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Objectives and Potentialities of Monetary Policy in Underdeveloped Countries
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OBJECTIVES AND POTENTIALITIES OF MONETARY POLICY IN UNDERDEVELOPED COUNTRIES

by

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Introduction

This paper endeavors to demonstrate that monetary policy in underdeveloped countries is not rendered impotent by the absence of a broad and active money market, and that monetary policy in these countries can make a substantial contribution to orderly and well-balanced economic growth.

In fact, economic stability and development should be the principal objectives of central banking. As is explained in the next section of this paper, however, most central banks in the underdeveloped countries were established at a time when the objectives and scope of central banking were much more modest. It is largely a result of the Great Depression and the economic disturbances occasioned by World War II and its aftermath that monetary policy is now primarily and more directly concerned with the broad task of promoting the optimum utilization of a country's economic resources. If these broader responsibilities are to be carried out effectively, however, substantial changes in present monetary and credit policies, and in existing banking legislation, will be necessary in many cases.

It is obvious, of course, that even if these changes are made, monetary policy by itself cannot produce the fullest measure of economic stability and development attainable by a country's own efforts. The final outcome will depend on whether the actions of the government and

the public add to, or detract from, the best efforts of the central bank. Nevertheless, monetary policy can make an important contribution of its own. In order to highlight the nature and extent of this contribution, references in this paper to the desirability of complementary action by the government are limited largely to cases in which specific objectives can be attained only through a joint effort by the government and the central bank.

The objectives of monetary policy

Up to the end of the First World War, the primary objective of central banks in the leading industrial nations was generally considered to be the maintenance of unrestricted convertibility between the country's currency and gold at a stable rate of exchange. In addition, central banks were expected to prevent financial panics by acting as lender of last resort and to provide elasticity to the supply of bank credit in order that seasonal and other temporary needs for credit could be met with a minimum of strain on the banking system. In this way, central banks were to mitigate some of the disruptive incidental effects of the operation of the gold standard mechanism. In times of war, when national survival was at stake, central banks were to see to it that the war effort was not impeded by a lack of funds for the government.

Little or no attention, however, was given to the question of central bank responsibility for maintaining domestic economic stability.[1]

1/ See, for example, E. A. Goldenweiser, American Monetary Policy (New York, 1951), p. 110.

Unemployment of labor and capital was regarded to be largely a frictional and transitory problem, and a necessary part of the process of adjustment required by distortions in the price-cost structure. The gold standard theory, which provided the "rules of the game" that governed central banking, was essentially a static theory, which ignored the problem of the business cycle, as Professor John H. Williams and others have pointed out.[1/] Changes in the money supply were to be determined primarily by the balance of payments, rather than by the level of domestic economic activity. Whenever gold was flowing into the country, the central bank was expected to increase the domestic credit base not only by purchasing gold but also by expanding its domestic assets. Similarly, when gold was flowing out of the country, the central bank was expected to contract credit. In this manner, the influence of gold movements on the domestic economy was to be magnified.[2/]

This does not mean that the central bank was expected to expand credit to the absolute limit permitted by its reserve requirement whenever gold flowed into the country. If it did so, it would not have the necessary "excess capacity" with which to accommodate seasonal and other special demands for credit of a temporary nature. It would be

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1/ Cf. John H. Williams, International Monetary Organization and Policy, in The Lessons of Monetary Experience, edited by A. D. Gayer (New York, 1937), p. 25.

2/ See International Currency Experience, League of Nations, 1944, Chapter IV, Sec. I.

unable to carry out its responsibility as lender of last resort and would lose practically all its freedom of action. Accordingly, it would be more exact to say that central banks were expected to expand credit by an amount which would be consistent with maintaining sufficient "excess reserves" to assure freedom of action in special temporary circumstances.

One other qualification should be added. It was quite compatible with the "rules of the game" that central banks not expand or contract their domestic assets if a gold movement seemed likely to be of brief duration and to be reversed in the near future. In such cases, central banks could quite properly endeavor to minimize rather than magnify the impact of the gold movement on the domestic economy.

With the foregoing qualifications, however, central bank credit policy was to be governed more or less automatically by changes in the country's gold reserves. Adjustments in the central bank's rediscount rate, supplemented by open-market operations in commercial paper and in government securities, were believed to be sufficient, prior to World War I, to implement central bank policy objectives.

In the nineteen-twenties, the thinking of monetary authorities was still conditioned by the objectives and institutional characteristics of central banking in the pre-war period, and it was generally hoped that the classical norms of monetary policy could be restored as a part of world economic and financial reconstruction. This hope was reflected in the legislation which established central banks in underdeveloped areas during the period.

It is important to note that the establishment of these banks was not closely associated with any avowed desire or intention to manage the supply, availability and cost of credit for purposes of stabilizing domestic economic activity or of promoting economic development. As in the case of the more advanced countries, it was generally believed that the unregulated operation of economic forces under laissez-faire and the gold standard would produce the optimum rate and pattern of economic growth. For this reason, the attention of central banks was directed toward the smooth and efficient operation of the banking system in accordance with the principles of the gold standard and of the commercial loan theory of banking. Little conscious attention was given by monetary authorities to the problems of economic stability and development as such.

The world-wide depression of the nineteen-thirties hit the underdeveloped economies particularly hard. Specialization in the production for export of a narrow range of primary products in which they had a comparative advantage made these countries very vulnerable to a decline in foreign demand for their products. It has been estimated, for example, that export earnings represent about a quarter of national income in most Latin American countries, as compared with less than one-tenth of national income in the United States.

