DE WILDE, JOHN C - Articles and speeches (1957-1968)

DE WILDE

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World Bank Adviser Predicts:

Crisis to Come When Suez Re-Opens

By Marie Smith

SHOULD CONGRESS give the Eisenhower Administration authority to spend money for economic development in the Middle East, it may not find "suitable projects" on which to spend the money, an economic adviser to the International Bank said yesterday.

"We have found that true in the International Bank," John de Wilde, adviser to the Bank's Asia-Middle East Department since 1950, told a luncheon meeting of the Woman's Democratic Club of the Tenth Congressional District of Virginia.

Excepting for Israel, there is "very little going on in the way of constructive economic development" in that area, de Wilde said in a talk on "Current Problems in the Middle East."

He expressed the opinion that any approach to offering aid for economic development in that area should be done "from an international standpoint."

"I would like to see us explore the possibility of some international development fund . . . under an interatioal organization to which various powers would contribute," he said.

AND, he added, "I would invite some of the oil rich countries" of the Middle East to contribute to it also.

One feature of the new Eisenhower doctrine, he explained to the lunching ladies, is to "do our best to stimulate economic development in the Middle East." One way to do that, he adds, is to raise the standards of living in that area.

However, de Wilde continued, "it's not easy to raise the living standards" there. "You can't just pour capital into this area . . . it takes some human resources, and in some areas there are not the human resources."

He pointed out that both Iran and Iraq are setting aside large portions of oil revenue for financing economic development, but so far the organization for getting a program under way has been lacking.

REFERRING to political problems of the Middle East, de Wilde predicted "we will have another first-class crisis on our hands" as soon as the Suez Canal is reopened.

Nasser will take the position, he predicted, that British and French ships will not be allowed to go through unless they pay toll to Egypt's nationalized company.

As a solution to the problems between Israel and other Arab countries, de Wilde proposed a "complete demilitarized area" on both sides of the border maintained by United Nations garrisons.

In a question and answer session following his talk, de Wilde said he doesn't think the "United States Government is anxious to revive" the Aswan dam project. And in reply to another question he said "serious consequences" would result should sanctions be applied against Israel, cutting off all capital from the United States.

"Israel is dependent on the influx of private capital from the United States, economic aid from the U. S. Government, the Export-Import bank and others," he added.

Club program Chairman Mary Marshall introduced the speaker at the luncheon in Allison's Little Tea House, Arlington, and Elizabeth Campbell, club president, presided.

de Wilde
Extract of extemporaneous Remarks

UNION D'ASSUREURS DES CREDIT INTERNATIONAUX
BERNE

EXTRAORDINARY GENERAL MEETING HELD IN MUNICH

29TH - 30TH JANUARY, 1962

EXTRACT: Mr. de Wilde

The PRESIDENT then invited Mr. de WILDE to say a few words on the general problem of countries in course of development.

Mr. de WILDE made the following statement:

"It is indeed a privilege for me to attend your deliberations for the first time. My predecessor as Head of the Economic Staff of the Bank, who is now Special Representative of the Bank for Africa, has been with you many times before and has asked me specially to convey his greeting to you. More recently we have been represented at your deliberations by members of our Paris staff.

"Your President asked me to make a few general remarks about the economic situation in the less developed countries with which we are all concerned. It is, of course, very difficult to generalise about the situation in some sixty-odd countries in a few minutes time, so I shall confine my remarks to a few developments which are of key importance.

"One of these developments pertains to the financial stability in the less developed countries. I think it is fair to say that in the last few years there has been a tendency in the less developed countries toward a greater concern for financial stability. In the past many of these countries have repeatedly or continuously had bouts with inflation which have put very heavy pressure on their balance of international payments. Today there is a more general recognition, I think, among these countries that continued financial stability is not a bar to economic progress but is indeed a prerequisite to sound economic development. Many countries have indeed over the past few years adopted programmes of financial stabilisation, and, although there have been a few exceptions, many of them have valiantly tried to pursue these, some with conspicuous success, some with indifferent success. In any event they have made efforts in this direction and these efforts in a number of cases have had very salutary results and are to be welcomed. So much for the favourable developments.

"There is, however, an unfavourable development which I should like particularly to emphasise and that is the development with respect to the terms of trade of the less developed countries. As you know, the terms of trade of these countries deteriorated fairly markedly in 1960. There was some slight improvement in some countries early in 1961, but for the year as a whole there was a still further deterioration by comparison with 1960. In many cases the prices of industrial raw materials and foodstuffs on which these countries very heavily depend for their exports are at a very low level.

"We in the Bank make it our business to follow these commodity trends very closely as we are obviously very much interested in the way in which the exports of the less developed countries will develop over the years ahead. I might say that we have uniformally a rather gloomy view about the future demand and prices for many of these raw materials and foodstuffs. No matter which group of commodities one contemplates - whether it be non-ferrous metals, rubber, grains, tea, sugar, vegetable oils or fibres - in most cases we anticipate either the continuation of the present low prices or else some further deterioration in these prices over the next few years. Of course, there may be here and there an effort to arrest or reverse these price trends by international commodity stabilisation agreements. For example, you know there are efforts under way now to conclude a new coffee agreement and a cocoa agreement. Basically, however, I don't think these will change markedly the level of commodity prices which intimately affects the economic future of these countries.

"Speaking generally and conceding that there are exceptions, I think it safe to say that the export earnings of the less developed countries will not increase very rapidly, but that they will tend to rise very slowly, or will stagnate. Now this is a matter of some concern for us in the Bank and presumably for all of you who are dealing with these countries, because, after all, it is only out of the export earnings or, indirectly, out of new capital inflow that debt can be serviced. Many of the countries, as you well know, are already fairly heavily burdened with debt, with debt service taking a fairly large proportion of their export earnings.

"It is clear, therefore, that by and large, some degree of caution is necessary, particularly in the extension of short- and medium-term credits in the cases of many countries. You have been debating here the question of the length of the term of insured or guaranteed credits which is obviously a matter of great concern, of legitimate concern, to you. We in the Bank, I shall not conceal from you, have in general been agitating in favour of longer-term credits, because we think they are more suitable to the circumstances of most underdeveloped countries than the shorter- or medium-term credits. In this connection we have, of course, been very much interested in following the terms on which your various organisations have been extending these credits.

"I recently had an analysis made of the payments that were due on insured or guaranteed credits to your countries, except for the United States, in order to determine how large a percentage of these credits were due over the next three years. I had an analysis made for each year going back over a five-year period. It was a source of some gratification for us in the Bank that the portion of payments due over three years had declined considerably from the middle of 1958 to the middle of 1961, that the percentage of such payments had fallen from 72.9% in the middle of 1958 to 60.9% in the middle of 1961. In the last year alone there was a decline from 66.9% to 60.9%.

"As I indicated, this trend pleases those of us who think that longer-term credits are more suitable to the circumstances of many countries. We readily appreciate, of course, that there are limits beyond which you, as credit insurers, really cannot go. We appreciate that this problem of the terms of credit cannot really be solved by the credit insurance organisations, but must be tackled by other means. It is clear that new institutions have been established for this purpose in recent years, and that there has been, in particular, a growing volume of Government to Government credits. The realisation, of course, that there was a need for longer-term credit on quite easy terms led us in the Bank to create a few years ago the International Development Association about which, I believe, Mr. Rist made a few remarks to you some time ago.

"The International Development Association, you will recall, grants credits on fifty year terms - terms I would not expect you to "match"! The credits are granted without any interest rate, but carry a service charge of 3/4 of 1 per cent. There are no repayments of principal due for the first ten years and over the ensuing forty years there is a gradually growing percentage of repayment. These are indeed easy terms, but they are, I think, necessary in view of the conditions prevailing in many underdeveloped countries. The first of these "credits" (and we call them credits to distinguish them from the normal loans of the International Bank itself) was made in 1961. We have now made a total number of eighteen such credits totalling a little over $180 million. As you know, the total capital subscription to the International Development Association - the authorised capital subscription - is $1 billion. We expect that out of this $1 billion a little over $750 million will be available in usable currencies. The rate at which we are committing these funds is increasing fairly rapidly and we expect probably to have most, if not all, of these funds committed sometime toward the end of 1963.

"The very fact that we are engaged in a considerable volume of this very long-term credit business is an indication on our part that we think the situation in many underdeveloped countries is such that even the type of conventional lending done by the World Bank - which, as you know, can go up to twenty-five or thirty years - is not in all cases suitable.

"This, Mr. President, concludes my preliminary remarks."

(Mar. 63) Canadian Nat'l Comm for Unesco Problems of External Aid

Mr. John C. de Wilde, Acting Director, Economic Staff, the World Bank, Washington, D.C.

When I was invited to address this distinguished gathering, I acceded readily to the suggestion that I should speak on "Problems of External Aid." The subject is both challenging and intriguing and as one who has been involved in this business of foreign aid for about fifteen years I cannot resist an opportunity to air my views or indeed my prejudices. But eveh more satisfactory, perhaps, is the way in which the subject was phrased namely, "Problems of External Aid", which presumably frees me from the necessity of discussing all problems of foreign aid, if that indeed were possible, and gives me an excellent advance defence against those who might criticise certain ommissions on my part. ¶ Let me start with a disclaimer that I am here as a spokesman for the institution with which I happen to be affiliated, the World Bank, if only because ~~they haven't~~ it has not seen an advance text of my speech.

Let us comment, first of all, on the magnitude of this foreign aid programme. We are indebted to the Development Assistance Committee of the Organization for Economic Co-operation and Development, for certain figures on the flow of aid to the less-developed world from the advanced countries. From these statistics one learns that the flow of capital to the less-developed countries has indeed grown by leaps and bounds. Total official aid, less repayment of loans, increased from a level of less than two billion a year in the first half of the 50's to a level of over 6 billion dollars this past year. If one adds to this total the amount of the private credits that have been extended to the less-developed countries and the amount of private foreign investment of various types in the less-developed countries, one will note that the total has mounted from an average of $3½ billion to over $9 billion. Adding, if you wish, the Soviet or Sino-Soviet aid to the less-developed countries, it is probable that the total flow of aid is today somewhere between 9½ and 10 billion dollars.

This is a very considerable sum for recipient countries; although the sum may be small in relation to their total national output, it nevertheless represents a crucial addition to their resources, particularly since their total exports probably do not aggregate more than around 20 billion dollars. For advanced countries, to be sure, this is not perhaps a terribly large outlay ~~significant sum~~. Total official aid is said to represent only 7/10 of one percent of the aggregate national product of the aid giving countries and for some countries, indeed, it is considerably less. The sum also pales by comparison with the billions and billions that are spent today on defence against communism.

Even so, there is considerable concern over the mounting sum that is being devoted to foreign aid and, I suppose, rightly so because more and more of this aid comes out of the pockets of the tax payer. Gone is the time when loans could be provided to the less-developed countries on commercial terms, when institutions like the World Bank could provide an unlimited amount of conventional credit to the less-developed countries. Many countries are so heavily indebted today that they need above all "soft assistance", assistance on concessional terms; and this kind of assistance can only by and large be provided through the budgets of the more developed countries and therefore requires the rather awkward process of appropriations of legislative approval, and of tax payers forking over hard-earned money.

Foreign aid, therefore, has become big business; it has become the concern of ever more institutions and ever more governments and, simultaneously with the mounting of the burden, ~~a~~ serious ~~amount~~ ~~of~~ concern is being expressed about foreign aid. Is ~~it~~ aid being effective ~~aid~~? Why are we giving it? How long is this burden going to last? How long is this task of helping the less-developed countries? Is this a problem that is going to be with us always? Are we always going to be appropriating tax dollars for this purpose? There is a sort of malaise and a feeling of disillusionment in many countries that have been giving aid, a feeling that we are not getting on with the task, that we ought to be stricter, that we ought to cut down.

Well, let us examine how long we have to share the burden, what our objectives are and how we can make foreign aid more effective. Let us address ourselves first of all to the duration of the problem. We call this the Decade of Development under the aegis of the United Nation ~~aegis~~, but I am afraid that it is more than a decade of development that is going to be required. This problem is indeed going to be with us for a long, long time and we might as well make up our minds to face that prospect. The original idea was that development was a temporary problem, that it could be solved by conventional loans on commercial terms and that after we had given the less-developed countries an initial filip they could somehow make it on their own. That idea has long since gone out of the window and no wonder, as we look at the magnitude of the problem. After all, whom are we aiding? We are aiding over a billion people who live on per capita income level of less than $200 per year. This level, as you well know, compares with somewhere close to $2000 per capita in Canada, $2500 across the border, and $1000 and upward in Europe. The task of raising this standard of living is indeed tremendous, and inevitably our progress is painfully slow.

The disparity of incomes between the more advanced and the less-developed countries, is still, as a matter of fact, increasing, if only because the less-developed countries need to run rapidly even to stand still in view of the very substantial increase in population that they face year by year, a rate of increase somewhere between 2½ % and 3 % for many countries. We must realize, too, that there are many other obstacles to rapid progress in these countries. For one thing, the markets for their traditional exports — their raw materials, their minerals and so forth — are only growing slowly and there are conditions of oversupply on the world markets today so that the prices for the products of the less-developed countries have been seriously depressed. Thus, exports are growing much less rapidly than the debt burdens ~~they~~ the less-developed countries have undertaken in order to finance their development. We must realize, too, that progress is bound to be slow, because these countries are all suffering from a variety of obstacles, institutional and other, that stand in the way of rapid progress. The governments are inexperienced; they are ill-equipped in many ways to cope with the task of dynamic economic development; people are not trained or educated sufficiently.

Moreover, quite apart from the obstacles that stand in the way of rapid progress, we have to take into account that, as we make progress with development, the appetite for development will inevitably increase. As education spreads and political consciousness grows, as with the process of development the rate of urbanization is accelerated and people are absorbed from the traditional subsistence economy, the appetite for the better of things of life will and does tend to grow, and with it the need for more capital for development. So, we can expect an ever ascending revolution of rising expectations, and the profound disparity between the ability to satisfy these expectations and the level of expectations will continue for a long time. So we can say that the problem will indeed be with us for a very long time.

One may well ask why we, in the more advanced countries, should be interested in helping these developing countries. What are our goals? It is my profound conviction that one cannot really base any foreign aid program on pure self interest, be it short sighted or long sighted. I think our aid programmes must always be founded, to a certain extent, on a degree of idealism, on the profound concern that we as human beings should have with the lot of our fellow men in distant lands, many of whom live on a per capita income level of less than $100 per year and in grinding poverty. Whether we be Christians or Jews or whatever religion we profess, we cannot remain oblivious to the plight of these people, and we cannot in all good conscience abstain from helping them.

But obviously idealism can never be the sole foundation of our foreign aid programmes. We cannot expect our legislators to appropriate money from sheer idealistic motives. There must be at least a foundation of enlightened self interest. Now, what is this enlightened self interest? Are we indeed engaged in a new crusade for democracy or are we solely engaged in holding the front against the advancing tide of communism? Well, it is evident that there is a spreading demand for development and that it is in our interest to be identified with it and to help it. To be sure, some of us may occasionally have a twinge of misgiving as to the blessings that development confers upon people. I myself have had experiences, at times startling, in the less-developed countries when one ~~occasionally~~ sees the repercussions of development on the lives of people. It gives one an occasional feeling of misgiving as to whether people are really becoming better off.

I remember once being in the rather remote northeast corner of Malaya, and riding around with an agricultural officer of the country. It was a very lush and tropical countryside with excellent and well watered soils, and the agricultural officer said to me, "Look; these people are really basically well-off or they could be very well-off. They are growing just one rice crop per year, but with this kind of climate and with these conditions, they could easily grow two rice crops a year. However, they prefer to be at leisure for at least a part of the year and not to ~~put out~~ make the additional effort that ~~they~~ would be required to have two rice crops." It so happened that I had lunch that day in a little town where, strangely enough, and much to my surprise, there was one of these ubiquitous Rotary Clubs, and I was invited to attend their weekly luncheon and to make a few remarks. In a somewhat facetious and personal vein, I remarked that I was not sure that development was necessary for the best interests of everybody and I recited my experience of that morning. I asked, "Who am I to say that the sense of values of these cultivators around this town is necessarily ~~unwise~~ unsound?" I was rather taken aback after these semi-facetious remarks by the storm that broke out among these leaders of the community that were gathered around the tables of Rotary that day. They called me an enemy of development; they said that I was condoning the laziness of these people who ought, as a matter of fact, to be made to grow two rice crops a year.

I was taught a salutary lesson, and no matter what anyone may say about the benefits of development there is no doubt in my mind that the politically conscious elements in all the less-developed countries - and these conscious elements are constantly growing, day by day - are certainly intent upon development. They intend to have it and we had better see that they have it with a minimum of damage to the fabric of society and with a minimum of violence.

That doesn't mean, however, that one can justify foreign aid as a kind of tranquilizer that one administers to the less-developed countries to keep them at peace and socially and politically content. Actually, foreign aid, if it is effective at all, ought not to act as a tranquilizer but rather as a dose of benzedrine. Development, as we all recognize, is a very disturbing if not revolutionizing process. It is an upsetting process; it upsets the established ways of life, it may destroy, for example, the extended family system in Asia or the tribal system of Africa. Its very objective is to disturb and to change. It is a process that is intensly dynamic if it is to be successful, and it is a process that is not necessarily consonant with political or social tranquility. In the last analysis, we have got to face the fact that these developing countries are going through a very dangerous age, ~~in~~ an age where the fabric of societies are being torn apart. The most that we can hope is that we will be able to help these countries in such a way that the fabric of society will not be too severely torn and, indeed, the society that results will be one that cherishes those values of human freedom and human dignity that we in our Western society cherish.

How can we make foreign aid more effective? I wish I could answer that question and list very simply a number of steps that could be taken. I don't think we can ever eliminate waste in an external aid programme; we have to be reconciled to a certain amount of waste. For one thing, I think we are bound to try to support the efforts of countries to achieve a rate of progress which is perhaps rather unrealistic and over-ambitious. When I say over-ambitious, I am reminded that one of the Vice-Presidents of the World Bank once chided me concerning the use of the word over-ambitious. "When you speak of these less-developed countries", he said, "how can you speak of a development program, that for example, wants to advance the national product of a less-developed country from a standard of income of $100 a year by 7 % as over-ambitious? Obviously, it is not over-ambitious in relation to ability to realize such a goal."

We have to realize that many of these countries set themselves very high targets and that we try to support them in the achievment of these high targets. In that effort, inevitably a certain amount of money is wasted. We also cannot prevent an excessive diversion of resources, even in a less-developed country, to such purposes as defence, and internal security. Sometimes, of course, it is a deliberate goal of the aid giver to make such a defence effort possible, but even where this isn't the case one often encounters countries which devot~~ing~~e what might well appear to be an excessive amount of their slender resources to defence and internal security. I know of one low income country that spends 16 % of its total national product on defence and internal security. Still another devotes 11% of its national product and another that spends 7% for that purpose. Yet, it is very difficult for any government giving aid to these countries, even though it believes that this expenditure is not justified, to dictate to such a country what it should spend on national defence. It is even very difficult for an institution like my own to say that we are not going to give you aid ~~on~~ or loans because we think that you are spending an excessive amount on national defence.

Yet, although I think we must be prepared, for various reasons, to face the continuation of some wateful expenditure, there are many steps that we can probably take to make the aid effort more effective. You have probably read in the press that in the United States we have recently had a report from a committee headed by General Clay which has advised the government on a number of steps which the committee deems necessary to make the aid effort a more effective one. Basically, what this report argues for is something with which I think most of us that have had something to do with foreign aid will agree. It is an argument in favour of a greater amount of concentration rather than a dispersal of effort and an argument to make aid conditional on a greater amount of self-help on the part of the aid recipients. Certainly, as one looks about the world today, there is too great a dispersion of aid. There are inevitably a good many countries that are still in such a state of disorganization or whose governments have such tremendous problems to face that they cannot really make a very effective use of foreign aid. We are all, I think, sufficiently sophisticated now to realize that capital is not the only determinant of development and that all that is necessary is merely to pour in the money and then you get the results. There is no direct necessary relationship between capital investment and output in the short run; a lot depends on how efficiently a government is organized, how well manned it is to carry out the job, how educated and well trained the people are to utilize the money that is forthcoming, how much initiative and enterprise there is in the country and how much effort in general the people are willing to put forth.

Certainly, I think the amount of aid that is being used in the world today would go much farther if we were somewhat more selective, choosing the countries that have reached a stage where they can effectively employ a larger amount of capital coming in from the outside and where they can make a decisive spurt towards a higher level of development if this aid were forthcoming and if one could confine one's efforts of technical assistance to those countries which have the requisite capacity to utilize aid effectively. The obvious recommendation of General Clay's committee was that we should insist on better performance; here again as a matter of principle, one cannot object. Surely whatever is poured in from outside is only a modest supplement to what must be a major effort on the part of the less-developed countries themselves.

