacity and the outside commercial parking locations are becoming more expensive and less attractive. Van pooling is one attempt to alleviate the problem, and the Bank initiated the current pilot program in September 1983. The Bank encourages van pooling by making free parking available, and by interviewing and counseling prospective van drivers and helping them make arrangements with others who live in the same direction. Also—and this is most important—the Bank guarantees potential riders that they can have their old parking privileges back if a van pooling arrangement is unsuccessful.

The Bank does not provide the vans. They are leased by the driver from a company called Van Pool Services Inc., a subsidiary of Chrysler Corporation. There is a fixed fee of $505 per month plus an operating cost of 5 cents per commuter mile for the 15-passenger vehicle, and this includes insurance, maintenance and repairs. The leasing fee, cost of gas and driver's fee (if applicable) are recovered from the passengers, who generally end up paying about two-thirds of what the cost of traveling by public transportation would be.

The vans are luxurious, boasting upholstered interiors, seat belts, air...
conditioning, and AM/FM radios. The driver rides free (and some collect a fee from their riders) in return for their services which include not only the driving but also the semi-weekly chore of filling the gas tank, monthly cleaning, arranging the scheduled maintenance, administration of the van pool, i.e., bookkeeping, paying the leasing agency and collecting from the passengers, reimbursing fares to riders who were away or who served as back-up drivers, and so forth.

Ms. Severski says there are at least 50 hours work per month for her, including driving time, and a great deal of responsibility. Although she started out charging no fee and handling everything in return for the free ride, she soon realized that this was not worth her while. Her riders agreed to pay a "driver's fee" which, together with the free ride, means that she is paid approximately U.S. minimum hourly wage for her part in the arrangement.

The driver has the use of the van on weekends—an ideal arrangement for a family that would like a second car, but not the expense. However, the agency only permits 150 "free" miles per month, and after using those up, the driver has to pay 8 cents a mile. The driver also pays for the gas when using the vehicle for personal trips, and this can be expensive since it gets less than 10 miles to the gallon.

800 Staff Members Interested

The Bank solicited potential van poolers through an announcement in the Weekly Bulletin about a year ago, the results of which indicated that some 800 staff members were interested. That list of names has been broken down by ZIP code. Mr. Edmonds will always help a new group get together or an established van pooler find a temporary substitute.

Anyone with a regular driver's license may drive a van, although it might take a little practice to get used to the heavier vehicle. You need to be "very disciplined and precise," according to Mr. Edmonds. "The van pool driver sticks to a schedule—if a passenger's not there on time, that person's out of luck. After all, there are some 14 other people to be considered. You've got to be tough."

Ms. Severski doesn't regard herself as tough. "Friendly but firm," she says. She is also well organized. She keeps a huge ring binder full of information about "The Blue Marble" and its riders and has the answer to any question pertaining to the van pool at her fingertips.

Back-up drivers? "Yes, we have two, both men as it happens, but I've told my members that I'd be glad to give any of them some practice in driving the van so that they could take over, if needed," she says.

High-Occupancy Lanes

What made her decide that she would like to be a van pool driver? "I enjoy driving and I enjoy people." There is also the advantage, she points out, of being sure to have enough passengers to be able to use the high-occupancy vehicle lanes.

What are your basic rules for passengers? For instance, will you wait 2 minutes for a latecomer? Or 5 minutes? Where do you draw the line?

"There's a 5-minute period between the time the van arrives at a pick-up point and its departure," she answers, adding that her riders try to be considerate of one another by arriving on time.

Ms. Severski's passengers—or "member riders" as she calls them—seem happy with the arrangements. Bill Lloyd, Marriott Cafeteria Group Manager at the Bank, says, "We're like a little family." Both he and Carl Dahlman have the same problem of sometimes being unable to get away on time for the evening ride, but even so, they find the van pool worthwhile.

"Pam is always punctual, absolutely reliable," says Maria-Teresa Sanchez of Latin America and the Caribbean Projects Department, repeating a compliment that Mr. Dahlman also made. "It sure beats driving myself," she adds, "and I can relax and save money too."

The Industry Department's Weng Leong cites the saving of time and money as the prime considerations when he decided to become a van pool driver last February. His "New Hampshire Express," which serves the Adelphi/College Park area, is now fully subscribed, although there is room sometimes for a temporary rider. He runs his group in the same democratic way that Ms. Severski does—that is, decisions, such as choice of radio station, whether or not smoking should be permitted, and so forth, are decided by majority vote. He has a couple of back-up drivers and describes his as "a very happy group."

Noella Edwards agrees, pointing out that some of her fellow passengers who had previously used public transportation find they are saving up to an hour each way. "We're guaranteed a comfortable seat too," she notes, "unlike the bus or train where you might not find a seat at all."

36,000 Passenger Miles

Mr. Edmonds uses a few statistics to demonstrate that the van poolers are not just helping themselves, but also the community at large. "Consider this," he says, punching numbers into his calculator, "three vans carrying 15 people each, traveling an average of 20 miles each way per day for 20 working days a month. That comes to 36,000 passenger miles per month. That's just three vans, traveling from the suburbs each day. They will save quite a few parking places, and there'll be that many fewer cars on the road. Think of the gas being saved; think of the pollution that's no longer being spewed into the environment."

Think about calling Jim Edmonds on Ext. 73411 for advice on starting your own van pool.
Firsthand Report:
The African Drought
by Bill Brannigan

Less than an hour's drive from Ho, capital of Ghana's Volta Region, on the country's eastern border, farmer P.K. Gadzekpo points to the gray-brown fronds of normally deep-green oil palm trees to give a visitor some indication what the drought has cost him. Some of his trees are dead, the recovery of others doubtful. Nearby, pineapples are ripening, but they are only half the size of normal, stunted by inadequate water supply.

Just a few miles along the road from the Gadzekpo farm, the waist-high bush is aflame. A lone farmer, armed only with a machete, furiously hacks at the bush adjacent to his out-buildings as the fire draws near. He wins his race with the flames; his buildings are saved.

Others in West Africa have not been so lucky. Fires, some ignited through carelessness, have swept across tinder-dry croplands and orchards. Others are set deliberately — bush fires have been used to clear land in Africa for generations — but the abnormal dryness of the ground frequently fuels a blaze that is quickly beyond the control of the farmer who set it and threatens pastures and even dwellings in a wide area.

Elsewhere in the province, women wash clothes in stagnant pools in the
P.K. Gadzekpo, a Ghanaian farmer, points to the gray-brown fronds of an oil palm tree. Normally, the tree has deep-green fronds.

bed of what traditionally has been a rushing, even a treacherous, stream. At another location, a man-made pond, stocked with fish in seasons past, has simply disappeared. On its floor, local residents lower buckets as deep as 20 feet into crude wells they have dug to extract what precious little water is available, however brackish.