The shock of the depression led to a re-examination of the doctrine that observance of the principles of laissez-faire and the gold standard automatically would lead to an optimum allocation of

resources and to a rapid rate of economic growth. There arose a strong conviction among underdeveloped countries everywhere that governments must consciously intervene in economic processes if a country is to have a well-balanced and expanding economy, and that the long-run gains of such intervention would more than compensate for possible short-run losses in real income. This conviction, which sprouted in the depression years of the nineteen-thirties, came into full form during the war and early postwar periods. Government promotion of economic development now seemed imperative if standards of living were to be raised and made less vulnerable to depressions in the industrial countries and to wartime non-availability of imports.

This reorientation in the thinking of underdeveloped countries on the general subject of economic development has quite naturally been accompanied by similar revisions of their thinking on central banking. Governments and economists have come to place more and more emphasis on the responsibility of central banks to promote economic stability and development. Much more attention is now given to the question of the implications of the existing exchange rate for the domestic economy of the country concerned, and changes in exchange rates are generally regarded as being in order whenever they create a fundamental obstacle to full employment and exchange convertibility.

Relationship between aggregate demand and the supply of money

The greater the extent to which demand for currently produced goods and existing assets responds to changes in the public's holdings

of money, the greater are the potentialities of monetary policy for preventing both inflations and deflations, thereby facilitating full and effective utilization of a country's resources.

There are good reasons for believing that the demand for goods and other assets in underdeveloped countries responds much more closely to changes in the stock of money than it does in the United States. One of the characteristics of underdeveloped countries is an unwillingness of the public to hold assets in the form of money. This means that holdings of money are generally kept to the minimum required for transactions and precautionary purposes.

There are several factors contributing to this situation. Each of them is of some importance in most of the underdeveloped countries, although the relative importance may vary from country to country.

First, the purchasing power of the currencies of many of these countries, not only in terms of domestic goods but also in terms of imports, has dropped rather sharply over the years, and many people have firm expectations that the inflationary policies which have contributed to this decline will continue, or will be resumed. These are important factors inducing people to hold their savings in forms which will appreciate in money value as the purchasing power of money declines.

Second, the bulk of the population of most of the underdeveloped countries has such low real incomes that any increase in their money incomes is spent almost immediately.

Third, for a variety of reasons, wealth held in the form of real estate, whether urban or rural, has more prestige value in underdeveloped countries than in the United States. The "prestige" element of holding property rather than cash or securities cannot be entirely divorced from the inflation factor which has already been mentioned. Nevertheless, the prestige element is of some importance even in countries such as Guatemala, Cuba and El Salvador which have had a history of currency stability for many years.

For the foregoing reasons, therefore, it seems reasonable to conclude that given changes in the money supply lead to larger changes in money incomes in the underdeveloped countries than in countries like the United States. Because of this greater "leverage effect", central banking in underdeveloped countries can influence the level of prices and money incomes more readily than is the case in the more advanced countries, in which central bank measures to alter the supply of money may be largely offset by changes in the income velocity of money.[1]

1/ The responsiveness of aggregate demand in underdeveloped countries to changes in the money supply also provides the conditions under which increases in foreign exchange reserves can rapidly be reflected in domestic price inflation if appropriate counteraction is not taken by the monetary authorities. Such counteraction might, for example, take the form of preventing an "automatic" expansion of bank credit when foreign exchange reserves are increasing as the result of an upward shift in foreign demand. Such action would serve the dual purpose of preventing a sharp rise in domestic prices and money incomes and of permitting the country to retain part of the increase in exchange earnings for use in any subsequent periods of reduced exchange receipts.

The problems of monetary policy in periods of depression

The social consequences of a sharp decline in national income are usually less serious in underdeveloped countries than in highly industrialized areas. The principal reason for this is that a much higher proportion of the population is, or can readily become, largely self-sufficient. As a consequence, there is less dependence on cash incomes and outlays. There is another important characteristic of underdeveloped countries which tends to shield the bulk of the population from the full impact of depressions. This characteristic is related to the distribution of changes in national income among the various economic classes of the population over the course of the business cycle. In periods of falling national income, the brunt of the reduction is borne by the propertied and mercantile classes, rather than by the salaried and wage-earning classes, just as increases in real income in periods of prosperity accrue mainly to profit-receivers. In the export industries, for example, changes in foreign demand in many cases are reflected largely in the value of exports and in the profits of exporters rather than in the volume of exports and the level of employment.

The fact that it is easier for the bulk of the population to "ride out" a depression in the case of an underdeveloped country than in a highly industrialized nation does not obviate the need for efforts to stabilize incomes. The wide and oftentimes abrupt swings in national income greatly handicap efforts to achieve a steadily rising standard of living and a more equitable distribution of income.

Depressions in the underdeveloped countries are usually the result of a contraction of foreign demand for their exports. If such a country enters a depression with small foreign exchange reserves, as most of them have done in the past, and if it is unable to borrow abroad, the results of monetary and fiscal measures to increase aggregate demand may largely take the form of higher domestic prices and exchange depreciation, with only limited increases in output. There may be some unemployed labor, and abundant supplies of a small number of primary products, but there are seldom the complementary resources needed to produce the kinds of consumers goods that are demanded when money incomes rise. Similarly, investment programs, whether undertaken by the government or by private enterprise, are limited by the fact that they usually require imported materials and equipment. In times of depression, however, current earnings of foreign exchange are likely to be so small, and the social consequences of any drastic reductions in imports of essential consumers goods so great, that any significant increase in the volume of imports of capital goods and raw materials may be impossible unless the country has substantial international reserves or can borrow abroad.

