

Rapid Inflation and International Payments

No article in Finance and Development has created more interest than Graeme Dorrance's "Inflation and Growth," which appeared in Vol. I, No. 1, and has since been widely reprinted. In that article the author dealt with the generally depressing effect of rapid inflation on a country's economic development. In this article he develops a theme that was only briefly introduced in his earlier article—the effect of a rapid inflation on a country's international position.

Graeme S. Dorrance

WHILE THE FUND is vitally interested in encouraging the economic development of all its members, its interests are naturally concentrated in its special sphere of responsibility, as outlined in the first of its Articles of Agreement:

To facilitate the expansion and balanced growth of international trade, and to contribute thereby to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members as primary objectives of economic policy.

Hence, the Fund is directly concerned with everything that influences the expansion and balanced growth of international trade, in the broadest sense, and particularly in the relation between the growth of a country's trade and its economic progress. Among the negative influences, rapid inflation is disastrously prominent.

In "Inflation and Growth," it was stated that "serious inflation does not limit its ravages to

those on the home economy. It also leads to a worsening of the country's international position." This can be seen directly in a country's international trading position, its international capital transactions, and its exchange rate. More broadly, the worsening of a country's position in these specific fields can seriously damage its general development.

Rapid Inflation and Trade

The effect of inflation on international trade may be described quite simply. When prices and costs in any country rise rapidly, goods produced in the country soon become more expensive than similar goods produced abroad. Unless the exchange rate changes (the exchange rate problem will be discussed later) this encourages imports and discourages exports.

As prices in a country rise more rapidly than in the rest of the world, not only does the

rest of the world buy less of its exports, but people in that country tend to turn from buying these increasingly expensive products of their own industries to the relatively cheaper foreign goods. Far from fostering purchases from home producers, which would encourage home output and the substitution of home produced goods for imports, inflation has the opposite effects: imports are encouraged while the growth of domestic industry is discouraged. The effects are not only quantitative but qualitative. Scarce foreign exchange tends to be dissipated on excessively large imports of consumption goods which might well be foregone in order to encourage the development of new industries. On the other hand, the growth of vibrant export industries tends to be stunted, and production of goods which would be acceptable as import substitutes is discouraged.

While the expansion of imports and contraction of exports have a generally depressing effect on a country's growth, the impact of inflationary pressures on specific imports and exports may prove to be of more direct harm. The effects of strong inflation on a country's traditional exports may in many instances be delayed. Producers in well-established activities yielding primary goods greatly in excess of a country's possible needs (e.g., coffee in Brazil, copper in Chile, rubber in Indonesia, and fish in Iceland) cannot turn to other production quickly, nor can they take advantage of inflationary demand at home. Consequently, the harmful effects of inflationary pressures on the output of traditional exports may be exerted over the long term rather than immediately. This long-term effect of inflation should not be underestimated. While their more stable competitors have advanced, Argentina, Bolivia, Brazil, Chile, and Haiti, with long histories of

inflation, have not been able to maintain the volume of their exports at even pre-1913 levels.¹

Yet striking as such long-term effects may be, the immediate effects of inflation on exports may be even more harmful in a country that seeks to encourage initiative, experimentation, and enthusiasm for new methods of production. Development of new products is often made easier if there is a prospect that some export sales may be achieved eventually, bringing with them the benefits of fairly large-scale production. If inflation makes the international competitive position of these producers more difficult, they may be discouraged from undertaking new activities, and diversification of the economy will be hampered. Thus, a comparison of two groups of countries, one with relative price stability from 1953 to 1959, and the other with rapid inflation in the same period, showed a marked expansion of traditional exports in the former and relative stagnation in the latter. Perhaps more significantly as an indicator of progress, new or relatively minor exports from the stable countries rose in this period by almost one half, while for the inflating countries these exports remained unchanged on balance.²

The effect of strong inflation on the structure of imports can also retard progress. Declining exports and rising import demands will by themselves lead to balance of payments difficulties. As discussed later, international capital

¹ The evidence on this point is contained in J. Herbert Furth, "On United Nations Economics," *World Politics*, January 1960, pp. 264-71.

² The data for this comparison are contained in G. Lovasy, "Inflation and Exports in Primary Producing Countries," *IMF Staff Papers*, Vol. IX, March 1962, pp. 37-69.

transactions are likely to aggravate these difficulties. In order to cope with these problems, the authorities in an inflating country are frequently forced to restrict imports. These restrictions form an element in general economic policies which are usually directed, in part, toward protecting the living standards of those most hurt by inflation. Social policies that are in themselves desirable—and that may even be indispensable—tend to encourage the import of goods considered to be essential or of high social value. It is upon such goods that the least restriction is imposed and the lowest rates of tax are levied. Because countries are best able to produce certain specific goods that are nutritious or otherwise desirable, these goods come to be regarded as necessities of life in their countries of production (e.g., beans or maize in much of Latin America, or rice in Asia), while they are considered luxuries or semiluxuries in other countries where they are expensive or impossible to produce. The most severe restrictions or highest taxes are placed on imports of nonessentials or products which have not been important imports in the past. This policy, which may be required for social tranquillity, results in exposing the domestic producers of essentials to the full rigor of foreign competition, while protecting the domestic producers of nonessentials and making the import of new products difficult. This can well result in discouragement of domestic production of goods that are either desirable or which the country is best able to produce, and an encouragement of production of goods that are not particularly desirable or which the country is not well-suited to produce. Many a multiple exchange rate system (a device which includes exchange taxes and subsidies on imports or exports and is frequently

adopted to minimize the effect of inflation on the balance of payments) might well be interpreted as an ingenious plan to discourage dairy farming and the improvement of children's welfare, while encouraging the production of alcoholic beverages.

Discouraging the import of new products, particularly if administrative controls are the means of discouragement, may well impede development. The import of materials or new types of equipment may be essential for the growth of new industries and the diversification of the economy. On occasion, strict import quotas based on historic trade patterns have prevented the import of necessary spare parts and forced the closing, at least temporarily, of vital new industries.

Rapid Inflation and Capital Movements

Strong inflation does not limit its havoc to transactions in goods and services: it also distorts the international movements of capital. First it discourages the flow of capital, and hence of resources, to developing countries. Perhaps even more tragically, it fosters flight of capital from the latter countries.

One of the differences between stable and inflationary economies is that investors can make reasonable estimates of future money costs and money receipts in the stable countries, while this is impossible once inflation is well under way. Further, this uncertainty bears most heavily on foreign investors. All the chances in the lottery are stacked against them. International investment is in any event likely to be more hazardous than domestic investment. With inflation, the hazards involved in movements of international capital are increased by the unpredictability of exchange rates. Not only are the net returns on invest-



Harvest scene in Ecuadorian lowlands.

Bananas are Ecuador's chief source of foreign exchange.

ment in the developing country's currency unknown, but the returns in terms of the investor's currency are even more speculative. So it is not surprising that foreign investors tend to shy away from countries with extreme inflation, and that such countries tend to cut themselves off from access to resources from abroad.

While a strong inflation by itself is thus likely to frighten capital away from a developing country, the policies frequently adopted by governments to ease the burdens of rising prices may have an effect that is even greater in discouraging national progress. As suggested above, strong inflation usually leads to the adoption of payments restrictions. Among the first candidates for restriction are payments on foreign capital. Even if assurances are given that foreign investors will be favorably treated, experience has taught these investors to be wary of restrictive systems, which usually contain considerable scope for administrative arbitrariness. Thus the almost inevitable exchange restrictions brought by strong inflation do more than discourage capital from fostering development. They so frighten capital away, and even encourage repatriation, that measures designed to conserve foreign exchange may in fact dry up a country's resources and actually dissipate its reserves.

It is hard to rank the effects of inflation on a country's balance of payments on any scale of severity. However, the effect of a strong inflation on capital flight must stand high on any such list. This capital flight has not only economic but also severe social effects. The inevitability of exchange rate depreciation in the uncertain world of a rapidly inflating country means that there is one sure prospect: if people

can get their money out of the country, they will be able to benefit in the future. Thus, to quote an extreme example, if a Brazilian receiving at all times only the current minimum wage had started at the beginning of 1959 to save 1 per cent of his wages, and if he had been able to lend these savings at an interest rate of 1 per cent a month, he would have accumulated approximately 15,000 cruzeiros by the end of 1964; if he had instead used these savings to buy a dollar bill each time he had accumulated enough cruzeiros to do so, he would have had a bundle of dollar bills worth approximately 45,000 cruzeiros at the end of 1964. It is little wonder that the incentive to capital flight becomes all-pervasive in an unstable economy, and that savings which might be used to develop the country fly abroad.