Volta Region, like much of drought-stricken West Africa, has experienced abrupt change. There was a period of about three to four months last year when nearly 50% of basic food requirements had to be brought in, according to Fred Kwawu, Manager of the Volta Region Agricultural Development Project, launched in 1980 with the assistance of a $29.5 million IDA credit.

This year, Mr. Kwawu says, the region “is exporting food to other regions, especially to greater Accra.” On the outskirts of that city, as well as in rural areas, people are increasingly attentive to providing their own food needs.

“A lot of the young men from the cities have moved back into the villages to farm. Rice, which wasn't grown in certain swampy areas, has become a very prominent crop,” he says. Vegetable gardens can be seen even in small patches alongside homes in crowded urban areas. However encouraging this emphasis on greater food production, the long-term impact of low rainfall remains.

Valuable Top Soil
“The drought has definitely hardened the soil,” Mr. Kwawu points out, setting the stage for erosion when the infrequent rains run off quickly, carrying valuable top soil with them. “To rejuvenate the soil takes several years, and I think this is the greatest negative impact the drought has caused.”

In Accra, the capital, the drought's impact goes beyond curtailed food supplies. Residents there reckon the days of the week by whether their homes and workplaces are “on” or “off” electricity. Most consumers have had to adjust to a schedule that gives them 27 continuous hours of power, then cuts them off for 21 consecutive hours. The use of air conditioners, which many homes in the city and some outside the city have, has been banned. Hospitals and other vital installations are exempt.

In Ghana and elsewhere in West Africa, electrical power has fallen victim to drought. A visit to Akosombo Dam, about 70 miles northeast of Accra, dramatically illustrates the problem.

Below the Gauge
The level of Lake Volta, formed behind the dam when it was built in the 1960s, has fallen to its lowest point ever; in mid-March it was nearly 15 feet below the bottom of the gauge installed to measure water level.

Curtailment of power supply from Akosombo’s generators and those at nearby, smaller Kpong Dam began at the end of 1982, according to Joseph Sowa Okpoti, Director of Power Operations for the Volta River Authority. The Authority runs the Akosombo-Kpong complex. Normally, that complex, which has received $92 million in IBRD assistance over the years, provides 95% of Ghana's total electrical power.

“We've cut back about 45% of our total generation to the country,” he tells us. “Our target is to get to about 135 continuous megawatts a day. But, right now we are around 158, so we have to cut power some more. Our target is to maintain this level up to July, which is the end of the dry season.”

Togo and Benin, Ghana's neighbors to the east, have been asked to halve their demands on Akosombo-Kpong and have already cut back 40%.

One of the Authority's main industrial customers, Volta Aluminum Company, has been cut 95%, “which means they only have power for emergency lighting,” Mr. Okpoti says.
In an address before the Los Angeles World Affairs Council last month, Bank President A. W. Clausen discussed "The Pacific Asian Countries: A Force for Growth in the Global Economy." Here are excerpts from his speech as prepared for delivery:

"The economic output of the Pacific region as a whole (including Japan, Australia and New Zealand as well as China and the market developing countries) is now equivalent to more than two-thirds the output of the U.S. economy. That's up from one-third only 20 years ago.

"The global recession has left nearly all the world's developing countries with acute economic problems. But (except for the violence-torn and poverty-ridden countries of Indo-China) the developing countries of Pacific Asia are coping relatively well. Other developing countries—and developed countries too—can learn from the strong economic performance of these up-and-coming countries of Pacific Asia.

"The market developing countries of East Asia have averaged economic growth of 7.5% a year over the last 20 years. Progress in reducing poverty has not been easy or even, but the proportion of people in absolute poverty has been substantially reduced. Fewer children are dying, and people are living longer. Nearly all children go to primary school now. Population growth still poses a major challenge, as it does throughout the Third World, but population growth rates in the market developing countries of the Pacific have come down significantly."

Common Patterns of Policy, Performance

"There is tremendous diversity among these countries, and their progress has been due to many causes, including cultural and political factors. But certain common patterns of economic policy and performance have, clearly, been basic to rapid progress in all these countries.

"The most prominent feature of their development has been rapid growth in manufactured exports. Korea has expanded its manufactured exports faster than any other country in the world, and the Philippines, Malaysia, and Thailand have expanded manufactured exports at rates of 20% to 30% a year. The vast opportunity of the global economy has stimulated rapid growth, and openness to the rest of the world has also made these economies more efficient, flexible, and innovative. The principal policy foundations for their export success have been competitive exchange rates and low barriers to imports.

"A second aspect of their success story is less widely appreciated: Agricultural production has expanded faster in these countries than almost anywhere else in the world. Agricultural growth has been related to export growth in that openness to the world economy has encouraged these countries to avoid price distortions, also in agriculture. And governments have furthered agricultural development directly through public investment in land settlement, irrigation, and research.

"A third key area of notable economic performance, in addition to exports and agriculture, has been investment. Investment in these countries has been equivalent to more than a quarter of their income, with over four-fifths of investment coming from domestic saving. Governments have encouraged saving with positive real interest rates, they have provided a policy framework conducive to private investment, and they have also invested directly in their people through strong programs of public education."

Price Distortions Have Been Limited

"The market developing countries of Pacific Asia have relied extensively on market forces. Price distortions have been relatively limited, and these countries have not depended heavily on state enterprises. However, it is not the absence of state intervention, but rather the selectivity and effectiveness of state intervention, which distinguishes these countries. Their governments have supported development with careful macroeconomic management, strong policy direction, and necessary public investments.

"Many of these countries need to develop a broader base of political participation, and no one can predict the political future. But until now at least, governments in the region have been relatively stable and committed to development.

"Each of the two oil price increases, in 1973 and again in 1978-79, cost the oil-importing developing countries of East Asia between 3% and 6% of their national income. By comparison, each of these two shocks cost the industrial countries 2% of their national income.

"The global recession of the last few years has also
been exceptionally costly to the developing countries of Pacific Asia, because they are so open to the rest of the world. Malaysia, for example, suffered a drop of fully one-tenth in its national income between 1980 and 1982 because of lower export revenues. And for all these countries, high interest rates have increased the cost of servicing international debt.

"Economic growth in the region has slowed down — to an average of 3% a year for 1982 and 1983. Poverty is, for now, getting worse instead of better. But these countries are taking impressive steps to adjust and to reaccelerate their development.

"In order to reduce energy imports, they have all raised domestic prices for energy, and they have also invested heavily in domestic sources of energy. Thailand, for example, is developing its off-shore reserves of natural gas (with assistance from The World Bank, and with important contributions by California companies). Starting at zero in 1980, natural gas now provides nearly a third of Thailand's electric power.

"The global recession has not made these countries turn inward; on the contrary. Korea has embarked on a major program to reduce tariffs and to liberalize imports and foreign investment. The Philippines has also reduced tariffs substantially. And partly because of such tough decisions, the market developing countries of the Pacific have managed to expand their manufactured exports by 13% a year even between 1980 and 1983, a period of stagnation in world trade."