If a country entering a depression has large foreign exchange reserves or can borrow abroad, the picture is quite different. Monetary and fiscal policy can then be effective instruments for supporting the volume of total output and the level of real income. Efforts by the government to promote investment, in order to help offset the domestic

effects of the drop in exports, will not be nipped in the bud by a lack of foreign exchange. In this connection, it should be noted that the activities of foreign and international lending institutions, particularly the International Bank for Reconstruction and Development, the Export-Import Bank, and the International Monetary Fund, can strengthen the ability of central banks and governments to promote investment programs in periods of depression.

Two lessons may be drawn from the foregoing. The first lesson is that central banks should make the accumulation of reserves of gold and foreign exchange one of their major objectives in times of prosperity. If this objective is achieved by anti-inflationary monetary and credit policies, it will also help to moderate the distortions in resource utilization which usually characterize the boom phase of the business cycle.

The industrialized countries now generally recognize that they have an international responsibility to take measures to counteract depressions within their own boundaries and to help the underdeveloped countries, through technical and financial assistance, to achieve their aspirations for economic growth. The discharge of this responsibility will be facilitated considerably if the primary producing countries, for their part, build up their foreign exchange reserves in periods of export boom. These countries obviously can not be expected to accumulate reserves large enough to take care of a depression as severe as that of the nineteen-thirties; however, it would appear feasible for them to

accumulate enough reserves to permit them substantially to maintain their imports in periods of relatively brief recessions in the industrialized countries. This would promote a greater degree of economic stability not only in their own countries but in the industrial nations as well.

The recommendation that action be taken by central banks and governments to accumulate reserves in boom periods does not necessarily mean that the rate of economic development should be checked at such times nor that projects of high priority should be postponed until periods of recession or depression. Most underdeveloped countries could have a considerable amount of developmental investment in times of prosperity--in some cases considerably more than they are having presently--and still build up their international reserves. The adoption of appropriate counter-cyclical policies during periods in which foreign exchange earnings are high would be designed merely to limit the absorption of foreign exchange for purposes of additional consumption and non-developmental investment.[1]

The second lesson to be drawn from this section is that central banks must focus their attention on the long-range problems

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1/ If, as was suggested in a footnote at the end of the preceding section, measures are taken by monetary authorities to prevent a multiple expansion of credit at times when foreign exchange reserves begin accumulating, a rapid growth in demand for foreign exchange could be prevented, and the danger of losing reserves during the period of continued prosperity would be minimized. This type of action would be designed to limit the growth of aggregate money demand for both foreign and domestic goods. Within this framework, however, selective credit and fiscal measures could be taken to promote an expansion of developmental investment and to prevent any excessive growth of non-developmental investment and luxury-type consumption.

of diversifying and developing the economies of their countries if they are to become less vulnerable to economic fluctuations and other disturbances abroad.

The foregoing should not be interpreted as a recommendation of autarchy, but rather as a statement of the need for carefully prepared development programs. More rapid economic development and a greater degree of economic stability in the primary-producing countries need not reduce the volume of world trade. On the contrary, it should permit world trade to take place at higher and more stable levels.

The problem of economic development

The need for monetary authorities to focus their attention on the long-range problems of developing the economies of their countries has already been noted. If monetary policy is to contribute to economic development, however, it must be able to influence the flow of real resources into developmental channels. Monetary policy deals with the supply, availability and cost of credit, but credit is only a medium through which monetary policy endeavors to influence the utilization of physical resources. Therefore, before entering into a discussion of the potentialities and appropriate direction of monetary policy, it is essential to study the changes in resource use necessary to achieve more rapid economic growth.

In order to accelerate the rate of development, a country must increase the volume of developmental investment. There are three possible ways by which resources for additional developmental investment may be obtained:

(1) by diverting resources that would otherwise be used for consumption;

(2) by diverting resources that would otherwise be used for non-developmental investment; and

(3) by obtaining additional resources from abroad, in the form of loans or direct investment.

A determination of the extent to which current and prospective levels of consumption can and should be curbed in order to promote economic development must depend on the circumstances prevailing in each country. It ought not to be assumed, however, that diversions of resources from consumption are neither advisable nor possible. An assumption of this sort usually overlooks two facts. First, that income in these countries is distributed very unevenly; consequently, a reduction in the over-all level of consumption could be accomplished without infringing on the standard of living of that part of the population which lives at or near what is frequently termed a "subsistence level". Second, the assumption overlooks the fact that the level of per capita real income in most underdeveloped countries will tend to rise over time, especially if vigorous efforts are made to accelerate the rate of economic development. As per capita real income increases, consumption could be permitted to rise less than proportionately, thereby making an even larger amount of resources available for developmental purposes.

The second major area from which resources can be obtained for development purposes is that of investment in the kinds of projects which cater to the consumption demands of high income groups. The

principal evidence that this type of investment presently absorbs a large volume of physical resources is to be found in the tremendous volume of construction of luxury-type residences and commercial buildings that has taken place in many of the underdeveloped countries in recent years.

The third way in which resources can be obtained for socially desirable forms of investment consists of measures designed to encourage the inflow of capital from abroad. In this connection, it should be noted that the ability of a country to attract foreign equity capital and to obtain foreign loans will depend to a considerable extent on the seriousness and success of its efforts to achieve economic stability and an optimum utilization of its own resources. A country which shows signs of rapid and well-balanced economic growth is a much better credit risk and a much more attractive prospect for direct investment than is a country whose future is clouded by erratic and ill-conceived economic policies. Accordingly, the acquisition of additional resources from abroad must be regarded as complementary to, rather than a substitute for, the diversion of domestic resources to developmental investment.

It should be noted from the foregoing that the problem of accelerating economic growth through a better utilization of domestic resources has two aspects: a negative aspect, which consists of checking the use of resources for certain purposes, and a positive aspect, which involves channelling resources into the desired types of investment.

