

PRINCETON STUDIES IN INTERNATIONAL FINANCE, NO. 2

Multiple Exchange Rates
and
Economic Development

Eugene Richard Schlesinger

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PRINCETON STUDIES IN INTERNATIONAL FINANCE



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Multiple Exchange Rates and Economic Development

By Eugene Richard Schlesinger

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PRINCETON STUDIES
IN INTERNATIONAL FINANCE

THIS is the second number in the series called PRINCETON STUDIES IN INTERNATIONAL FINANCE, published from time to time by the International Finance Section of the Department of Economics and Social Institutions in Princeton University. The first was *Monetary and Foreign Exchange Policy in Italy*, by Friedrich A. and Vera C. Lutz, published in January 1950. The present study was developed out of portions of a doctoral dissertation submitted by Dr. Schlesinger to Harvard University in 1950. Dr. Schlesinger is now an economist with the Federal Reserve Bank of New York. Nothing in this study should be considered an expression of the views of that institution.

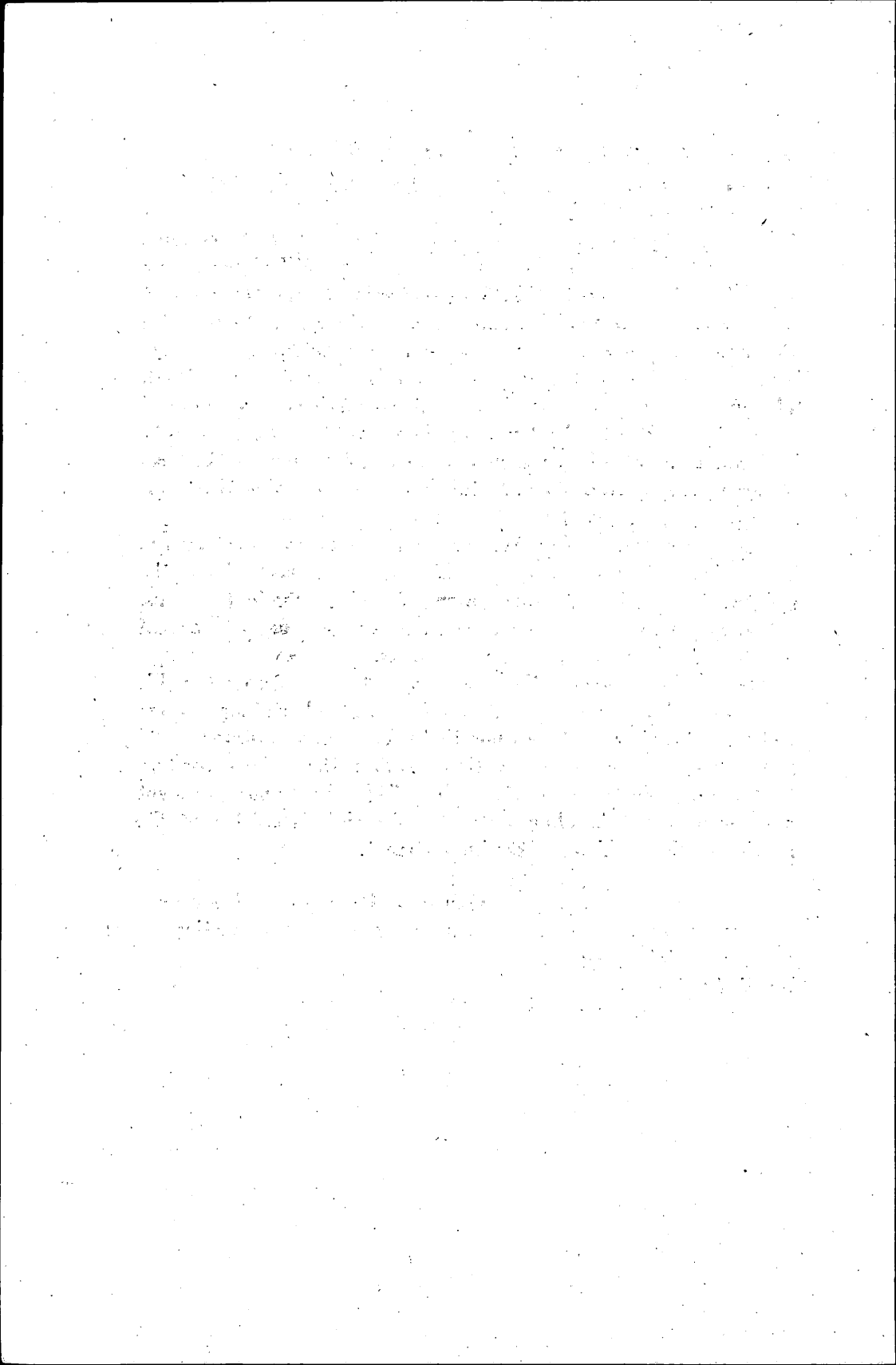
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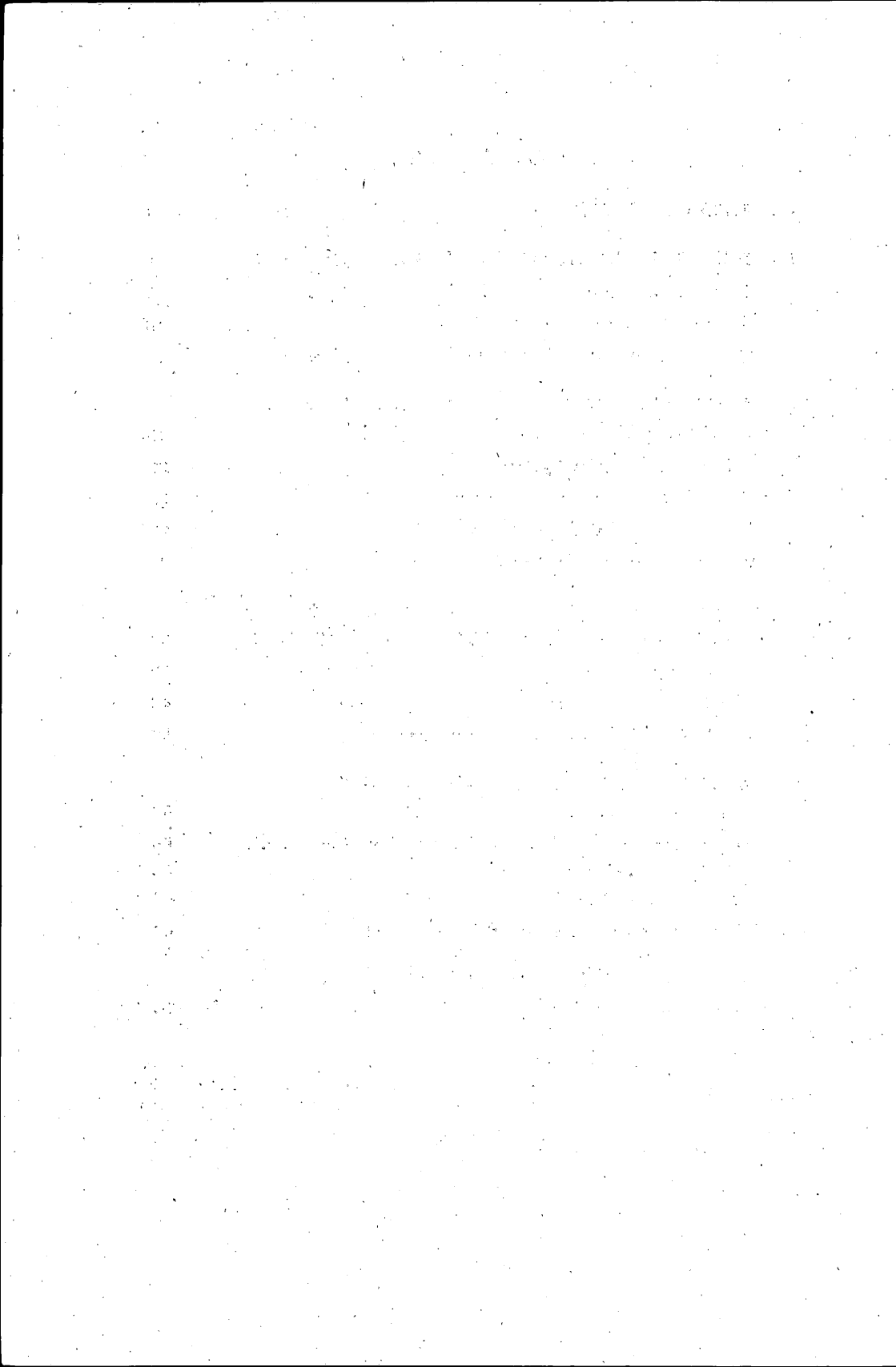
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Princeton University
April 1952