**Cutting Back on Public Expenditure**

"Most of these countries have also been relatively prompt in cutting back on public expenditure during the recession. Indonesia, for instance, has postponed major projects with high foreign-exchange costs — while continuing with labor-intensive projects and with priority investments in agriculture, education, and health.

"In general, policymakers in these countries need to make further efforts to share the costs and benefits of adjustment equitably."

* * *

"With a billion citizens, the size of China's economy exceeds the combined national income of all the rest of East Asia excluding Japan. But China remains a very poor country, with average per capita income of about $300 a year.

"Like its capitalist neighbors, China has consistently given high priority to development. And despite policy oscillations, China's leadership has been relatively stable. But instead of pursuing efficiency and productivity, the hallmarks of development in the rest of East Asia, China has, until recently, based its development mainly on the massive mobilization of resources.

"China achieved rapid growth in industry, despite virtually no growth in productivity, by assigning a large share of national income to industrial investment. And China also made great strides in reducing poverty. As I saw for myself during a visit last year, serious poverty persists in China, particularly in more backward rural areas. But poor people all have work and food security, and the great majority have access to schools for their children and to health and family planning services.

"Toward the end of the 1970s, the Chinese authorities launched a far-reaching program of economic reform — to improve efficiency and productivity. China has been decentralizing economic decision-making, relying more on private incentives, and opening itself to increased foreign commerce.

"The effects of reform have been most striking in the countryside. The government has delegated more responsibility to lower-level institutions, and income is more directly linked to output. Over three-fourths of China's production teams have contracted out land to individual households. At the same time, the government has sharply increased agricultural prices. As a result of all these changes, agricultural production has grown at an extraordinary pace. Since 1978, rural incomes have gone up about 10% a year."

**Greater Scope for Decision-making**

"In the urban areas, state enterprises now retain more profit and have greater scope for decision-making. There is also more scope for business activity by cooperatives and individuals. The government is encouraging industry to use energy more efficiently, mainly by rationing.

"China's relatively slight involvement in the global economy has insulated it from the global recession. But the Chinese authorities are convinced that the benefits of international trade, technology, and finance outweigh the risks of deeper involvement. In 1980, the People's Republic of China took its seat in the International Monetary Fund and The World Bank. Between 1978 and 1983, China doubled its exports and is now a keen customer for capital goods and technology.

"Thanks to the reform program, China achieved economic growth of over 6% a year between 1978 and 1983. China has already reaped the fruits of correcting some of the most glaring inefficiencies of the past, so it may prove difficult to maintain the present pace of economic expansion. But all signs point to continued economic and social advances for China, now as an integral part of the global economy."

* * *

"The development of the global economy has opened new opportunities for upward mobility among countries . . . Newly industrializing countries in East Asia are now strong competitors in certain lines of manufacturing. As a result, consumers in Western Europe and North America get better value for money, and increased competition also stimulates established producers to raise their productivity. Some industries in the West have been hurt in..."
the process, but the newly industrializing countries import more manufactured goods than they export. Their net effect on employment in the advanced industrial countries is positive.

"Here in California, one-seventh of all manufacturing is for export. Manufactured exports account for one in every 20 jobs. And Pacific Asia is, without question, California's fastest growing export market.

"Economic problems, as well as progress, now pass quickly from one nation to another. But even in bad times, the benefits of international interdependence exceed the costs. And we can reduce the problems, if nations learn to give more consideration to how their economic policies affect other nations.

"The developing countries of Pacific Asia are doing their share to build the current recovery into a new period of sustained economic expansion worldwide. But their success will depend on complementary actions by the advanced industrial countries.

"First, trade. In part, the increasing outward orientation of the developing countries of Asia is an act of faith—that the advanced industrial countries will maintain the momentum of economic recovery and resist protectionist pressures. If we disappoint them, it will be more difficult for them to maintain their outward orientation.

"Second, interest rates. The developing countries of Pacific Asia have not, in general, borrowed excessively; they are responsible for less than a sixth of total developing-country debt. Yet, debt has become a heavier burden for these countries too, despite their strong export performance. The World Bank's five major borrowers in the region have increased their export revenues fivefold over the last 10 years, but their debt-service payments have grown even faster—from 14% of exports in 1973 to 20% in 1983. This is partly because these countries are receiving less concessional assistance, but it is mainly due to high interest rates.

"During the 1970s, real interest turned out to be low, or even negative, after inflation. But in 1981, '82, and '83, the developing countries paid an average interest rate of 11% on their outstanding debt to private lenders. Inflation had been successfully reduced, and the U.S. dollar appreciated. So the prices of internationally traded manufactured goods, measured in U.S. dollars, actually dropped 3.5% a year in 1981, '82, and '83. The bulk of international debt is denominated in U.S. dollars, so, in real terms, the developing countries have been paying an average interest rate of over 14%.

"In the East Asian context, the burden of external debt is not, to any significant degree, due to imprudence or to the unproductive use of borrowed funds. Thus, the punishing effect of today's high interest rates on developing countries stands out in stark relief. Reducing real interest rates to a more normal level—say 4% to 5%—should be among the leading goals of economic policy in the dominant industrial countries. Reducing real interest rates will be difficult, but getting government deficits under control, especially in the United States, would surely help."

"In conclusion, let me stress two simple, but powerful lessons that emerge from the development experience of Pacific Asia.

"First, the effectiveness of economic policy. Steady commitment to development, coupled with flexibility, has paid off for these countries. By mobilizing resources for development and by increasing economic efficiency, they have substantially improved standards of living for themselves and their children.

"And a second lesson, the practical importance—the human importance—of the global economy. The global economy has contributed to rapid economic growth and the reduction of poverty in these countries. And their economic dynamism, in turn, is a stimulus to economic improvement in the rest of the world.”

Rainer B. Steckhan, Director, Country Programs Department I, Latin America and the Caribbean, discussed "Latin America and The World Bank: Partners in the Present Crisis" at the Miami Herald Business Achievement Conference April 9 in Miami, Florida. The Herald is a major newspaper in the United States with a significant circulation among Latin Americans living in South Florida. Here is a summary of his remarks:

For a generation, Latin America grew by almost 6% a year in real terms. By 1981 the economy of Latin America was three times the size it was in 1960, or five times that of 1950. During the past decade, the rate of
growth of Latin American countries was the highest worldwide, with the exception of a few countries in the Pacific Basin and some major oil exporters. Of particular significance, the pace of growth in Latin America was higher in the 1970s than at any time since World War II, despite the major disruptions taking place in the world economy.

The population of Latin America has more than doubled since 1950. It is rapidly approaching 400 million, about one-and-a-half times that of the United States. Fortunately, the rate of population growth has declined significantly from 3% to 2.2% in recent years.