It may be maintained that the harmful effects of inflation on capital inflows may be mitigated, and the flight of capital prevented, by exchange controls. Such arguments ignore the experience of virtually all exchange controllers that such controls cannot be effective when pressures on them are great, and often they may even have a tendency to induce capital flight.

Rapid Inflation and the Exchange Rate

Exchange rate movements are often front page news in a country where inflation is rampant. It may be taken that once inflation is under way the exchange rate must break. Rising prices leading to an increased demand for imports and an unwillingness to export cannot persist without complete collapse of the economy, unless the exchange rate moves to offset the rise in domestic prices. In fact, the rush to import, the collapse of exports, the slowdown in capital inflows, and the flight from

the home currency all produce such pressures on the exchange rate that eventually it is likely to deteriorate even faster than prices are rising. This rapid worsening of the rate makes import prices rise more rapidly still and magnifies, in terms of national currency, the profits to be made from capital flight, thereby aggravating the pressure on the exchange.

If exchange depreciation were allowed to progress fast enough it might serve to reduce imports adequately, encourage export production, and eventually encourage the belief that future capital flight would not be profitable. On occasion, a freely moving exchange rate may indeed redress the harmful effects of inflation on the balance of payments. However, if this happens, the prices of imports will rise more rapidly than other prices, a situation which could be unfavorable to those imports that are frequently essential to maintain the standard of living or the continued operation of domestic industry. Further, the foreign exchange value of a country's currency is often taken as a symbol of its real worth, despite the overvaluation that has developed owing to rapid inflation. Governments therefore try to hold the rate in an attempt to soften the sufferings

caused by inflation and to help retain that confidence in the currency which is essential if monetary stability is sought, even as a distant ambition. Recent history is replete with examples of such attempts to stem the tide of exchange depreciation. Before these attempts fail, as in a rapid inflation they are bound to, the worst effects of the eventual depreciation are observed. With strong beliefs developing that the exchange rate cannot be held indefinitely, importers rush to buy goods before prices rise, and exporters hold up their sales in the hope of better days; with depreciation confidently expected, capital is sent out of the country in the belief that it can be brought back soon at a large profit. Attempts to peg the rate lead to the worst of both worlds. The harmful effects of a depreciation are not even delayed, while the handicaps of a fixed rate out of line with reality are experienced. In brief, a strong inflation necessarily involves a depreciation of the exchange rate, with the adverse effects of such a movement on the economy. Yet, even though a worsening of the rate may impose burdens on a country, to attempt to hold the rate when inflation is rampant may have even more serious consequences.

What Kind of Agricultural Research?

Looking back on his own experience in New Zealand, the author of this article makes a plea for agricultural research that is directed toward the real needs of developing countries.

C. P. McMeekan

A LIFE that has combined the romantic role of research in a developing country with the hard facts of investment banking in a wide range of emerging nations has given me one outstanding impression: while organized research in the field of agriculture in underdeveloped countries is largely noticeable by its absence, the research that is done rarely involves an effective partnership between economics and technology.

Most agricultural research in needy countries is based on the thinking and approach of the highly developed Western world; seldom is it directed toward meeting the countries' own development needs. This has serious consequences. The inadequacy of local data on methods, possibilities, and potentials makes it difficult to plan investment in agricultural development in these countries; it can even relegate planning to the realm of guesswork, with all the dangers implicit in such a state of affairs. It also hampers and frustrates outside participation in agricultural preinvestment studies and investment programs. The situation is particularly galling because economically oriented research programs—those that take account of a country's economic realities—could so easily have provided the necessary data.

The lack of such studies not only impedes the World Bank's ability to play an effective role in the agricultural development of its member countries; it also obstructs or may misdirect these countries' own efforts to improve the pattern of agriculture. Fortunately, the task of realigning agricultural research policies and programs to give them a more practical economically oriented cast may be less difficult in countries where the research organization is still embryonic, or at an early stage of evolution, than in those where the vested interests of long-established groups tend to work strongly against changes in outlook or approach.

The governments of emerging countries should not be blamed for the present situation. Their leaders have long been aware that the economy of the highly developed nations is based largely upon superior technology and that the know-how has its roots in research. Research is a good thing! It is the key to progress! Research must be fostered! Advocates of these views look to the developed lands for guidance in this new adventure. They develop programs similar to those they see. They import advisors. They send their young men abroad for training. They bring them back and support them in whatever they have been trained to do.

Research for the Future

But what these new nations see is the agricultural research of today and not that of yesterday. They see thousands of scientists in the United States engaged in highly specialized studies geared to a future already within the grasp of such a sophisticated agricultural nation. They see men exploring the mysteries of metabolism of plants and animals with elaborate and expensive radio isotope techniques; they find others probing cellular structure with powerful electron microscopes to provide clues to the mechanism of inheritance; they observe large groups attempting to elucidate the mysteries by which hormones control reproduction, milk secretion, growth, and disease. And when they turn toward Europe they see the same kind of activity.

What they do not see and are not told is that this kind of research—research for the distant future—has been made possible only by successful accomplishment in a much less exotic area of activity—the solution of immediate problems hindering development. The wealthy countries can afford the luxury of the pursuit of knowledge for the sake of knowledge because they have previously subjected themselves to the discipline of securing reasonably effective control over their environment by simple methods based on a clear concept of needs.

What the needy nations do not appreciate when they import advisors is that these are rarely close enough to the pioneering stage of their countries of origin to be able to adapt themselves to new environments with physical, social, economic and political problems so radically different from those they know. The agricultural scientist, the general practitioner

who made the useful advances in the past, hardly exists any longer in North America or Europe. He is no longer being trained. Few of the specialists who have replaced him really know “farming” for the complex that it is. Their work of today is no longer dominated by immediate usefulness. It lies in fields that are often only remotely connected with agricultural production as it now exists. Inevitably, these men are handicapped in a raw environment. Few understand the power of radically different economic forces that make it quite unrealistic to attempt to transfer methods and approaches of their own countries to the less developed lands.

Then what about the young men who are sent to the developed countries for training? Surely they have a realistic understanding of problems in their homelands? Unfortunately, this is often not so; or at least not so by the time they go home. Generally, they return home with outlooks and techniques much too advanced for their countries' needs. They are specialists because their tutors are specialists. They absorb a philosophy of modern science that attaches more merit to publication in a scientific journal to enhance their specialist reputation than to the dignity of immediately useful but unpublishable work. It is difficult to induce these young specialists to take on such mundane jobs as the testing of different cultivation practices, the better feeding of a pig, or the rather dirty routine of diagnosing pregnancy in a cow to provide a basis to better cow management systems.

Practical Problems

The prime responsibility of the agricultural scientist is to serve the industry of which he is a part. In any developing country, this defines

very clearly the work to be done. In practice it means applied rather than basic research, the latter being left to the developed countries that can afford it. It means that the agricultural technologist takes established principles and promising theories and develops from them techniques that can be fitted into a pattern and program of production. Acceptance of this view does not imply a lack of interest or non-participation in basic research that turns up new knowledge, evolves new theories, or modifies old ones. Soundly designed and executed, applied research often does these things as by-products of the main objective. This is fortunate because it recruits and retains within the field of applied agriculture those bright creative minds that are essential to it. However, in contrast to the attitude of the purist who avoids like a plague any taint of economic justification for his existence, the applied agricultural research worker is proudly dedicated to the underlying motive of usefulness.

These views have their impacts upon the work of the agricultural economist. His research priorities, too, must lie in the direction of assisting the technologist. He must provide appropriate analyses of economic forces capable of modification through technical attack. In this, he must measure the impact of definable technological weaknesses upon efficiency. These things must be done with a keen sense of priorities; perhaps his most vital function is to pinpoint priority needs. The agricultural economist, like the agricultural scientist, should above all seek to be useful. In this he must recognize his dependence on technology if his attitude is to be creative and forward looking rather than merely descriptive or historical. Without appreciation of the need for and potentials of conscious partnership along com-

mon lines, each group runs the risk of working in a vacuum. It is a tragedy that this risk is a reality in so many countries.

THE EXAMPLE OF NEW ZEALAND

New Zealand provides an example of the economic and social dividends that can come from conscious pursuit of realistic policies for agricultural research. New Zealand is still an under-developed country in the sense that its natural resources of land and climate are still far from being fully exploited even on a basis of existing know-how. Thirty years ago, when organized agricultural research was just beginning, it was much less developed; the problems that then faced New Zealand in the development of a modern agriculture were little different in principle and nature from those facing most of the newly emerging nations today. There was no organized agricultural research. The use of land was based upon rule of thumb experience, upon tradition, upon trial and error. There were few facts upon which to base planned development. There was, however, a widespread consciousness of potentials, and in particular of the possibilities of translating the principles underlying farming advances in Europe and North America to the New Zealand scene. The major problem was how.