It is fashionable today to insist that as an instrument of better performance we should require all these countries to engage in planning. This is almost one of the prerequisites of the Alliance for Progress on which the United States and the other Latin American countries are embarked. It is something that we, in the Bank, frequently insist upon; and here again who is there to gainsay the need for planning. Yet it is well to sound a note of caution about the type of development planning that is fashionable in many countries. There is a tendency to go in for economic planning models which are beautifully worked out in theory and have all the merits of apparent internal consistency. Unfortunately they incorporate many untested assumptions about the development of public and private savings, the relationship of capital investment to output and the evolution of consumption which may all be very wide of the mark. They thus often rest on shifting sands, on tenuous assumptions that may have very little relationship to the facts of the situation.

It would be better if planning were to pay more attention to what is feasible in practice than what is possible or desirable in theory. Planning ought to take more account of the practical problems of implementation which are actually being experienced in various sectors of the economy. Above all, it should emphasize what I like to call the "building blocks" or the "bricks and mortar" of development - the detailed working out of individual projects and programs which in the aggregate go to make up the total development effort.

Believe it or not, the greatest bottleneck today that all aid agencies, be they bi-lateral agencies or multi-lateral agencies, face is the lack of sound projects, that are available for financing. The aid giving countries could commit more funds to the World Bank and to our sister institution the International Development Association, and we, in turn, could commit our funds more rapidly if the less-developed countries were able to present us with better worked out and more numerous projects. That is, very frequently, where the bottleneck lies. Mind you, I do not think that it is solely due to the deficiencies of the less-developed countries that not enough projects are forthcoming. Obviously, some of the aid giving countries and agencies also labour under certain limitations. Some of them, for public relations or other reasons of public policy, don't want to finance certain types of projects; but within the range of projects that they are willing to finance, certainly not enough projects are forthcoming.

I think one of the greatest challenges to those who are engaged in foreign aid is to take steps to help countries formulate and appraise projects in such a way that they can be financed and give some guarantee of producing effective results. This is indeed being done in some measure by the Special Fund of the United Nations. We ourselves in the World Bank are setting aside a portion of our resources to help in the study of various projects. But in some countries we still face the elementary step of simply identifying in some measure the things that ought to be studied. In the emergent nations of Africa, for example, this task of trying to identify development possibilities which can then be subjected to detailed feasibility studies has in many cases not been completed.

In the field of better performance, there is also an obvious need to insist that nations manage their own financial resources more effectively, and abstain from run-away and chronic inflationary practices which put pressures on their balance of payments and force other countries to bale them out of trouble. There is need to insist that a greater part of the additional income that is generated through the process of development be set aside as savings to finance further development; in many cases the savings performance of many developing countries leaves very much to be desired.

There is one further thing that I think is also needed and that is a real attempt to mobilize local and private business initiative. Such mobilization is evidenced in community development programmes and similar grass roots programmes for economic development and also in private business enterprise on which of course, a good many Western countries have laid a great deal of stress. Here I must come to the conclusion, I am afraid, that in many respects the efforts that have been made to stimulate this kind of private business enterprise abroad have fallen far short of what is required. Let me say that I don't think the question of whether or not one stimulates private enterprise abroad is an ideological issue, a question of whether one is sympathetic with socialism or with capitalism. To me, it is simply a method of trying to decentralize, if you will, the responsibility for development, and of mobilizing such latent energies, enterprise or ~~inclination~~ initiative as you may have in a country. In every developing country, governments are greatly over-burdened with the tasks that they must inevitably carry out themselves, and which they cannot pass on to private enterprise; thus, wherever there is any opportunity at all to mobilize private enterprise, and to expand the private enterprise sector, I think it is very important that this be done. It is certainly my impression, gained through travels throughout the world, that those countries that have a vigorous and healthy private enterprise sector have made the greatest amount of progress —

for example, Mexico, India or even Pakistan. When you contrast these with countries like Burma and Ceylon where private enterprise has been little or not at all developed, I think the contrast is very vivid.

Whenever one talks about an insistence on better performance by countries, one comes inevitably up against the fact that governments, in their bi-lateral assistance programmes, find it very hard to insist that the governments of the developing countries comply with certain terms and conditions as a pre-requisite to assistance. For example, in the United States, which is after all the biggest bi-lateral aid giver in the world, proposals are advanced again and again that we must be tough, that we must insist on more and better performance on the part of the aid recipients. Yet in practice such proposals prove difficult to carry out. Why is this? Simply because every government does not like to risk alienating another government by dictating to it what it should do. For example, how can any government effectively insist that another should raise taxes or raise the rates that are charged by its electrical power enterprises even though these may be the most effective ways of ensuring more savings. Let us consider also the case of a government that has got itself into difficulties by sins of ommission and commission and thus finds itself heavily in debt. Such a government can appeal to the governments of the developed countries and can get effective aid in terms of a bailing out operation, simply because the denial of assistance is politically inexpedient. ~~to help~~.

It is my own firm conviction that as long as aid remains on the government-to-government level, particularly as far as the United States is concerned, one cannot insist on conditions very effectively. In my opinion, one needs to channel a much greater amount of aid through multi-lateral institutions. I might well be accused of some degree of bias since I happen to be a staff member of one of these institutions, but I firmly believe, as a result of my experience of the last twelve years with that institution, that an objectively administered international institution can do a much more effective job in the field of assisting development than most bi-lateral assistance programmes. I say this because, again and again, we have had the experience that we can aid the developing countries without incurring severe displeasure or giving rise to the charge of interference with their sovereignty. We can effectively insist on certain conditions, and there have been many cases indeed where we, in the World Bank, have declined to give aid to a number of countries until they showed evidence of better performance.

I remember that there was one country in particular, which shall remain nameless, where for years on end we discussed a very large financing programme for public utility expansion, and where the savings rate was very low, even though economic progress was reasonably good. We felt that one of the effective ways of increasing savings was for public enterprise to charge more adequate rates for power. For many years, we had a debate with that government, but at long last we won our point, and I think it was a very important point. We insisted successfully that the government hike its power rates, and we did this for the purpose of enabling the country to set aside at least a portion of these power revenues for further self-financed expansion. That is, after all, what we want to achieve, that gradually more and more of the additional income that is generated through the process of development go into the financing of additional development, so that dependence on foreign aid should gradually, if only slowly, diminish.

Thus, I feel very strongly that Aid should be channeled through multi-lateral institutions to a much larger extent, if it is to be effective.

Unfortunately, I don't think that at the moment, there is much chance of that happening. Somehow many countries still feel very strongly that their bi-lateral assistance programmes are a necessary instrument of their foreign policy and that they cannot afford to diminish the bi-lateral component of their assistance programmes in favour of a larger multi-lateral component. Recently, for example, we have been trying to replenish the resources of our sister institution the International Development Association which makes dredit available on a long-term basis and at a rate of interest which is nil. It charges only a service fee of .75%. We have virtually committed all these funds and we now need to replenish the funds through additional subscriptions to the IDA. Unfortunately, it looks very much as if our chances are very small of getting the really generous replenishment of these resources that would enable us to do a more effective job.

This leads me to make one final point. I think it is inevitable that in the future we will continue to see a proliferation of governments and agencies, multi-lateral and bi-lateral, engaged in the giving of aid to the less-developed countries. Under these conditions there is even a greater need of effective co-ordination, which, of course, should not take a form that would be tantamount to "ganging up" on the less-developed countries, to get together to consider the kind of economic problem that they are confronted with, to diagnose the economic situation and to determine what kind of aid and what terms of aid are most appropriate to the conditions in each of the less-developed countries. We, in the International Bank, have taken the lead in organizing consortia or consultative groups for a number of countries with this very objective of trying to co-ordinate the aid effort of a number of different institutions and sources. The Development Assistance Committee of the Organization for Economic Co-operation and Development in Paris has also played the role of getting interested coutries around the conference table to discuss mutual problems of foreign aid. These efforts under the present circumstances have to be considerably extended; there has to be much more co-ordination then there is today. This is a task which is only beginning.

I have given ~~This~~ is necessarily a very cursory survey of the many problems that are involved in the extension of foreign aid. Many of them I have been able to deal with only very sketchily, but I hope that I have at least been able to indicate that progress in resolving these problems of foreign aid and bringing about a satisfactory rate of development is apt to be slow. Development is a challenge, and indeed a noble challenge, which we cannot afford to ignore, but we must be prepared for many disappointments and many set-backs. We must develop understanding and sympathy, and yet, at the same time, we must be tough minded in the administration of our foreign aid. Above all, we must persevere in the task for a long, long time. The United Nations may have proclaimed the 60's as the Decade of Development, but I am sure that this is not the only decade of development, and that we shall have very many more because the problem will remain with us, whether we like it or not, for a long, long time.

RESEARCH IN THE

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

by

John C. de Wilde

(Paper prepared for delivery at the Annual Meeting of the American Economic Association at Pittsburgh, Penna., December 29, 1962)

A. Introduction

When I began to think of the role of research in the Bank, I immediately encountered a question of definition. What could qualify for inclusion in "research"? One could, I suppose, avoid the need for definition by simply describing the work of an officially designated research department. However, the Bank does not have such a department. To be sure, there is a department entitled "Economic Staff" which consists of people - economists and statisticians - who in part do what would generally be regarded as research. But it would be difficult to contend that this department is preoccupied solely with research or that no other department in the Bank is engaged in research.

My Webster defines research as "careful, systematic, patient study and investigation in some field of knowledge, undertaken to establish facts or principles." Certainly the Bank carries out innumerable investigations, and these are intended to unearth the "facts" and make the analyses that are relevant to the determination of "principles" or policies. Whether the investigations are "careful, systematic and patient" is a matter for judgment. There are, however, serious limitations on the amount of time that can be devoted to investigations in an operating financial institution. The Bank is constantly pressed for decisions by governments who are not easily convinced of the virtues of patient and time-consuming investigations; and it is difficult also for the Bank to recruit an international staff of sufficient competence and size to handle the volume of business after doing the research incidental thereto in a manner that would be regarded as exhaustive and detailed enough by all critics. Considerations of time and staff require us constantly to decide in effect at what point it is really unrewarding to spend more time on the collection of data or the refinement of the analysis. In this connection one should perhaps again point to the obvious - the inadequacy, both qualitative and quantitative, of data in the less developed countries. While the Bank by no means contents itself with published data and puts its clients to considerable work in assembling available but unpublished information or collecting new information, it cannot itself generally devote months and even years to the gathering of all the data that it might be desirable to have. Investment decisions and recommendations about development policies and programs must, therefore, often be based on fragmentary information and estimates that do not permit the application of the most sophisticated methods of analysis which are theoretically available.

I do not, of course, wish to leave the impression that the Bank is not careful and thorough in its investigations. As a matter of fact the Bank - and, more recently, the International Development Association - is sometimes criticized because the volume of its lending is much too small. If the volume is small, however, it is primarily because we refuse to be stampeded into making loans or credits without reasonably careful investigation of the projects to be financed and a diagnosis of the borrowing country's economy. Fortunately the Bank operates relatively free from the political pressures that so often operate on bilateral foreign aid programs and result in ill-considered attempts to "bailout" countries in situations which they themselves have precipitated by improvident and unsound economic and financial policies.

Let me make a few more preliminary observations before concretely considering the types of research carried out by the Bank. The first is that the Bank publishes only a fraction of its reports embodying some research. The outsider is generally acquainted only with the volumes dealing with the development of a series of countries which are published for us by the Johns Hopkins Press. These reports are done by missions which are sent out at the request of individual countries for the purpose of advising on the outlines of a development program and the complementary economic and financial policies. Reports of this type have encountered considerable criticism in academic circles. The critics, however, have sometimes forgotten that the reports are not intended as exercises in theoretical model building or in theoretical optimization of output, but rather as practical operational guidance for governments. In any event, such reports represent but a small portion of the Bank's output. The country economic reports and the project analyses on which our investment decisions are based are not published. In the last fiscal year, the number of such country reports totaled about 30, and the number of project reports was nearly 50. Why are these not published? The country economic reports sometimes include information supplied in confidence, and, more important, contain frank and critical discussions of the economic policies or programs being carried out. The government concerned will generally take no umbrage at such criticism in an unpublished document, but would in many cases be seriously embarrassed either at home or abroad if such critical observations were made public. As far as the project reports are concerned, these generally contain recommendations on issues which are to be considered in subsequent loan negotiations. Moreover, if they were to be published, a time-consuming effort would often be required to write up some elements of the analysis which, for the sake of brevity, are often summed up simply in the form of a conclusion.

Applied Research and the Functions of the Bank

The other preliminary observation is that the research of the Bank is applied research carried out as part of the process of reaching decisions within the Bank's operating responsibilities or on problems which come up recurrently in connection with this decision-making process. The Bank is obviously not a research institution; and it cannot and does not pretend to do basic research in the whole field of development economics. Since we are concerned with applied research, it is important to state briefly the functions of the Bank.

The primary function of the Bank and its sister institution, the International Development Association, is to make loans and credits to finance development. The financing is for specific projects, although the concept of "project" is often broad enough to include a series of closely related investment activities or a sub-sector program such as a general highway or railway expansion and rehabilitation program. The Bank relies principally on borrowing in the financial market as a means for obtaining its funds and the terms of its loans reflect this. The interest rate is adjusted to the rate at which the Bank borrows its funds and the maturity of Bank loans range up to a maximum of 25 or 30 years. The debtor's capacity to meet the not insignificant interest and amortization charges is, therefore, of great importance to the Bank, even though the Bank can, in the event of default, require its member countries to pay in all or part of the uncalled portion of their capital subscriptions. On the other hand, the International Development Association, which is financially separate from, but in effect administered by, the Bank, relies entirely on the capital supplied by the governments of its members. This is because it extends development credits on lenient financial terms to countries which are considered to have no capacity or insufficient capacity to service loans on the more conventional terms required by the Bank. Up to the present these credits have been extended without interest, except for a service charge of 3/4%, and with a maturity of 50 years, including a 10-year period of grace.

Incidental to and accompanying these financing activities, the Bank has become engaged in a steadily growing volume of technical assistance and advisory work. For investment projects this has taken the form of informal help given in connection with the Bank's appraisal of loan applications and also of arranging for and financing project feasibility studies. In the more general development field we have sent specially recruited missions abroad to advise on development programs and policies, and we maintain resident missions and advisers in a number of countries. Recently we have taken steps to organize a special corps known as the Development Advisory Service from which people may be drawn for such assignments.

B. Country Economic Studies

The research or investigations of the Bank focus largely on the investment decisions it must make. Studies of the economies of our clients and of the projects they present for financing serve this purpose. The frequency of economic studies on any one country depends on the volume and recurring nature of our investment operations there. From time to time we may have a rather basic and detailed study, particularly when the country is launching a development program, and at more frequent intervals we may have briefer studies to up-date our information and check on the economic progress that has been made. Except in rare cases, such studies are based on investigations on the spot, because experience shows that the scant and inadequate published data can only be supplemented in the field and that some judgment of the imponderables bearing on development can only be acquired through personal knowledge of the government and the way it operates, of business enterprise and of the farming classes.

The country studies seek to analyze the existing structure of the economy, the rate of growth and the structural changes that have taken place in the past and the factors that have been instrumental in accelerating or inhibiting growth. The analysis of past and present must be expressed in a diagnosis of the critical problems confronting the economy, thus facilitating in turn the identification of areas in which Bank financial or technical assistance can be helpful. It is also the starting point for an extremely important projection of the economy. In this projection we seek to determine the probable rate of overall growth in the light of the various factors that have conditioned this growth in the past. In this process we try to arrive at some approximative judgments about such relevant magnitudes as investment, savings, exports and imports, availability of external resources and of the factors that might be subsumed under "management" of the economy and that determine the rationality of policy and the efficiency and speed with which capital investment takes place. Where an official development program exists, an attempt is made to reach a conclusion about its size and composition and the possibility of carrying it out. Finally, the report considers the terms on which the country ought to get external capital assistance other than foreign private investment - i.e.

how much the country may be able to borrow on more or less conventional terms and how much should be obtained in the form of grants or credits on lenient terms such as those provided by IDA. This entails an assessment of the service burden on already outstanding debt and of the possibility of adding to this burden in the light of the projection of the economy that has already been made. I should like to return a little later to this "creditworthiness" appraisal.

Shortcomings

By this time the reader or listener might be tempted to congratulate the Bank for its presumed ability to find an answer to, or to make judgments on, all the questions I have mentioned. Let me hasten to disclaim this ability. If I could let you peruse a representative sample of our economic reports I am sure you would find plenty of serious deficiencies in them. As chairman of a Bank committee which considers all these reports in draft I am painfully aware of their defects. In my opinion we do produce some quite good reports, but also others which are bad or indifferent. The quality varies with the authors, the information available, the amount of time available for the study and the degree of complexity of the economy. Limitations of data are serious. National accounts data may be wholly lacking or unreliable. Information on savings may take the form of only very rough estimates and that on marginal savings is likely to be even more dubious. Up-to-date information on government expenditures and their breakdown by economically meaningful classifications is frequently lacking. In the absence of adequate and reliable data any sort of economic diagnosis becomes difficult and any projection exceedingly hazardous. Limitations on time are another handicap. Undoubtedly we could do a better job if we could take all the time necessary and employ all the requisite personnel.

But operational considerations are pressing. We must be content with rather imperfect answers and hope that these will in any event be good enough to enable us to avoid serious mistakes. Finally, let us admit that some of the deficiencies are due to the rather imperfect knowledge which economists have of the process of growth. This handicap is particularly significant in the analysis of economies which have achieved some degree of complexity. Even when the economy is still rather simple but undergoing a transition it is not easy to determine exactly in what direction and how rapidly it can and will develop. It is easy, for instance, to establish that Ecuador was able to grow rapidly in the fifties because of the mushrooming expansion of banana production and exports, but now that this banana boom has come to a halt it is not equally easy to discover what could provide the impetus for renewed economic growth.

Unfortunately we have not had the time and opportunity to evaluate fully the Bank's experience born of continuous contact with the economies of the less developed countries so as to systematize our conclusions about the development process. Individuals in the Bank have, of course, learned much and this is reflected in their approach to development problems and in their judgments. But few individuals - let alone the Bank as an institution - have had the time or the inclination to think carefully and systematically about their experience and formulate some theory or philosophy of development. For example, if we had formulated and expressed our ideas, the current and correct belief that capital pure and simple is by no means so crucial in development as was once thought might have received recognition much earlier. Certainly many of the things which we in the Bank have for many years emphasized both in analysis and practice bears on the importance of "human resources" relative to capital. It is reflected in the attention given to institutional bottlenecks; to the existence or adequacy of initiative and enterprise both in the private and public sector; to the quality and organization of the civil service and the decision-making process of the government; to the degree to which a sense of purpose or an air of buoyancy pervades the country; to the importance of execution as against planning, and of defining and preparing the project content of development programs as against the making of internally consistent macro-economic projections; and to feasibility rather than theoretically optimum solutions. But however knowledgeable we in the Bank may claim to be, we would have to plead guilty to not having set forth a clear formulation of our ideas about development.

Analysis of Creditworthiness

I would now like to turn back to one subject on which some of our research focuses - namely, the determination of the terms of external capital assistance in the light of an economy's capacity to service debt. Experience and study indicate that there is no ready formula for measuring creditworthiness. Non-economic factors must be considered. The pride which, on the basis of the historical record, a government and people take in meeting their external obligations irrespective of the sacrifice involved is one of these factors. There are other imponderables, partly economic in character, on which judgments must be made. It might be argued, for instance, that creditworthiness assessments are unimportant because countries can and do to a large extent borrow to cover not only their net capital inflow requirements but also the service on their existing debt. Yet it is easy to demonstrate for many countries that the rate at which gross borrowing would rise under these conditions would be extremely rapid. It becomes accordingly important to have some judgment at what point the gross capital inflow requirements are likely to become so large as to be in practice improbable. Another judgment relates to the time required to make an economy financially self-supporting in the sense that its savings will generally be adequate for its investment needs. By varying the terms on which external capital assistance is given one can hasten or postpone the achievement of that objective.

In the main, creditworthiness must be appraised in the light of the economy's prospects for economic growth and the use likely to be made of the incremental incomes which accrue - of the growth in GNP in relation to the claims of investment and consumption; of the growth in government revenues in relation to requirements for current and capital expenditures; and of the growth of exports in relation to the need for imports. As already indicated, the country economic studies try to reach some judgment on these questions. In the Bank we have fallen into the habit of stating debt service in terms of a percentage of current or anticipated earnings from exports of goods and services. This does not mean, however, that we consider only the relationship to exports relevant. Thus if a certain proportion of export proceeds are pre-empted for debt service, this means a loss of import capacity; and I shall not conceal from you that we have considerable difficulty in assessing the implications of such a loss of command over imports, particularly in determining how import demand is likely to develop under the influence of accelerating growth of investment and consumption on the one hand and of the growth of production for import substitution on the other.