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I. INTRODUCTION

ONE of the most striking and significant trends in the pattern of development of exchange restrictions since the end of the war has been the spread of multiple exchange rates, particularly among the economically less developed areas of the world. Although this special form of exchange control has, to be sure, also been put to use by such Western European industrial countries as France and Italy, its utilization by more than half of the twenty Latin American republics—and by such widely differing countries as Greece, Indonesia, Israel, Lebanon, Spain, and Thailand—suggests that modern multiple exchange rate systems are particularly suited to the economic structures and problems of low *per capita* income countries whose international trade consists essentially of exchanging exports of primary products for imports of capital equipment and other manufactured goods.¹ Considerable interest attaches to a discussion of this hypothesis in view of the deep-seated and growing opposition in the United States and other quarters to any country, underdeveloped or not, which wishes to retain exchange restrictions on current account or to continue multiple currency practices.²

Multiple exchange rates originally became important as depression-born devices, and like other forms of exchange control were very much criticized in the literature of the 1930's and early 1940's. In fact, because of a popular tendency to identify them with the German system, multiple rates came to be considered a particularly abusive form of exchange control, and Professor Ellis' characterization of the German setup as a development "from an emergency measure to a totalitarian system"³ can thus be taken readily as being typical of the traditional libertarian view of multiple rates. In most other countries, particularly those

¹ For a complete list of countries which have used multiple rates in recent years consult the International Monetary Fund, *First Annual Report on Exchange Restrictions*, Washington, D.C., March 1, 1951 and *Second Annual Report on Exchange Restrictions*, Washington, D.C., April 6, 1951.

² With the end of the five-year transitional period (March 1952) that was specified in the Articles of Agreement of the International Monetary Fund, the Fund authorities must be consulted by any country which desires to retain these devices.

³ H. Ellis, *Exchange Control in Central Europe*, Cambridge, Harvard University Press, 1941, p. 158.

of Latin America, the multiple exchange rate systems of the interwar period did not, of course, bear the taint of totalitarianism. They were considered for the most part as emergency or discriminatory devices introduced for psychological reasons or such special purposes as easing the burden of the external debt service;⁴ particular emphasis was given to their utilization as a method of relaxing quantitative exchange restrictions;⁵ and little attention was paid to the possibility of using them as an alternate or independent way of curbing exchange disbursements.

A number of countries retained or expanded their multiple exchange rate systems during the period following World War II, while other nations introduced these instruments for the first time. In general the reasons for using multiple rates appear to have been the same as in the 1930's: emergency conditions, this time of an inflationary rather than a deflationary nature, existed, and ample opportunities for discrimination were afforded. The most basic difference between prewar and postwar systems has probably been the growing use of multiple rates as independent restrictive devices; the International Monetary Fund now makes a sharp distinction between *cost* restrictions and *quantitative* restrictions, classifying multiple exchange rates as the former⁶—a point of departure which contrasts significantly with the *measures of relaxation* approach that was employed by the League of Nations.⁷ One important result of this change in emphasis has been a growing awareness that certain types of multiple rate systems may prove valuable adjuncts to economic development programs. In view of the fact that a number of systems, although originally only emergency measures, appear to be firmly entrenched and regarded by some governments as, in the long run, advantageous to nations employing them, it seems worthwhile to examine multiple exchange rates with particular reference to their relationship to the problems of underdeveloped economies.

⁴ For a description and analysis of the multiple rate systems of Latin American and other countries see M. S. Gordon, *Barriers to World Trade*, New York, Macmillan, 1941, pp. 100-114; or League of Nations, *International Currency Experience*, Princeton University Press, 1944, pp. 162-189.

⁵ Cf. League of Nations, *Report on Exchange Control*, Geneva, 1938, pp. 46-47.