Improve in human welfare has been substantial. Life expectancy has risen from 51 to 64 years. Child mortality has declined from 23 per thousand to less than 6 per thousand. The literacy rate has increased from 57% to 80%. These are crude indicators of social progress, but they do reflect the results of large investments in social infrastructure.

Latin America has been a major market for the United States. Exports from the United States to Latin America were worth $41 billion in 1981, or about 20% of total U.S. exports.

The debt crisis in Latin America was the result of a combination of events: The rapid debt build-up that began after the first large increase in oil prices (total debt in some countries had increased by more than 30% annually since the early 1970s), the persistence of high real interest rates, and the recent recession in the world economy combined with a decline in export earnings in 1982 and 1983.

U.S. Banks Are Principal Creditors

Latin America's total debt of some $350 billion (including short-term debt) has been built up over the last 10 years, an indication that this is not a cyclical, but rather a structural, problem which may take a decade to solve. In addition to the large size of the debt, its composition—two-thirds from commercial banks—gives it relatively short maturities. U.S. banks are the principal creditors of Latin America, accounting for about one-half of the continent's commercial debt. In the wake of the debt, U.S. exports to Latin America dropped from US$41 billion in 1981 to $32 billion in 1982 and $25 billion in 1983.

Since 1981, 16 of the 28 countries in Latin America have entered into agreements with the IMF to support stabilization programs. In these cases, the IMF has given mainly short-term credit on the basis of these programs. Adoption of domestic austerity programs aimed at restoring international liquidity, compounded by the decline in demand for the region's exports, resulted in the sharpest decline in output and employment in 50 years. The magnitudes of decline for some countries are similar to what these countries experienced in the depression of the 1930s. For the entire region, per capita GDP (Gross Domestic Product) fell for the third consecutive year. It has now fallen to about the 1976 level.

Interest payments in 1983 reached about US$30 billion. Investment is believed to be well below the 1981 level. The costs of adjustment in terms of foregone output are equivalent to roughly 33% of 1983 GDP. Despite these adjustments, almost all Latin American nations continue to experience severe financial problems and external payments difficulties. Unemployment reached unprecedented levels in 1983. Nutrition, education, housing and health services—where significant gains were made in the 1970s—have all suffered severe setbacks.

Slowing Growth of Outstanding Debt

The adjustment which took place in 1983 was successful in slowing the growth of the region's outstanding debt and at improving most of the creditworthiness indicators. On the other hand, cutting imports, investment, output and employment (the major means of adjustment in 1983) can only be a first step on the road to recovery. The region will now have to carry out the structural change necessary to strengthen its long-term debt servicing capacity as well as its economic and social development. In view of continued population growth (2.2%), and even faster labor force growth (3%), increases in investment, output and employment are now indispensable. Hence, Latin America faces the challenge of shifting from import and output cuts to growth-oriented, export expanding adjustment which is compatible with rising investment, output and employment.

Clearly, strong recovery of the world economy, freedom of trade, a greater willingness of commercial banks to lend to Latin America, and a return to Latin America of private capital which had left the continent since 1980 would greatly facilitate Latin American growth.

In support of recovery efforts of Latin American countries, The World Bank can play an increasing role both as a financier of projects and as an economic adviser. Promoting long-term reconstruction and development in Latin America is a key task for the Bank. Thus, in addition to the some $3 billion per year which the Bank has loaned on average in recent years, the Bank has a continuous policy dialogue with Latin American countries. Given the importance of appropriate macroeconomic policies and a favorable investment climate for Latin American recovery, this policy dialogue could play an even more important role in the future, and more World Bank lending—structural adjustment loans, sector loans—could usefully support such dialogue.

What is required in the present debt crisis of Latin America is a joint effort by all participants: Latin American countries, commercial investors, donor countries and multilateral institutions such as The World Bank, the IMF and the Inter-American Development Bank.
Debt: It's a controversial problem that weighs heavily on the development process, and last month 15 renowned experts came to the Bank to discuss it.

They came from universities in the United States, Korea, Brazil and Switzerland, and two were from the Bank of Mexico.

The occasion was a 2½-day conference on "Debt and the Developing Countries," which the Development Research Department (DRD) in the Economics and Research Staff (ERS) sponsored.

"The basic idea was to bring to Bank staff the current thinking of the best minds on the debt question," says Michael Finger of DRD, who orchestrated the meeting, "so we invited to the Bank some of the world's leading applied economic analysts on debt to air their views. We wanted the opinion of every party — the experts, borrowers and creditors. The purpose of the conference was for everybody to gain a better understanding of how decisions on debt — in an economic context quite different from when the loans were made — would affect everyone's interest."

Reasons for Indebtedness

Rudiger Dornbusch of the Massachusetts Institute of Technology (MIT) explored the damage imbalances in exchange rates and budget deficits cause in generating external indebtedness and the current debt problem. "Oil, interest rates and world recession are often isolated as the chief causes of the world debt crisis," he said. "But these factors only have made much more apparent an unsustainable and underlying disequilibrium in which exchange rate overvaluation and/or budget deficits were perpetuated by continuing and excessive recourse to the world capital markets."

According to Richard Cooper and Jeffrey Sachs of Harvard University, "external debt has risen to the top of the agenda of international monetary economics in recent years, partly because developing countries have become much more dependent on external funding for their economic development during the past decade than before, and partly because a growing number of countries have experienced difficulties in servicing their external debts since 1981."

As Leopoldo Solis and Ernesto Zedillo from Mexico described Mexico's current situation, "Mexico's long-run solvency as a foreign debtor seems to be warranted as long as a delicate balance among all the following is maintained: (1) the success of the current stabilization program; (2) an orderly rescheduling of maturities; (3) a return to normality in international capital markets so that a modest increase in the real stock of debt proves feasible; and (4) an expansion of international trade, if not spectacular, at least better than the one registered over the last few years."

Managing Foreign Debt

According to Yungchul Park of Korea, Korea's success story in adjusting to a series of external and internal shocks suggests that export promotion policies contributed to rapid growth in output and employment and that financial difficulties were partly avoided by limiting foreign borrowing to an amount which Korea could effectively invest.

"An important lesson," said Mr. Park, "is that in coping with adverse external shocks, domestic stabilization with a real exchange rate depreciation could be more effective and less costly than a protracted adjustment characterized by an expansionary policy backed by foreign borrowing."

A complementary point was emphasized by Arnold Harberger of the...
University of Chicago who reviewed the experiences of several countries which have had difficulties managing their foreign debt. “The main point,” he said, “is that countries should begin to worry when capital inflows reach unsustainable rates.”

In their presentation, Daniel McFadden and Richard Eckaus of MIT pointed out that “difficulties in repayment of international debt are not a modern innovation. They have a long history that dates back well into the 19th century. It is not even true that the contemporary history of debt difficulties started in the late 1970s. Throughout much of its life the activities of the International Monetary Fund have involved implicit or explicit help to countries experiencing difficulties with their international debt. However, the magnitude of repayments problems has reached an unprecedented level, and has increasingly involved commercial banks.”