Work on the terms of assistance includes also the elaboration of criteria for the extension of IDA credits. A finding that a country's debt service capacity is already over-taxed or may become over-taxed before long is one prerequisite for IDA assistance. But if it were the only prerequisite, many countries who have become and continue to remain uncreditworthy owing to mismanagement would find themselves rewarded for such mismanagement. Lack of creditworthiness must in the first instance be attributable to inadequate savings potential in view of low per capita incomes and the primitive structure of the economy. Adequacy of performance is also regarded as a prerequisite, and criteria of adequacy therefore receive attention. The types of performance we are interested in measuring are effectiveness in raising domestic resources for development and the allocation and use of all available resources. In practice we have found it impossible and undesirable to set up absolute or uniform standards of performance. We often judge improvement in performance a sufficient justification for the extension of IDA credits even though performance is far short of ideal or of that in some other comparable countries.

While determinations concerning the size and terms of external capital assistance are made primarily in connection with individual country cases, the Bank also pays continuing attention to the global capital movements between the developed and less developed countries and to the total development of external indebtedness in relation to international trade. Our work on international capital movements and external debt is particularly relevant to a determination of the aggregate requirement for "soft" loans. Since the capital of IDA which provides these soft loans must be periodically replenished by new capital subscriptions, this work is of considerable importance.

Other Terms of Assistance

There is one other aspect of the terms of assistance that has received some study. This relates to the considerations that should govern the decision on the proportion of a project's total costs which we should finance. For the Bank the paramount consideration has always been the foreign exchange cost of the project, because the Bank's charter stipulates that, save in "exceptional circumstances", only the procurement of goods and services outside the borrowing country should be financed. However, the charter of IDA permits greater flexibility, and even in the case of the Bank we uncover "exceptional" circumstances with increasing frequency. In many cases it is no easy task to determine to what extent a country receiving financial assistance for a project should match this with its own resources. Among the factors relevant to this determination are the total public savings "gap", the extent to which available domestic resources are transferable, the portion of the investment program that is likely to receive little or no external financing and the matching requirements of an assortment of other institutions or governments which are also providing financing.

C. Project Analysis

I now come to the Bank's work on project appraisal which is done by our Technical Operations Department. This has its technical, economic, financial and organizational aspects. The economist, of course, always tends to stress the economic analysis, but in the Bank the other aspects of project evaluation tend to receive as much, if not more, attention.

As the result of experience the economic analysis of projects has considerably improved. Yet we are still confronted with serious difficulties. The most important one relates to the divergence between market prices and real costs or benefits to the economy. Most of us recognize that market prices provide imperfect yardsticks for measuring costs and benefits. We have taken cognizance of the theoretical desirability of using "shadow" or "accounting" prices. In practice we have also recognized that the opportunity cost of labor in many less developed countries is considerably below the prevailing wage or that the opportunity cost of capital is higher than, for example, the controlled rate of interest at which the government borrows. Thus we have attributed little or no extra real cost to additional use of family labor in the evaluation of agricultural projects. Similarly, in examining the choice between more and less capital-intensive techniques as in the case of the hydro-thermal power alternative we have frequently assumed higher interest rates than those prevailing.

The Shadow Price of Capital

We are, however, still baffled in many respects by the complexity of the problem of pricing inputs and outputs. Recently we had a paper on the cost of capital prepared. The paper considered various methods of determining this cost. It examined, for example, the interest rate structure of a number of the less developed countries to see whether one could find a rate which might be considered as approximating a "free market" or equilibrium rate and which would be devoid of any compensation for risk and entrepreneurial initiative and for future loss in the value of money. It also dealt with various formulae for the calculation of shadow rates of interest, particularly that developed by R. M. Solow and applied to India by S. Chakravarty. The first of these approaches might be regarded as the least sophisticated and in effect depended on the correctness of one's "hunch" that one interest rate was better than another. The Solow formula was more sophisticated, but its use in practice was also found open to serious objections. For one thing, it requires national accounts data which are frequently not available such as statistics on the proportion of profit and property income saved, proportion of wage income saved and the proportion of profit and property income to total national income. Secondly, it assumes static relationships in the economy, such as production functions that are linear and homogenous, not changing over time, constancy of savings coefficients, etc. Thirdly, the national accounts data used in the formula should really themselves be calculated at shadow prices. The last comment typifies, perhaps, the dilemma that we face when we try to replace market prices; in principle, we are then confronted with the need to devise a completely new price structure.

We have struggled particularly with the cost of capital because we wanted to devise a yardstick, expressed in terms of a minimum return to capital, by which the acceptability of projects could be judged. This has seemed all the more important because projects come to us generally one at a time. We are unable at any one time to compare the merits of a whole range of projects. Faced with the need for setting a minimum rate of return, we have at times exercised our judgment in raising the rate above the prevailing level, but in the last analysis we do not know the limits to which such an adjustment can be pressed.

Time Path of Benefits

Another important factor in project analysis is the determination of the time path of costs and benefits. In part this is dependent on proper market analysis, showing how demand for the goods or services to be produced is likely to develop. But in many cases the rapidity with which the "capacity" becomes fully utilized and the benefits accordingly accrue will be determined by institutional factors. In agricultural projects, for example, it may well depend significantly on the effectiveness with which the government organizes or induces farmers to make essential adjustments in cropping patterns or methods of cultivation and to carry out measures such as the digging of field channels which are indispensable to the realization of irrigation benefits. Similarly, the determination of the extent and timing of benefits from industrial projects requires judgments regarding the development of the efficiency of management and labor. Judgments of this type made in the Bank are conditioned by experience. It is quite possible that a more systematic evaluation of relevant experience would contribute to better judgments in this sphere.

Other Aspects of Project Analysis

The difficulties still encountered in the economic analysis of projects have not made us despair. In coping with the other aspects of project analysis we have in fact often indirectly contributed to a more efficient use of economic resources. The technical analysis, for example, has frequently resulted in substantial revisions in investment costs which tend to be chronically underestimated and in the consideration of alternatives which had previously been ignored. The financial analysis has often produced a realization of certain problems relating to financing which had previously been overlooked. Above all, it has produced more sensible policies and practices in the pricing of goods and services produced by a project or enterprise. As far as possible we insist that a revenue producing project should produce revenues considerably in excess of its expenditures. We may be guilty of some fairly arbitrary judgments as to how much this "excess" should be, but our insistence on more adequate pricing has had a salutary effect on public savings. The inadequacy of public savings is a constant problem; and particularly with the progressively larger role played by public enterprise, it is important, in our opinion, that "corporate savings" in the public sector should gradually play the same role in financing public investment as this same type of savings in the private sector already does in financing private investment.

About the analysis of the organizational and management aspects of projects I need say very little. I only wish to stress that in our experience the benefits of a project are significantly affected by the attention which these aspects are given both while the project is being completed and after it has become "operational".

D. Other Research Work

Among the other types of research done by the Bank is our work on commodities. We maintain a small staff which makes projections of demand, supply and prices of the principal commodities entering international trade. This work is done primarily to assist the analysts working on individual countries in making their projections of economic growth and export earnings. Occasionally it is done in connection with the evaluation of specific investment projects. Some reports have also been prepared as a service to other institutions. Thus we have done a study on "The Financing of Coffee in Producing Countries" for the Coffee Study Group; and we have just embarked on an analysis of the market prospects for extra-long staple cotton at the request of The International Cotton Advisory Committee.

Most of the commodity analysis work is concentrated on raw materials, but it has been extended also to a number of industrial products. For example, we have recently completed a study on methods of projecting demand for steel which we hope will be useful either in forecasting import requirements or in judging whether one of the pre-conditions for an investment in steel-making exists.

Other research is done in the field of public finance and financial institutions. We have started some work, for example, on taxation with particular reference to the problems encountered in the less developed countries. Some studies, generally descriptive in character, have been made on the capital markets of a number of countries. With reference to particular financial institutions, we have examined the increasingly important role which social insurance is playing in Latin American countries in the mobilization and use of savings.

Finally, I should mention the research that has been the outgrowth of the training activities of the Bank's Economic Development Institute. As an indirect byproduct of the Seminars conducted by this Institute we have published monographs on industrial development banks, many of which have been established with the Bank's assistance, and on the planning experience of several countries including Morocco and Yugoslavia.

E. Concluding Remarks

I have construed my mandate to discuss the research work of the Bank quite broadly. I have utilized it particularly as an opportunity to tell you of some of the problems with which we in the Bank are grappling. Many of these problems are quite challenging. I for one would like to see more collaboration between economists in the academic field and those in the Bank for the purpose of advancing their solution. There has been far too deep a gulf between the so-called "operational" economists and the "academic" economists. Both have tended to be rather contemptuous of each other. The former accuses the latter of being impractical and unrealistic, and the latter frequently sneers at the former for his alleged lack of sophistication. There is an element of justification in the attitude of each, but I am sure that both have much to learn from each other. I am certainly anxious to explore any suggestion for fruitful collaboration.

INTERNATIONAL BANKING SUMMER SCHOOL

INTERNATIONAL FINANCING OF INDUSTRIAL DEVELOPMENT

5th Lecture on September 20, 1963, by

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Introductory Remarks

In addressing myself to this subject, I face two difficulties. One of these is psychological. As some one who has long been identified with an international financial institution devoted to development, I am acutely conscious of the fact that the availability of financial means is often not the crucial element in the fostering of development. Admittedly it is an essential condition, but only if certain other prerequisites exist. Among these are enterprise, managerial and technical skills, and markets. Industry cannot develop unless there are entrepreneurs capable of taking initiative and accepting responsibility, willing to take risks and endowed with the imagination to see investment opportunities. And the entrepreneurs must have the necessary managerial skills, the capacity to combine effectively the factors of production, to make investment decisions, to train and manage labor, to purchase raw materials and to market the finished products, all in such a way as to realize profits. Technical skills are no less vital, though they can perhaps be more readily acquired through training or even to some extent imported. The availability of adequate markets is particularly important to industrial development, for in many parts of the world the existence of small markets in terms of population or purchasing power is a serious obstacle to the promotion of a wide range of industries, many of which are dependent on economies of scale. But, though these non-financial factors are important, I shall resist the temptation to dwell on them at length. From time to time, however, I shall revert to them throughout this lecture.

The second difficulty of which I spoke is that of limitations of data. The information on the international flow of resources is by no means as tidy and complete as one should wish. Various international agencies—the United Nations, the International Monetary Fund and the Organization for Economic Cooperation and Development—have done extremely useful work in marshalling the data on this subject, but they have largely been unable to remedy the deficiencies in the information supplied by individual capital exporting countries. In many cases it is impossible to break down capital exports by geographic destination or by purpose. I am accordingly unable to give you any reliable estimates of the total international flow of capital going into industrial development or complete information on the areas or countries to which such industrial capital has been directed.

In discussing international financing of industry I shall distinguish between the various sources of finance, namely private sources, public funds channeled through individual governments or government institutions, and funds made available through international or inter-governmental institutions. I shall then discuss the rôle of development banks or corporations in the capital importing countries as intermediaries for the investment of external capital. Finally, I shall give some consideration to the issue of financing public as distinct from private investment in industry.

I might add that throughout this lecture I shall generally use the word "industry" in the restrictive sense of manufacturing industry, thus excluding the extractive industries and the processing facilities, such as refining, that are intimately associated with the latter.

Private Investment

Private direct investment is still by far the most important source for the international financing of industrial development. During the four-year period 1958—1961, U.S. and U.K. direct

private investment in manufacturing industries abroad totaled no less than $5,090 million, or an average of $1,272 million per year. For other major capital exporting countries such as France, Germany, Netherlands, Italy and Japan, there are no precise data on the volume of direct private investment in manufacturing industries abroad, but they probably bring the total annual average to around $1,500 million per year.

Several characteristics of this type of private investment abroad are worth noting. The first is that investment in manufacturing accounts for substantially less than half of total private foreign investment. For the U.S. the proportion for the period indicated is 38 per cent. For the U.K. it was probably only about 20 per cent in 1960 and 1961, after due allowance is made for estimated foreign investment in the petroleum industry which is not normally included in the U.K. figures for overseas private investment. Of German direct private investment abroad the proportion going into manufacturing is probably not far different from that of the U.S., while for French direct investment the proportion may be closer to that of the U.K.

This characteristic reflects the concentration of private investment on the development of the extractive industries, particularly of petroleum and petroleum refining, but to some extent also of mining and smelting. Investment in these industries has been especially important in the case of the U.S., U.K., France and The Netherlands. The extractive industries are by their very nature international in scope and therefore attract a large amount of private capital.

The second notable feature of direct private foreign investment is the large proportion going into the manufacturing industries of the developed countries. Business firms of the industrialized, capital-exporting countries tend to invest above all in the manufacturing industries of other developed countries. In the period 1958—1961, for example, only about one-sixth of the total U.S. direct investment in manufacturing abroad has been in underdeveloped countries. For the U.K. the proportion is somewhat higher, but still probably not more than 25 to 30 per cent.

This tendency of the developed, industrialized countries to invest in each other's manufacturing industries is natural. Businessmen are attracted by the high and growing purchasing power in such countries. They can do business there under conditions which are familiar to them. They have greater confidence in the political and economic stability of these countries and in the prospect that their investments will be fairly treated. They can rely on a good reservoir of skilled labor and technicians. On the other hand, in the less developed countries the market for manufactures is often small. For instance, The Netherlands, with a population of 11.5 million, enjoys a national income around 50 per cent greater than that of Pakistan, a country of 94 million people; and the market for manufactures in The Netherlands is even greater than this proportion suggests, for with the low level of living prevailing in Pakistan a much smaller percentage of total national income goes into the purchase of manufactures. In the underdeveloped countries foreign businessmen also encounter greater difficulties in terms of unfamiliar institutions and customs, the lack of an adequately schooled labor force and political conditions which are often unstable and uncertain. It is therefore no wonder that 81 per cent of the net increase in U.S. manufacturing investment abroad during 1960 and 1961 took place in Canada and Europe. The expanding European market has been particularly attractive to U.S. businessmen; from 1950 to the end of 1961 the value of total U.S. direct investment in Europe quadrupled as compared with a tripling of the value of total U.S. direct investment abroad.

Yet the actual and potential contribution of direct private foreign investment to the manufacturing industries of the less developed countries should not be underestimated. It contributes not simply capital, but also the even more vital elements of enterprise, management and training. By providing competition foreign business often acts as a spur to the efficiency of indigenous business undertakings and counters the inclination of the latter to resort to monopolistic practices. For these reasons the governments of many underdeveloped countries try to encourage private foreign investment through tax concessions, provisions for compensation in the event of nationalization and guarantees for the transfer of profits and the repatriation of capital. However, even such governments often have reservations. They fear that foreign business may become too dominant and may impair the prospects for more rapid development of indigenous enterprise. For this reason they generally prefer partnership arrangements with domestic business. Not unnaturally they also tend to insist that foreign companies accelerate the training of native personnel and curtail the number of foreigners employed. Quite a few governments are inimical to private foreign investment either because they look upon it as a form of neocolonialism, or because they prefer socialism to capitalism.

The governments of many developed countries have been anxious to direct more private investment to the underdeveloped parts of the world. Their efforts have been directed to the creation of conditions more conducive to such investment and to the development of guarantees to cover such non-commercial risks as war and civil commotion, nationalization and confiscation and non-transferability of earnings. A number of countries such as the U.S., Germany, and Japan have adopted investment guaranty programs for the overseas investments of their nationals and have supplemented these by concluding so-called investment treaties with governments of the less developed countries. In recent years many suggestions have been made for the institution of a multilateral investment guaranty system which some of the proponents believe would best be administered by the World Bank. Such a multilateral program, it is held, would be more comprehensive in its coverage, overcome the difficulties which many of the smaller investing countries have in devising their own national programs and be more attractive to the less developed countries. At the request of the Development Assistance Committee of the OECD, the World Bank last year submitted a report on Multilateral Investment Insurance without, however, taking a position on its advisability.

I shall not attempt here to make a comprehensive analysis of the merits and demerits of multilateral investment insurance. In any event prospects for its early adoption are probably not very great. There is little doubt that the availability of investment guarantees does provide some stimulus to private foreign investment even though questionnaires addressed to investors indicate that in many cases guarantees may not be crucial to investment decisions but simply afford an additional element of protection for investments that would still be made without them. Fears have been expressed that the generalization of investment guarantees might even be a disincentive to the better treatment of foreign private investment unless it is accompanied by some sort of investment code to which the less developed countries would subscribe, or unless some discrimination is exercised in the extension of guarantees as between countries which make an effort to create conditions favorable to private foreign capital and those which fail to provide the minimum protection desired. Moreover, one important deficiency of investment guarantees is the difficulty of protecting investments against measures which are sometimes styled as "creeping expropriation". These include government measures in the field of taxation, price or profit control, labor policy, foreign exchange allocation for imports of vital raw materials and spare parts and the like, all of which may in their cumulative impact greatly diminish or even eliminate the profitability of a venture without formally depriving the investor of his property. It is often the fear of such measures which deters investment.

Private Export Credits

This discussion of private foreign investment cannot be terminated without some reference to export financing which is usually facilitated by guarantees or insurance provided by public or quasi-public institutions. Exact estimates of the amount of such export credits accorded by private banking institutions are not available, but in recent years the gross volume has probably been around $1 billion. The bulk is provided by banks in the U.K., Germany, France and, more recently, in the United States. Well over half of these credits are apparently extended on exports to the less developed countries. It is impossible to determine how large a

part is devoted to financing industrial development. The proportion is probably not very large considering the fact that a substantial amount finances exports of consumer goods, raw materials and spares or equipment destined for non-industrial undertakings in the importing countries.

While it is only natural that industrialized countries should seek to promote their sales by export credits, there is little doubt that private export credits have some undesirable features. One is their relatively short maturity, stemming from the obvious reluctance of most ordinary banks to make long-term commitments. The Berne Union of export credit insurance organizations has generally insisted on a limit of five years, extended to seven in some cases. In recent years there has been a tendency to lengthen the terms, primarily by arrangements under which public institutions or consortia of insurance companies and investment banks have agreed to take longer maturities supplementing those which regular banks are prepared to accept. From the standpoint of the debtors, however, the maturities appear to be still too short. But more serious drawbacks are the ease with which such credits can be contracted and their use in a number of cases to finance ill-considered ventures. The anxiety of exporters to sell, combined with the readiness in the less developed countries to borrow, often leads to a rather rapid and reckless pyramiding of debt in such a way that refinancing of payment obligations becomes necessary from time to time. This is particularly true in the case of debtor countries which find it difficult to meet the more stringent requirements of investment banking institutions such as the World Bank and are therefore tempted to resort to the easy expedient of contracting export credits. In the extension of such credits no attempt is usually made to screen the soundness of the ventures for which the plant and equipment is bought. The rule of caveat emptor is supposed to apply in such export sales on credit, but this practice not infrequently results in the carrying out of projects of doubtful technical or economic soundness. On the other hand, investment banking institutions which provide loans for development usually examine carefully the project for which the financing is sought.

Bilateral Government Financing

I now come to the rôle played by individual governments and government institutions in providing capital for industrial development abroad. I should emphasize at the outset that such government financing has been primarily directed to public infrastructure development such as transport and communications, power, irrigation and agriculture, and, to some extent, housing, public health and education. A portion, however, has been used for financing industrial enterprise both in the public and private sector.

In absolute and probably also in relative terms the United States has made the largest contribution of public funds to industrial enterprise in the less developed countries. Two institutions have been active in this field—the Export-Import Bank and the Development Loan Fund. In the three fiscal years of 1960 to 1962, the Export-Import Banks made loans or credits available for industrial purposes amounting to $493 million or an average of $164 million a year. Through the five fiscal years 1958 to 1962, the Development Loan Fund made loans for individual industrial projects totaling $369 million or almost $74 million a year. In addition, $184 million in loans were made available, primarily for industry, to development banks in the less developed countries. Finally, the U.S. has made a considerable volume of loans and even grants available for the importation of industrial raw materials and equipment by the less developed countries. Such assistance has often been instrumental in overcoming bottlenecks to the fuller utilization of industrial capacity which stem from the shortage of foreign exchange for imports of vital spares and raw materials.

Unfortunately there is little readily available information on the allocation by purpose of development aid provided by other countries such as France, the U.K., Germany and the Communist nations. With the possible exception of aid provided by the Communist countries, I believe that only a small proportion is used for the direct financing of industrial projects. Both the U.K. and Germany have, however, often provided credit lines which

have been employed to purchase industrial plant and equipment. It is well known that the U.K., Germany and the Soviet Union have each financed a major steel plant in the public sector in India. The Communist Bloc countries have also done considerable financing of industrial development in such countries as the U.A.R., Indonesia, Iraq and others.