⁶ *First Annual Report on Exchange Restrictions, op.cit.*, p. 7.

⁷ *Report on Exchange Control, op.cit.*, pp. 46-47.

After all, our thinking on the imposition of exchange controls on capital account—and even more so on current account—has undergone considerable modification in the course of the last decade; objections which were considered quite serious a few years ago have tended to be modified in the light of greater experience, and even exchange control on current account is now deemed fairly “respectable” under certain conditions.

In view of the changing emphasis and growing popularity that have recently characterized multiple exchange rate systems, there has been surprisingly little discussion of the impact of these devices in the academic literature of the last few years. E. M. Bernstein has given a brief but excellent systematic analysis of their economic effects, but has framed this in general terms rather than against a specific background of the process of economic development itself, the structure and institutions of underdeveloped countries, and the policy alternatives which are available to their governments.⁸ The discussions of the auction market system of exchange control provide what is perhaps a more useful introduction to the relationship between multiple exchange rates and the structure and problems of economically less developed countries⁹—the critics of this particular type of multiple exchange rate structure having distinguished sharply between its relative effectiveness in industrialized and underdeveloped economies.¹⁰

Despite these occasional references to the problem in the literature, there has been no systematic attempt to analyze the applicability of multiple exchange rates to conditions in underdeveloped countries. This, therefore, is the purpose of the present mono-

⁸ E. M. Bernstein, “Some Economic Aspects of Multiple Exchange Rates,” International Monetary Fund, *Staff Papers*, Vol. I, No. 2 (September 1950), pp. 224-237.

⁹ The principal proponent of the auction market instrument has been Robert Triffin. Cf. “National Central Banking and the International Economy,” *International Monetary Policies*, Postwar Economic Study No. 7 (September 1947), Washington, Board of Governors of the Federal Reserve System, pp. 46-81; or “Exchange Control and Equilibrium,” *Foreign Economic Policy for the United States* (S. E. Harris, Editor), Cambridge, Harvard University Press, 1948, pp. 413-425.

¹⁰ G. Haberler, “Comments on ‘National Central Banking and the International Economy,’” *International Monetary Policies*, *op.cit.*, pp. 82-102; H. D. Henderson, “The International Economy,” T. Balogh, “A New View of the Economics of International Readjustment,” and R. F. Harrod, “A Comment,” all in *The Review of Economic Studies*, Vol. XIV (2), No. 36 (1946-1947), pp. 76-97.

graph, which seeks to discover to what extent, if any, our traditional distrust of these devices can be modified in the light of the exigencies of economic development.

In treating this question in the present monograph consideration has been almost entirely restricted to the effects of multiple exchange rates in the country which introduces them, and comparatively little analysis of their repercussions in the world at large is undertaken. That is, consideration has not been given to the question of whether the optimum pattern of exchange practices for countries taken singly would add up to the optimum pattern for the world at large. Let it be clearly stated that the nationalistic point of view is not the only appropriate point of view for economists to use in discussing international relations. The relation between the optimum pattern of resources and practices for nations taken singly and the optimum pattern for the world economy as a whole is a question of great importance, but, since it involves a consideration of such complex factors as the difference between static and dynamic patterns of resource utilization and the question of the over-all aims of the world economy, it falls beyond the scope of the present study.

A study of multiple exchange rate systems is seriously complicated by the fact that in many cases the countries that have employed them do not appear to have been fully aware of all their uses, nor to have obtained anything approaching the full benefits that can be realized from them. For this reason the principal aim of the present study is to determine the maximum benefits that a developing country can derive from multiple exchange rates under realistic conditions, with correspondingly less attention being paid to historical experience with these systems. Admittedly an approach of this kind tends to be somewhat abstract and theoretical, and some readers may not find the analysis as closely tied to actual systems as they may have hoped. But some choice between the two alternatives had to be made.