Applied Economics

From the first, organized research in the field of animal production—the main business of New Zealand—was based on a marriage between economics and technology. This union was strongly influenced by a study of the dairy industry made in 1926. This provided the first critical appraisal of this industry in terms of inputs and outputs and of the relative impor-



New Zealand grazing country.

Scientific development of grasslands raised milk production as high as 1,200 gallons per acre with grass as the only cattle feed.

tance of measurable factors affecting efficiency. The study highlighted five main points: the overwhelming importance of pastures rather than forage crops and concentrates; the key importance of output per labor unit; the major contribution of animals per unit area, rather than output per animal, to production per acre; and output per acre as the most significant single criterion of economic efficiency.

These five points set the pattern of the research program, which other individuals and institutions carried forward. The first sent New Zealand along the road of pasture exploitation for low-cost milk production and thus to becoming the only significant dairying country where grass is the sole dairy feed. A grassland research station concentrated on improvement of suitable species of grasses and clovers, on high quality seed production based on certification of quality, and on studies designed to achieve maximum production. Soil and fertilizer units devised fertilizer practices to the same end. Management units concentrated on better utilization so that a maximum of the feed produced was turned into milk.

The second factor, output per labor unit, focused the attention of special teams on milking and management procedures to achieve maximum output per man. Better milking machines, automatic cleaning, nonstripping, machine stripping, and the 'herring bone dairy' transformed an arduous chore to a factory operation and stepped up the number of cows milked per man to 90 head.

The concept of high stocking rate as the key to high per acre output and maximum economic production led to revolutionary attitudes and practices in grassland management which are slowly spreading to the rest of the grassland world. Teamwork by pasture, animal hus-

bandry, and veterinary practitioners at the now well-known Ruakura Animal Research Station lifted milk yield targets from 500 gallons to 1,200 gallons of milk per acre from grass alone.

Applied Science

These approaches enabled the pattern of dairy research to be extended. Analysis of the causes of dairy herd wastage justified and stimulated technical efforts to eliminate those causing maximum loss. New Zealand became the first country to make national use of vaccines to control contagious abortion and black-leg, and of penicillin to control mastitis. Extension of this economic approach to sheep and beef cattle farming provided guidelines which shaped the pattern of research into wool, fat lamb, mutton, and beef production with similar spectacular results. In the last 15 years, during which the sheep population of her two foremost competitors in South America remained static, that of New Zealand doubled to over 50 million head. Today New Zealand is the world's largest exporter of dairy produce and mutton, and the second largest supplier of wool to world markets. Its people enjoy a standard of living comparable to that of the most advanced countries.

All these advances were based on a conscious effort to take the existing principles of northern hemisphere science and to work out practical ways of applying them to the realities of the New Zealand scene. In practice, many techniques of key importance in America and Europe had to be abandoned. All technical research was economically oriented. The spectacular transformation of millions of acres of New Zealand land by application of the trace elements, cobalt, copper, molybdenum, or selenium, for example, did not arise from the

inquisitiveness of back room scientists about the role of individual chemicals upon plant and animal health. It sprang from the determined and sustained effort of scientists dedicated to conversion of useless lands into usable ones.

This whole attitude and approach virtually forced the adoption of a special type of research organization—a project basis to research in which the requisite specialists, including economists, were drawn together in teams with the common objective of attacking the problem decided upon.

This is in marked contrast to the more usual type of organization where scientists are grouped in relatively independent specialist departments and where in consequence coordination, most particularly economic coordination, is most difficult to obtain. The project method tends to keep the feet of the scientist firmly on the ground. Specialist departmentalism easily leads to his occupying a zone so high in the air that he is often unconscious that the farmer exists beneath as an economic being.

The reasons New Zealanders went about the business of technical research in the way they did is because their environment forced this approach upon them. They were conscious of the tremendous and pressing problems of a raw and undeveloped land. They belonged to a young nation in a hurry to grow up. They were interested in a high standard of living for their people and themselves. Their immediate needs were pressing and clearcut. In this general climate, they had no alternative.

One is tempted to draw an analogy with Denmark, where the economic crisis at the turn of the century, through the opening up of lands of the new world, forced a new way of life on the people and was responsible for the

economic bias of agricultural research for which Denmark has been renowned ever since. One is equally tempted to look at the converse in the United Kingdom, which so long relied upon the farm lands of her dominions and colonies to the detriment of her own agriculture—a situation perhaps largely responsible for the pre-occupation of British agricultural research workers with the pure rather than the applied and for the lack of conscious planned attack on production problems of economic importance. When I reviewed the organization and programs of the major production research stations of Britain in 1958, on behalf of the Agricultural Research Council, I found that none employed an agricultural economist, and that few programs and projects were based or justified on economic grounds. I was staggered to find scientists so rarely exposed to the thinking of farmers and with so little knowledge of, or interest in, the practical problems of the industry they were selected and paid to serve. I am not unconscious or unappreciative of the substantial contributions to knowledge that have come from the British system. It is not without significance, however, that countries other than Britain herself—particularly New Zealand—have capitalized on this knowledge more rapidly and efficiently. This capitalization is what the less developed countries should and can do.

ROLE OF INTERNATIONAL ORGANIZATIONS

International agencies have not been unaware of the agricultural needs of the underdeveloped world. Several organizations have set out to meet these needs and have expended a tremendous effort in recent years.

The results have fallen far short of expectations, although the general objectives of each

project are usually soundly based. They have aimed at making some positive contribution to the economic and technical solution of the problems of the country concerned. The weakness has been in execution. Here the problem is one of sub-agency remote control and of staffing. For reasons already outlined, recruited staff are not always suitable. Too often they regard their period of temporary though highly paid exile as a means of following up some basic scientific problem which would add to their personal scientific reputation. Remote from contact and knowledge of actual local conditions and needs, too often the executing sub-agency has condoned and even encouraged this.

For example, a project that should have aimed, in practice, at increasing the efficiency of animal production in an animal producing country was allowed to become concentrated upon a scientifically interesting disease, the economic importance of which is insignificant in relation to economic problems of calving percentage, slow growth rate, and low output per hectare per man and per unit of capital investment. Similarly, with a project on dairying in a country whose people desperately need milk, the efforts of the expatriate group as a whole have been channeled toward solution of fundamental problems of cattle physiology in hot humid environments and not upon the job of converting millions of acres of tropic pastures to milk. There seems little justification for the provision of radio isotope equipment to a country where the economic need is for elementary studies on how to use better the feed supplies available, rather than exploration of the fate of minerals in the animal body, especially since the equipment concerned has not been used since it was installed by expen-

sive and highly trained technicians several years ago.

This trap of transfer of technologies is difficult to avoid—I have been caught in it myself. I have fostered trainees to whom the practical techniques of artificial insemination were imparted, and who have not applied this knowledge to improve the welfare of their farming communities but have engaged in academic studies concerning the travel of spermatozoa up the genital tracts of mice and rabbits. The fact that such studies had already been investigated by much better qualified people escaped the notice of the individuals as well as the agency concerned. These are not isolated examples. In consulting work round the world, I have found them to be the rule rather than the exception.

SOME POSITIVE APPROACHES

What can be done about all this? There are some positive approaches.

There is then the need to ensure that research in underdeveloped areas is economically oriented. Apart from direct support of survey studies designed to point the way to useful research, the World Bank could get together with existing agencies with the objective of making their contributions more positive. It could write into many of its loan operations support for research and advisory services designed to make projects more rewarding to all concerned. This would not be a new venture.

Basic to the whole problem is the matter of training. The time has arrived to establish, with international aid, a series of regional training establishments in the fields of crop production, grassland improvement, and animal production, of such status that they could attract

the best qualified young men of the emerging countries, who would be sent to them automatically for training. The British help to Trinidad and the Bank help to Los Baños in the Philippines are examples of positive action of this type. The established research organizations of the Western world, which lie in temperate and not tropical zones, cannot meet this need. The Bank could help more to set up such centers, just as it has supported other kinds of educational activity in underdeveloped areas.

Western science has a great deal to contribute to the less developed nations. This contribution, however, must be geared to the needs of such nations and not to the standard attitudes of Western countries. The training of peoples of less developed nations should not be accepted unless a special responsibility is recognized. Our top universities are not incapable of adjust-

ing themselves to the needs. They must be impressed, however, with the necessity of adjustment. They should be helped with appropriate financial support.