Multilateral Financing

1. *The Inter-American Development Bank*

International institutions have played an important rôle in financing industrial development. I shall first deal with a regional development bank, the Inter-American Development Bank, which was established in 1960. This has made loans for industrial purposes both out of its own ordinary capital and out of the "Fund for Special Operations" which was created to finance projects on somewhat more flexible terms than are possible in the employment of ordinary capital.

In 1961 and 1962 the Bank made 20 loans to private industrial enterprises in a total amount of $49,067,206. Although two of these loans were made from the Fund for Special Operations, all loans carried an interest rate of 5¾ per cent. The length of loans varies with the nature of the investment, ranging from 6 to 15 years, with the majority about 12 years. Periods of grace also vary from 1½ to 3 years, again depending on the nature of the project. Unlike the World Bank, the Inter-American Development Bank can finance private enterprise without a government guaranty.

The pulp and paper, cement, chemical, automotive and agricultural processing industries have been the principal beneficiaries of these loans. About 75 per cent of this lending has been concentrated in Argentina, Brazil, and Chile.

The Bank has also made funds available for relending through local intermediaries. Seven such loans have been extended from its ordinary capital, three totaling about $4 million for purely industrial purposes and four to a total of $28.5 million for financing agricultural, livestock and fishery as well as industrial undertakings.

Most of these loans are for 12 years and all are at an interest rate of 5¾ per cent. In addition, the Fund for Special Operations has been tapped for 5 loans totaling $35 million to credit intermediaries which are engaged in financing both agricultural and industrial enterprises. All but one of these are at concessional interest rates of 4 or 4½ per cent, apparently because it is believed that the nature of the undertakings financed will not permit the charging of commercial interest rates.

One of the interesting features which distinguishes the financing of the Inter-American Development Bank from that of the World Bank is the utilization of its capital subscriptions in local currencies for lending. Six of its loans to private industrial enterprises and 7 of its loans to intermediary institutions have had a local currency component amounting altogether to the equivalent of about $10.3 million.

2. *The International Bank for Reconstruction and Development and the International Development Association*

The World Bank and its affiliate, the International Development Association have concentrated primarily on the financing of the infrastructure investments in their member countries. Since the Bank opened its doors in June 1946, it has made loans totaling $698 million directly for industrial projects and, additionally, loans to development banks engaged in financing industry amounting to $225.4 million. While these sums together amount to less than 13 per cent of the total development loans extended by the Bank, they nonetheless represent a substantial contribution to industrial development. Over 60 per cent of the direct industrial loans have gone to expand the steel industries in Japan, India and Colombia. The paper and pulp industry, particularly in Finland, and the fertiliser and chemical industries have been other important beneficiaries of Bank lending. The balance has gone to a varied range of industries.

In recent years there has been a marked shift from the direct financing of industrial projects to the provision of financing through the intermediary of local development banks. In the last four years

ended June 30, 1963, the annual volume of bank loans to individual industrial enterprises averaged $35.5 million per year, while the average amount of Bank lending to development banks rose to $44 million. I shall revert later to the increasingly important rôle of development banks. Suffice it to say here that direct Bank financing of industry has been handicapped both by the smallness of most industrial enterprises in the less developed countries and by the requirement, under the Bank Charter, that loans to private enterprise can only be made with a government guaranty. Some governments dislike to provide such a guaranty on the ground that it forces them to discriminate among business enterprises; and some private undertakings undoubtedly are reluctant to ask for a government guaranty for fear that it may open the way to government interference in their business.

The International Development Association, which was established to provide financing on specially lenient terms for countries which due to no fault of their own are unable to serve an adequate amount of borrowing on commercial terms, has so far made only two credits for industrial development—one of $10 million for the China Development Corporation of Taiwan and one of $6.5 million for an interesting venture involving the establishment of estates for small industries in Pakistan. It should perhaps be noted that whenever IDA credits benefit private enterprise we insist that the latter does not get the benefit of the very lenient IDA terms. Thus the credit for the China Development Corporation was actually made to the government which re-lent the amount to the Corporation at the rate of interest prevailing in Taiwan and on much shorter maturities. In general we see no reason why the viability of private enterprise should not be tested by its ability to pay a commercial rate of interest on its borrowing.

As in the case of the Inter-American Development Bank, the maturity and the period of grace of World Bank loans for industrial projects has varied rather widely in accordance with the nature of the investment and the enterprise. Interest rates, conditioned by the rate at which the Bank itself can borrow, have fluctuated from 5½ to 6 per cent in recent years.

3. *The International Finance Corporation*

In 1956 the International Finance Corporation, a sister institution of the World Bank, was founded for the special task of promoting private industrial enterprise. It was designed to have greater flexibility in this field than the Bank, since it could make investments without government guaranty and in forms other than simple loans. It was expected to act as a catalyst in bringing together capital management, as well as local private and foreign private capital.

At the end of June 1963, 73 countries were members of IFC and had paid in $89,198,000 out of a total authorized capital of $100,000,000 all of which is in US dollars. By mid-1963 it had made investment commitments, less cancellations and terminations, of $74.7 million in addition to standby and underwriting commitments totaling a little over $8 million. After allowing for investments not yet effective, sales, repayments, and the acquisition of underwriting and standby commitments by others, the IFC's total investment commitments stood at $54.9 million, including about $3.7 million in outstanding standby or underwriting obligations. It had disbursed nearly $60.9 million, but in view of repayments and sales out of portfolio, it still had $55.8 million in uncommitted funds. It is noteworthy that almost two-thirds of the IFC's commitments have been made in Latin America—a testimony to the vigorous growth of private enterprise in these countries.

In the initial years, IFC's operations were somewhat handicapped by its inability to make straight investments in equity or share capital. It could ask for stock options as part of the conditions of its lending or could invest in convertible debentures, but under conditions which enabled only those which bought such investments from IFC to exercise the stock option or the right of conversion. This disability made for complex financing arrangements which were not readily accepted in some countries. Moreover, it prevented IFC from engaging in the vital business of underwriting share issues. In 1961 an amendment to the Charter fortunately removed this disability. The IFC promptly took advantage of this new power

by entering into standby and underwriting commitments totaling about $8 million in the last two years; and this was instrumental in raising total new IFC commitments to $20.3 million and $18.0 million in the fiscal years 1962 and 1963 respectively.

To some the operations of IFC have been disappointing. It must be remembered, however, that a vast amount of energy and time is involved in corporate financing. Since IFC had made no less than 59 commitments by mid-1963, it will be seen that the average size of the commitment was rather small. Individual commitments have ranged from as little as $160,000 to a little over $4 million, with the majority actually falling below $1 million. Yet in virtually every case the IFC, unlike the Bank, had to concern itself with the intricate details of corporate financing, to bring the various interested parties together and even, in many cases, to assist in getting proper management of enterprises. Since it could not rely on government guarantees, the IFC was obliged to exercise extra care in screening all investment proposals. There is now some tendency toward increasing the size of individual investments—a tendency which is facilitated by the growing number of local development banks or finance corporations which can take care of the financing of smaller industrial enterprises; and this may help the IFC in the future to step up the aggregate amount of its investments.

It must be noted also that the amount of IFC investments is by no means an adequate reflection of its contribution to industrial development. In quite a few cases the IFC has assisted sponsors in working out attractive industrial ventures which subsequently could be entirely or almost entirely financed without IFC participation. This is quite in accordance with IFC's rôle as an investor of last resort. Even more important, IFC participation often brings much larger amounts of capital from other sources. To cite an instance, an IFC subscription of $3,050,000 in convertible debentures put the vital capstone on financing arrangements which enabled a $80 million petrochemical complex in Argentina to get started. Similarly an IFC commitment of $2 million permitted a Colombian textile concern to complete a $13 million modernization and expansion program; and IFC actually ended up by retaining only $275,000 of this commitment, for four American and two European banks took over the balance. Last year, too, the IFC organized a syndicate to underwrite a share issue of about $3 million and to buy outright a little over $1 million in shares as a vital contribution to an expansion program of the second largest Mexican steel company. Subsequently, IFC was able to liquidate virtually all of its shares and underwriting commitments to other investors. As confidence in the IFC has grown, the IFC has been able increasingly to act as a catalyst in attracting other private capital for industrial investment abroad. It is also enabled to sell off more of its investments, thus fulfilling the original expectation of gradually turning over its capital. Thus in the last fiscal year IFC managed to sell $6.7 million of its investment portfolio, raising the cumulative total of sales to $16.9 million.

The methods and terms of IFC financing vary considerably according to the circumstances. Its investments never take the form of simple, straight loans, partly because there are other sources of loan capital and partly because a "mixed" type of financing is considered more appropriate. Loans carrying a fixed interest rate of 7 per cent, for instance, have often been accompanied by options to purchase shares or entitlements to receive additional interest contingent on profits or sales turnover. More recently combined equity and loan financing has tended to become the prevailing pattern. As already indicated, underwriting or standby commitments have become a prominent feature of financing in the last few years.

It would be surprising if all of the industrial ventures assisted by IFC had been uniformly successful. On the whole, however, only a few have run into serious difficulties and these have affected only a very small percentage of IFC's total investments. In only one case has a partial loss been sustained; and in a few other cases some refinancing and reorganization has been necessary. It is perhaps inevitable that IFC incur some losses in pioneering risk-taking investments; and some critics might even hold that the record shows that IFC has not taken sufficient risks.

The Rôle of Intermediaries

In recent years the IFC has demonstrated a keen interest in participating, in various countries, in the capitalization of development banks or finance corporations through which a growing volume of industrial financing is taking place. This complements the work of the World Bank which has for many years been extremely active in organizing and financing such institutions. Since IFC has a paramount interest in the development of private enterprise, it has now assumed primary responsibility, both for itself and the Bank, for promoting and handling the relations with these local financial institutions. Up to mid-1963, the Bank, IDA and IFC had together made available financial resources amounting to $239.9 million to 12 different development banks for reinvestment. Of this sum $123.3 million had been credited for approved projects and $95.4 million had been disbursed. Since these sums are in addition to the equity and loan funds raised by these institutions from other sources, it is evident that the total volume of business is assuming considerable proportions. One of the more prominent of these corporations, the Industrial Credit and Investment Corporation of India, has made loans and equity investments and undertaken underwriting operations to an equivalent of $127.2 million by the end of 1962.

The Bank, and now the IFC, have not restricted themselves to financing these institutions. We have played a prominent rôle in establishing eight of them and in reorganizing two others in order to make them more effective. This promotional and organizational task has several aspects. An investigation must be made to determine whether the prospective volume of business of the institution is large enough to warrant the expectation that it can operate profitably. Local business interest must be found to act as sponsors and pledge subscriptions to the initial share capital. Similarly, foreign business interests such as banks, insurance companies and other corporations operating in the country or interested in its development must be prevailed upon to participate in the equity financing. In this connection it is important to bring foreign and domestic private investors into partnership, but under conditions that will give domestic stockholders a majority interest. Then the institution's charter must be worked out and it must be incorporated either by a special legislative act or, preferably, under the provisions of general company law. Finally, it is of course essential to obtain the active cooperation of the government in establishing the bank or corporation and in providing financial support. The latter has generally been obtained in the form of a long-term, non-interest or low-interest bearing advance tantamount to equity capital which is necessary to enable the institution to earn profits on its share capital.

We have insisted that these development banks or finance corporations be basically privately owned and managed even though governments or public institutions occasionally hold minority interests. We believe such private ownership and management is important for corporations dedicated to the promotion of private enterprise. It helps to insure greater flexibility and efficiency in management and independence of political considerations in making investment decisions. This does not mean, of course, that these institutions disregard government development plans and policies in their operations. They function within the industrial policy framework set by the government. The Pakistan Industrial Credit and Investment Corporation, for example, can operate without government approval in financing investments in a fairly wide range of industries which the government has determined to be of high priority, but in other cases the consent of the government to the individual investment must be obtained.

Because investment banks or corporations are seldom likely to earn significant profits in the early years, it is sometimes difficult to obtain sufficient domestic capital subscriptions. In such cases the willingness and ability of the IFC to take a portion of the equity come in good stead. Governments which are naturally reluctant to have private foreign shareholders control the financing corporation are usually willing to consider the IFC-held equity a "domestic" holding on condition that the IFC is ready to sell it ultimately to domestic interests as and when these are attracted by the profitability of the institution.

These development banks and corporations are today financing a large number of industrial ventures which owing to their size and number could not expect to have direct access to foreign credit. They not only provide financial assistance in various forms, but a number of them have made important contributions to the vital development of a capital market by engaging in underwriting operations. As their staffs of financial and investment analysts acquire increasing competence and experience, they are also performing important services in examining the technical and economic soundness of projects and in uncovering new investment opportunities. In this connection it might be pointed out that the Bank has frequently assisted in getting appropriate management and setting up training facilities for these institutions.

It must be admitted that the financing provided by these banks and corporations is not cheap. Requirements for sufficient income to cover the cost of foreign borrowing and operating expenses as well as reserves and dividends make the charges for their financial services often rather high. In a sense, however, this may be considered an advantage rather than a drawback, for in a developing country where capital is scarce it is by and large unwise to finance enterprises which cannot earn a high return on the capital invested.

A few observations should be made about the terms on which the World Bank has made loans to such financing institutions. These loans are in effect credit lines against which specific amounts can be drawn as and when projects are approved. The Bank usually reserves the final right of approval for specific investments above a minimum size, and it has been our experience that this helps the local financing institution in developing appropriate criteria for screening projects. We gradually relax this type of control, however, as the institution gains experience. Bank loans have generally been for periods of 10 to 15 years and at the interest rate prevailing at the time the loans are made. In a number of recent cases, however, the interest rate has been left undetermined and is fixed only when an amount is credited out of the loan for a particular project. A similar arrangement is in such cases usually made with respect to amortization. Such loans thus carry amortization schedules and interest rates which may vary with the type and timing of the individual projects financed from them. It should be noted finally that World Bank loans to these development institutions have in many cases been supplemented to an important extent by other foreign credits, particularly those extended by the U. S. Development Loan Fund.

The Issue of Private vs. Public Enterprise

The accent throughout this paper has been on the financing of private as distinct from government industrial enterprise. The World Bank has so far declined to finance government ventures in the manufacturing field and has insisted, as already indicated, on private ownership and management of the finance corporations it has assisted. Most Western governments which aid developing countries also attach paramount importance to the stimulation of private enterprise, although, except for the United States, they are less rigorous in excluding assistance to public industrial undertakings. As far as the Bank is concerned, this is not really an ideological issue. It does not deny that there are cases where government or public enterprise may be successful or may perform useful pioneering work in vital industries which private entrepreneurs may be as yet unprepared to develop owing to the large amount of capital required or the unusual risks involved. But the Bank is convinced that by and large private enterprise is the most practical, efficient and rapid way of developing manufacturing industries.

The reasons for this conviction are many. Governments, with their cumbersome and time-consuming methods of reaching decisions, are generally ill-equipped to make the many day-to-day and even hour-to-hour decisions that a business enterprise operating in the market must make. Even where there is considerable delegation of powers to a public corporation, vital decisions are often reserved to the government and the danger of political interference is ever present. Public enterprises are usually under pressure to lower their prices and raise wages and fringe benefits in such a way that their ability to generate necessary savings for expansion is impaired. On the other hand, private business tends

to maximize profits and to "plough back" a large portion of these as savings for the further development of the business or the launching of new ventures. Above all, if the energies of the people of any country are to be fully mobilized for the task of development, it is important that actual or latent individual capacities for initiative and enterprise be given scope to develop the private sector. In a sense private enterprise is a means for decentralizing and disseminating responsibility for development more widely. In most of the less developed countries, governments are deficient in experience and in organizational and technical skills. They are already overburdened with tasks which the private sector is unable or ill-suited to assume, including, apart from normal government functions, far-reaching responsibilities for the development of power, transport and communications, social services, irrigation and other facilities for agriculture. On the other hand, there are in most countries energetic people who do not fit readily into the government mold and who relish the responsibility of initiating their own enterprises, prompted by motives of profit, power or creativity. It is important that this actual or latent talent be fully utilized in the development process.

Experience has amply demonstrated that wherever a vigorous private sector has developed, as in most of Latin America and in such Asiatic countries as India and Pakistan, economic progress is accelerated. To be sure there is little evidence of private enterprise in industry in some countries of South East Asia and in many countries of Africa. Yet this does not mean that this deficiency can simply be remedied by government assumption of responsibility for initiating and operating industrial establishments when governments themselves lack managerial and technical skills and are already overburdened. Rather, every effort must be made to encourage and stimulate initiative in the manufacturing field among private interests which may be engaged in commerce, transport or handicraft and small-scale industry.

All in all it can be said that adequate facilities have been and are being developed for the international financing of industrial development. As indicated in my introductory remarks, the paramount task is to overcome certain other bottlenecks. It is necessary to develop managerial and technical skills, to train the labor force, to pursue economic and financial policies conducive to investment and, in many cases, to create larger market areas without which diversified and economic industrial development is often impossible.

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International Financing of Industrial Development

By John C. de Wilde

(Fifth Lecture, September 20)

Introductory Remarks

In addressing myself to this subject, I face two difficulties. One of these is psychological. As some one who has long been identified with an international financial institution devoted to development, I am acutely conscious of the fact that the availability of financial means is often not the crucial element in the fostering of development. Admittedly it is an essential condition, but only if certain other prerequisites exist. Among these are enterprise, managerial and technical skills, and markets. Industry cannot develop unless there are entrepreneurs capable of taking initiative and accepting responsibility, willing to take risks and endowed with the imagination to see investment opportunities. And the entrepreneurs must have the necessary managerial skills, the capacity to combine effectively the factors of production, to make investment decisions, to train and manage labor, to purchase raw materials and to market the finished products, all in such a way as to realize profits. Technical skills are no less vital, though they can perhaps be more readily acquired through training or even to some extent imported. The availability of adequate markets is particularly important to industrial development, for in many parts of the world the existence of small markets in terms of population or purchasing power is a serious obstacle to the promotion of a wide range of industries, many of which are dependent on economies of scale. But, though these non-financial factors are important, I shall resist the temptation to dwell on them at length. From time to time, however, I shall revert to them throughout this lecture.

The second difficulty of which I spoke is that of limitations of data. The information on the international flow of resources is by no means as tidy and complete as one should wish. Various international agencies - the United Nations, the International Monetary Fund and the Organization for Economic Cooperation and Development - have done extremely useful works in marshalling the data on this subject, but they have largely been unable to remedy the deficiencies in the information supplied by individual capital exporting countries. In many cases it is impossible to break down capital exports by geographic destination or by purpose. I am accordingly unable to give you any reliable estimates of the total international flow of capital going into industrial development or complete information on the areas or countries to which such industrial capital has been directed.

In discussing international financing of industry I shall distinguish between the various sources of finance, namely private sources, public funds channeled through individual governments or government institutions, and funds made available through international or inter-governmental institutions. I shall then discuss the role of development banks or corporations in the capital importing countries as intermediaries for the investment of external capital. Finally, I shall give some consideration to the issue of financing public as distinct from private investment in industry.

I might add that throughout this lecture I shall generally use the word "industry" in the restrictive sense of manufacturing industry, thus excluding the extractive industries and the processing facilities, such as refining, that are intimately associated with the latter.

Private Investment

Private direct investment is still by far the most important source for the international financing of industrial development. During the four-year period 1958-1961, U. S. and U. K. direct private investment in manufacturing industries abroad totaled no less than \$5,090 million, or an average of \$1,272 million per year. For other major capital exporting countries such as France, Germany, Netherlands, Italy and Japan, there are no precise data on the volume of direct private investment in manufacturing industries abroad, but they probably bring the total annual average to around \$1,500 million per year.

Several characteristics of this type of private investment abroad are worth noting. The first is that investment in manufacturing accounts for substantially less than half of total private foreign investment. For the U.S. the proportion for the period indicated is 38%. For the U.K. it was probably only about 20% in 1960 and 1961, after due allowance is made for estimated foreign investment in the petroleum industry which is not normally included in the U.K. figures for overseas private investment. Of German direct private investment abroad the proportion going into manufacturing is probably not far different from that of the U.S., while for French direct investment the proportion may be closer to that of the U.K.

This characteristic reflects the concentration of private investment on the development of the extractive industries, particularly of petroleum and petroleum refining, but to some extent also of mining and smelting. Investment in these industries has been especially important in the case of the U.S., U.K., France and The Netherlands. The extractive industries are by their very nature international in scope and therefore attract a large amount of private capital.

The second notable feature of direct private foreign investment is the large proportion going into the manufacturing industries of the developed countries. Business firms of the industrialized, capital-exporting countries tend to invest above all in the manufacturing industries of other developed countries. In the period 1958-1961, for example, only about one-sixth of the total U.S. direct investment in manufacturing abroad has been in underdeveloped countries. For the U.K. the proportion is somewhat higher, but still probably not more than 25 to 30 per cent.