Mark Gersovitz of Princeton University concentrated his analysis on the situation of the commercial banks which have lent to developing countries. He explained the choice faced by a debtor country: To be able to continue to finance part of its development with international capital, it must maintain its standing with international lenders, and that means continuing to meet its debt service obligations. The banks, on the other hand, have to choose between lending more now against a small chance of losing more later; or refusing to lend more now and thereby increasing the chances that the debtor countries will then choose to cut back on their debt service payments.

“Whether partial servicing will enable lending banks to remain solvent is an open question,” he said. “Many banks have amounts at stake several times their capital. Even a 10% write-off of their LDC portfolio would cripple many of them, so banks will probably not resume lending to LDCs in this situation.”

Jack Guttentag and Richard Herrring of the University of Pennsylvania focused on commercial bank lending to LDCs. They agree that the debt situation results partly from imprudent borrowing and mostly from the world recession. But they also blame the banks which continued to lend long after “the writing was on the wall” in terms of debtor countries' capacity to repay. They said banks suffered from “disaster myopia” and also expected official support in case of trouble.

Paul Krugman of MIT stressed that “the key both to understanding what has happened so far and to formulating an international debt strategy is to allow for the reality of uncertainty.” He warned against the simple distinction between short-term “liquidity” and longer-term “solvency” because there are too many question marks hanging over the future of the world economy.

Alexander Swoboda of the Graduate Institute of International Studies in Geneva spoke about the structural long-term issues. He focused on improving the efficiency of capital markets in transferring resources from lenders to borrowers, especially to those most in debt.

“The concern with efficiency is bound up with that for stability,” he said. “An international financial system that is crisis-prone, where resource flows are subject to abrupt fluctuations and waves of panic and euphoria, is unlikely to foster efficient resource allocation.” Also needed, he argued, are correct pricing of capital in private markets and proper policies in borrowing countries, on the one hand, and increased official development assistance, on the other.

Mario Simonsen of the Graduate School of Economics in Rio de Janeiro suggested some forms of debt relief. He sees a bigger role for the IMF and the Bank as central coordinator to foster cooperation between creditors and debtor countries.

He also believes that the bitter medicine of adjustment policies should lead not only to relatively quick recovery but also to sustained growth. “This is not only necessary for political reasons,” he said, “but also to keep exports growing in the long run. Adjustment should focus on consumption and not on investment cuts. Moreover, debtor countries should create favorable conditions for new direct investments from abroad.”

The conference raised as many questions as it answered. Says Mr. Finger: “The conference contributed substantially to a better understanding by lenders of how the debtors would be affected by various outcomes, and vice versa. The more we move toward each party understanding the other's situation, the further we move from creating a crisis situation, and the closer we come to a cooperative solution.” Plans are for the papers to appear in book form.
More and Better-Managed Water Flows to Fields of India

The Green Revolution Gathers Speed

by John Maxwell Hamilton

Shivaji, the Hindu warrior who successfully drove Mogul rulers out of 17th century Maharashtra state, remains a symbol of Indian independence. So it is appropriate that from his birthplace, a Mogul fort perched on a sheer outcropping of rock about 40 miles north of Pune, one modern Indian effort at self-sufficiency — this one in food — comes clearly into focus.

Sprawled out below the crumbling Moorish arches and tamarind trees lies part of the Kukudi irrigation scheme: Three freshly built dams holding back reservoirs of grayish-blue water; irrigation canals tracing clean lines across the landscape; and just below the entrance to the mountain redoubt, a new village housing farmers whose land now lies under water.

Kukudi, which includes more than a score of other dams, spreads farther than the eye can see and is itself part of an even larger irrigation effort that embraces five other schemes throughout the state.

Kukudi's size reflects India's recognition that it must increase agriculture production, if it is to meet its food needs in the coming years.

India has made major agricultural advances in the last two decades. Once the defenseless victim of droughts and floods, which came with devastating frequency, leaving famine in their wake, India in the mid-1960s began to use high yielding varieties of grain (HYVs) developed at the International Maize and Wheat Improvement Center in Mexico and the International Rice Research Institute in the Philippines, and adapted to local conditions. To buttress this "Green Revolution," the Indian government, with the help of international donors, undertook major reforms designed to ensure food storage, realistic pricing, and further agricultural research and extension, among other things.

At the beginning of this process, India was the world's second largest importer of food grains. By the end of the 1970s its imports were more than offset by its agricultural exports. Even when droughts spread over 75% of the country, as has happened recently, India does not resort to massive food imports.

Yet, while India has achieved remarkable gains, particularly in the northwest region, the agricultural potential of other regions is far from realized. Some estimates indicate that twice as much land could be sown with HYVs. But that cannot happen without improved irrigation, for large amounts of water are required to get the best of yields from improved varieties of grain.

Life and Death Issue

Spreading the Green Revolution is a life and death issue. Despite recent agricultural gains, 40% of the nation lives below adequate nutritional standards. And the population grew a full 25% during the 1970s.

Maharashtra in the southwest is one of those states most in need of improved irrigation. Only 11% of the crop land is irrigated. The state has among the lowest cropping intensities in India and is deficient in food grains. Half of the rural population lives below the poverty line.

The development of improved irrigation systems has become a national priority. But as Chris Perry, who oversees the Bank's irrigation projects in India, says, "Irrigation is not enough." Just as Shivaji is remembered for establishing an efficient civil service based on meritocracy to run his empire, modern day success will only come when water and other natural resources are better managed.

The case of Shanker Shivram Jadhav illustrates the potential and problems that confront India. Mr. Jadhav grows tomatoes on a two-acre plot lying close along a recently
completed artery of the Kukudi project. Last year he grew millet and grossed 700 rupees (about US$70). This year, with more abundant supplies of water, he decided to raise tomatoes, a cash crop that will bring him 50,000 rupees.

All that will not be profit. He has to repay a loan from the government for land leveling—a prerequisite for irrigation. But he sees a brighter future and is already laying plans for additional investment in his farm.

But why aren't all his neighbors engaging in the same effort to make better use of the water that is now available?

“They are not convinced that the water will continue to come as promised,” he says.

Increasingly, the Government of India has turned to irrigation projects that will build up infrastructure and a management system that provides water reliably. In the Maharastra Kukudi project, which is supported by international assistance from donors including The World Bank, this has meant working with local authorities to improve land drainage activities, building access roads and resettlement schemes, establishing and training land development and water management specialists, and setting up an irrigation research and development center. Elsewhere, it has meant experimenting with brand new approaches to irrigation.

**Weeds Clog Canals**

Perhaps the most interesting experiment is taking place in Uttar Pradesh. Since the early 1930s Uttar Pradesh has used tubewells to tap the vast reservoirs of water stored in the alluvial Ganges plain on which the state is located. While these communal wells have helped farmers, their efficiency has been hampered. Weeds clog open well-to-field canals. Tubewell operators have often shirked their duties or favored some farmers at the expense of others.