Some governmental and central bank measures may be specifically designed only to limit the flow of resources into consumption and non-developmental investment; other measures may be specifically designed to increase the volume of developmental investment but may in themselves do nothing directly to force a curtailment of resource use for other purposes or to obtain additional resources from abroad. An effective development program obviously requires a skillful combination of both types of measures.

It is clear that monetary policy alone can not bring about the reallocation of resources, or the increase in total resources, needed to assure an optimum pattern of economic growth. Many of the most serious obstacles to economic development are not susceptible to central bank action, or can be handled more effectively by direct government action. There are two things, however, that monetary policy can do to promote a better utilization of the resources available to the country, and to increase the prospects of obtaining additional resources from abroad. Moreover, it can undertake to do these two things regardless of whether monetary policy operates within a framework of an over-all development program which includes substantial supporting action by the government. The first thing that can be done is for the central bank to take every possible measure within its power to prevent inflation from continuing to be, or from becoming, the medium through which redistributions of income take place. The second thing that can be done is for the central bank to regulate the availability and

cost of credit in such a way as to encourage certain forms of investment and to discourage others. The next two sections deal with these two subjects.

Inflation and economic development

The alleged benefits of inflation. It is sometimes asserted that inflation leads to a larger amount of private investment than would occur under conditions of monetary stability because income distribution is altered in favor of profit-receivers, at the expense of wage and salary earners and persons living on fixed incomes. Persons whose income consists largely of profits usually save a higher proportion of their income than do persons whose income is derived from other sources. Thus, by enlarging the share of national income going to profit receivers, a larger volume of savings can be obtained. This, in conjunction with the increased profitability of many kinds of investment under conditions of inflation, leads to an acceleration of economic growth, so the argument goes. The following discussion endeavors to reveal the fallacies of this line of reasoning.

The social and economic costs of inflation. One of the social costs of inflation is that, for every additional unit of savings obtained by altering income distribution in favor of the high-saving groups, there must be a transfer of more than one unit of income from low-saving groups. To take a reasonably realistic example, let us suppose that the members of the high-saving group of the population save one-quarter of any increase in their income, and that the low-saving

groups consume all of their income and save none of it. Then, for every desired increase of one unit in total savings, four units of income must be transferred from the "poor" to the "rich". Of these additional four units of income, three will be consumed and one will be saved. Thus, to get one additional unit of savings and investment, the volume of consumption of the upper-income groups will have been increased by three units, and the consumption of the lower-income groups will have been reduced by four units.

Inflation, therefore, is truly a process for making "the rich richer and the poor poorer". By reducing the standard of living of the wage-earning and fixed-income groups of the population, inflation retards the growth of a large middle class, thereby impeding the development of democratic institutions and a politically stable society. The objections to inflation are not limited to its regressive effects on income distribution, however.

The use of inflation to obtain a larger volume of savings might be justified as a temporary measure, notwithstanding the social costs involved, if it would set in motion a cumulative process of growth in the country's productive capacity, thereby making possible higher levels of both consumption and investment in the future. There is little reason for believing that inflation does this, however. By its very nature, inflation in underdeveloped areas encourages the kinds of investment that are least desirable from the standpoint of sound economic

development.[1] Because of the redistribution of income which inflation produces, much of the investment is of a kind which caters to the consumption demands of the high income groups. In addition, inflation encourages investment of a sort which yields high returns in the form of speculative profits. Finally, inflation provides the conditions under which a system of social values which does not favor industrial development can be perpetuated.

It follows from the preceding observations that the use of inflation to increase the ratio of savings to total income may well result in lower future levels of income, rather than in higher future levels of savings, as contrasted with a situation in which economic development is sought within a framework of monetary stability.[2]

Because much of the argument against inflation rests on its undesirable effects on the composition of investment, it is worthwhile to examine in some detail the types of distortions in resource use that inflation produces.

1/ Inflation may, of course, be the result of credit expansion for the purpose of financing the "right" kinds of investment by the government, and it might be argued that the end justifies the means in this case. The influence of inflation on income distribution and resource allocation within the private sector is the same, however, regardless of the reasons for its inception. It follows, therefore, that maximum benefits can be derived from a government development program only if provisions for its financing are made within a general framework of monetary stability. The specific contributions that monetary policy can make to this end are discussed in the last section.

2/ What the author means by the phrase "monetary stability" is a situation in which expectations of future changes in the general level of domestic prices are not a major determinant of investment and consumption decisions. It should be noted that this definition is not incompatible with a slowly rising price level or with small fluctuations in the price level.

Inflation makes it extraordinarily profitable to invest in additions to inventories. As long as a part of the current output of each period is diverted to an unnecessary addition to inventories, the amount of resources immediately available for more productive forms of investment tends to be reduced. Under conditions of monetary stability, additions to inventories are much more likely to be geared to the working requirements of industry and commerce, rather than to speculative expectations about price movements; as a result, a more rapid growth in production and consumption is possible.

Inflation tends to promote investment in real estate not so much for the purpose of meeting the needs of the population for shelter, but as a hedge against rising prices. Real estate becomes a kind of "store of value" under inflationary conditions. The demand for existing residential and commercial buildings as a hedge against inflation drives up their price and leads to investment in new construction. As a consequence, an excessive amount of the national savings flows into construction of a sort which adds very little to the productive capacity of the country. This means that fewer resources are available for more productive forms of investment.