This tendency of the developed, industrialized countries to invest in each other's manufacturing industries is natural. Businessmen are attracted by the high and growing purchasing power in such countries. They can do business there under conditions which are familiar to them. They have greater confidence in the political and economic stability of these countries and in the prospect that their investments will be fairly treated. They can rely on a good reservoir of skilled labor and technicians. On the other hand, in the less developed countries the market for manufactures is often small. For instance, The Netherlands, with a population of 11.5 million, enjoys a national income around 50% greater than that of Pakistan, a country of 94 million people; and the market for manufactures in The Netherlands is even greater than this proportion suggests, for with the low level of living prevailing in Pakistan a much smaller percentage of total national income goes into the purchase of manufactures. In the underdeveloped countries foreign businessmen also encounter greater difficulties in terms of unfamiliar institutions and customs, the lack of an adequately schooled labor force and political conditions which are often unstable and uncertain. It is therefore no wonder that 81 per cent of the net increase in U.S. manufacturing investment abroad during 1960 and 1961 took place in Canada and Europe. The expanding European market has been particularly attractive to U.S. businessmen; from 1950 to the end of 1961 the value of total U.S. direct investment in Europe quadrupled as compared with a tripling of the value of total U.S. direct investment abroad.

Yet the actual and potential contribution of direct private foreign investment to the manufacturing industries of the less developed countries should not be underestimated. It contributes not simply capital, but also the even more vital elements of enterprise, management and training. By providing competition foreign business often acts as a spur to the efficiency of indigenous business undertakings and counters the inclination of the latter to resort to monopolistic practices. For these reasons the governments of many underdeveloped countries try to encourage private foreign investment through tax concessions, provisions for compensation in the event of nationalization and guaranties for the transfer of profits and the repatriation of capital. However, even such governments often have reservations. They fear that foreign business may become too dominant and may impair the prospects for more rapid development of indigenous enterprise. For this reason they generally prefer partnership arrangements with domestic business. Not unnaturally they also tend to insist that foreign companies accelerate the training of native personnel and curtail the number of foreigners employed. Quite a few governments are inimical to private foreign investment either because they look upon it as a form of neocolonialism, or because they prefer socialism to capitalism.

The governments of many developed countries have been anxious to direct more private investment to the underdeveloped parts of the world. Their efforts have been directed to the creation of conditions more conducive to such investment and to the development of guaranties to cover such non-commercial risks as war and civil commotion, nationalization and confiscation and non-transferability of earnings. A number of countries such as the U.S., Germany, and Japan have adopted investment guaranty programs for the overseas investments of their nationals and have supplemented these by concluding so-called investment treaties with governments of the less developed countries. In recent years many suggestions have been made for the institution of a multilateral investment guaranty system which some of the proponents believe would best be administered by the World Bank. Such a multilateral program, it is held, would be more comprehensive in its coverage, overcome the difficulties which many of the smaller investing countries have in devising their own national programs and be more attractive to the less developed countries. At the request of the Development Assistance Committee of the OECD, the World Bank last year submitted a report on Multilateral Investment Insurance without, however, taking a position on its advisability.

I shall not attempt here to make a comprehensive analysis of the merits and demerits of multilateral investment insurance. In any event prospects for its early adoption are probably not very great. There is little doubt that the availability of investment guaranties does provide some stimulus to private foreign investment even though questionnaires addressed to investors indicate that in many cases guaranties may not be crucial to investment decisions but simply afford an additional element of protection for investments that would still be made without them. Fears have been expressed that the generalization of investment guaranties might even be a disincentive to the better treatment of foreign private investment unless it is accompanied by some sort of investment code to which the less developed countries would subscribe,or unless some discrimination is exercised in the extension of guaranties as between countries which make an effort to create conditions favorable to private foreign capital and those which fail to provide the minimum protection desired. Moreover, one important deficiency of investment guaranties is the difficulty of protecting investments against measures which are sometimes styled as "creeping expropriation." These include government measures in the field of taxation, price or profit control, labor policy, foreign exchange allocation for imports of vital raw materials and spare parts and the like, all of which may in their cumulative impact greatly diminish or even eliminate the profitability of a venture without formally depriving the investor of his property. It is often the fear of such measures which deters investment.

Private Export Credits

This discussion of private foreign investment cannot be terminated without some reference to export financing which is usually facilitated by guaranties or insurance provided by public or quasi-public institutions. Exact estimates of the amount of such export credits accorded by private banking institutions are not available, but in recent years the gross volume has probably been around $1 billion. The bulk is provided by banks in the U.K., Germany, France and, more recently, in the United States. Well over half of these credits are apparently extended on exports to the less developed countries. It is impossible to determine how large a part is devoted to financing industrial development. The proportion is probably not very large considering the fact that a substantial amount finances exports of consumer goods, raw materials and spares or equipment destined for non-industrial undertakings in the importing countries.

While it is only natural that industrialized countries should seek to promote their sales by export credit, there is little doubt that private export credits have some undesirable features. One is their relatively short maturity, stemming from the obvious reluctance of most ordinary banks to make long-term commitments. The Berne Union of export credit insurance organizations has generally insisted on a limit of five years, extended to seven in some cases. In recent years there has been a tendency to lengthen the terms, primarily by arrangements under which public institutions or consortia of insurance companies and investment banks have agreed to take longer maturities supplementing those which regular banks are prepared to accept. From the standpoint of the debtors, however, the maturities appear to be still too short. But more serious drawbacks are the ease with which such credits can be contracted and their use in a number of cases to finance ill-considered ventures. The anxiety of exporters to sell, combined with the readiness in the less developed countries to borrow, often leads to a rather rapid and reckless pyramiding of debt in such a way that refinancing of payment obligations becomes necessary from time to time. This is particularly true in the case of debtor countries which find it difficult to meet the more stringent requirements of investment banking institutions such as the World Bank and are therefore tempted to resort to the easy expedient of contracting export credits. In the extension of such credits no attempt is usually made to screen the soundness of the ventures for which the plant and equipment is bought. The rule of caveat emptor is supposed to apply in such export sales on credit, but this practice not infrequently results in the carrying out of projects of doubtful technical or economic soundness. On the other hand, investment banking institutions which provide loans for development usually examine carefully the project for which the financing is sought.

Bilateral Government Financing

I now come to the role played by individual governments and government institutions in providing capital for industrial development abroad. I should emphasize at the outset that such government financing has been primarily directed to public infrastructure development such as transport and communications, power, irrigation and agriculture, and, to some extent, housing, public health and education. A portion, however, has been used for financing industrial enterprise both in the public and private sector.

In absolute and probably also in relative terms the United States has made the largest contribution of public funds to industrial enterprise in the less developed countries. Two institutions have been active in this field - the Export-Import Bank and the Development Loan Fund. In the three fiscal years of 1960 to 1962, the Export-Import Banks made available loans or credits for industrial purposes amounting to $493 million or an average of $164 million a year. Through the five fiscal years 1958 to 1962, the Development Loan

Fund made loans for individual industrial projects totaling $369 million or almost $74 million a year. In addition, $184 million in loans were made available, primarily for industry, to development banks in the less developed countries. Finally, the U.S. has made a considerable volume of loans and even grants available for the importation of industrial raw materials and equipment by the less developed countries. Such assistance has often been instrumental in overcoming bottlenecks to the fuller utilization of industrial capacity which stem from the shortage of foreign exchange for imports of vital spares and raw materials.

Unfortunately there is little readily available information on the allocation by purpose of development aid provided by other countries such as France, the U.K., Germany and the Communist nations. With the possible exception of aid provided by the Communist countries, I believe that only a small proportion is used for the direct financing of industrial projects. Both the U.K. and Germany have, however, often provided credit lines which have been employed to purchase industrial plant and equipment. It is well known that the U.K., Germany and the Soviet Union have each financed a major steel plant in the public sector in India. The Communist Bloc countries have also done considerable financing of industrial development in such countries as the U.A.R., Indonesia, Iraq and others.

Multilateral Financing

1. The Inter- American Development Bank

International institutions have played an important role in financing industrial development. I shall first deal with a regional development bank, the Inter-American Development Bank, which was established in 1960. This has made loans for industrial purposes both out of its own ordinary capital and out of the "Fund for Special Operations" which was created to finance projects on somewhat more flexible terms than are possible in the employment of ordinary capital.

In 1961 and 1962 the Bank made 20 loans to private industrial enterprises in a total amount of $49,067,206. Although two of these loans were made from the Fund for Special Operations, all loans carried an interest rate of 5-3/4%. The length of loans varies with the nature of the investment, ranging from 6 to 15 years, with the majority about 12 years. Periods of grace also vary from 1-1/2 to 3 years, again depending on the nature of the project. Unlike the World Bank, the Inter-American Development Bank can finance private enterprise without a government guaranty.

The pulp and paper, cement, chemical, automotive and agricultural processing industries have been the principal beneficiaries of these loans. About 75% of this lending has been concentrated in Argentina, Brazil, and Chile.

The Bank has also made funds available for relending through local intermediaries. Seven such loans have been extended from its ordinary capital, three totaling about $4 million for purely industrial purposes and four to a total of $28.5 million for financing agricultural, livestock and fishery as well as industrial undertakings. Most of these loans are for 12 years and all are at an interest rate of 5-3/4%. In addition, the Fund for Special Operations has been tapped for 5 loans totaling $35 million to credit intermediaries which are engaged in financing both agricultural and industrial enterprises. All but one of these are at concessional interest rates of 4 or 4-1/2%, apparently because it is believed that the nature of the undertakings financed will not permit the charging of commercial interest rates.

One of the interesting features which distinguishes the financing of the Inter-American Development Bank from that of the World Bank is the utilization of its capital subscriptions in local currencies for lending. Six of its loans to private industrial enterprises and 7 of its loans to intermediary institutions have had a local currency component amounting altogether to the equivalent of about $10.3 million.

2. <u>The International Bank for Reconstruction and Development and the International Development Association</u>

The World Bank and its affiliate, the International Development Association, have concentrated primarily on the financing of the infrastructure investments in their member countries. Since the Bank opened its doors in June 1946, it has made loans totaling \$698 million directly for industrial projects and, additionally, loans to development banks engaged in financing industry amounting to \$225.4 million. While these sums together amount to less than 13% of the total development loans extended by the Bank, they nonetheless represent a substantial contribution to industrial development. Over 60% of the direct industrial loans have gone to expand the steel industries in Japan, India and Colombia. The paper and pulp industry, particularly in Finland, and the fertiliser and chemical industries have been other important beneficiaries of Bank lending. The balance has gone to a varied range of industries.

In recent years there has been a marked shift from the direct financing of industrial projects to the provision of financing through the intermediary of local development banks. In the last four years ended June 30, 1963, the annual volume of bank loans to individual industrial enterprises averaged \$35.5 million per year, while the average amount of Bank lending to development banks rose to \$44 million. I shall revert later to the increasingly important role of development banks. Suffice it to say here that direct Bank financing of industry has been handicapped both by the smallness of most industrial enterprises in the less developed countries and by the requirement, under the Bank Charter, that loans to private enterprise can only be made with a government guaranty. Some governments dislike to provide such a guaranty on the ground that it forces them to discriminate among business enterprises; and some private undertakings undoubtedly are reluctant to ask for a government guaranty for fear that it may open the way to government interference in their business.

The International Development Association, which was established to provide financing on specially lenient terms for countries which due to no fault of their own are unable to serve an adequate amount of borrowing on commercial terms, has so far made only two credits for industrial development -- one of $10 million for the China Development Corporation of Taiwan and one of $6.5 million for an interesting venture involving the establishment of estates for small industries in Pakistan. It should perhaps be noted that whenever IDA credits benefit private enterprise we insist that the latter does not get the benefit of the very lenient IDA terms. Thus the credit for the China Development Corporation was actually made to the government which re-lent the amount to the Corporation at the rate of interest prevailing in Taiwan and on much shorter maturities. In general we see no reason why the viability of private enterprise should not be tested by its ability to pay a commercial rate of interest on its borrowing.

As in the case of the Inter-American Development Bank, the maturity and the period of grace of World Bank loans for industrial projects has varied rather widely in accordance with the nature of the investment and the enterprise. Interest rates, conditioned by the rate at which the Bank itself can borrow, have fluctuated from 5-1/2 to 6% in recent years.

3. The International Finance Corporation

In 1956 the International Finance Corporation, a sister institution of the World Bank, was founded for the special task of promoting private industrial enterprise. It was designed to have greater flexibility in this field than the Bank, since it could make investments without government guaranty and in forms other than simple loans. It was expected to act as a catalyst in bringing together capital and management, as well as local private and foreign private capital.

At the end of June 1963, 73 countries were members of IFC and had paid in \$98,198,000 out of a total authorized capital of \$100,000,000 all of which is in U.S. dollars. By mid-1963 it had made investment commitments, less cancellations and terminations, of \$74.7 million in addition to standby and underwriting commitments totaling a little over \$8 million. After allowing for investments not yet effective, sales, repayments and the acquisition of underwriting and standby commitments by others, the IFC's total investment commitments stood at \$54.9 million, including about \$3.7 million in outstanding standby or underwriting obligations. It had disbursed nearly \$60.9 million, but in view of repayments and sales out of portfolio, it still had \$55.8 million in uncommitted funds. It is noteworthy that almost two-thirds of the IFC's commitments have been made in Latin America - a testimony to the vigorous growth of private enterprise in these countries.

In the initial years, IFC's operations were somewhat handicapped by its inability to make straight investments in equity or share capital. It could ask for stock options as part of the conditions of its lending or could invest in convertible debentures, but under conditions which enabled only those which bought such investments from IFC to exercise the stock option or the right of conversion. This disability made for complex financing arrangements which were not readily accepted in some countries. Moreover, it prevented IFC from engaging in the vital business of underwriting share issues. In 1961 an amendment to the Charter fortunately removed this disability. The IFC promptly took advantage of this new power by entering into standby and underwriting commitments totaling about \$8 million in the last two years; and this was instrumental in raising total new IFC commitments to \$20.3 million and \$18.0 million in the fiscal years 1962 and 1963 respectively.

To some the operations of IFC have been disappointing. It must be remembered, however, that a vast amount of energy and time is involved in corporate financing. Since IFC had made no less than 59 commitments by mid-1963, it will be seen that the average size of the commitment was rather small. Individual commitments have ranged from as little as $160,000 to a little over $4 million, with the majority actually falling below $1 million. Yet in virtually every case the IFC, unlike the Bank, had to concern itself with the intricate details of corporate financing, to bring the various interested parties together and even, in many cases, to assist in getting proper management of enterprises. Since it could not rely on government guaranties, the IFC was obliged to exercise extra care in screening all investment proposals. There is now some tendency toward increasing the size of individual investments - a tendency which is facilitated by the growing number of local development banks or finance corporations which can take care of the financing of smaller industrial enterprises; and this may help the IFC in the future to step up the aggregate amount of its investments.

It must be noted also that the amount of IFC investments is by no means an adequate reflection of its contribution to industrial development. In quite a few cases the IFC has assisted sponsors in working out attractive industrial ventures which subsequently could be entirely or almost entirely financed without IFC participation. This is quite in accordance with IFC's role as an investor of last resort. Even more important, IFC participation often brings much larger amounts of capital from other sources. To cite an instance, an IFC subscription of $3,050,000 in convertible debentures put the vital capstone on financing arrangements which enabled an $80 million petrochemical complex in Argentina to get started. Similarly an IFC commitment of $2 million permitted a Colombian textile concern to complete a $13 million modernization and expansion program; and IFC actually ended up by retaining only $275,000 of this commitment, for four American and two European banks took over the balance. Last year, too, the IFC organized a syndicate to underwrite a share issue of about $3 million and to buy outright a little over $1 million in shares as a vital contribution to an expansion program of the second largest Mexican steel company. Subsequently, IFC was able to liquidate virtually all of its shares and underwriting commitments to other investors. As confidence in the IFC has grown, the IFC has been able increasingly to act as a catalyst in attracting other private capital for industrial investment abroad. It is also enabled to sell off more of its investments, thus fulfilling the original expectation of gradually turning over its capital. Thus in the last fiscal year IFC managed to sell $6.7 million of its investment portfolio, raising the cumulative total of sales to $16.9 million.

The methods and terms of IFC financing vary considerably according to the circumstances. Its investments never take the form of simple, straight loans, partly because there are other sources of loan capital and partly because a "mixed" type of financing is considered more appropriate. Loans carrying a fixed interest rate of 7%, for instance, have often been accompanied by options to purchase shares or entitlements to receive additional interest contingent on profits or sales turnover. More recently combined equity and loan financing has tended to become the prevailing pattern. As already indicated, underwriting or standby commitments have become a prominent feature of financing in the last few years.

It would be surprising if all of the industrial ventures assisted by IFC had been uniformly successful. On the whole, however, only a few have run into serious difficulties and these have affected only a very small percentage of IFC's total investments. In only one case has a partial loss been sustained; and in a few other cases some refinancing and reorganization has been necessary. It is perhaps inevitable that IFC incur some losses in pioneering risk-taking investments; and some critics might even hold that the record shows that IFC has not taken sufficient risks.

The Role of Intermediaries

In recent years the IFC has demonstrated a keen interest in participating, in various countries, in the capitalization of development banks or finance corporations through which a growing volume of industrial financing is taking place. This complements the work of the World Bank which has for many years been extremely active in organizing and financing such institutions. Since IFC has a paramount interest in the development of private enterprise, it has now assumed primary responsibility, both for itself and the Bank, for promoting and handling the relations with these local financial institutions. Up to mid-1963, the Bank, IDA and IFC had together made available financial resources amounting to $239.8 million to 12 different development banks for reinvestment. Of this sum $123.3 million had been credited for approved projects and $95.4 million had been disbursed. Since these sums are in addition to the equity and loan funds raised by these institutions from other sources, it is evident that the total volume of business is assuming considerable proportions. One of the more prominent of these corporations, the Industrial Credit and Investment Corporation of India, has made loans and equity investments and undertaken underwriting operations to an equivalent of $127.2 million by the end of 1962.

The Bank, and now the IFC, have not restricted themselves to financing these institutions. We have played a prominent role in establishing eight of them and in reorganizing two others in order to make them more effective. This promotional and organizational task has several aspects. An investigation must be made to determine whether the prospective volume of business of the institution is large enough to warrant the expectation that it can operate profitably. Local business interests must be found to act as sponsors and pledge subscriptions to the initial share capital. Similarly, foreign business interests such as banks, insurance companies and other corporations operating in the country or interested in its development must be prevailed upon to participate in the equity financing. In this connection it is important to bring foreign and domestic private investors into partnership, but under conditions that will give domestic stockholders a majority interest. Then the institution's charter must be worked out and it must be incorporated either by a special legislative act or, preferably, under the provisions of general company law. Finally, it is of course essential to obtain the active cooperation of the government in establishing the bank or corporation and in providing financial support. The latter has generally been obtained in the form of a long-term, non-interest or low-interest bearing advance tantamount to equity capital which is necessary to enable the institution to earn profits on its share capital.

We have insisted that these development banks or finance corporations be basically privately owned and managed even though governments or public institutions occasionally hold minority interests. We believe such private ownership and management is important for corporations dedicated to the promotion of private enterprise. It helps to insure greater flexibility and efficiency in management and independence of political considerations in making investment decisions. This does not mean, of course, that these institutions disregard government development plans and policies in their operations. They function within the industrial policy framework set by the government. The Pakistan Industrial Credit and Investment Corporation, for example, can operate without government approval in financing investments in a fairly wide range of industries which the government has determined to be of high priority, but in other cases the consent of the government to the individual investment must be obtained.

Because investment banks or corporations are seldom likely to earn significant profits in the early years, it is sometimes difficult to obtain sufficient domestic capital subscriptions. In such cases the willingness and ability of the IFC to take a portion of the equity come in good stead. Governments which are naturally reluctant to have private foreign shareholders control the financing corporation are usually willing to consider the IFC-held equity a "domestic" holding on condition that the IFC is ready to sell it ultimately to domestic interests as and when these are attracted by the profitability of the institution.

These development banks and corporations are today financing a large number of industrial ventures which owing to their size and number could not expect to have direct access to foreign credit. They not only provide financial assistance in various forms, but a number of them have made important contributions to the vital development of a capital market by engaging in underwriting operations. As their staffs of financial and investment analysts acquire increasing competence and experience, they are also performing important services in examining the technical and economic soundness of projects and in uncovering new investment opportunities. In this connection it might be pointed out that the Bank has frequently assisted in getting appropriate management and setting up training facilities for these institutions.