To overcome these problems, the Uttar Pradesh government, with the help of The World Bank, initiated a project in the late 1970s using a new tubewell system. It includes underground pipes and relies on a newly designed tubewell with a holding tank that fills automatically. Although well operators are still needed to keep records, the farmers, organized in water user groups, have keys to the field turnouts, thus giving them more control over the system.

There are still problems. Electricity to run the pumps is often not dependable, extension work must be improved, and there is concern among officials that in some cases more powerful farmers still get more than their fair share of water.

The introduction of dedicated power lines to pumping stations and steps to improve a system of water user groups are under way, however, and the overall assessment of the project is bright. The first project, with 559 wells, worked so well that the state and The World Bank agreed this year to a second project. It involves the construction of 2,200 tubewells and the upgrading of 750 more. Officials from Punjab and West Bengal are visiting to consider building their own similar systems.

Improved agricultural output, say Indian planners and development experts, will provide growth in other sectors. Dam construction in Maharashtra is already giving work to men and women who once relied only on farming. Many who lost their farm land to irrigation schemes now say they never want to return to full-time farming.

Such aspirations are not new to developed countries where farm-to-city migration has paralleled a radical change in farming patterns. In India, however, where only 3% of the farm households have 10 hectares or more, agriculture will remain labor intensive well into the future, and non-farm work will often involve grueling manual labor. Men and women hauling rock to open irrigation tunnels earn only 10 rupees a day.

But as the view from Shivaji’s venerable birthplace suggests, the Green Revolution is bringing great change and hope.
On Becoming a Member of the Bank

by H. Paul Crevier
Secretary’s Department

You are the recently named Minister of Finance of a country whose government has decided to become a member of The World Bank. The matter has already been informally discussed with Bank staff, and you are aware of the benefits and obligations of membership, as well as the institution’s structure and operations. What must you do next?

The Articles of Agreement of the Bank require that a nation be a member of the International Monetary Fund (IMF) before it can become a member of the Bank. The Articles also state that the Bank’s Board of Governors must approve new members and the conditions of their admission.

The first formal step toward admission is to submit an application for membership to the President of the Bank. This application should be signed by the Head of State or Minister of Foreign Affairs and will name a representative to furnish the Bank with any required information. Most nations apply to both the Bank and the Fund at the same time, in which case the two institutions coordinate the membership process.

Economy, Population, Trade

The Bank’s Executive Directors are informed of the application and told it will be processed when the Fund has determined the appropriate quota for the prospective member. Basically, a member’s quota in the Fund is an amount, expressed in Special Drawing Rights (SDRs), which the member pays to the Fund. It determines a member’s voting power in, and the extent to which it can borrow from, the Fund. The quota is determined after examining extensive information about a prospective member’s economy, population, trade, and other data. The quota is then used to calculate the member’s capital subscription in the Bank. This subscription is the amount of capital subscribed by a member, only a portion of which is actually paid to the Bank. While the size of the subscription determines a member’s voting power in the Bank, it does not influence either that member’s eligibility for funding or the amount it can borrow from the Bank.

The capital subscription is calculated at the time the Fund’s Executive Board approves the prospective member’s quota. It is then sent, in the form of a draft membership resolution and a report from the Executive Directors recommending adoption of the resolution, to the Bank’s Board of Governors for a vote. The voting is by mail, addressed to the Vice President and Secretary. A tally is recorded daily, to be approved by the Executive Directors. Once the majority of a quorum of two-thirds of the Bank’s total voting power (cast by a majority of Governors) approves, the resolution is adopted.

Besides adoption of the membership resolution, there are other requirements necessary to complete the membership formalities. These are:

- **Enabling legislation**, the legislation adopted by the government of the prospective member authorizing the country to become a member of the Bank and Fund, and provision for the necessary payments to be made to the institutions;
- **The memorandum of law**, a legal opinion signed by the appropriate legal officer of the prospective member, setting forth the requirements, under its law, for becoming a member of the Bank and for carrying out its obligations under the Bank’s Articles;
- **The instrument of acceptance**, a formal declaration that the prospective member accepts in accordance with its laws the Articles of the Bank;
- **The full powers**, or authorization for a representative of the prospective member to formally deposit the instrument of acceptance and to sign the original copy of the Bank’s Articles. This is the last step toward complete membership formalities.

A prospective member’s capital subscription in the Bank is calculated as a fixed arithmetical ratio of that country’s quota in the Fund. This ratio, often known as the “institutional ratio,” originated when the Bank and the Fund were created. Initially, this ratio was one-to-one, reflecting the accepted principle that members’ Bank subscriptions should equal their Fund quotas. Since 1945, this ratio has changed five times due to general capital increases in the Bank and general quota increases in the Fund.

Obligatory and Optional

A new member’s subscription in the Bank is twofold. One is obligatory, the other optional, the latter reflecting what would have been allocated to the member under the last general capital increase. Both are expressed in terms of shares of capital stock. Each share has a face value of 100,000 1944 dollars.

The decision to use 1944 dollars was made to give the shares a permanent or fixed value equal to the amount of gold a dollar was worth in 1944. The last official value of these dollars was $1.20635, and it is on the basis of this value that subscriptions of new members are converted into current dollars. For the purpose of determining capital subscriptions, the SDR is considered to have the same value as a 1944 dollar. If, for
example, a prospective member's obligatory capital subscription and optional subscription were, respectively, SDR54 million and SDR50.5 million, the current worth of these subscriptions would be:

- ** obligatory:** SDR54 million
  \[= 54 \text{ million 1944 dollars (540 shares) } \times 1.20635 = 65,142,900;\]

- ** optional:** SDR50.5 million
  \[= 50.5 \text{ million 1944 dollars (505 shares) } \times 1.20635 = 60,920,675.\]

To subscribe these amounts, the prospective member must pay 10% of its obligatory subscription and 7.5% of its optional subscription to the Bank. The unpaid balance of these subscriptions—90% of the obligatory subscription and 92.5% of the optional subscription—become what is known as the Bank's callable capital, meaning the Bank could call upon its members to pay these amounts in the very unlikely event that it could not pay its creditors, for example, the Bank's bondholders.

The Bank's Articles state that each member has 250

### Bank Aids African Drought Relief Program

The World Bank will contribute $2 million to the World Food Programme to help in the delivery of emergency food aid supplies for drought-stricken Sub-Saharan Africa.

At a reception for 45 African ambassadors held in the Bank April 18, A. W. Clausen, Bank President, said it is a first step in management's urgent response to the Executive Director's call for a study of the drought's dimensions and the measures that might be taken to combat its effects.

In addition, Mr. Clausen told the gathering, the Bank will produce in time for the Annual Meetings in September an updated, action-oriented program to follow up on two earlier reports on Africa.