Inflation gives rise to a similar phenomenon with respect to the utilization of foreign exchange earnings. Because inflation almost inevitably leads to a depreciation of the country's exchange rate, people have an incentive to accumulate foreign exchange assets in anticipation of revaluation profits. This means that resources that could otherwise be used to finance the foreign exchange requirements of a

development program are not immediately available. Under conditions of monetary stability, there would be much less incentive for individuals and firms to hold savings in this form; they would be more likely to hold savings in forms that would make possible a larger amount of domestic investment.

Inflations which are fed by domestic credit expansion tend to impede investment in the export industries because the inflationary process raises exporters' costs but has little or no beneficial effect on the prices they receive. Although exporters eventually obtain relief through devaluation in most cases, this is likely to happen only after a lag--sometimes a considerable lag. The consequences of this are that foreign exchange earnings are lower than they would be under conditions of monetary stability, and the capacity of the country to import is reduced. Moreover, the resources that would otherwise have been invested in the export industries are probably used to only a very limited extent to increase the amount of productive investment of other sorts. What usually happens is that the incomes of importers are augmented, partly because conditions of imperfect competition enable them to widen their profit margins as demand increases, and partly because the volume of imports is expanded. As a result, resources flow into the types of consumption and investment favored by importers. Investment of this sort is seldom of a very productive nature. As a consequence, the tendency of domestically engendered inflation to redistribute income from exporters to importers reduces the rate of growth in the real income of the country as a whole.

Inflation leads to waste in still another way. Under conditions of monetary stability, inefficient firms suffer losses. The losses make them change their operations so as to utilize their resources more efficiently, or else they must go out of business and the real resources formerly employed by them are put to use by the more efficient enterprises. The process is quite different under inflation. Nearly all firms make profits, in monetary terms, partly because the accounting methods which are generally employed do not provide adequate allowance for the higher costs of replacing inventories, plant and equipment. As a result, firms which in real terms are actually making losses on their investment may appear to be making a profit-- a smaller profit than their more efficient competitors, but a profit none the less. A loss has a much more compelling effect on businessmen to produce more efficiently or else get out of business than does a smaller-than-average profit. Accordingly, by failing to penalize inefficient firms, inflation tends to retard the allocation of resources to the most efficient users.

Inflation also impedes economic development by retarding the growth of financial intermediaries for channeling private savings into investment. Economic development can be more rapid and effective if there are well-organized financial intermediaries to mobilize small savings for worthwhile investment projects, especially those requiring large amounts of funds. These intermediaries grow most rapidly in a climate of monetary stability. Under inflation, the public is less

willing to entrust its savings to life insurance companies or to savings banks, because these institutions can afford the savers no protection against a decline in the real value of their savings. Inflation similarly discourages the growth of a broad and active securities market, and the development of a habit by the public of placing part of its savings in bonds and debentures, both governmental and private. Business enterprises have a greater motivation to raise funds by borrowing from banks rather than by selling additional shares to the public, and this too impedes the growth of securities markets and savings in the form of security purchases.

Inflation, as was pointed out earlier, provides certain groups in the economy with large incomes unaccompanied by any substantia contribution on their part to the volume of goods and services produced. Monetary stability, by drying up most of such speculative profits, would exert pressure on members of these groups to seek incomes from productive employment. In conditions of monetary stability, it is the producer and the enterpreneur--those who can devise better and cheaper ways of producing things--who prosper. As a result, the most capable and energetic individuals are likely to occupy themselves with activities which are consistent with rapid and well-balanced economic development. On the other hand, it is the shrewd speculator, rather than the producer, who prospers under inflation. Given freedom of choice, the energies of the most able individuals in almost any society tend to be channelled into the areas where the rewards are greatest.

As a consequence, under inflation, the energies of many of the ablest individuals are likely to be directed toward better ways of making speculative profits rather than to better ways of producing or distributing useful goods and services.

One of the most important tests of any society is whether the distribution of national output among individuals in that society is approximately related, on the whole, to their contributions to what the society regards as its welfare. If a rapid growth in productivity and in the general standard of living is regarded as an important element in the welfare of a society, then the greatest rewards should go to those who contribute most to the achievement of this goal. Under inflation, however, as we have noted, precisely the opposite is true. Accordingly, if a society aspires to economic development but distributes its output on a basis inconsistent with the achievement of its objectives, it may be considered to be rather irrational and short-sighted.

In conclusion, a consideration of the manner in which savings are increased and the forms which investment takes under conditions of inflation does not reveal any rational grounds for assuming that inflation leads to cumulative growth in a country's productive capacity. Quite the opposite conclusion is supported by an analysis of the predictable effects of inflation, particularly in areas which lack the institutional arrangements and the material and social heritage of an industrial society.

The transitional problems of stopping an inflationary process. Where inflation has become chronic, and this is the situation in a number of the underdeveloped countries, the case against inflation may be fully accepted by the monetary authorities in principle, but they may be unwilling to take positive action to bring inflation to a halt because of a fear that this will cause some unemployment and may even precipitate a depression. Warnings that this will happen are usually made by businessmen and commercial bankers whenever a central bank is considering the adoption of measures to restrict credit. The reasons for such concern on the part of businessmen and bankers are quite understandable. The profitability of many business operations, and consequently the "soundness" of many bank loans, depends on a realization of expectations that an inflationary environment will continue. Because the arguments against stopping inflation frequently have a plausible ring, it is worthwhile to examine the process of transition from a situation of inflation to one of monetary stability.

If anti-inflationary measures are vigorously imposed, the expectations of businessmen that prices will continue to rise will be broken. As a consequence, those types of private investment whose attractiveness depends on continually ascending prices would no longer be made in so large a volume. As was noted in the preceding section, there are three major types of such investment: (1) investment in inventories, (2) hoarding of foreign exchange, and (3) investment in luxury-type construction. Let us examine the direct effects of

anti-inflationary measures on each of these three categories of investment, and the consequences of these effects.