It must be admitted that the financing provided by these banks and corporations is not cheap. Requirements for sufficient income to cover the cost of foreign borrowing and operating expenses as well as reserves and dividends make the charges for their financial services often rather high. In a sense, however, this may be considered an advantage rather than a drawback, for in a developing country where capital is scarce it is by and large unwise to finance enterprises which cannot earn a high return on the capital invested.

A few observations should be made about the terms on which the World

Bank has made loans to such financing institutions. These loans are in effect credit lines against which specific amounts can be drawn as and when projects are approved. The Bank usually reserves the final right of approval for specific investments above a minimum size, and it has been our experience that this helps the local financing institution in developing appropriate criteria for screening projects. We gradually relax this type of control, however, as the institution gains experience. Bank loans have generally been for periods of 10 to 15 years and at the interest rate prevailing at the time the loans are made. In a number of recent cases, however, the interest rate has been left undetermined and is fixed only when an amount is credited out of the loan for a particular project. A similar arrangement is in such cases usually made with respect to amortization. Such loans thus carry amortization schedules and interest rates which may vary with the type and timing of the individual projects financed from them. It should be noted finally that World Bank loans to these development institutions have in many cases been supplemented to an important extent by other foreign credits, particularly those extended by the U. S. Development Loan Fund.

The Issue of Private vs. Public Enterprise

The accent throughout this paper has been on the financing of private as distinct from government industrial enterprise. The World Bank has so far declined to finance government ventures in the manufacturing field and has insisted, as already indicated, on private ownership and management of the finance corporations it has assisted. Most Western governments which aid developing countries also attach paramount importance to the stimulation of private enterprise, although, except for the United States, they are less rigorous in excluding assistance to public industrial undertakings. As far as the Bank is concerned, this is not really an ideological issue. It does not deny that there are cases where government or public enterprise may be successful or may perform useful pioneering work in vital industries which private entrepreneurs may be as yet unprepared to develop owing to the large amount of capital required or the unusual risks involved. But the Bank is convinced that by and large private enterprise is the most practical, efficient and rapid way of developing manufacturing industries.

The reasons for this conviction are many. Governments, with their cumbersome and time-consuming methods of reaching decisions, are generally ill-equipped to make the many day-to-day and even hour-to-hour decisions that a business enterprise operating in the market must make. Even where there is considerable delegation of powers to a public corporation, vital decisions are often reserved to the government and the danger of political interference is ever present. Public enterprises are usually under pressure to lower their prices and raise wages and fringe benefits in such a way that their ability to generate necessary savings for expansion is impaired. On the other hand, private business tends to maximize profits and to "plow back" a large portion of these as savings for the further development of the business or the launching of new ventures. Above all, if the energies of the people of any country are to be fully mobilized for the task of development, it is important that actual or latent individual capacities for initiative and enterprise be given scope to develop the private sector. In a sense private enterprise is a means for decentralizing and disseminating responsibility for development more widely. In most of the less developed countries, governments are deficient in experience and in organizational and technical skills. They are already overburdened with tasks which the private sector is unable or ill-suited to assume, including, apart from normal government functions, far-reaching responsibilities for the development of power, transport and communications, social services, irrigation and other facilities for agriculture. On the other hand, there are in most countries energetic people who do not fit readily into the government mold and who relish the responsibility of initiating their own enterprises, prompted by motives of profit, power or creativity. It is important that this actual or latent talent be fully utilized in the development process.

Experience has amply demonstrated that wherever a vigorous private sector has developed, as in most of Latin America and in such Asiatic countries as India and Pakistan, economic progress is accelerated. To be sure there is little evidence of private enterprise in industry in some countries of Southeast Asia and in many countries of Africa. Yet this does not mean that this deficiency can simply be remedied by government assumption of responsibility for initiating and operating industrial establishments when governments themselves lack managerial and technical skills and are already overburdened. Rather, every effort must be made to encourage and stimulate initiative in the manufacturing field among private interests which may be engaged in commerce, transport or handicraft and small-scale industry.

All in all it can be said that adequate facilities have been and are being developed for the international financing of industrial development. As indicated in my introductory remarks, the paramount task is to overcome certain other bottlenecks. It is necessary to develop managerial and technical skills, to train the labor force, to pursue economic and financial policies conducive to investment and, in many cases, to create larger market areas without which diversified and economic industrial development is often impossible.

Making Agricultural Research Relevant To African Farmers

By John C. de Wilde

Paper for National Academy of Sciences' Conference on Agricultural Research Priorities for Economic Development in Africa, Abidjan, April 5-12, 1968.

Summary

Agricultural research must be largely oriented to the requirements of the small family farm which is characteristic of African agriculture. Research should not be understood simply as the technical and scientific work carried out on agricultural experiment stations. It must be more broadly conceived as including all types of studies and investigations that produce innovations which farmers will consider feasible and rewarding. It must be concerned with all the factors, socio-economic as well as technical, which condition the receptivity to change at the farm level.

On agricultural stations research must depart from a knowledge of the farmer's whole farming pattern and of the rationale of prevailing methods of cropping and animal husbandry. Single innovations which appear worthwhile by themselves may become unprofitable or impractical when their repercussions on the entire farm are taken into account.

Research should not be concerned exclusively with increasing the yield of crops or livestock per unit of area. It should recognize that most farmers in Africa, particularly those in the savanna areas, consider labor their principal constraint and are therefore primarily interested in maximizing their returns to labor rather than to land. It is important therefore to devote more study to the labor implications of possible agricultural improvements - to determine how the farm family uses its available labor resources over the entire season and where the bottlenecks are; and to estimate to what extent and when a proposed innovation is likely to require additional labor.

Labor bottlenecks may be widened by judicious introduction of machinery drawn by animals or by tractors. African agriculture is greatly under-equipped. Unfortunately, however, there are still only a relatively few cases where tractors have proved successful, and even the adoption of animal traction has been confined to certain areas. Mechanization, particularly with the tractor, is difficult because it usually entails a rather thorough revolution in farming methods and practices, including the adoption of changes in land tenure and new means of maintaining soil fertility and the replacement of extensive with intensive methods of cultivation. Much more work must be done to devise implements and machinery suitable to African conditions; and every major research station should carry on such work, adapting it to the problems encountered in the area it serves. Systematic efforts should also be made to analyze the many experiences with the use of various types of machinery and to disseminate the results of such analyses so that costly mistakes will not be repeated.

Many innovations have not been accepted by the farmer in the past because the nature and amount of incentives required to bring about their adoption have not been adequately appreciated. More socio-economic studies are needed to throw light on all the factors conditioning response to change in the societies of which farmers are part. These are important also for determining the best way of organizing agricultural extension work in various societies. Particularly when we are dealing with situations where there has as yet been little change we must be sure to study in advance such relevant social factors as the kinship organization and the associated network of obligations, the identity of the

people who wield authority and those who may be potential leaders in effecting change, the system of land tenure and inheritance, the degree of exposure of the society to stimulating outside contacts through labor migration, trade and education, and others of this type. Sociological investigations should, of course, not be content to describe a society at any one point of time but should rather single out and assess both the factors which are making for change and those which still tend to impede progress.

Adequate preliminary studies can bring about much more intelligently devised methods for improving agriculture. They will not, however, ensure absolute success. There must always be a certain amount of trial and error. Under such conditions it is especially important to have periodic surveys to check the effectiveness of agricultural improvement or development programs. Too often there has been a tendency to continue with the same program without evaluating the results. It is only through farm economic surveys that we can determine what problems are being encountered at the farm level and how we can devise innovations that will take these problems more effectively into account.

Making Agricultural Research Relevant
To African Farmers

By John C. de Wilde

Before launching on a discussion of the subject which has been assigned to me I would like to define two terms - namely "agricultural research," and "African farmers."

In using the words "agricultural research" I do not want to confine them to research conducted on agricultural experiment stations. The work on such stations may be characterized as primarily technical and scientific in character. It is concerned with testing new crops, developing new varieties or improving livestock breeds, devising methods of treating diseases and pests, analyzing soils and the possibility of their improvement, assessing water requirements, improving methods of cultivation and the like. The focus of this research is largely on raising and conserving yields per unit of land area. There is usually some concern with the economies of research solutions in the sense that attempts are made to relate the cash cost of inputs to the cash value of the increased output that is said to be possible. In some, but by no means the majority of, cases an agricultural station may also undertake some applied research in the rural milieu outside the station in order to ascertain to what extent the cost:benefit ratio of innovations may need to be modified under actual farming conditions.

However important this type of research may be, its scope is not sufficient to determine whether innovations will really be adopted in practice - that is, whether they take into account the needs and capabilities of farmers for whom they are intended. Thus agricultural research must be broadened to cover the study of all the factors which condition the farmer's acceptance of change. One of these factors relates to the feasibility of proposed changes. Does the farmer command the additional inputs of labor and other factors of production that are required; and if he cannot, can the government take the necessary action to put them at his disposal? A second factor relates to the profitability of the proposed innovation. In the eyes of the farmer will the benefits be sufficient considering the costs of the extra labor and other inputs involved, the troublesome nature of the adjustments of his working habits and the degree of risk inherent in the supposed benefits? A third and final factor relates to the proper approach that must be used to persuade the farmer living within a certain social framework to try whatever is judged by others to be to his advantage. Here it is above all a question of determining the methods of agricultural extension work that are likely to be best suited to the structure of the society of which the farmer is a part. A knowledge of the last two factors depends above all on the adequacy of economic and sociological research.

I now come to the definition of "African farmers." Characteristically these are men and women who farm small family holdings. Except in still limited areas where there have been increasing population pressures on available land, the size of the holding is circumscribed in part by the fact that the need for land is still primarily governed by subsistence requirements and in part by the limited equipment available to the farmer. The first of these has tended in many areas to become a less important governing factor as profitable opportunities for growing cash crops have opened up. The second, however, remains a serious constraint. Over much of Africa the hoe and the axe remain the only tools available to the farmer; and the improved equipment of the farmer in a manner that will prove economic is one of the central problems of African agriculture.

The family holding must be further characterized. In the majority of cases it is not a single production unit. Normally the man in the family is responsible for the portion devoted to cash crops, while the woman or women are charged with the cultivation of subsistence crops.

There are, of course, deviations from this pattern. Here and there, particularly in East Africa and in Rhodesia, large individual African farms exist. There are state and cooperative farms and privately-owned plantations. But for the most part these do not play a major role. The area in plantations, for example, is unlikely to be extended except perhaps in the form of so-called nuclear plantations with associated outgrowers consisting of small farmers who deliver their crops such as sugar cane, palm fruit and rubber to central processing facilities located on the plantation which itself produces the minimum crop necessary to make the processing plant economic. In that case, however, the problem is still to give the small African farmer the means and incentive to contribute the supplemental output.

Need for Knowledge of Prevailing Farming Patterns and Constraints

A study of selected experiences with agricultural development in tropical Africa which I directed for the World Bank has convinced me that one of the major causes of failure in the past has been the inadequate attention paid to the contraints of African farming and to the types and magnitudes of incentives required to bring about change. 1/

The first prerequisite of successful development is an adequate knowledge of the prevailing farming patterns and methods of production. Efforts to introduce innovations are likely to fail unless one knows why farmers adhere to certain practices, in what respect the innovations will modify the farming pattern and what difficulties the necessary modifications are likely to cause the farmer. One must know, for example, why farmers sow a crop at a particular time, especially when the date of sowing practised does not maximize the yield per unit of area. Similarly, if one wants to introduce an improved variety of a cash crop which should only be grown in pure stand, it is useful to know the implications for the farmer and his wife who have previously grown this crop mixed with others.

In recent times much more study has been devoted to the study of indigenous farming systems. 2/ Traditional African farming is no longer always dismissed as primitive and unworthy of consideration. There is a greater appreciation of the fact that the farmer, within the limits of his experience, makes a fairly rational use of the resources available and often displays a good practical knowledge of ecology. Yet the need for a more systematic collection and analysis of information on prevailing farming patterns still exists. Such surveys must not be purely descriptive, but must try to understand the rationale of given cropping patterns and methods of crop and animal husbandry. Information of this sort can be invaluable to both research and extension workers in enabling them to understand situations with which they must deal and which they are seeking to modify. It should form part of the teaching material in all agricultural schools and colleges.

I do not wish to suggest, of course, that all improvements in farming involve profound changes in existing systems. Some may involve little or no change. An improved variety may be substituted for another, or spraying may be introduced with minimal disturbance to the pattern of production. Perennial crops such as coffee and cocoa may simply be "added" without involving changes in established farming activities. Yet even in such cases experience in West Africa indicates that farmers often do not adopt the improved practices that are essential for high yields because these involve them in certain changes in utilizing their labor which they do not find advantageous. When new annual crops such as cotton are introduced these usually do have more far-reaching implications for existing cropping patterns because they raise problems of devising new crop rotations and of reconciling the competition of cash and subsistence crops for the available farm labor during the planting season. The most profound transformations are usually involved in the introduction of mechanization or irrigation, for these nearly always necessitate the replacement of extensive by intensive methods of production, the re-allocation or re-grouping of land, the adoption of new methods of increasing and maintaining soil fertility and the acceptance of a generally more disciplined form of agriculture.

The Labor Constraint

In this connection the need for a much better knowledge of the labor constraint in African agriculture must be particularly emphasized. Inadequate appreciation of this constraint has caused the rejection of many innovations. Again and again efforts to get farmers to increase their yields by timely sowing of a particular crop have failed because farmers have considered that they simply did not have the labor to do so at the recommended time. The most conspicuous example of this sort has been the failure in large part to bring about earlier sowing of cotton. Changes in practices which required greater inputs of labor per unit of area, such as tie-ridging of cotton land in Tanzania or improvements in coffee and cocoa husbandry in the Ivory Coast, have often failed because farmers considered with some justification that they could increase their output with less expenditure of labor by putting new land under crops and retaining their more extensive methods of cultivation. Irrigation schemes such as the Office du Niger in Mali have failed to recognize their full potential because it was not sufficiently appreciated that a high density of settlement was necessary to produce the intensive system of agriculture that the high capital investment in the irrigation network appeared to require. Attempts to introduce the transplanting of rice on this scheme quickly proved unsuccessful simply because there was not enough labor available and farmers accordingly found that the continuation of the old method of growing rice by direct sowing yielded a better return for their efforts. On the other hand, the transplanting of rice was successfully introduced on the Mwea-Tebere irrigation scheme in Kenya because the comparatively dense population in nearby areas made it possible to achieve a greater density of settlement and to procure supplemental paid labor for transplanting.

I am inclined to believe that research stations have often been too much preoccupied with increasing the yield of crops per unit of area and to work on one crop in isolation from another. Farmers on the other hand are primarily concerned with maximizing their returns to labor rather than land, and they frequently continue to consider labor their limiting factor even when land is becoming progressively scarcer. Moreover, farmers may be less interested in the yield of a single crop than in the aggregate return from all the activities on the amount of farm land they can manage to utilize within the limits of available labor supply. They may find that their interest in security and the total return for their efforts are best served by sowing their food crops at optimum dates and planting their cash crops at a later time even though this practice may not optimize the yields of cash crops according to the findings on research stations.

In orienting their work research stations should therefore take fully into account the factors which in the eyes of farmers govern output. This may necessitate more emphasis on subsistence crops. Given the fact that the total amount of land which the farmer can cultivate with the labor supply available is limited, the possibility of growing cash crops in addition to subsistence crops is in many cases restricted. Additional labor and land could be released for cash crops if improved varieties of food crops could be developed and grown with less labor and on a smaller area of land. Another way of recognizing the labor constraint would be to look at the cropping system as a whole and to devise improvements which would relieve labor bottlenecks, enable the farmer to utilize available labor over a longer period and thus obtain a greater aggregate return. For example, where a farmer grows sorghum or millet and cotton, it would be desirable to develop a combination of varieties and planting sequences that would make better use of the farmer's labor. I do not know what the potentialities of plant breeders are, but I wonder whether in such a case it would not be possible to develop a shorter-maturing sorghum or millet that could be planted after cotton or alternatively to concentrate on developing a cotton variety which would give the best return when planted after sorghum or millet.

If existing farm labor constraints are to be respected two conditions must be met. The research stations must work out the labor implications of any improvements in crops and crop husbandry they have worked out for possible adoption by farmers; and there must be sample surveys to determine the labor supply available and how and to what extent this supply is actually used for various tasks during different parts of the cropping season.

Neither of these conditions is easy to meet. Research stations, using different methods of cultivation and employing paid labor under more or less close supervision, will have some difficulty in working out the amount of labor the African farmer will need to effect particular improvements. They will need to simulate the actual methods used in African farming or induce some African farmers to test the proposed improvement or practice and thus measure the labor inputs. The measurement of farm labor availability and employment also poses problems which, however, are not so great as to make the exercise valueless.

Any studies of labor availability must take into account the supply both from within the farm family and from outside sources. As already indicated, it cannot be assumed that family labor represents a single pool on which one can draw to carry out uniformly all tasks on the family holding. There still tends to be a division of labor responsibilities between men and women even though this may have become less sharp on those farms which produce a growing proportion of their output for the market. Account must also be taken of the considerable amount of work which women must devote to non-farm activities including domestic tasks, the fetching of fuel and water, and marketing.

Another factor affecting the availability of labor may be the incidence of sickness. On this subject little research has yet been done. In various areas, however, one often gets the impression that labor inputs may be seriously curtailed by such diseases or infections as Guinea worm, bilharzia and malaria. At critical times, particularly during the transition from the dry to the rainy season, various types of fevers may incapacitate one or more members of the family just at the critical time when land must be prepared and crops planted. Wherever there is prima facie evidence that this is the case it would certainly be desirable to study closely the relationship of health to labor inputs and determine to what extent measures to improve public health should be an integral part of any agricultural development program.

The availability of outside labor for employment on the farm may be critically important in coping with seasonal labor peaks such as planting, weeding and harvesting. In many areas the only labor available outside the immediate family is that furnished in the form of communal work groups usually based on ties of kinship, age or neighborhoods. Since they are usually based on reciprocity, they theoretically provide no net supplement to family labor; yet in practice they may do so by raising the efficiency of labor or extending the number of hours that people are willing to work. Over much of Africa, however, the use of hired labor has become a practice on farms producing largely for the market. In some cases this hired labor may come from the same tribe to which the employing family belongs; and the tabus against the employment of fellow tribesmen which have prevailed in some areas have gradually disappeared, particularly where, as in the Central Province of Kenya, land has been scarce and unequally divided and there accordingly has been a pressing need for the poorly endowed farmers to seek employment with the more prosperous ones. The most important source of workers, however, has been migrant labor from other tribes and other areas. The development of the large Gezira scheme in the Sudan, for example, would hardly have been conceivable had it not been for its ability to attract labor for sowing and weeding and, especially, for the picking of cotton, from the poorer regions of Sudan and and even from northeastern Nigeria, the Central African Republic and the Chad. Similarly, the expansion of cocoa and Robusta coffee in the Ivory Coast and of cocoa in Nigeria and Ghana owes much to the availability of labor migrants from the northern parts of these countries as well as from the Upper Volta and the southern part of Mali.

In assessing the feasibility of certain innovations in farming which depend on the ability to hire outside labor, two factors must be taken into account. First of all one must make sure that there are reservoirs from which such labor can in principle be drawn. Secondly, one must determine whether the increase in farm cash income which the proposed innovation is likely to generate will be sufficient not only to warrant the payment of wages high enough to attract labor but also to leave the farmer with a net income that will appeal to him as an adequate incentive. It is significant that the crops which have been grown with substantial amounts of paid labor - coffee, cocoa and irrigated long-staple cotton - have all been highly profitable in relation to other alternatives open to the growers and have therefore made possible the payment of wages to labor migrants which were in turn considerably higher than the incomes which such migrants could obtain in their native regions.

The Problem of Equipment

It is equally important to consider to what extent actual or potential labor bottlenecks can be relieved through the use of appropriate implements and machinery. Within the scope of a brief paper it is impossible to give an adequate appreciation of both the potentialities and the problems of introducing animal-drawn and tractor-drawn implements. In the study which I directed for the World Bank we tried to sum up the conclusions which might be tentatively drawn from the many experiences with the employment of various types of machinery in tropical Africa. 3/ Although some progress has been made, particularly in the introduction of animal traction, it is obvious that there are still many unresolved problems in devising types of equipment that would be both effective and economic. I have already alluded to the fact that the economic use of tractors in particular usually entails a far-going revolution in farming methods which is by no means easy to effect. To some extent this is also true where animal-drawn implements are to be introduced. Experience also emphasizes the importance of making sure that the use of machinery to widen one bottleneck does not aggravate other bottlenecks such as weeding and harvesting with which machinery so far has not generally been able to cope effectively. On a cotton growing scheme in Tanzania where land preparation and spraying had been mechanized I noted, for example, a tendency to assign each participating farm family a cotton plot larger than this family could be expected to pick effectively with the labor available. Toward the end of last year I also visited a number of mechanized group farms in Uganda. These consisted of grouped individual holdings on which tractors were used under centralized management to do the plowing and sowing for both cotton and food crops. Weeding and harvesting were the responsibility of the participating farm families. On one of these group farms the use of tractors had apparently been successful in removing a key bottleneck. With the help of such tractors food crops were sown first, and when the farmers were busy harvesting their food crops the tractors were at work preparing the land for, and sowing, cotton. The farmers were thus able to harvest their food crops before it became necessary to weed cotton. Yet on another group farm farther to the north where the growing season was somewhat shorter, there was apparently considerable difficulty in achieving a proper timing of agricultural operations. There cotton had become badly infested with weeds because the farmers were still gathering their food crops when the weeding of cotton became necessary.