The contribution, approved by the Executive Directors April 26, will be administered by the World Food Programme and used to strengthen the capacity of local government agencies to receive, store and distribute emergency food supplies. While the Bank does not normally participate in short-term relief operations, the unprecedented magnitude of the drought calls for extraordinary efforts.

The countries most severely affected by the drought include those in the Sahel, and Ghana, Botswana and Zimbabwe. For some countries, this is the second year of drought.

The international donor community has pledged about 2.3 million tons of food supplies, and further emergency food allocations are expected.

The Bank's contribution will be disbursed in four tranches of $500,000 each and charged against IBRD's FY84 administrative budget.

### 14 to Share $265,000 in McNamara Fellowships

Fifteen men and women will share $265,000 in fellowships from the Robert S. McNamara Fund. This is the second year of the awards, and there are 12 individual fellowships and one joint award to two young Indian women to further their research on income and investment patterns among working women in Malaysia. The individual awards support research into activities such as the effects of pulverized phosphate rock on crops in Niger and the relationship of income to individual productivity in Chinese agriculture.

Robert S. McNamara Fellowships were established to honor the Bank's former President who retired in 1981. The 12-month fellowships are awarded to young scholars who undertake innovative research projects at the postgraduate level that will make an immediate and significant contribution to development.

Fellowship winners, who are usually less than 35 years old and are residents of Bank member countries, propose projects in countries other than their own. The fellowships are financed from endowment grants which World Bank member governments make, including, to date, Bangladesh, China, India, Kuwait, Nigeria, Pakistan, Peru and Yugoslavia, in addition to a contribution from the Bank itself.

The winners, selected by a panel of international experts, are:

**INDIVIDUAL AWARDS**

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Nationality</th>
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votes, plus one additional vote for each share of stock held. The hypothetical member referred to would thus have 1,545 votes—250 for membership, 1,045 for its shares of stock and an additional 250 allocated with its optional subscription. This comprises 0.27% of the Bank's voting power. To put this number in perspective, consider that the United States, the Bank's largest shareholder, and Maldives, one of the smallest, have, respectively, 19.45% and 0.09% of total voting power.

A new member of the Bank has to appoint a Governor and Alternate Governor and, to be formally represented on the Board of Executive Directors, must participate in the regular election of Executive Directors, held every two years during the Bank's Annual Meeting.

The Bank and Fund currently have 146 members. In the future, excluding major European nations such as Bulgaria, Czechoslovakia, Poland, the Soviet Union, Switzerland, and the African countries of Angola and Mozambique, the Bank's new members will probably be small independent states with populations of fewer than one million.

Work Groups to Discuss Attitude Survey Results

Work groups will discuss the results of Attitude Survey II which show an overall improvement over Survey I and indicate the need for further studies into issues concerning career development and stress. Managers of all groups with six or more respondents to the survey questionnaire will receive work group reports. The managers will discuss the results with their staff, and the management of each Vice Presidential Unit will determine the follow-up to the results.

Nearly 84% of Headquarters and field staff participated in Survey II; 85% had participated in Survey I conducted 18 months earlier.

Here are highlights of the results of the second survey:

- There is an overall improvement in the Survey II results compared to Survey I, especially in staff views on the Institution's climate, planning processes, goal setting, and performance feedback.
- Staff derive a great deal of satisfaction from their work, and they are positive about the effectiveness of their work group, their identification with the Institution's goals, and pay and benefits.
- While the overall results are favorable, there are large differences among work groups. Groups responding favorably to the follow-up process to Survey I have better results and show larger improvements than groups who were dissatisfied with their Survey I follow-up.
- There was a large response from Field Offices. Headquarters staff assigned to Field Offices regard their assignments as valuable to their professional development and increasing their impact with clients, but are uncertain of the career advantages of such an assignment. Local staff indicated a generally positive attitude to the Institution, their management and work.
- There were many concerns
Around the Bank continued

about career development, which had the lowest results in the Survey, although views vary widely among staff within different job categories.

- Stress is the only major area to show a deterioration since Survey I, mainly due to workload pressures and unexpected changes and conflicts in priorities.

In a letter to staff that accompanies the results of Survey II, Martijn J.W.M. Paijmans, Vice President, Personnel and Administration, emphasizes the progress made in the positive nature of the results. The staff response, he says, indicates the value of the Survey as a tool for organizational improvement.

Noting staff concerns, he speaks of the need to take institutional action on stress and career development. "The Institution makes many demands on the staff at all levels, and these demands are right and necessary if we are to continue to meet the standard of excellence of which the Institution is proud. On the other hand, we need to be constantly mindful of the well-being of our own staff, the most valuable resource we have. It is important, therefore, to monitor closely the way organizational pressures affect staff, and to take measures to prevent and alleviate stresses which harm staff well-being and productivity."

Mr. Paijmans adds that the Personnel Management Department and the Medical Department are collaborating on a special study of stress in the Institution to discover the major avoidable organizational stressors and to come up with plans to deal with them.

As far career development, the Survey data will be closely analyzed to obtain a better understanding of the aspirations of different groups of staff so that developments can be designed in a way that is practical, appropriate, and related to the evolving needs of the Institution.

Senior Staff Appointments

EDWARD K. HAWKINS, a British national, has been appointed to the position of Resident Representative in Sri Lanka. Mr. Hawkins joined the Bank in 1963 as an Economist, Western Hemisphere Department. In 1966 he transferred to the Economics Department and in 1969 became Chief of the Population and Human Resources Division. From 1972 until 1974 he served as Senior Adviser in the Development Economics Department, after which he assumed his current position as Senior Departmental Economist in the East Asia and Pacific Country Programs Department. Mr. Hawkins will begin his new assignment in June.

JOHN H. STEWART, a British national, will become Manager of the Personnel and Administration Unit, IFC, combining his present role of Personnel Manager with the administrative functions for the Corporation. Mr. Stewart joined the Bank in 1967 and has served as a Loan Officer in the South Asia Department, Deputy Chief of Mission in the Tokyo Office and Senior Personnel Development Officer in the Bank and IFC. In 1979 he left IFC, returning in 1982 to assume the position of Manager, Personnel Office. His new position was effective May 1.

JESSICA P. EINHORN, a U.S. national, has been named Chief of the newly created Planning and Special Operations Unit in the Office of the Vice President and Treasurer. Mrs. Einhorn first joined the Bank in 1978 as a Financial Analyst in the Programming and Budgeting Department. Most recently she served as Adviser in the Office of Vice President and Treasurer. Mrs. Einhorn assumed her new responsibilities April 1.

ANTHONY MEASHAM has been promoted to Health Adviser, Population, Health and Nutrition Department, effective April 1. Dr. Measham, a Canadian national, joined the Bank in 1982 as a Public Health Specialist. He has extensive experience in health and family planning programs in Asia and Latin America.