Wholesalers and retailers who were attempting to capitalize on inventory profits while prices were rising would no longer find it profitable to hold inventories in excess of normal working requirements. Disinvestment in such inventories would characteristically be accomplished in two ways. First, by a reduction in purchases from producers, and secondly by a reduction in prices to consumers.

During the transitional period of partial inventory liquidation, the process of adjustment could be expected to develop approximately as follows. First, the incomes of those who are liquidating inventories, and the incomes of those who sell goods and services to them, would be reduced, and this could lead to a decline in employment in some lines. The amount of unemployment that would be produced can be easily exaggerated, however. If the inventories which were being reduced consisted largely of imported goods, which would be the case to a great extent in an underdeveloped country, much, and perhaps most, of the tendency towards unemployment would be "exported". The amount of domestic unemployment created by the reduction in merchants' inventories would probably be small, therefore, and could be taken care of by a temporary acceleration of the government's development program during the time the economy was adjusting to an atmosphere of monetary stability.

One of the by-products of inventory liquidation would be a tendency for the foreign exchange reserves of the central bank to increase, at least during the period of disinvestment in inventories of imported goods. This would make it possible to increase the importation of the sort of producers' goods needed for an accelerated government development program to ease the period of transition from inflation to stability.

The second type of private investment which would be affected by measures to halt inflation would be investment in foreign exchange. This type of investment would be affected in two ways. First, there would be less incentive for exporters and others to build up balances abroad in the expectation of devaluation profits. Secondly, reduced availability of credit at home would ordinarily force some holders of foreign balances to repatriate them in order to meet their local currency requirements. Neither of these two reactions would give rise to a problem of resource unemployment, so that a reduction of investment in foreign exchange would have the sole effect of giving government and the monetary authorities more scope within which to pursue programs of economic development and economic stabilization.

The third major type of investment which would be reduced if inflation were halted would be construction, especially construction of the type whose purpose is to satisfy the demands of high income receivers. There would thus be a tendency towards unemployment in the construction industry and in enterprises which produce materials,

equipment and other supplies for builders. This tendency towards unemployment would probably develop gradually, however, and would not present a serious problem until buildings already under construction were completed.

To some extent, the specific resources freed by a reduction in luxury-type construction would be absorbed in other activities without special action by the government or the monetary authorities to facilitate the transfer. In some cases, for example, the improved cost-price relationship for producers of export goods might lead to somewhat increased demand on their part for the resources released from construction activities, although the prospects for this sort of transfer of resources might be very limited in many if not most countries. A complete reorientation of the rather highly specialized labor, plant and equipment that would become available would be neither necessary nor wholly desirable, however. In fact, one of the most desirable consequences of checking inflation would be that some of the most highly skilled labor and some of the most productive equipment in the economy would become available for diversion to developmental construction projects. The kinds of resources released from luxury-type construction could be used, with relatively little transitional hardship, to increase the construction of low-cost housing developments, schools, hospitals, roads, power plants, and so forth.

Consideration of the three forms of investment whose reduction would be most likely during a period of transition from inflation to

stability does not reveal any alarming difficulties of adjustment. There would, of course, be vociferous complaints from that part of the business community which would find its profits and incomes reduced. The kind of profits which would be reduced, however, are those which owe their existence to inflation. Anti-inflationary measures would prevent some of the rich from getting richer, and would therefore reduce the prospective level of their expenditures for consumption and investment. By the same token, however, the same measures would prevent the poor from growing poorer and would even increase the prospective level of their consumption. In addition, the anti-inflationary measures would make it easier for the government to acquire the additional real resources needed for an accelerated program of developmental investment.

The end result, therefore, would be higher levels of consumption by the lower-income groups, a larger volume of developmental investment by the government (and eventually by private enterprise as well), and lower levels of "non-essential" private investment and consumption. The process of readjustment would involve changes in the pattern of aggregate demand and would require some re-allocation of resources. The problem of smoothing this transition is not particularly formidable, however, and could be handled under a carefully conceived plan for the employment of some of the more specialized resources which would be released from activities whose profitability depends on a continuation of inflation and on the redistribution of income which accompanies inflation.

Use of special measures to influence the availability of credit for specific purposes

It was pointed out in the preceding section that economic development is likely to be sounder and more rapid under conditions of monetary stability than under conditions of inflation. The task of monetary policy, however, does not end with the achievement and maintenance of monetary stability. Given the institutional arrangements and the system of social values in most underdeveloped countries, private lenders and borrowers usually would not have any strong preference for the kinds of investment most needed in a well-balanced development program, even under conditions of monetary stability. The rest of this study discusses some of the reasons why this is so, and the extent to which special measures designed to influence the availability of credit for specific purposes might be helpful in overcoming this problem.

One of the characteristics of underdeveloped countries is the absence of a diversified capital market to which investors can turn for financing. Consequently, investors must rely almost exclusively on bank credit. This enables banks to exercise much greater control over the use of resources for various purposes than in countries which have a well-developed capital market. Accordingly, the attitudes of bankers and the legal restrictions which govern their lending activities have an important influence on the kinds of investment that are actually made in underdeveloped countries.

In present circumstances, however, loans to finance the types of private investment which are most conducive to economic development may not be obtainable from commercial banks in any significant volume, for the following reasons:

(1) Banks have strict standards of liquidity and security. Most banking legislation places rather rigid limitations on the maturity of loans which commercial banks may make, and on the kinds of security which they may accept. These restrictions have their origin partly in the short-term nature of commercial bank liabilities and partly in the types of credit that were most urgently needed in primary-producing countries during the earliest stages of their economic development.