A considerable amount of useful work has been done in developing and testing implements and machinery on agricultural research stations and at a limited number of implement centers. Attention should also be drawn to various pilot projects, usually involving the introduction of animal-drawn equipment, undertaken by a number of French organizations engaged in extension work in Africa. There have also, of course, been many experiences with the employment of tractors on a large scale which have in most cases proved costly, albeit potentially instructive, failures.

In the future there is great need for more comprehensive and better-directed efforts to devise ways and means of meeting the equipment requirements of African agriculture. I would like to see all major agricultural research stations, except for those specializing in a single crop, devote some work to this subject, relating it to the practical problems encountered by farmers in the area which each of them serves. More attention, however, should probably be devoted to the multiplication of well-designed pilot projects which would test the technical suitability and the economies of various types of machinery on African farms. I would emphasize the pilot nature of such schemes, for far too much money has been wasted in the past on ill-conceived and untested large-scale projects. However, whatever the nature or the scale of the scheme, it is vitally important that there be more systematic evaluation of past and current experiences with the introduction of machinery. Failures to make such evaluations and disseminate the results of past experience have no doubt contributed to the constant repetition of costly mistakes. In this connection I have suggested that serious consideration be given to the possibility of creating, within FAO or ECA, an international center specially concerned with the problem of agricultural equipment in Africa. Such a center might collect, analyze and disseminate all relevant information on experiences with various types of traction and equipment under different conditions. On the basis of this analysis, it would also recommend and sponsor further experimental and developmental work to devise improved types of implements and machinery. This task of evaluating, testing and developing equipment should not, however, be the exclusive province of the agricultural engineer. Practical agriculturists and economists must be associated with it if the end product is to conform to the practical requirements of the farmer and meet the test of economic soundness.

Identification of Labor Bottlenecks

I would now like to return to the question of identifying actual labor bottlenecks encountered on the farm. What is required is a time profile of the utilization of farm labor over an entire season. Information on the existing pattern of labor inputs can only be obtained by sample surveys covering the time devoted to agricultural and non-agricultural activities alike and distinguishing between the work of men and women. There have been an increasing number of such surveys, but much more work needs to be done in this field. The necessary data must be obtained basically from periodic interviews with farmers. Since we must rely on their own subjective testimony, the information may not be objectively accurate. However, this is not a very serious handicap, since we are in any event primarily interested in the farmer's own appreciation of his bottlenecks. If he thinks that at any given time in the agricultural season his family is already excessively burdened with work, it is unlikely that he will take very kindly to innovations that will increase the workload at that time.

Care must be taken in interpreting the results. The labor profile which emerges may itself already reflect a tendency by the farm family to extend certain farming operations over a longer time than what would be the optimum if there were no labor shortage. Experience with surveys that have already been conducted shows that the use of resources and the resulting output is likely to vary widely within the sample. In such cases attention must be paid to the frequency distribution within the sample and to the reasons for differences in performances among farm families. In any society some people will obviously work harder and more effectively than others. Probably only a minority will work extremely hard, just as only a small number may be extremely lazy. In the practical work of promoting agricultural development it should be recognized that the greater number of people are likely to fall between these extremes and that efforts to improve their output will have to proceed, at least initially, within the limits set by their existing capacity to work.

The Determination of Necessary Incentives

In most cases the amount of labor that a farmer and his family will be willing to undertake is to some degree flexible. Even at peak labor requirements the farm family may be induced to work still harder. The critical question is the type and extent of inducements needed to bring forth the extra effort. At this juncture it is well to examine how much we know about the broader problem of the nature and amount of return which any group of farmers is likely to want as compensation for their own labor and the cost of any additional cash inputs.

We do know that farmers are interested in the reliability as well as the amount of return they may get from any innovation. People who live near the bare subsistence level and have little cash income are disinclined to take risks and are not interested in any improvement which promises them greater returns over an average number of years without giving them an assured return each year. For example, they do not generally want to pay cash for fertilizer when experience shows that fertilizer in some years will give them little or no increase in output out of which their cash outlay can be met.

I suspect that underestimation of the level of incentives required has often prevented the acceptance of innovations. 4/ It may be significant at any rate that in the past the greatest progress has been made in the adoption of tree crops such as coffee, cocoa and tea which were extremely profitable in relation to any alternative opportunities for earning cash income. Similarly, there is considerable empirical evidence that the adoption of new crops has been particularly rapid when prices of these crops were rising.

Presumably the kind of incentive required is closely geared to the extra effort or trouble involved for the farm family and the level of income it has already attained. The type as well as the amount of extra effort demanded may be important. There is reason to believe that incentives must be greater when farmers have to make rather fundamental changes in their working habits, when they are expected, for example, to conform to a high degree of labor discipline as may be the case on a managed irrigation or mechanized farming scheme. It cannot always be assumed that farmers who have already experienced a considerable rise in income will necessarily take advantage of any opportunity to increase it further. They may do so only if the return for their extra effort significantly exceeds the average return they are already obtaining for the labor they have been putting into their farms. In any event they may be expected to weigh, consciously or subconsciously, the advantages of additional income against the disadvantages of losing time for leisure, or as social anthropologists often express it, of time devoted to social activities.

In considering the whole problem of the adequacy of incentives, I believe we are still working too much on the basis of impressions and untested hypotheses. How much, for example, do we really know about the reality of "target income" concepts in various societies and their impact on incentives? How much do we know about responses of farmers to price changes? Last year in Uganda a Bank Mission appraising the country's five-year plan had to determine the possibility of attaining a certain cotton production target in the light, among other things, of a recent government measure which had slashed the farm price of cotton by one third. In recent years there had been a considerable expansion of cotton output. It proved virtually impossible, however, to get an accurate idea of the factors that had contributed to this increase in production - to what extent many farmers had recently started growing this crop or in what degree already existing growers had expanded their acreage or raised their yields. It was equally difficult to determine the effect of the reduction in prices. Would farmers who had long been growing cotton and had presumably become accustomed to a certain level of cash income from this crop strive even to raise their output in order to maintain their cash income? Would they be more disposed or less disposed to try and raise their net yields through spraying and the use of fertilizers? As for the unknown numbers of farmers who might have been growing cotton for only a few years, would they be sufficiently discouraged by the price cut to abandon the crop? The Mission could obtain no really reliable answers to these questions.

The Need for Socio-Economic Studies

In determining the adequacy of incentives or the general receptivity to innovations one must never lose sight of the fact that the customs, values and institutions of the society to which the farmer belongs may greatly influence the responses one is likely to get. All those concerned with stimulating agricultural progress must have a proper understanding of the rural societies within which development is taking place or is being initiated. The need for careful study of the factors that are pertinent to development in each society will, of course, vary. It will be of little importance where kinship and other social bonds have been greatly loosened and the interests of the individual and the nuclear family are the paramount factors governing responses. Conversely, it will be specially important where the society is highly structured and hierarchic, kinship ties are still strong and the standards of value and behavior are largely determined by the community and its authorities. Preliminary sociological or socio-economic studies are particularly necessary when one deals with a traditional society which has as yet experienced very little change.

However, great care must be taken in planning sociological investigations. If sociologists are to be employed, one must be sure to select those who are interested in, and are capable of, analyzing social change. A static description of society is useless. One must determine in what ways the society is already evolving, what factors are favorable or unfavorable to innovation and in what ways change may be accelerated. It is important that the agriculturist, economist and sociologist agree on the terms of reference for any such study. Otherwise the result may be simply a catalogue of customs, practices and institutions which, however, fascinating, may not throw much light on the feasibility of various means of modifying agriculture.

Within the scope of a brief paper it is possible to give only a brief and illustrative indication of some of the aspects of any society which are particularly relevant. The nature and strength of kinship groups or lineages and the network of social obligations to which they give rise have an important bearing on incentives. Practices governing land tenure may affect not only incentives but also the feasibility of re-allocating or re-grouping land to facilitate the introduction of new methods of cultivation. The duration and extent of stimulating contacts with the outside world through labor migration, trade and education will influence income aspirations and the receptivity to innovation. The division of tasks and the distribution of income among men and women within the family will affect the degree of identity of interest in the adoption of agricultural improvements. Wherever considerable livestock are kept, it is obviously important to determine attitudes toward cattle - whether they are or can become a source of regular income or whether they are to be considered wholly or primarily as a source of subsistence, a means of cultivation, a form of insurance or a method of cementing social ties or consummating marriages.

As I have earlier indicated, a socio-economic study may be needed not only to get a better understanding of all the factors governing receptivity to change and of the required incentives, but also to devise the proper methods of broaching proposed innovations to the members of a society. Except in areas where considerable agricultural progress has been achieved and people have acquired confidence in the government, one must be prepared to counter considerable distrust and skepticism. One must identify the persons who effectively wield authority and whose collaboration must be obtained or whose potential opposition must at least be overcome. One must determine whether one can work with individual farmers or only with groups. If it appears possible to work with individuals, it is desirable to find out whether there are persons who by virtue of education or outside experiences are likely to be more receptive than others. If some form of group action is indicated, it is necessary to determine on what basis the group should be organized and who should be the leader. Kinship may in certain cases be the right basis for organizing groups, but in other cases kinship groups may be so rent by internal strife that they are an unsuitable vehicle for constructive effort. Similarly, while it may be necessary to get the consent of a traditional village chief for any agricultural extension work in the village, he may not himself have sufficient interest in innovation to lead a group effort to introduce changes in agriculture. 5/

Even though careful preparatory studies are undertaken before launching campaigns to improve agriculture, one can often not be sure in advance that any proposed measures will prove feasible and profitable in the eyes of farmers. One must inevitably proceed to some extent by trial and error. This leads me to make one final observation. It is important to have periodic evaluations to determine what is really being accomplished at the farm level. Today much attention is being paid to planning, including planning for agriculture. Comparatively little effort, however, is devoted to assessing the effectiveness of the specific measures taken to achieve plan objectives. Even where there are no agricultural development plans as such, agricultural extension programs are often pursued indefinitely without really finding out specifically what obstacles are being encountered in persuading farmers to adopt the recommended measures. Here and there farm economic surveys have been undertaken and have thrown some useful light on the degree of acceptance of innovations. 6/ But they have not been on an adequate scale or sufficiently far-reaching. One cannot assume that an increase in output necessarily reflects the effectiveness of agricultural extension efforts. Experience indicates that such increases are often unrelated to the recommendations that are being made by the extension workers. Sample surveys are needed to determine the extent of acceptance of specific recommendations and the specific causes of failure to secure adoption. Where, as is often the case, some members of the community are adopting recommended new crops or practices but others have failed to do so, it is important to discover the reasons for this difference. Only on the basis of such evaluations can one determine what changes may be necessary in extension methods, what additional services may have to be provided to overcome certain difficulties of application, and to what extent the research on agricultural stations may have to be reoriented to take into account problems encountered at the farm level.

Notes

1/ John C. de Wilde et al., Experiences with Agricultural Development in Tropical Africa (Vol. I, The Synthesis; Vol. II, The Case Studies; the Johns Hopkins Press, Baltimore, 1967.)

2/ See, for example, William E. Allan, The African Husbandman (New York, Barnes & Noble, Inc., 1965).

3/ See Chapter 6, "Implements and Machinery", in de Wilde et al., Experiences with Agricultural Development in Tropical Africa, cited.

4/ Prof. Schultz has particularly criticized the failure to develop, on a sufficient scale, new agricultural inputs which are really rewarding to the farmer. See Theo. W. Schultz, "Economic Growth from Traditional Agriculture", in A. H. Moseman, ed., Agricultural Sciences for the Developing Countries (Publication No. 76 of the American Association for the Advancement of Science, Washington 1964).

5/ Two agricultural extension schemes - one in the Bokoro region of the Chad and the other in the central region of Upper Volta - illustrate the importance of prior sociological investigations before effective groups for initiating agricultural innovation can be organized. See Chapters 3 and 4 of Section II, Volume II, of de Wilde et al., Experiences with Agricultural Development in Tropical Africa, cited; also "l'observation sociologique et psychosociologique dans les opérations de modernisation rurale" (mimeographed paper presented to a symposium at the Bureau pour le Développement de la Production Agricole, Sept. 1-2, 1966.)

6/ Notable in this respect are a series of farm economic surveys carried out by the Farm Economics Survey Unit of the Ministry of Economic Planning and Development in Kenya.

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International Financing of Industrial Development

By John C. de Wilde

(Fifth Lecture, September 20)

Introductory Remarks

In addressing myself to this subject, I face two difficulties. One of these is psychological. As some one who has long been identified with an international financial institution devoted to development, I am acutely conscious of the fact that the availability of financial means is often not the crucial element in the fostering of development. Admittedly it is an essential condition, but only if certain other prerequisites exist. Among these are enterprise, managerial and technical skills, and markets. Industry cannot develop unless there are entrepreneurs capable of taking initiative and accepting responsibility, willing to take risks and endowed with the imagination to see investment opportunities. And the entrepreneurs must have the necessary managerial skills, the capacity to combine effectively the factors of production, to make investment decisions, to train and manage labor, to purchase raw materials and to market the finished products, all in such a way as to realize profits. Technical skills are no less vital, though they can perhaps be more readily acquired through training or even to some extent imported. The availability of adequate markets is particularly important to industrial development, for in many parts of the world the existence of small markets in terms of population or purchasing power is a serious obstacle to the promotion of a wide range of industries, many of which are dependent on economies of scale. But, though these non-financial factors are important, I shall resist the temptation to dwell on them at length. From time to time, however, I shall revert to them throughout this lecture.

The second difficulty of which I spoke is that of limitations of data. The information on the international flow of resources is by no means as tidy and complete as one should wish. Various international agencies -- the United Nations, the International Monetary Fund and the Organization for Economic Cooperation and Development -- have done extremely useful work in marshalling the data on this subject, but they have largely been unable to remedy the deficiencies in the information supplied by individual capital exporting countries. In many cases it is impossible to break down capital exports by geographic destination or by purpose. I am accordingly unable to give you any reliable estimates of the total international flow of capital going into industrial development or complete information on the areas or countries to which such industrial capital has been directed.

In discussing international financing of industry I shall distinguish between the various sources of finance, namely private sources, public funds channeled through individual governments or government institutions, and funds made available through international or inter-governmental institutions. I shall then discuss the role of development banks or corporations in the capital importing countries as intermediaries for the investment of external capital. Finally, I shall give some consideration to the issue of financing public as distinct from private investment in industry.

I might add that throughout this lecture I shall generally use the word "industry" in the restrictive sense of manufacturing industry, thus excluding the extractive industries and the processing facilities, such as refining, that are intimately associated with the latter.

Private Investment

Private direct investment is still by far the most important source for the international financing of industrial development. During the four-year period 1958-1961, U.S. and U.K. direct private investment in manufacturing industries abroad totaled no less than $5,090 million, or an average of $1,272 million per year. For other major capital exporting countries such as France, Germany, Netherlands, Italy and Japan, there are no precise data on the volume of direct private investment in manufacturing industries abroad, but they probably bring the total annual average to around $1,500 million per year.

Several characteristics of this type of private investment abroad are worth noting. The first is that investment in manufacturing accounts for substantially less than half of total private foreign investment. For the U.S. the proportion for the period indicated is 38%. For the U.K. it was probably only about 20% in 1960 and 1961, after due allowance is made for estimated foreign investment in the petroleum industry which is not normally included in the U.K. figures for overseas private investment. Of German direct private investment abroad the proportion going into manufacturing is probably not far different from that of the U.S., while for French direct investment the proportion may be closer to that of the U.K.

This characteristic reflects the concentration of private investment on the development of the extractive industries, particularly of petroleum and petroleum refining, but to some extent also of mining and smelting. Investment in these industries has been especially important in the case of the U.S., U.K., France and The Netherlands. The extractive industries are by their very nature international in scope and therefore attract a large amount of private capital.

The second notable feature of direct private foreign investment is the large proportion going into the manufacturing industries of the developed countries. Business firms of the industrialized, capital-exporting countries tend to invest above all in the manufacturing industries of other developed countries. In the period 1958-1961, for example, only about one-sixth of the total U.S. direct investment in manufacturing abroad has been in underdeveloped countries. For the U.K. the proportion is somewhat higher, but still probably not more than 25 to 30 per cent.

This tendency of the developed, industrialized countries to invest in each other's manufacturing industries is natural. Businessmen are attracted by the high and growing purchasing power in such countries. They can do business there under conditions which are familiar to them. They have greater confidence in the political and economic stability of these countries and in the prospect that their investments will be fairly treated. They can rely on a good reservoir of skilled labor and technicians. On the other hand, in the less developed countries the market for manufactures is often small. For instance, The Netherlands, with a population of 11.5 million, enjoys a national income around 50% greater than that of Pakistan, a country of 94 million people; and the market for manufactures in The Netherlands is even greater than this proportion suggests, for with the low level of living prevailing in Pakistan a much smaller percentage of total national income goes into the purchase of manufactures. In the underdeveloped countries foreign businessmen also encounter greater difficulties in terms of unfamiliar institutions and customs, the lack of an adequately schooled labor force and political conditions which are often unstable and uncertain. It is therefore no wonder that 81 per cent of the net increase in U.S. manufacturing investment abroad during 1960 and 1961 took place in Canada and Europe. The expanding European market has been particularly attractive to U.S. businessmen; from 1950 to the end of 1961 the value of total U.S. direct investment in Europe quadrupled as compared with a tripling of the value of total U.S. direct investment abroad.

Yet the actual and potential contribution of direct private foreign investment to the manufacturing industries of the less developed countries should not be underestimated. It contributes not simply capital, but also the even more vital elements of enterprise, management and training. By providing competition foreign business often acts as a spur to the efficiency of indigenous business undertakings and counters the inclination of the latter to resort to monopolistic practices. For these reasons the governments of many underdeveloped countries try to encourage private foreign investment through tax concessions, provisions for compensation in the event of nationalization and guaranties for the transfer of profits and the repatriation of capital. However, even such governments often have reservations. They fear that foreign business may become too dominant and may impair the prospects for more rapid development of indigenous enterprise. For this reason they generally prefer partnership arrangements with domestic business. Not unnaturally they also tend to insist that foreign companies accelerate the training of native personnel and curtail the number of foreigners employed. Quite a few governments are inimical to private foreign investment either because they look upon it as a form of neocolonialism, or because they prefer socialism to capitalism.

The governments of many developed countries have been anxious to direct more private investment to the underdeveloped parts of the world. Their efforts have been directed to the creation of conditions more conducive to such investment and to the development of guaranties to cover such non-commercial risks as war and civil commotion, nationalization and confiscation and nontransferability of earnings. A number of countries such as the U.S., Germany, and Japan have adopted investment guaranty programs for the overseas investments of their nationals and have supplemented these by concluding so-called investment treaties with governments of the less developed countries. In recent years many suggestions have been made for the institution of a multilateral investment guaranty system which some of the proponents believe would best be administered by the World Bank. Such a multilateral program, it is held, would be more comprehensive in its coverage, overcome the difficulties which many of the smaller investing countries have in devising their own national programs and be more attractive to the less developed countries. At the request of the Development Assistance Committee of the OECD, the World Bank last year submitted a report on Multilateral Investment Insurance without, however, taking a position on its advisability.

I shall not attempt here to make a comprehensive analysis of the merits and demerits of multilateral investment insurance. In any event prospects for its early adoption are probably not very great. There is little doubt that the availability of investment guaranties does provide some stimulus to private foreign investment even though questionnaires addressed to investors indicate that in many cases guaranties may not be crucial to investment decisions but simply afford an additional element of protection for investments that would still be made without them. Fears have been expressed that the generalization of investment guaranties might even be a disincentive to the better treatment of foreign private investment unless it is accompanied by some sort of investment code to which the less developed countries would subscribe, or unless some discrimination is exercised in the extension of guaranties as between countries which make an effort to create conditions favorable to private foreign capital and those which fail to provide the minimum protection desired. Moreover, one important deficiency of investment guaranties is the difficulty of protecting investments against measures which are sometimes styled as "creeping expropriation." These include government measures in the field of taxation, price or profit control, labor policy, foreign exchange allocation for imports of vital raw materials and spare parts and the like, all of which may in their cumulative impact greatly diminish or even eliminate the profitability of a venture without formally depriving the investor of his property. It is often the fear of such measures which deters investment.