If I were asked to draft a manifesto for the revolution that is needed in agricultural research in the developing countries, I should stress a few vital points. The first, of course, is the ideal aim of "usefulness." The second would be cooperation between agricultural researchers and economists—and also administrators and politicians, who, like the first two groups, would have to nurture the ideal of usefulness in all their planning and thinking. Finally, the efforts of these groups in the developing countries would have to be backed up by fresh thought, new attitudes, and new kinds of help, to which I would hope that the World Bank group might well make an important contribution.

Charting the Channels for Development Capital

The need of the developing countries for development aid is urgent and imperative; yet their ability to identify and present projects worth aiding is often limited. This grim paradox is one of the most serious difficulties in the way of the provision of aid. But it can be overcome, and this article discusses some of the efforts now being made to do so.

David L. Gordon

THAT MOST COUNTRIES in Asia, Africa, and Latin America suffer from an acute shortage of capital is one of the most familiar facts in modern world affairs. They lack an adequate infrastructure of power and sanitation facilities, of roads, ports, and railways; they are short of schools, research institutions, housing, and hospitals; their agriculture is often primitive, and their industries sparse and ill equipped. Their development needs and plans typically call for a much higher investment rate than their meager savings can sustain, and for more foreign exchange than can be supplied by their present export earnings; and the provision of international loans and aid never seems sufficient to bridge the gap.

The Paradox

Yet at the same time there are frequent complaints from aid-giving countries and agencies that they are not presented with a sufficient number of well-prepared high priority projects to make use of all the funds that could be

made available. As Mr. George D. Woods, President of the World Bank, told the United Nations Conference on Trade and Development in March 1964

The flow of sound, economically viable projects coming forward from many developing countries today is not enough to enable these countries to realize the growth rate which it is within their capacity to attain. It is not that good investment opportunities are lacking; what is lacking is initiative and proper organization to enable those opportunities to be realized.

This paradox—the urgent need for investment as against the lack of suitable objects for investment—is yet another example of the stubborn complexity of the problem of development. In an economy that is already technically advanced and highly productive, new opportunities for investment constantly, almost inevitably, come to light and are appraised and pursued. On the other hand, in countries where development is rudimentary or spotty, the possibilities and conditions for using capital productively are usually much



Work on the Volta Dam, Ghana.

Few developing countries can prepare such projects
for financing without expert help.

less clear, and the doubts and difficulties are formidable. Development planning—whose prodigious growth was described by Albert Waterston in the previous issue of *Finance and Development* (Vol. II, No. 1)—can help progressively to define the sectors and magnitudes in which capital should be made or encouraged to flow, and to pinpoint investment projects. But too many national plans, at least in the initial stages of planning, resemble those early maps of little known continents—fairly clear in general outline, a few salient features more or less precisely marked, but the rest mostly blank or spotted at random with depictions of exotic beasts.

This lack of accurate information is undoubtedly a deterrent to investment. Nevertheless the urge to build, to modernize, to develop is irresistible in most countries; their governments must take action to provide the facilities, and to encourage establishment of the industries, that will begin to satisfy this urge; and so investment goes forward regardless. Even if no projects exist that have been sufficiently studied and justified to meet the conditions of the World Bank or the major governmental lenders, there will often be equipment suppliers or contractors ready to tailor a scheme around what they have to sell, and sometimes to arrange financing. The resulting investment may be ill-adapted to the country's real needs and may cost much more than it should—it may even prove to be a burden rather than an asset for the country's development—but at least it is *something* tangible, and accordingly gives some satisfaction, unjustified as it may be.

To avoid such misapplication of scarce capital resources, and consequent difficulties

and disillusionment, the people who make investment decisions, both within the developing countries and in the various international and bilateral aid agencies, need to have much better information and more refined criteria on which to base their judgments. Practitioners in the field of economic development, at both ends of the flow of capital, have devoted increasing attention to this problem.

The Special Fund

This concern was given institutional form with the establishment, in January 1959, of the United Nations Special Fund, which is not only a new institution but a new *kind* of institution. Unlike the World Bank or the major bilateral aid agencies, it is not intended to finance capital goods or directly productive projects, nor to sponsor a diffusion of individual experts on the usual technical assistance pattern. Rather its mission is to bridge the gap between these earlier approaches—to bring technical experience and resources to bear directly

on the removal of bottlenecks and other obstacles that have been hampering the progress of a country or region. Among the most important of these is the lack of comprehensive surveys in depth of natural resources, manpower, skills and industrial potentials which would create a solid basis for future advancement.¹

Its essential purpose, in other words, is to foster the preinvestment studies necessary to decide sensibly whether specific development projects ought to be carried out, and how, and to facilitate the training of the people needed to carry them out successfully.

¹ *The United Nations Special Fund: An Explanatory Paper by the Managing Director* (New York, 1959).

In undertaking to cultivate this area of activity the Special Fund did not, of course, enter a virgin field. Scores of surveys of development possibilities in different countries, and hundreds of feasibility studies of individual projects, had previously been made under varied auspices. A number of governments in developing countries had employed private consulting firms to advise them; some had been glad to accept offers of technical services from contractors or suppliers interested in a project; many more had obtained experts under UN or bilateral technical assistance programs. The World Bank, when it made a project loan, would sometimes reimburse from the loan funds engineering costs incurred in preparation of the project, or include an allowance for the expense of planning a subsequent project to be undertaken by the same borrower; and some bilateral aid agencies extended similar credits for pre-investment study of major projects.

These diverse efforts were of considerable value. They brought into being a large number of productive projects, which made up the bulk of externally financed development investment during the 1950's. But they were inadequate in a number of respects. Many developing countries were inexperienced in the selection and supervision of independent consultants—who, moreover, were usually quite expensive. On the other hand, the studies and recommendations of contractors or suppliers of equipment were frequently suspected of being biased by commercial self-interest, a suspicion that sometimes extended also to bilateral aid programs.

Moreover, decisions about the studies to be undertaken were often arbitrary or ill-informed. Almost inevitably, in the absence of adequate sector studies that would analyze over-all needs,

priorities, and comparative returns, individual projects were looked at in isolation; and the choice tended to fall on big, dramatic projects, with a high foreign exchange and aid component, in preference to those of more modest size but perhaps of superior yield and long-term value.

The Special Fund, to be sure, did not eliminate these problems—nor was it expected to do so. But it did begin to offer a more satisfactory alternative and to define standards for preinvestment studies and the principles that should underlie preinvestment decisions in more rational fashion. Under the persuasive leadership of Mr. Paul Hoffman, its first Managing Director, it has gained increasing prestige and support in the developing and the more developed countries alike.

Contributions to the Special Fund—coming mainly from the industrialized countries of North America, Western Europe, and Japan, but also including substantial amounts from the developing countries and smaller sums from the Soviet bloc—rose from \$25.8 million in the year 1959 to \$85.5 million in 1964. The cumulative total cost of approved projects, from 1959 to date, is estimated at about \$1.1 billion, of which roughly 40 per cent is being provided by the Special Fund and 60 per cent by recipient countries.

Special Fund Projects

Special Fund projects fall into four main categories. The first of these comprises large-scale surveys of resources and of investment needs and priorities and feasibility studies for major projects. The program to date includes 197 such surveys, to the cost of which the Special Fund is contributing \$160 million. A

study of power and irrigation in Guatemala, a mineral survey in Pakistan, a telecommunications development study in Central America, a survey of the Lower Volta River flood plain in Ghana, and studies of Bangkok port siltation and the feasibility of Sriracha Port in Thailand are typical projects drawn from this first category.

The establishment of training institutions for engineers, managers, technicians, and other key personnel for development forms a second category of Special Fund projects. Training programs so far approved involve 182 institutions and Special Fund contributions of \$178 million. They include a national vocational training service for industry in Mexico, a school of engineering at the National University in Colombia, a rural vocational program in Senegal, a College of African Wildlife Management in Tanzania, and a Fisheries Training Institute in India.

The third category comprises organization of applied research programs to investigate the industrial potential of developing countries, to adapt modern technology to their needs, and to increase productivity in industry and agriculture. The Special Fund has agreed to help finance 101 research institutions with grants totaling \$91 million. Included in this category are a Petroleum Institute in Argentina, a Marine Resources Research Institute in Peru, an Industrial Research Institute in the Sudan, a Savanna Forestry Research Station in Nigeria, an Animal Husbandry Research Institute in Iran, and a National Productivity Center in Malaysia.

The fourth and last main class of Special Fund projects is made up of economic development planning, including help in creating plan-

ning mechanisms and training planners. Nine such projects have been approved, with Special Fund contributions of \$17 million. Examples are regional institutes for economic and social planning located in Santiago de Chile, Bangkok, Dakar, and Kuwait; assistance to the Liberian national planning agency; and an Institute of Urban and Regional Planning in Argentina.