Historically, the first stage in the economic evolution of these countries was the transformation of primitive self-subsistence economies into market economies based on the exportation of primary products and the importation of finished goods. To a large extent, long-term capital was supplied by foreign investors interested in expanding the production, processing and exportation of raw materials and foodstuffs. What was needed to keep exports and imports moving smoothly was short-term capital combined with a knowledge of the intricacies of financing international trade. Bank credit in the form of short-term, "self-liquidating" loans seemed well designed to meet the needs of business and at the same time to protect the interests of depositors.

The banking systems of the primary-producing countries, therefore, have been designed for the most part to provide working

capital for commerce, particularly international commerce, and not to provide long-term capital for industry or agriculture. The extension of bank credit for this latter purpose runs contrary to the canons of banking tradition and banking legislation in most of these countries.

(2) Banks have specialized in the problems of trade and commerce for so long that they quite naturally tend to hesitate to plunge into new and riskier types of business, especially since the returns, after due allowance for the risk element, might not appear to be high, even under conditions of monetary stability.

(3) The principal depositors and shareholders of the banks, who are usually importers, exporters and merchants, might object if they found that the managers of their bank were investing any substantial amount of the bank's resources in loans to finance new industries, except perhaps in ventures undertaken by the shareholders and large depositors themselves.[1/] They might oppose any such

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1/ It is interesting to note that in Mexico, according to Sanford A. Mosk in his book Industrial Revolution in Mexico (Berkeley and Los Angeles, 1950), the older industries that had become important prior to World War II have little trouble in obtaining bank credit. In fact, some of the old industrial firms are linked to banks by interlocking directorates. Even where such formal ties do not exist, however, the banks regard the older manufacturing enterprises as favored clients, a position which they share with the large commercial firms (Mosk, p. 25). The older industries, for a number of reasons, do not look with enthusiasm on the growth of the new industries and hence do not endeavor to influence the banks to extend credit to the new group of industrialists which sprang up during and after the War. "A principal defect that the New Group finds in the present credit structure is the reluctance of the banks to make loans to industrial concerns. This reluctance does not hold for the older well-established manufacturing firms, as we have seen, but the new and smaller firms feel it very strongly. The difficulty of getting credit from the banks is not only a bar to plant expansion but it is also a severe handicap in ordinary industrial operations that require more working capital than the owners are able to supply." (Mosk, p. 44).

tendency on several grounds. They might fear that the bank would suffer losses, thereby jeopardizing its ability to pay dividends and possibly even to meet its obligations to depositors. Even if the profitability of these operations were not doubted, there might be a fear that industrial loans would absorb so much of the bank's limited resources, and tie them up for such long periods, that the bank might not be able to meet the peak demands for credit by its present customers Another reason for opposing bank financing of new industries might be that the products of these industries would compete with the imported goods of the bank's shareholders and large depositors. For these and other reasons, therefore, there may be pressure on bank management to adopt lending policies that harmonize with the investment judgment of the groups which are presently dominant in the business and financial community. As a result, existing investment patterns tend to be sustained.

For all of the reasons enumerated above, banks would probably continue to prefer to make short-term, "self-liquidating" loans even under conditions of monetary stability.

It should be recognized, of course, that there can be some circumvention of the lending policies of the banks, as a result of the transferability of funds from one purpose to another. What concerns a borrower is the availability of funds from all sources in relation to his desired expenditures for all purposes, and his ability to transfer funds from one use to another. The diversified nature of the business

activities of the average businessman in the underdeveloped countries, the limited use of the corporate form of business organization, and the fact that the ownership of so many enterprises is in the hands of one person or family, make the transferability of funds especially great. Nevertheless, the ease with which bank credit can be obtained to finance certain lines of activity, such as importing and distribution tends to facilitate a disproportionate volume of investment in such fields.

In many underdeveloped countries, the negative attitude of bankers toward developmental investment is also shared by borrowers. The preference of private investors for investment in importing, merchandising and luxury-type construction is greatly intensified by inflation and would be less pronounced under conditions of monetary stability. Nevertheless, even in the absence of inflation, investors may show no great amount of interest in undertaking kinds of investment which contribute to economic development unless special inducements are offered by government or central bank action.[1/]

1/ A very interesting study of the efforts of the Mexican Government to promote industry in the years 1830-35 and 1843-46 has been made by Henry G. Aubrey in an article entitled "Deliberate Industrialization", Social Research, June 1949; also reprinted in an Occasional Paper of the Institute of World Affairs. The following sentences have been pieced together from this study. Mr. Aubrey states that "it is not unreasonable to conclude that Mexico's headstart over all the other Latin American nations was, to a large extent, due to the priming by the state during the crucial early period". The government supplemented "entrepreneurial initiative in several ways: planning the development, procuring the equipment, encouraging formation of companies to operate it, and financing a great part of the initial outlays". The promotion of

Measures designed to affect the availability and cost of credit for specific purposes can help to overcome some of the causes of investor apathy toward developmental investment but cannot overcome all of them. The following discussion does not endeavor to cover the whole range of social, political and economic obstacles to a rapid rate of economic growth, but will dwell primarily on what can be done through selective credit measures to provide the optimum financial environment for such growth.

Central bank action can contribute to a better utilization of a country's real resources in two respects. First, it can facilitate the transfer to the government of the real resources needed for its development projects in a way which will result in a minimum curtailment of socially desirable consumption and investment in the private sector of the economy. Second, the central bank can take action designed to make credit available to private investors for worthwhile projects on liberal terms, and to restrict the availability of credit for other purposes.