It has been found convenient to analyze the usefulness of multiple exchange rates on two different levels which correspond rather closely to two basic decisions which the government of a developing country must reach: their effects are compared (1) with those of other methods of interfering with the free working

of the foreign exchange market, and (2) with the opportunities for economic development under a free exchange market. The discussion begins with a consideration of the impact of multiple rates on the level and composition of imports; the effects of different types of systems are analyzed and then contrasted with those of quantitative restrictions and tariffs. With this as a framework we then proceed to investigate, from the point of view of economic development, the influences of multiple rates on the domestic price system, government revenues, capital formation, and the structure of production and to compare these to the impact of various other commercial, fiscal, and monetary policies. The next part of the paper analyzes the effects of different multiple rate systems on exports and foreign investment, while a fourth section discusses their impact on the geographic trade pattern and the relation of this to the problem of discrimination. Finally the various threads of the analysis are brought together in a brief over-all evaluation of the significance of multiple exchange rates.

Only those multiple rate systems which are unilaterally imposed are considered, and the analysis of individual systems has been restricted to Latin America. Thus, systems which are based on fixed differential exchange rates, the partial utilization of free market sales, the imposition of exchange taxes or surcharges, and the granting of exchange premia are included in the discussion; omitted are clearing agreements, intergovernmental barter agreements, and private compensation agreements; although these forms of exchange control also give rise to a pattern of multiple rates, cost restrictions and quantitative restrictions apparently are so closely related in the case of these devices that the *cost restriction* aspect cannot be separated out for examination. The decision to confine the analysis to Latin American systems¹¹ was in part the result of the author's special familiarity with that area; but to a larger extent, it reflects the conviction that, in view of the large number of Latin American countries which have employed multiple exchange rates, all the important varieties (as defined above) are covered.

¹¹ Descriptions of the particular systems that are analyzed can be found in the International Monetary Fund's *Annual Reports on Exchange Restrictions*.

II. MULTIPLE EXCHANGE RATES AND IMPORTS

The most immediate impact of the majority of multiple exchange rate systems has been on the level and composition of imports, which are known to be extremely sensitive to economic development programs, particularly when these programs take the form of more rapid industrialization. In view of the low capacity of underdeveloped countries for capital goods production, an increased rate of capital formation is usually reflected in a larger demand for imports of investment goods, while higher incomes and urbanization create a concurrent, or perhaps slightly delayed, expansion in the demand for imported consumers' goods;¹ in cases where the additional capital formation is partly or wholly financed by bank credit these "normal" developmental difficulties in the balance of payments tend to be greatly intensified by the resulting inflationary pressures.

Under these conditions governments of underdeveloped countries have frequently found it necessary to take measures to curtail imports of merchandise and invisibles.² Any action of this type necessarily implies that some decision has previously been reached with respect to a changed composition of imports. If the authorities decide to reduce imports by raising the income tax or depreciating the exchange rate, they have in effect concluded that any change in the composition of imports can be effected through the operation of the price mechanism and believe that this method of reallocating imports is in the best interests of the economy. In other circumstances, however, the government may believe that larger benefits may be achieved by interfering with the action of the price mechanism: for example, a smaller degree of adjustment may be necessary if depreciation is undertaken only with respect to imports with highly elastic demands; the long-run aim

¹ For a brief but comprehensive discussion of the "real income" effects of industrialization on the balance of payments, see J. H. Adler, *The Underdeveloped Countries: Their Industrialization*, New Haven, Yale Institute of International Studies, 1949, pp. 22-23.

² In the discussion which follows, the effects of multiple exchange rates on most nonmerchandise transactions are disregarded since it is believed that this does not change the results significantly; the treatment of interest, dividends, and profits under various types of multiple exchange rate systems is covered in a subsequent section (see pp. 50-53).

of economic development may be facilitated by granting special preferential treatment to imports of capital goods; or some other type of desired social rationing of foreign exchange may be achieved.

If it is decided to discriminate among different types of imports,³ a decision must then be reached with respect to the technique or combination of techniques to be used in effecting the desired discrimination.⁴ In making the selection account must be taken of a number of difficulties inherent in any discriminatory action that is taken to reduce the level of imports or alter their composition. The degree of interference with the price mechanism is important in this respect, as is the allocation of the scarce foreign exchange resources among competing importers. Closely related is the question of whether one sector or the entire economy is to obtain the benefits of the windfall profits which may be created by a restriction of imports. The certainty of the effects and the period of time that is necessary for them to be realized are also essential considerations, particularly in cases where the international reserves of a country are already quite depleted.

Selective curtailment of imports can, of course, be obtained by influencing either the local supply or the local cost of individual imports:