The Special Fund's activities differ from the other UN technical assistance programs in being pointed somewhat more explicitly toward early, tangible investment. Typically also, its projects involve fairly large teams of experts working together over a considerable period, rather than a multitude of individual assignments. To avoid duplication with other programs, and to decentralize its operations, the Special Fund farms out the execution of its projects to other agencies of the UN family, making use of the experience and skilled personnel they have built up in their several specialties. Its overseas representatives, responsible for reviewing requests and generally overseeing Special Fund operations in various countries, are also the Resident Representatives of the UN Technical Assistance Board (UNTAB). And under a plan recently approved by the UN Economic and Social Council this coordination will be further strengthened by a merger of the central administrative machinery of the Special Fund and UNTAB.

The World Bank

For the World Bank and its affiliates—the International Development Association (IDA) and the International Finance Corporation (IFC)—a steady supply of well-prepared and justified projects for financing is an obvious and vital concern.

The Bank is regarded by economic development practitioners as a strongly “project-oriented” institution. Its financing is almost invariably linked to expenditures for a specific investment purpose—a stretch of highway, an industrial or power installation, an agricultural improvement scheme—rather than being available to meet the general requirements of the borrowing country for capital or for imports. This bias was established from the Bank’s inception; the Articles of Agreement specify that its loans “shall, except in special circumstances, be for the purpose of specific projects of reconstruction and development.” And 16 years of development financing have confirmed the wisdom of this approach.

It has sometimes been criticized as too inflexible and atomistic, not taking sufficient account of the national economic context which vitally affects the feasibility and merits of individual investments. But in fact the Bank’s first concern is with the over-all development potential and program of a prospective borrowing country. (See “Project Appraisal” by Hugh B. Ripman, in *Finance and Development*, Vol. I, No. 3.) Its periodic economic missions seek to estimate the likely growth of the national output, of savings, of export trade and import requirements; to assess the amount and adequacy of aggregate resources for development; and to analyze the interrelation of different economic sectors and the relative emphasis they should receive. Thereafter they narrow their focus to examine which sectors and projects deserve priority in the national economic framework—which usually means the investments that offer the most favorable economic yield, taking into account both the rate and timing of the return. This is the context in

which the capital provided by the Bank is linked to, or embodied in, specific projects.

Some of the projects that come forward for consideration are already quite mature, but many (nowadays probably most of them) have been nurtured by the Bank through various preparatory stages. A scheme may, for example, have been identified in embryo, or even conceived, by a general survey mission organized by the Bank at a member government’s request; the rail links that were progressively extended to become the Atlantic Railway in Colombia are an example. Another scheme may have been stimulated by a resident Bank adviser assigned to the national Planning Department; or its place in the country’s scale of development priorities may have been established through analysis by one of the aforementioned economic missions, working in consultation with the country’s own planning authorities. In many countries the Bank (or, for industrial financing, the IFC) will have helped to set up the national agency that is promoting and has responsibility for carrying out the project; examples are the highly successful industrial finance companies in India and Pakistan (ICICI and PICIC) and several smaller counterparts in other countries, the Imperial Highway Authority and the Telecommunications Board in Ethiopia, a number of power, irrigation, and port authorities, and so on. A Bank technician may have helped the government to draft terms of reference for consultants on a feasibility study, or may have suggested changes in some feature of the project to reduce the required investment or make it more efficient.

Helping member countries to define, select, and improve their investment projects has always been an important part of the Bank’s



New diesel locomotive financed by Bank
for use on Colombia's Atlantic Railway.

activity. In this area the line between its operational concerns, on the one hand, and technical assistance and advice, on the other hand, has progressively become blurred.

New Developments in Bank Preinvestment Studies

Until some four years ago the Bank's assistance to preinvestment studies was largely incidental to its current lending operations. Since 1961, however, it has been helping to organize and finance a series of urgent "project and sector studies," where such studies seem likely to clear a direct channel for Bank or IDA investment. Its commitments for this purpose have expanded rapidly over the subsequent years; the cumulative total exceeded nine million dollars by April 15, 1965. They include, for example, such undertakings as comprehensive transport surveys in Nepal and Zambia; studies of a port project in Somalia, and of the Bolivian railways; surveys of the East Pakistan inland waterways; and assistance for the planning of school buildings in Tunisia, of power development in Ecuador, and of roads in Nigeria and Peru.

This new departure might be interpreted as the sincerest flattery of the Special Fund, for the Bank-financed studies are similar to the first category (surveys and feasibility studies) of the Special Fund program. There is, however, no duplication. The President of the Bank has been, from the start, a member of the Consultative Board which considers all Special Fund projects before they are included in its final program. The Bank is serving as Executing Agency for 21 Special Fund projects in transport, communications, power, and mineral resources development; it is prepared to turn over to the Special Fund any project the latter

wishes to undertake, and, if desired, to act as Executing Agency for that project; and it finances similar projects itself only when the Special Fund is unable, for one reason or another, to handle them.

In fact, direct assistance to preinvestment studies stemmed logically from the changing character of the Bank's activities. In the first place, after a dozen years of investment on an unprecedented scale—from the Bank and even more from other sources—in Latin America, Asia, and Africa, the reserve of clearly justified projects had been considerably depleted in some countries. To decide on the merits of further investment often required more complex analysis than in the earlier phase, partly because the dynamics of development had introduced some new and variable factors into the calculation. Projects of agricultural and educational development, to which the Bank has given increasing attention, often present especially difficult problems.

Furthermore a large number of newly independent nations were joining the Bank—its membership increased from 68 to 102 in the five years, 1960-64. Many of these lacked practical programs of development or felt it necessary to review and reformulate plans associated with a former colonial regime, and the responsible governmental and financial agencies were generally inexperienced and seriously overburdened. If the Bank was to be able to do any substantial financing in these countries, their governments would have to be helped to prepare sound programs and projects. And, finally, the creation of IDA, with its softer credit terms, made it possible to envisage a larger total of lending to certain countries—if enough good projects were available.

During the past year or two this trend, toward more extensive and varied preinvestment assistance, has continued. The Economic Development Institute (EDI), the staff college sponsored by the Bank for senior officials of developing countries, has introduced a series of courses in project evaluation especially designed for officials charged with formulating and approving specific schemes. Resident advisers in project preparation have been provided to several countries, at their governments' requests. Two field offices are being established, in East Africa and West Africa respectively, staffed with men whose specific function is to help governments in those regions in preparing projects to the point where they can be presented for Bank or IDA financing. And in March 1964, cooperative agreements were made with FAO and UNESCO that would enlist their wealth of experience and some members of their staff for the identification and preparation of projects suitable for Bank/IDA financing in the agricultural and educational sectors, respectively.

Competition and Coordination

The growth and variety of preinvestment activity are exemplified in the programs of the Special Fund and the World Bank. But these organizations, as has been noted, were not the originators and are not now, by any means, the sole practitioners of preinvestment activity. The U.S. Agency for International Development (AID) and its predecessors have done a great deal to promote it, and so increasingly have the other bilateral aid givers. The Inter-American Development Bank (IDB) and the UN regional commissions have also been active in this type of work, although the latter have tended recently to leave it to the Special Fund.

Some of the work of the Ford Foundation and other private groups is also relevant. Unfortunately, no comprehensive, comparable data are available on preinvestment work sponsored or assisted by the various regional, national, or private agencies.

The multiplicity of sources of help for preinvestment studies poses problems of choice for a developing country, and the choice may have implications going far beyond the study itself. For one thing, a feasibility study made under the auspices of country X will not usually be accepted as an adequate basis for appraisal and eventual financing of the project by an agency of country Y; the latter is likely to suggest that the study be redone by consultants from Y. By the same token, despite all the conventional reservations, the willingness of an aid-giving agency to help to finance a feasibility study is usually taken to indicate that it will follow through with capital assistance for the project—provided, of course, that the results of the study are favorable. Thus very early marriages between projects and their potential financiers are quite normal. Whether the advantages, for either party, of a relatively assured continuity and of avoiding waste and duplication of effort outweigh those of maintaining freedom of action until the project is more mature is often hard to judge.

Yet such arrangements are likely to continue. So long as the provision of external capital falls far short of the desires and hopes of developing countries on the one hand, while on the other the supply of promising projects located in countries with good credit standing remains limited, developing and capital-exporting countries will be impelled to get together at an early stage. And there will be

no lack of eager matchmakers—suppliers, local promoters, and various go-betweens.