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industrial development by the Mexican Government was short-lived and limited (it occurred mainly in the periods 1830-35 and 1843-46) but the "government's initiative broke through the traditional Spanish syste of social values which did not favor industrial development. Speculatio offered better short-range opportunities than production; ostentatious living and the purchase of land brought more social prestige. Industrial venture capital could not be borrowed at reasonable rates" but funds lent by a special government development bank (the Banco de Avio) "added to the private means of the investment-minded minority, provided the initial stimulus for new enterprises which might otherwise have not been possible, and set an example for others". Unfortunately, following 1846 there was political unrest and the succeeding governments in the 19th century did not continue with the previous policy of direct support to economic development.

In the early stages of economic development, the government may have to lead the way by undertaking a large volume of investment of sorts which are either unsuitable for, or insufficiently attractive to, private investors, but which are essential for further economic growth.

There are two broad categories of investment projects which usually require government investment. The first is investment of a sort designed to improve the health and education of the public and to assure law and order. This is an area that has long been largely reserved to governments and requires no further comment. The second category covers investment projects of a public service nature, such as the building of new railroads, highways and electric power facilities. By providing such facilities where private enterprise is not able or ready to provide them, private investment in complementary activities can be encouraged.

As far as possible, government development programs should be financed by taxation. To the extent that recourse to bank credit is unavoidable, however, the central bank can prevent an upward spiral of prices by restricting or contracting the total volume of credit available to businesses and consumers. The specific measures adopted to regulate the amount of private credit would probably have to vary from country to country, depending on the circumstances involved. Among the measures that might be considered, however, would be an increase in deposit reserve requirements, portfolio ceilings, and supplementary

reserve requirements applied against increases in either deposits or loans to private borrowers.

The mere diversion of resources from the private sector to the government would not exhaust the potentialities of selective credit policies. Appropriate credit policy would also require that credit be made available on liberal terms for desirable forms of private investment, and that the use of credit for other purposes be restricted to the extent necessary to accomplish the desired re-allocation of resources within the private sector without driving up the price level. There are a number of measures that could be taken to influence the availability of bank credit for specific purposes. Among them are the following:

(1) The present restrictions on long-term lending by commercial banks could be liberalized, and banks could be provided with adequate assurances that the central bank would assist them in meeting any sudden and unexpected withdrawal of deposits.

(2) Upper limits could be set for the total amount of credit each bank could grant for certain specified purposes. These limits would usually be based on the amount of such credit the bank had outstanding as of a given date. By establishing upper limits on loans of certain types, banks which had made the maximum permissible amount of such loans would in effect be given the alternative of holding excess reserves as their deposits increased or of directing any further expansion of credit along lines favored by the central bank.

(3) Banks could be permitted to include certain types of loans and/or investments as part of their required reserves in order to give them an incentive to grant such credit. If such a device were not to have inflationary repercussions, however, it would have to be accompanied by higher reserve requirements.

(4) Supplementary reserve requirements could be imposed which would apply to increases in certain classes of assets. A supplementary reserve mechanism of this sort could be applied in a very selective manner. High reserve requirements could be set for increases in certain types of credit and low requirements could be fixed for increases in certain other kinds of credit. Banks would tend to find it more profitable to make loans of the types favored by low reserve requirements and to discriminate against the types of loans subject to high reserve requirements.

(5) The central bank could make conditional guarantees on the servicing and repayment of certain worthwhile kinds of bank loans. This would reduce or eliminate the risk to the bank making the loan, depending on whether the guarantee was complete or partial. Part of the central bank's profits could be used to establish a reserve fund for this purpose.

(6) Government-owned development banks or development institutions could be utilized to provide credit to private investors for worthwhile projects for which financing was not obtainable from commercial banks or other sources. The government, rather than the central

bank, would have to establish such institutions, obviously, but the central bank could be given authority to determine the general nature of their credit policies and to lend them funds for purposes consonant with the central bank's program of regulating the availability of credit for specific purposes.

It should be stressed that any credit extended by special institutions of this sort should not be permitted to raise the total volume of credit above the amount compatible with monetary stability. Accordingly, it might be necessary to contract the amount of credit available from commercial banks. Selective credit measures could be used to prevent this adjustment from reducing the flow of credit to socially desirable activities.

It is not the purpose of this section to analyze in detail the relative potentialities and limitations of the various kinds of action listed above, or of other possible measures. The purpose is rather to point out that there are a number of ways in which the availability of credit for specific purposes can be influenced. The most appropriate ones for any individual country will obviously depend on a number of circumstances.

It should be recognized that the use of any of these measures, or of any combination of them, might have little visible effect on the use of real resources in the private sector of the economy over the very short-run, because of certain non-financial obstacles to private investment in developmental projects. Moreover, it is to be expected

that borrowers would seek to evade restrictions on the use of credit for certain purposes by using their own funds for these purposes and then borrowing more heavily to finance operations not subject to restriction. In order to compensate for such diversions of funds, the restrictions on many types of credit might have to be very drastic.

Even in the short-run, however, appropriate credit policies would produce certain beneficial results. Those who are presently competent and willing to invest in productive enterprises would have much better opportunities for obtaining financing on attractive terms. Others, whose energies are now devoted to maintaining and enlarging their incomes through activities which are not consistent with an optimum use of the country's resources would be given an incentive to find sources of income which would be more compatible with the objectives of economic development.

In the longer-run, a wider range of profitable opportunities for complementary investment by private entrepreneurs can be expected to appear as government development programs are carried out. Some of the present non-financial obstacles to private investment will tend to diminish as better transportation and power facilities become available and as the supply of skilled labor increases. As this process evolves, the availability of credit for private investment in productive enterprises will become a more and more important factor in a country's economic development.