ROSWITHA J. KLEMENT-FRANCIS, an Austrian national, has been promoted to Director, Management Systems and Accounting Department, International Finance Corporation. Mrs. Klement-Francis joined the Corporation in 1979 as Manager of the Management Systems Unit. Her new position was effective May 1.
New Staff Members

Mehmet Aksoy
Turkey
Economist/ASA/5/1

Myrna Alexander
Canada
Financial Analyst/WAP/4/30

Hazel Amselle
United States
Secretary/LC2/4/2

Rui M. Coutinho
Portugal
Economist/ASA/5/1

Myrna Alexander
Canada
Financial Analyst/WAP/4/30

Hazel Amselle
United States
Secretary/LC2/4/2

Rui M. Coutinho
Portugal
Economist/ASA/5/1

Judy M. Crawford
United States
Secretary/PMA/4/2

Deborah S. Cutler
United States
Chief, Telephone Service
Section/ADM/4/2

Gautam Datta
India
Economist/DRD/5/1

Deborah Edwards
United States
Secretary/ACT/4/9

Veronica Gana
Chile
Disbursement Asst./LOA/4/18

Laura Grike
United States
Secretary/CENED/4/9

Deborah Ann Gunter
United States
Secretary/IRMD/4/16

Richard Hamilton
Canada
Energy Economist/EMP/5/1

Anne Harrison
United Kingdom
Data Administrator/ERS/4/10

Riaz Husein
Bangladesh
Accounts Asst./LOA/5/1

Patricia Lee
United States
Secretary/LCP/4/30

Geneva Lovett
United States
Cable Testing Clerk/CSH/4/16

William Lyons
United States
Building Maintenance & Repair
Asst./ADM/4/16

Jean-Francois Maquet
France
Port Engineer/WAP/4/16

Robert McGough
United States
Industrial Training Specialist/AEP/4/30

Sylvie Monin
Switzerland
Secretary/CA2/4/9

Sylvia Moringo
Peru
Secretary/ASP/4/23

Roger Neil
Australia
Economist/ERS/4/16

Ian Newport
United Kingdom
Senior Counsel/LEG/4/12

Allan Newstadt
United States
Computing Asst./WAN/5/1

Raphaella Nicol
United Kingdom
Secretary/PHN/4/16

Rani Purushotham
India
Secretary/CPBA/4/23

Una Raymond
United Kingdom
Secretary/CUNCF/4/30

Keiko Sato
Japan
Information Officer/TPM/4/2

Arlette Snyder
United States
Secretary/PFP/4/30

Jane Sweeney
United States
Secretary/PUB/4/30

Helene Thulacker
Luxembourg
Documentation Asst./ADM/4/16

Cung Tran-Luu
Vietnam
Building Maintenance & Repair
Asst./ADM/4/16

Juliana Weissman
United States
Projects Officer/PHN/4/23

Scott B. White
United States
Projects Officer/PHN/4/23

William Peters
April 30

Mary Wolfe
April 30

WILLIAM E. REES, an Australian national, has been promoted to Chief of the newly established Education Division in the South Asia Projects Department. Mr. Rees joined the Bank in 1975 as a Manpower Planner/Economist, Education and Manpower Development Division, EMENA Projects Department. He was promoted to Senior Manpower Planner/Economist in the same division in 1978 and to Deputy Division Chief, Education and Agricultural Institutions, South Asia Projects Department, in 1980. He assumed the position of Chief of the Education and Manpower Development Unit in the South Asia Projects Department in 1982. His new appointment was effective April 16.

Letter to the Editor

If you have a comment about an article that has appeared in this magazine, a Bank policy, or some interesting information you’d like to share, please let us know by sending a letter to: The Editor, The Bank’s World, Room D-839. The editor reserves the right to make changes because of space limitations and style, and all letters must be signed, though names will be withheld upon request.

* * *

Just wanted to let you know how much I enjoyed Thierry Sagnier’s contribution in the April issue (‘The Girls’). To be able to address the sensitive issue of the institution’s attitude toward support staff with humor and a light touch is a real talent.

Donneve Rae
Chair, A-H Issues Working Group
Staff Association
The purpose of this column is to answer questions of broad interest concerning The World Bank/IFC's policies and procedures. Because of space limitations, only questions of wide interest can be published. If you have such a question, send it to: Answer Line, The Bank's World, Room D-839.

* * *

Question: Has the Bank considered taking advantage of the Walkman/audio cassette craze by producing learning/training tapes on subjects like co-financing, procurement, and many other topics covered in the various manuals, PMD seminars, etc., as well as issues relating to productivity such as time management and stress? This learning technique has proved effective, provides an alternative to the tons of papers we shuffle, allows a greater number of staff to benefit from the information, is a productive use of time during commuting, and could possibly reduce the cost of maintaining extensive training facilities and services.

Answer: Yes, we have. Audio-cassette tapes are available for language self-study, and we are looking into expanding their use to other areas. Tapes, as well as audio-visual programs, are most likely to be developed on procurement and other subjects where the demand is high. We would also use them to help meet the training needs of staff in the Bank's Resident Missions and other offices. The new materials would be used in combination with other training approaches. A tape can be an effective learning supplement but is not a proven substitute for a course or on-the-job training. Erik B. Eriksen, Chief, Staff Training Division, Personnel Management Department.

As we go to press...

QURESHI ON FINANCE AND AGRICULTURE: Addressing the Annual Conference of the International Fertilizer Industry Association in Mexico City, Moeen A. Qureshi, Senior Vice President, Finance, said: "In the last decade, the Bank has provided two-thirds of the multilateral aid, and nearly one-third of all external resources for agricultural development. Between 1974 and the end of 1984, the Bank will have invested some $33 billion in agricultural production, as our contribution to a total project investment of between $90 billion to $100 billion in that sector. Over the 10 years, the Bank's investment in agriculture has averaged 28% of total Bank investment...

"After the South Asia region, which during this last decade has absorbed 25% of the Bank's agricultural lending, Latin America and the Caribbean rank second with 21% and $6.8 billion in total borrowings. While India was by far the largest borrower for agriculture during this period, Mexico ranked second and Brazil, fourth. The agricultural sector has a key role to play in the Latin American adjustment process because of its extreme importance to foreign trade. The share of agricultural exports in the total often exceeds 50% as it does in Paraguay, Argentina, Brazil and Colombia. The sector also is important in total employment, despite the large migration to urban areas that has been taking place for many years. If the problems of the severe unemployment levels at the present time are to be minimized, the sector has to absorb much more labor. This will also be consistent with long-run growth with equity since the two resources most abundant in many of the major countries of the region are labor and land."

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COMMUNITY RELATIONS: Edward Jaycox, Director, East Asia and Pacific Country Programs Department, recently briefed Washington, D.C. Mayor Marion Barry and his associates on the eve of their visit to China, Korea and Thailand. The briefing was part of the Bank's expanded community relations program, which is attempting to make the institution's civic role more visible in the Washington metropolitan area.

The briefing dealt with the development problems and prospects of the three countries and the Bank's work in them.