This dilemma was avoided and the developing country, at least, got what appears to be the best of both worlds in the arrangements made for the Kainji Multipurpose Project in Nigeria. A survey of the potential and the best approach for developing power, irrigation, and navigation on the Niger River was one of the first investigations financed by the UN Special Fund, with the World Bank as Executing Agency. An elaborate feasibility study was carried out by internationally known consultants—in fact, jointly by two firms of different nationalities—under the Bank's supervision. After being satisfied about the soundness of the proposed investment, the Bank expressed willingness to finance part of the cost, and invited bilateral aid givers to offer loans for the rest of the external funds required. The United States, the United Kingdom, Canada, the Netherlands, and Italy responded. For the most part their offers were tied to procurement within the respective lending countries; but it was agreed that Nigeria could award all contracts on the basis of international bidding and that, to the extent that the various winning bids came from the countries offering tied loans, their cost could be applied against those loans. Financing from the Bank made up the balance.

The Kainji Project is unusual; it involves an investment of over \$200 million, its prestige value is considerable, and Nigeria is one of the largest and the richest countries of Africa. A smaller, more typical scheme would not elicit the same interest from aid-giving, exporting countries, nor justify the arduous and expensive preparatory work that was necessary. Nevertheless, for a substantial number of projects,

there does appear to be a realistic possibility that internationally sponsored and supervised feasibility studies could serve as a catalyst for investment from a number of bilateral as well as multilateral sources. This prospect would presumably be more favorable in those countries for which a consultative group of the principal aid givers has been formed; this had been done in Nigeria under the aegis of the World Bank.

Conclusion

During the past half dozen years, then, there has been a substantial increase in the attention and resources specifically devoted to paving the way for productive investment, and considerable progress has been made toward a more rational organization of preinvestment work. What amount of actual investment will result, what multiplier effect these studies may have, are difficult even to conjecture. Mr. Paul Hoffman, in his report to the Special Fund Governing Council in January 1965, said that although only 33 out of 421 Special Fund projects had been completed by that date, 16 of them, whose cost to the Special Fund was about \$16 million, had already brought forth investment commitments of \$780 million from domestic and international sources. This estimate includes \$208 million of projected investment in the Kainji project mentioned earlier, for which the Special Fund allocation was a little over \$707,000. Such examples can be treacherous; in fact, the Special Fund contribution was only a fraction of the total preinvestment cost for the Nigerian project, including various prior and supplementary studies. But there is no doubt that the contribution helped, at a critical juncture, to precipitate

favorable action. And there can be no doubt that similar assistance by the Special Fund, the World Bank, and other agencies, if properly organized and used, can facilitate sound investment to a value many times its cost.

It is no less important to prevent unsound use of scarce capital. The fact that, after careful investigation, an investment is *not* made seldom gets publicity—certainly it is less dramatic than the spectacular study-cost/investment ratios cited by Mr. Hoffman—but it may save a great deal of trouble and disillusionment, as well as money. Some of the Bank/Special Fund surveys—of coal resources in Colombia and power needs in Argentina, for example—have had this result, and have thereby helped to avoid ab-

sorbing available funds for which more productive use could be found.

The trend of preinvestment activity and expenditure is likely to continue upward if the rhythm of development is maintained. For increased investment and output do not slake the demand for further economic growth; rather they create new investment needs and opportunities, progressively more complex and calling for more sophisticated analysis. So just as the elaboration of over-all development plans has been the prodigy of the immediate postwar years, its indispensable counterpart, the study and preparation of specific projects, is showing similar prodigious growth in the Development Decade of the 1960's.

Consultations with the Fund

Although it is the Fund's financial transactions with its members that attract the most attention in the press and elsewhere, its role as counsellor—a professional consultant on questions of international monetary policy—has grown to be a very important one, both for the members and for the Fund itself. Some consultations are compulsory, others voluntary; some regular, others occasional. Whatever the type of the particular consultation, this kind of international cooperation is constantly going on.

Jean van der Mensbrugghe

EACH ONE OF US needs at some time to consult his doctor or his lawyer. Sometimes these consultations have some very specific problem in view: an ailment to be cured, or legal action to be taken. At other times they consist of a fairly general discussion in which the professional knowledge of the consultant comes into play: a physical examination, or a survey of some particular legal situation. It is the same with consultations between the Fund and its members: sometimes the member countries need advice for solving some special problem, and at other times they discuss their economic and monetary situation in general, in the light of the purposes of the Fund.

Consultations under Article XIV

Article I of the Articles of Agreement mentions the following among the purposes of the Fund:

to assist in the establishment of a multilateral system of payments in respect of

current transactions between members and in the elimination of foreign exchange restrictions which hamper the growth of world trade.

Article VIII prescribes that

no member shall, without the approval of the Fund, impose restrictions on the making of payments and transfers for current international transactions [Section 2]

and

no member shall engage in any . . . discriminatory currency arrangements or multiple currency practices except as . . . approved by the Fund [Section 3];

it goes on to say that

each member shall buy balances of its currency held by another member if . . . (i) the balances to be bought have been recently acquired as a result of current transactions; or (ii) that their conversion is needed for making payments for current transactions. [Section 4]

In the period following World War II, most members found it impossible to assume fully the obligations imposed on them by Article VIII, and during the postwar transition period member countries availed themselves of the

provisions of Article XIV which permitted them to maintain restrictions on payments and transfers for balance of payments reasons. Members must, however, have continuous regard to the purposes of the Fund. Article XIV also stipulates:

Five years after the date on which the Fund begins operations [i.e., in March of 1952] and in each year thereafter, any member still retaining any restrictions inconsistent with Article VIII, Sections 2, 3, or 4, shall consult the Fund as to their further retention. The Fund may . . . make representations to any member that conditions are favorable for the withdrawal of any particular restriction, or for the general abandonment of restrictions. . . .

This passage from Section 4 of Article XIV constitutes the legal basis for the mandatory consultations.

Originally, only 5 of the countries which ratified the Bretton Woods agreement, and are still members, declared that they were prepared to assume the obligations of Article VIII. All the other original members availed themselves of the transitional arrangements provided for in Article XIV, and were still doing so in March 1952, the date on which consultations between these countries and the Fund became obligatory. Annual consultations under Article XIV are still obligatory for the great majority of members. Of the 102 members of the Fund on March 31, 1965, 26 had assumed the obligations of Article VIII, 74 were governed by Article XIV, and 2 had not yet made their decision. The Fund therefore now holds 74 annual consultations under Article XIV. These consultations are among the main activities of the Fund; it is therefore important to examine their purpose and the way in which they are conducted.

Purpose of Consultations Under Article XIV

The Fund's consultations with an Article XIV country have the main purpose of determining whether the existing exchange restrictions on that country's current transactions are still justified, or whether, on the contrary, they may be abolished without damage to the country's economy and particularly to its balance of payments.

Between 1952 and 1958, the volume of exchange restrictions in most member countries was very great; during those years the Fund concentrated on the restrictions that seemed most likely to hamper the progressive establishment of a multilateral system of payments, and whose elimination would not entail serious difficulties for the countries imposing them. In 1952-53, the Fund focused its attention on "retention quotas." This cryptic phrase denotes a practice, very widespread in Europe after World War II, whereby exporters—generally to the dollar area—were not bound to surrender the whole of their export earnings, but could use part of them either directly for transactions not normally permitted—for example, to import goods subject to quota in excess of the established quotas for local use or re-export—or indirectly for sale at free market prices to other nationals who in their turn, with the aid of this exchange, carried out transactions not normally permitted. Such a practice has many features in common with multiple exchange rates, and if it became widespread it would have the effect of entirely distorting the system of international payments.

During the years 1954-56 the Fund undertook an exhaustive study of bilateralism, including the bilateral payments agreements main-

tained by many of its members; as a result of these efforts, the Fund in June 1955 took a decision setting forth its policies on this matter. After this, in 1957-58, the Fund made a detailed study of multiple exchange rate practices, in the light both of the Articles of Agreement and of its decisions on the subject adopted on December 18, 1947 and June 26, 1957. Finally, in 1959, noting the progress made by certain countries, especially in Europe, in restoring *de facto* convertibility to their currencies, the Fund decided to pay special attention to discriminatory restrictions.

To determine whether restrictions on current transactions should be maintained or abolished, the Fund must study the balance of payments of the countries maintaining restrictions, since the balance of payments situation of a country is the decisive factor in deciding whether restrictions should be retained or eliminated. A balance of payments surplus, especially when it is long-term, ought in the normal course of events to lead to the gradual elimination of the restrictions. When there is a balance of payments deficit, it is more difficult to judge whether it would be opportune to abolish restrictions; to reach such a decision the causes of the deficit should be thoroughly analyzed, as well as the relationship between the various items in the balance of payments and the restrictions in force.

It is not enough, however, to study the balance of payments alone. The causes of the deficit can be discovered only in relation to the general state of the economy. Sometimes a deficit is due to a national calamity; sometimes to the attitude of other countries which have imposed restrictions on imports from the country with the deficit. Often the deficit in a particular country's balance of payments is due to

inflation, and the restoration of external equilibrium, which is a prerequisite to elimination of the exchange restrictions, can be achieved only through the restoration of internal equilibrium, which generally calls for measures in the monetary, fiscal, price, and income fields.