Private Export Credits

This discussion of private foreign investment cannot be terminated without some reference to export financing which is usually facilitated by guaranties or insurance provided by public or quasi-public institutions. Exact estimates of the amount of such export credits accorded by private banking institutions are not available, but in recent years the gross volume has probably been around $1 billion. The bulk is provided by banks in the U.K., Germany, France and, more recently, in the United States. Well over half of these credits are apparently extended on exports to the less developed countries. It is impossible to determine how large a part is devoted to financing industrial development. The proportion is probably not very large considering the fact that a substantial amount finances exports of consumer goods, raw materials and spares or equipment destined for non-industrial undertakings in the importing countries.

While it is only natural that industrialized countries should seek to promote their sales by export credit, there is little doubt that private export credits have some undesirable features. One is their relatively short maturity, stemming from the obvious reluctance of most ordinary banks to make long-term commitments. The Berne Union of export credit insurance organizations has generally insisted on a limit of five years, extended to seven in some cases. In recent years there has been a tendency to lengthen the terms, primarily by arrangements under which public institutions or consortia of insurance companies and investment banks have agreed to take longer maturities supplementing those which regular banks are prepared to accept. From the standpoint of the debtors, however, the maturities appear to be still too short. But more serious drawbacks are the ease with which such credits can be contracted and their use in a number of cases to finance ill-considered ventures. The anxiety of exporters to sell, combined with the readiness in the less developed countries to borrow, often leads to a rather rapid and reckless pyramiding of debt in such a way that refinancing of payment obligations becomes necessary from time to time. This is particularly true in the case of debtor countries which find it difficult to meet the more stringent requirements of investment banking institutions such as the World Bank and are therefore tempted to resort to the easy expedient of contracting export credits. In the extension of such credits no attempt is usually made to screen the soundness of the ventures for which the plant and equipment is bought. The rule of caveat emptor is supposed to apply in such export sales on credit, but this practice not infrequently results in the carrying out of projects of doubtful technical or economic soundness. On the other hand, investment banking institutions which provide loans for development usually examine carefully the project for which the financing is sought.

Bilateral Government Financing

I now come to the role played by individual governments and government institutions in providing capital for industrial development abroad. I should emphasize at the outset that such government financing has been primarily directed to public infrastructure development such as transport and communications, power, irrigation and agriculture, and, to some extent, housing, public health and education. A portion, however, has been used for financing industrial enterprise both in the public and private sector.

In absolute and probably also in relative terms the United States has made the largest contribution of public funds to industrial enterprise in the less developed countries. Two institutions have been active in this field -- the Export-Import Bank and the Development Loan Fund. In the three fiscal years of 1960 to 1962, the Export-Import Banks made available loans or credits for industrial purposes amounting to $493 million or an average of $164 million a year. Through the five fiscal years 1958 to 1962, the Development Loan Fund made loans for individual industrial projects totaling $369 million or almost $74 million a year. In addition, $184 million in loans were made available, primarily for industry, to development banks in the less developed countries. Finally, the U.S. has made a considerable volume of loans and even grants available for the importation of industrial raw materials and equipment by the less developed countries. Such assistance has often been instrumental in overcoming bottlenecks to the fuller utilization of industrial capacity which stem from the shortage of foreign exchange for imports of vital spares and raw materials.

Unfortunately there is little readily available information on the allocation by purpose of development aid provided by other countries such as France, the U.K., Germany and the Communist nations. With the possible exception of aid provided by the Communist countries, I believe that only a small proportion is used for the direct financing of industrial projects. Both the U.K. and Germany have, however, often provided credit lines which have been employed to purchase industrial plant and equipment. It is well known that the U.K., Germany and the Soviet Union have each financed a major steel plant in the public sector in India. The Communist Bloc countries have also done considerable financing of industrial development in such countries as the U.A.R., Indonesia, Iraq and others.

Multilateral Financing

1. The Inter-American Development Bank

International institutions have played an important role in financing industrial development. I shall first deal with a regional development bank, the Inter-American Development Bank, which was established in 1960. This has made loans for industrial purposes both out of its own ordinary capital and out of the "Fund for Special Operations" which was created to finance projects on somewhat more flexible terms than are possible in the employment of ordinary capital.

In 1961 and 1962 the Bank made 20 loans to private industrial enterprises in a total amount of $49,067,206. Although two of these loans were made from the Fund for Special Operations, all loans carried an interest rate of 5-3/4%. The length of loans varies with the nature of the investment, ranging from 6 to 15 years, with the majority about 12 years. Periods of grace also vary from 1-1/2 to 3 years, again depending on the nature of the project. Unlike the World Bank, the Inter-American Development Bank can finance private enterprise without a government guaranty.

The pulp and paper, cement, chemical, automotive and agricultural processing industries have been the principal beneficiaries of these loans. About 75% of this lending has been concentrated in Argentina, Brazil, and Chile.

The Bank has also made funds available for relending through local intermediaries. Seven such loans have been extended from its ordinary capital, three totaling about $4 million for purely industrial purposes and four to a total of $28.5 million for financing agricultural, livestock and fishery as well as industrial undertakings. Most of these loans are for 12 years and all are at an interest rate of 5-3/4%. In addition, the Fund for Special Operations has been tapped for 5 loans totaling $35 million to credit intermediaries which are engaged in financing both agricultural and industrial enterprises. All but one of these are at concessional interest rates of 4 or 4-1/2%, apparently because it is believed that the nature of the undertakings financed will not permit the charging of commercial interest rates.

One of the interesting features which distinguishes the financing of the Inter-American Development Bank from that of the World Bank is the utilization of its capital subscriptions in local currencies for lending. Six of its loans to private industrial enterprises and 7 of its loans to intermediary institutions have had a local currency component amounting altogether to the equivalent of about $10.3 million.

2. The International Bank for Reconstruction and Development and the International Development Association

The World Bank and its affiliate, the International Development Association, have concentrated primarily on the financing of the infrastructure investments in their member countries. Since the Bank opened its doors in June 1946, it has made loans totaling $698 million directly for industrial projects and, additionally, loans to development banks engaged in financing industry amounting to $225.4 million. While these sums together amount to less than 13% of the total development loans extended by the Bank, they nonetheless represent a substantial contribution to industrial development. Over 60% of the direct industrial loans have gone to expand the steel industries in Japan, India and Colombia. The paper and pulp industry, particularly in Finland, and the fertiliser and chemical industries have been other important beneficiaries of Bank lending. The balance has gone to a varied range of industries.

In recent years there has been a marked shift from the direct financing of industrial projects to the provision of financing through the intermediary of local development banks. In the last four years ended June 30, 1963, the annual volume of bank loans to individual industrial enterprises averaged $35.5 million per year, while the average amount of Bank lending to development banks rose to $44 million. I shall revert later to the increasingly important role of development banks. Suffice it to say here that direct Bank financing of industry has been handicapped both by the smallness of most industrial enterprises in the less developed countries and by the requirement, under the Bank Charter, that loans to private enterprise can only be made with a government guaranty. Some governments dislike to provide such a guaranty on the ground that it forces them to discriminate among business enterprises; and some private undertakings undoubtedly are reluctant to ask for a government guaranty for fear that it may open the way to government interference in their business.

The International Development Association, which was established to provide financing on specially lenient terms for countries which due to no fault of their own are unable to serve an adequate amount of borrowing on commercial terms, has so far made only two credits for industrial development -- one of $10 million for the China Development Corporation of Taiwan and one of $6.5 million for an interesting venture involving the establishment of estates for small industries in Pakistan. It should perhaps be noted that whenever IDA credits benefit private enterprise we insist that the latter does not get the benefit of the very lenient IDA terms. Thus the credit for the China Development Corporation was actually made to the government which re-lent the amount to the Corporation at the rate of interest prevailing in Taiwan and on much shorter maturities. In general we see no reason why the viability of private enterprise should not be tested by its ability to pay a commercial rate of interest on its borrowing.

As in the case of the Inter-American Development Bank, the maturity and the period of grace of World Bank loans for industrial projects has varied rather widely in accordance with the nature of the investment and the enterprise. Interest rates, conditioned by the rate at which the Bank itself can borrow, have fluctuated from 5-1/2 to 6% in recent years.

3. The International Finance Corporation

In 1956 the International Finance Corporation, a sister institution of the World Bank, was founded for the special task of promoting private industrial enterprise. It was designed to have greater flexibility in this field than the Bank, since it could make investments without government guaranty and in forms other than simple loans. It was expected to act as a catalyst in bringing together capital and management, as well as local private and foreign private capital.

At the end of June 1963, 73 countries were members of IFC and had paid in $98,198,000 out of a total authorized capital of $100,000,000 all of which is in U.S. dollars. By mid-1963 it had made investment commitments, less cancellations and terminations, of $74.7 million in addition to standby and underwriting commitments totaling a little over $8 million. After allowing for investments not yet effective, sales, repayments and the acquisition of underwriting and standby commitments by others, the IFC's total investment commitments stood at $54.9 million, including about $3.7 million in outstanding standby or underwriting obligations. It had disbursed nearly $60.9 million, but in view of repayments and sales out of portfolio, it still had $55.8 million in uncommitted funds. It is noteworthy that almost two-thirds of the IFC's commitments have been made in Latin America -- a testimony to the vigorous growth of private enterprise in these countries.

In the initial years, IFC's operations were somewhat handicapped by its inability to make straight investments in equity or share capital. It could ask for stock options as part of the conditions of its lending or could invest in convertible debentures, but under conditions which enabled only those which bought such investments from IFC to exercise the stock option or the right of conversion. This disability made for complex financing arrangements which were not readily accepted in some countries. Moreover, it prevented IFC from engaging in the vital business of underwriting share issues. In 1961 an amendment to the Charter fortunately removed this disability. The IFC promptly took advantage of this new power by entering into standby and underwriting commitments totaling about $8 million in the last two years; and this was instrumental in raising total new IFC commitments to $20.3 million and $18.0 million in the fiscal years 1962 and 1963 respectively.

To some the operations of IFC have been disappointing. It must be remembered, however, that a vast amount of energy and time is involved in corporate financing. Since IFC had made no less than 59 commitments by mid-1963, it will be seen that the average size of the commitment was rather small. Individual commitments have ranged from as little as $160,000 to a little over $4 million, with the majority actually falling below $1 million. Yet in virtually every case the IFC, unlike the Bank, had to concern itself with the intricate details of corporate financing, to bring the various interested parties together and even, in many cases, to assist in getting proper management of enterprises. Since it could not rely on government guaranties, the IFC was obliged to exercise extra care in screening all investment proposals. There is now some tendency toward increasing the size of individual investments -- a tendency which is facilitated by the growing number of local development banks or finance corporations which can take care of the financing of smaller industrial enterprises; and this may help the IFC in the future to step up the aggregate amount of its investments.

It must be noted also that the amount of IFC investments is by no means an adequate reflection of its contribution to industrial development. In quite a few cases the IFC has assisted sponsors in working out attractive industrial ventures which subsequently could be entirely or almost entirely financed without IFC participation. This is quite in accordance with IFC's role as an investor of last resort. Even more important, IFC participation often brings much larger amounts of capital from other sources. To cite an instance, an IFC subscription of $3,050,000 in convertible debentures put the vital capstone on financing arrangements which enabled an $80 million petrochemical complex in Argentina to get started. Similarly an IFC commitment of $2 million permitted a Colombian textile concern to complete a $13 million modernization and expansion program; and IFC actually ended up by retaining only $275,000 of this commitment, for four American and two European banks took over the balance. Last year, too, the IFC organized a syndicate to underwrite a share issue of about $3 million and to buy outright a little over $1 million in shares as a vital contribution to an expansion program of the second largest Mexican steel company. Subsequently, IFC was able to liquidate virtually all of its shares and underwriting commitments to other investors. As confidence in the IFC has grown, the IFC has been able increasingly to act as a catalyst in attracting other private capital for industrial investment abroad. It is also enabled to sell off more of its investments, thus fulfilling the original expectation of gradually turning over its capital. Thus in the last fiscal year IFC managed to sell $6.7 million of its investment portfolio, raising the cumulative total of sales to $16.9 million.

The methods and terms of IFC financing vary considerably according to the circumstances. Its investments never take the form of simple, straight loans, partly because there are other sources of loan capital and partly because a "mixed" type of financing is considered more appropriate. Loans carrying a fixed interest rate of 7%, for instance, have often been accompanied by options to purchase shares or entitlements to receive additional interest contingent on profits or sales turnover. More recently combined equity and loan financing has tended to become the prevailing pattern. As already indicated, underwriting or standby commitments have become a prominent feature of financing in the last few years.

It would be surprising if all of the industrial ventures assisted by IFC had been uniformly successful. On the whole, however, only a few have run into serious difficulties and these have affected only a very small percentage of IFC's total investments. In only one case has a partial loss been sustained; and in a few other cases some refinancing and reorganization has been necessary. It is perhaps inevitable that IFC incur some losses in pioneering risk-taking investments; and some critics might even hold that the record shows that IFC has not taken sufficient risks.

The Role of Intermediaries

In recent years the IFC has demonstrated a keen interest in participating, in various countries, in the capitalization of development banks or finance corporations through which a growing volume of industrial financing is taking place. This complements the work of the World Bank which has for many years been extremely active in organizing and financing such institutions. Since IFC has a paramount interest in the development of private enterprise, it has now assumed primary responsibility, both for itself and the Bank, for promoting and handling the relations with these local financial institutions. Up to mid-1963, the Bank, IDA and IFC had together made available financial resources amounting to $239.8 million to 12 different development banks for reinvestment. Of this sum $123.3 million had been credited for approved projects and $95.4 million had been disbursed. Since these sums are in addition to the equity and loan funds raised by these institutions from other sources, it is evident that the total volume of business is assuming considerable proportions. One of the more prominent of these corporations, the Industrial Credit and Investment Corporation of India, has made loans and equity investments and undertaken underwriting operations to an equivalent of $127.2 million by the end of 1962.

The Bank, and now the IFC, have not restricted themselves to financing these institutions. We have played a prominent role in establishing eight of them and in reorganizing two others in order to make them more effective. This promotional and organizational task has several aspects. An investigation must be made to determine whether the prospective volume of business of the institution is large enough to warrant the expectation that it can operate profitably. Local business interests must be found to act as sponsors and pledge subscriptions to the initial share capital. Similarly, foreign business interests such as banks, insurance companies and other corporations operating in the country or interested in its development must be prevailed upon to participate in the equity financing. In this connection it is important to bring foreign and domestic private investors into partnership, but under conditions that will give domestic stockholders a majority interest. Then the institution's charter must be worked out and it must be incorporated either by a special legislative act or, preferably, under the provisions of general company law. Finally, it is of course essential to obtain the active cooperation of the government in establishing the bank or corporation and in providing financial support. The latter has generally been obtained in the form of a long-term, non-interest or low-interest bearing advance tantamount to equity capital which is necessary to enable the institution to earn profits on its share capital.

We have insisted that these development banks or finance corporations be basically privately owned and managed even though governments or public institutions occasionally hold minority interests. We believe such private ownership and management is important for corporations dedicated to the promotion of private enterprise. It helps to insure greater flexibility and efficiency in management and independence of political considerations in making investment decisions. This does not mean, of course, that these institutions disregard government development plans and policies in their operations. They function within the industrial policy framework set by the government. The Pakistan Industrial Credit and Investment Corporation, for example, can operate without government approval in financing investments in a fairly wide range of industries which the government has determined to be of high priority, but in other cases the consent of the government to the individual investment must be obtained.

Because investment banks or corporations are seldom likely to earn significant profits in the early years, it is sometimes difficult to obtain sufficient domestic capital subscriptions. In such cases the willingness and ability of the IFC to take a portion of the equity come in good stead. Governments which are naturally reluctant to have private foreign shareholders control the financing corporation are usually willing to consider the IFC-held equity a "domestic" holding on condition that the IFC is ready to sell it ultimately to domestic interests as and when these are attracted by the profitability of the institution.

These development banks and corporations are today financing a large number of industrial ventures which owing to their size and number could not expect to have direct access to foreign credit. They not only provide financial assistance in various forms, but a number of them have made important contributions to the vital development of a capital market by engaging in underwriting operations. As their staffs of financial and investment analysts acquire increasing competence and experience, they are also performing important services in examining the technical and economic soundness of projects and in uncovering new investment opportunities. In this connection it might be pointed out that the Bank has frequently assisted in getting appropriate management and setting up training facilities for these institutions.

It must be admitted that the financing provided by these banks and corporations is not cheap. Requirements for sufficient income to cover the cost of foreign borrowing and operating expenses as well as reserves and dividends make the charges for their financial services often rather high. In a sense, however, this may be considered an advantage rather than a drawback, for in a developing country where capital is scarce it is by and large unwise to finance enterprises which cannot earn a high return on the capital invested.

A few observations should be made about the terms on which the World Bank has made loans to such financing institutions. These loans are in effect credit lines against which specific amounts can be drawn as and when projects are approved. The Bank usually reserves the final right of approval for specific investments above a minimum size, and it has been our experience that this helps the local financing institution in developing appropriate criteria for screening projects. We gradually relax this type of control, however, as the institution gains experience. Bank loans have generally been for periods of 10 to 15 years and at the interest rate prevailing at the time the loans are made. In a number of recent cases, however, the interest rate has been left undetermined and is fixed only when an amount is credited out of the loan for a particular project. A similar arrangement is in such cases usually made with respect to amortization. Such loans thus carry amortization schedules and interest rates which may vary with the type and timing of the individual projects financed from them. It should be noted finally that World Bank loans to these development institutions have in many cases been supplemented to an important extent by other foreign credits, particularly those extended by the U.S. Development Loan Fund.

The Issue of Private vs. Public Enterprise

The accent throughout this paper has been on the financing of private as distinct from government industrial enterprise. The World Bank has so far declined to finance government ventures in the manufacturing field and has insisted, as already indicated, on private ownership and management of the finance corporations it has assisted. Most Western governments which aid developing countries also attach paramount importance to the stimulation of private enterprise, although, except for the United States, they are less rigorous in excluding assistance to public industrial undertakings. As far as the Bank is concerned, this is not really an ideological issue. It does not deny that there are cases where government or public enterprise may be successful or may perform useful pioneering work in vital industries which private entrepreneurs may be as yet unprepared to develop owing to the large amount of capital required or the unusual risks involved. But the Bank is convinced that by and large private enterprise is the most practical, efficient and rapid way of developing manufacturing industries.

The reasons for this conviction are many. Governments, with their cumbersome and time-consuming methods of reaching decisions, are generally ill-equipped to make the many day-to-day and even hour-to-hour decisions that a business enterprise operating in the market must make. Even where there is considerable delegation of powers to a public corporation, vital decisions are often reserved to the government and the danger of political interference is ever present. Public enterprises are usually under pressure to lower their prices and raise wages and fringe benefits in such a way that their ability to generate necessary savings for expansion is impaired. On the other hand, private business tends to maximize profits and to "plow back" a large portion of these as savings for the further development of the business or the launching of new ventures. Above all, if the energies of the people of any country are to be fully mobilized for the task of development, it is important that actual or latent individual capacities for initiative and enterprise be given scope to develop the private sector. In a sense private enterprise is a means for decentralizing and disseminating responsibility for development more widely. In most of the less developed countries, governments are deficient in experience and in organizational and technical skills. They are already overburdened with tasks which the private sector is unable or ill-suited to assume, including, apart from normal government functions, far-reaching responsibilities for the development of power, transport and communications, social services, irrigation and other facilities for agriculture. On the other hand, there are in most countries energetic people who do not fit readily into the government mold and who relish the responsibility of initiating their own enterprises, prompted by motives of profit, power or creativity. It is important that this actual or latent talent be fully utilized in the development process.

Experience has amply demonstrated that wherever a vigorous private sector has developed, as in most of Latin America and in such Asiatic countries as India and Pakistan, economic progress is accelerated. To be sure there is little evidence of private enterprise in industry in some countries of Southeast Asia and in many countries of Africa. Yet this does not mean that this deficiency can simply be remedied by government assumption of responsibility for initiating and operating industrial establishments when governments themselves lack managerial and technical skills and are already overburdened. Rather, every effort must be made to encourage and stimulate initiative in the manufacturing field among private interests which may be engaged in commerce, transport or handicraft and small-scale industry.

All in all it can be said that adequate facilities have been and are being developed for the international financing of industrial development. As indicated in my introductory remarks, the paramount task is to overcome certain other bottlenecks. It is necessary to develop managerial and technical skills, to train the labor force, to pursue economic and financial policies conducive to investment and, in many cases, to create larger market areas without which diversified and economic industrial development is often impossible.