This kind of examination—focusing on the causes of the deficit and the adequacy of proposed policies—is also usually made in the many instances where consultations are linked to the evaluation of a request for the use of the Fund's resources.

Procedure for Consultations Under Article XIV

In describing the consultations procedure, an effort has been made to stress the most general factors; in reality the procedure varies from one consultation to another, as the Fund tries to adjust its methods to the problems of its various member countries. It would be impossible, in a brief article, to deal with all the variants.

The consultations procedure consists of several stages, beginning with the preparation each year by the Fund of a general schedule of consultations and the designation of the personnel to be involved in each of them. The preparation of the schedule is facilitated by the fact that the consultations are normally held once a year.

Consultation discussions are usually held in the capital of the country consulted; and the Fund staff, of necessity, make preparations to carry out their mission. Often, the first of these preparations is the compilation of preliminary material, the so-called background paper, of which the first section describes the recent economic and monetary developments in the

member concerned, while the second section gives an account of the existing system of exchange controls and any changes made since the previous consultation. This material is compiled from many different sources, in part from the Fund's own extensive records and the experience of its staff, but also from published books and newspapers. A number of copies are sent in advance to the country consulted so that the government departments there may verify its accuracy before the arrival of the Fund mission.

Sometimes, but not always, the Fund staff also draws up a preliminary questionnaire, which is also sent in advance to the country being consulted. This questionnaire is not intended to limit the points to be discussed. The Fund staff may ask questions on the spot which had not been included in their questionnaire. Sending the questionnaire in advance gives the country that is to be consulted an idea of the direction in which the Fund staff proposes to steer the consultation discussions, and enables it to prepare its replies in time for the mission's arrival. The list of questions is varied. It often includes questions of fact that the Fund staff have not been able to clarify in preparing the preliminary report, and sometimes questions on the authorities' views regarding the immediate future and the policy they are pursuing and intend to pursue to overcome their economic, monetary, and exchange restrictions problems.

The next stage of the procedure consists of the consultation discussions between the Fund mission and officials of the country being consulted—officials of the ministry of finance, of the central bank, and of the exchange office. To get a general view of the economic situation and policy of the country consulted, the mission

also talks with the staff of the ministries of planning, of economic affairs, of industry, of agriculture, and of trade. Discussions about policy matters are generally conducted with the governor of the central bank and with some cabinet ministers; in some instances, the Fund mission is also received by the head of state.

During the first phase of its work, the mission usually tries to obtain all the factual information needed, so that in the second phase the discussions may concentrate on the views of the authorities of the country visited regarding the future and the policies to be pursued.

On returning to Washington, the mission gives the Managing Director a summary of the outstanding features of the visit, and then proceeds to write a report for the Executive Board, which is presented in two parts. The second part contains the background material redrafted in the light of observations made and information collected in the country being consulted.

The first part is devoted to a report of the consultation discussions themselves; it begins by giving a summary of the current position and an account of the principal subjects covered in the discussions, and then makes an appraisal of the economic position and policies of the country being consulted. Part I of the report concludes with the staff's recommendations for the consideration of the Executive Board. The recommendations contain both statements of fact and also a statement of the Fund's views on such restrictions as still remain.

The staff report and recommendations are discussed at one of the regular meetings of the Executive Board. In this discussion staff members who have taken part in the mission reply

to the technical questions asked. After this general discussion, the Executive Board considers the text of the draft decision which is set forth in the staff's recommendations. Sometimes changes are suggested and agreed; on other occasions, the recommendations are approved without modification. The recommendations as approved by the Executive Board constitute the Fund's decision on that particular consultation, and also complete it. The text of the decision is, of course, sent to the member country concerned.

Consultations Under Article VIII

Countries that have assumed the obligations of Article VIII do not generally apply exchange restrictions. However, Article VIII countries may impose restrictions with the prior approval of the Fund, and in some instances members obtained the Fund's approval of restrictions existing at the time they elected to be governed by Article VIII. In other instances Article VIII countries later found it necessary to introduce restrictions on current transactions because of adverse developments in their balance of payments, and obtained the Fund's approval for them. Such authorizations are frequently granted for a specified period, and if the country concerned still feels it necessary to continue them thereafter, a new authorization must be obtained. All members maintaining restrictions under Article VIII are required to consult the Fund about them; for other Article VIII countries, consultations are not mandatory.

In 1960, when several European countries were contemplating the transfer to the Article VIII regime, the Fund undertook a careful review of its policies with respect to both Article XIV and Article VIII, and on June 1, 1960, adopted a decision on the subject. This

decision pointed out the advantages of periodic discussions between the Fund and its members even though there were no questions involving action under Article VIII, and stated that such discussions would be planned between the Fund and the member and would ordinarily take place at intervals of about one year. Most of the countries that have assumed the obligations of Article VIII have, since 1961, consulted annually with the Fund.

The main purpose of these consultations is to discuss monetary and financial developments in the country consulted, as well as the contribution the Fund might be able to make toward solving the country's problems.

The procedure for conducting these consultations is practically the same as that for consultations under Article XIV, except that no decision is called for where no restrictions are maintained. Each staff report on an Article VIII consultation contains an appraisal of the country's position and policies, and the Executive Director concerned reports to the authorities in that country the views expressed in the discussion of the staff report.

Other Consultations

In addition to the consultations already described, a member may consult the Fund at any time. Such consultations may have very different purposes: a member may ask the Fund's advice for determining the par value of its currency, for organizing or carrying out an anti-inflationary program, for setting up or reorganizing its central bank, for establishing monetary statistics, for debt rescheduling, or for improving the system of government finance, with regard both to government spending and to revenue. There are also frequent

special consultations in connection with stand-by arrangements.

When a member country makes use of the Fund's resources under the terms of a stand-by arrangement, the Fund usually receives, when the contemplated drawings exceed the first credit tranche (i.e., raise the Fund's holdings of the currency of that country above 125 per cent of quota), some firm commitments with regard to the economic and monetary policies which the country will follow to restore equilibrium. Frequently the drawings authorized under the stand-by arrangement can only be made in accordance with a schedule, after the Fund has ascertained that the commitments have been fulfilled. When, for one reason or another, the commitments are not fulfilled, special consultations are also organized to judge whether the country should actually be permitted to make further drawings under the stand-by arrangement.

The Usefulness of Consultations

The usefulness of special consultations, which take place in response to a request for technical assistance, is so obvious that it does not need to be described. The same does not apply to regular consultations or to those held under Articles XIV or VIII; these closing remarks will therefore try to show how the country consulted, the Fund, and the other members all benefit from these consultations.

The first advantage of consultations, both for the member and for the Fund, is the establishment of frank and regular contact between national and international experts. In discussions with the Fund mission, the authorities of the country consulted find it necessary to describe to international experts the national economic

situation and their policies. In describing their economy to outside experts, the authorities are often led to reconsider their attitudes and to modify them in some respects. For example, when the authorities of many countries have, during consultations, analyzed the reasons why a certain exchange restriction must be maintained, they have come to realize that these reasons are sometimes more closely related to long-established custom than to the solution of balance of payments difficulties. To take another example, it has frequently happened that, in endeavoring to explain the causes of inflation to the Fund's experts, the authorities of the country being consulted have glimpsed a lack of coordination between some of their policies, and have then proceeded to remedy this deficiency.

Moreover, consultations provide them with an excellent means of utilizing the Fund's expertise. During the discussions, the Fund's staff, knowing the situations and problems of many countries, can often give valuable advice on varied policy problems. And since the consultations are regular, a country visited by a mission more or less annually can discuss highly confidential matters—a possible change in the par value, for example—without stirring up public opinion or setting off speculative movements.

In practice, consultations have proved to be one of the Fund's most effective means of achieving the aims laid down in the Articles of Agreement. Consultations provide the Fund with its most valuable source of information on the situations of its members, and it uses this source, in the first instance, as a basis for many of its general policy decisions. In making major decisions regarding the use of its re-

sources or an increase in a member's quota the Fund relies on valuable information gained in numerous consultations. The situation of a great many members of the Fund has, also, often been improved by help and advice received through consultations.

Consultations have played a major part in reducing recourse to exchange restrictions. The efforts the Fund has made, in the course of consultations, toward elimination of retention quotas, bilateralism, multiple exchange rates, and discrimination have been amply rewarded,

and have stimulated members to take active measures toward the establishment of a multi-lateral system of payments, as far as the situation of their balance of payments permitted.

Consultations likewise have the advantage of showing members that their problems are not peculiar to them but must be viewed in a world context, and that the solution of these problems demands not only individual effort but also international cooperation under the aegis of the Fund.

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Development Finance Companies

Development finance companies—sometimes called development banks or other similar names—formed to mobilize capital and aid development are not a new type of institution. But their proliferation, their variety, and their success are increasing their importance. Throughout the world they are taking a place in the foreground of the development picture.

William Diamond

INDUSTRIALIZATION, it need hardly be said, is one of the most important paths to economic development; and successful industrialization depends on a number of factors—entrepreneurship, access to modern manufacturing techniques, competent management, technicians, accountants and other skilled personnel, markets, and of course capital. Some of these requisites can be imported, as they have often been in the past. Indeed, contacts and cooperation with foreign firms are likely to be important not only in starting industrialization but throughout its progress, for various purposes—to keep abreast of the most modern technology, to open up export markets, to obtain financing for major projects, and so on. Even the most advanced industrial nations continue to supplement their domestic capital and know-how from abroad.

In an attempt to increase the supply of some of these ingredients of successful industrialization, virtually all the countries of the world, developed and underdeveloped, have established special institutions to mobilize their re-

sources of capital and channel them into the productive economy. In the past 25 years, the governments of an increasing number of less developed countries have created, promoted, or encouraged the organization of entities variously called “development corporations,” “development banks,” or “development finance companies.” Those institutions have taken forms so diverse that, despite frequent similarity of formal title, they often have little resemblance to each other and often have little in common. Among them are such different institutions as the Etibank of Turkey, originally created to exploit mineral resources and to build power plants on behalf of the Government; the Corporación de Fomento de la Producción of Chile, first established to draw up and carry out a general plan to promote production in all sectors of the economy and to obtain credit from abroad; and the Pakistan Industrial Credit and Investment Corporation (PICIC), established to provide long-term finance to private industry. Although virtually all such institutions have been sponsored by governments, which exert a varying degree of

influence on their policies and operations, some are owned exclusively by governments, others by private interests, and still others by a combination of the two. Some are devoted to the promotion and financing of government enterprises and others exclusively to private investment; still others act in both fields. Some have broad planning functions, some can only lend, some can both lend and invest in share capital, and some can set up and manage enterprises on their own account. Some are concerned with the entire economy, others with but a single sector. Some are regional, others national. Ownership, capitalization, degree of dependence on government, objectives, and methods of operation vary over a broad range.

No definitive list has been compiled of this type of institution, but their number almost certainly runs into three figures. The efforts of the World Bank and its affiliates, the International Finance Corporation (IFC) and the International Development Association (IDA), up to now have primarily been concerned with one type of development bank: the development finance company that is entirely or predominantly private in ownership. The Bank, IFC, and IDA have extended financial assistance to 19 development finance companies in 17 countries in Asia, Africa, Europe, and Latin America. The World Bank has extended lines of credit totaling \$281.6 million to 12 institutions. Three IDA credits of \$5 million each have also been granted. IFC, which handles relations with development finance companies for the World Bank group, has invested in 14 institutions, for a total original commitment of \$17.3 million. In seven of these cases the World Bank and IFC have acted jointly, the former supplying loan capital and the latter share capital.

Financial assistance in itself is not the only measure of the activity of the World Bank group in this field. On a number of occasions the group has been asked to provide help and advice in establishing a new development finance company or in reorganizing an existing institution. In these cases, IFC may help to bring together a sponsoring group of investors, prepare a Charter or Articles of Association for the institution, advise on investment policies, and help to locate top management and staff.

The World Bank group, moreover, may play a continuing role in private development finance companies. IFC's Development Finance Companies Department is prepared to help an institution to establish an effective system of project appraisal. The World Bank and IFC have helped to train staff members of development finance companies by arranging for them to visit Washington and study methods of project appraisal and administration, both with the staff and at the Economic Development Institute, the Bank's staff college in Washington for senior officials involved with economic development. The Bank and IFC also arrange visits with well-established development finance companies in other countries.

Further, as an equity investor, IFC can accept representation on the boards of directors of development finance companies. Where the other shareholders want IFC to be represented, and where IFC feels that board membership can be a constructive influence, IFC has been prepared to take a seat. It has, in fact, done so in 7 companies. The close relationship with many development finance companies has facilitated IFC's collaboration with them in joint investments; such action has been particularly important where the needs of industrial enterprises have proven to be too large to be

met entirely from the resources of the local development finance company or the domestic capital market.

Scope and Purposes

Development finance companies can perform a valuable function by identifying promising fields for investment and helping to bring together the factors of production. By becoming active and important in a country's capital market, they can help to mobilize domestic savings and, in combination with technical know-how, channel them into productive activities. At the same time, these companies can become a channel through which foreign and international capital and skills can flow into the national economy, reaching enterprises too small to be able alone to attract foreign capital and technology. Because they are themselves private, these finance companies have a unique role in helping the growth of the private sector, where problems of stimulating healthy growth are often particularly intractable.

The principal tools of development finance companies are:

- a. A supply of long-term capital, which will be particularly useful if part is available in foreign exchange;
- b. Experienced management, possessing both a world-wide acquaintance with modern investment techniques and a knowledge of national conditions, and capable of appraising objectively investment opportunities, market possibilities, and business risks, and of assisting clients to obtain technical and managerial aid; and
- c. Contacts with foreign business and investment institutions and international

financial and technical assistance agencies, which are indispensable in recruiting outside capital and know-how.

Ownership

It is desirable that the institution should be regarded as a domestic institution in its own country; therefore, only a minority of its stock should be owned outside the country. IFC—since it is owned by its member governments—is usually not regarded as foreign, so that a combined domestic-IFC majority of shares in the finance company conveys the image of a national institution; in addition, when necessary to maintain domestic control, IFC is willing to confine its sales of the company's shares to private investors within the country.

IFC prefers in general that ownership of the finance company be as broad as possible to demonstrate the national character of the institution. Such a representative pattern of ownership permits the government to recognize that the success of the company is in the public interest, and thus to extend certain financial and other benefits without which the finance company might have difficulty in surviving.

A development finance company is not likely to be very profitable in its early years, and its initial stockholders must therefore be people who are not thinking in terms of quick returns. In most countries some public-spirited institutions and individuals can be found who take the long view and are willing to back it up by investing. There also are investors in the industrialized countries, mainly financial institutions with a general interest in reinforcing their connections with, and promoting economic growth in, the developing country con-

cerned, which in the past few years have demonstrated their willingness to subscribe to the share capital of development finance companies. IFC's presence may induce other investors, domestic and foreign, to come in; and in fact, all the finance companies in which IFC has invested represent a blend of domestic and foreign ownership.

Investment Policies

The investment policies of a development finance company reflect the fact that it is at the same time a development institution and a profit-making institution. In appraising a project, it should place as much weight on the economic and financial prospects and the management of the enterprise as upon security. Yet it cannot ignore security. The terms of its investments must be closely related to the needs of the projects that it finances; a balance must be struck between placing an unduly heavy burden on the client enterprises and the interest of the IFC in revolving its funds.

Various factors have to be balanced. Thus, new enterprises often need substantial equity capital. Most development finance companies are willing to make equity investments, provided this does not require them to assume managerial responsibilities (except perhaps in an initial promotional phase). On the other hand, following the principle of matching the duration of their resources with the duration of their investments, they would be unwise to hold, in their portfolios, equities amounting to more than their paid-up capital and free reserves.

Support of new enterprises is probably one of the most useful contributions that finance

companies can make to development. This function was illustrated by the situation involving the cement industry of Pakistan and the Pakistan Industrial Credit and Investment Corporation (PICIC). A dramatic factor was the settlement late in 1960 of the dispute between India and Pakistan over the division of the waters of the Indus River system. The settlement involved a huge public works program, including the construction of a giant dam and storage reservoir and the building or rehabilitation of a far-flung web of irrigation canals. The demand for new cement capacity was a clear and urgent one. The Pakistan Government called for a general review of the industry, and PICIC volunteered to be responsible for the study.

In a report presented at the end of 1960, PICIC's consultants recommended the expansion of existing plants and the construction of three new ones. Responsibility for promoting construction of two of the new plants fell to PICIC, which soon found two prominent industrialists in Pakistan willing to sponsor and invest in the cement companies. For one company, PICIC subsequently arranged financing from the Commonwealth Development Finance Corporation in London, and for the other it received assistance from IFC; and in both cases PICIC itself provided a substantial part of the financing required.

Assistance to Development of Capital Market

One of the development finance company's broad objectives is to fill a gap in, and contribute to the growth of, the national capital market. One of the ways that it can do this is to sell, from its own portfolio, securities of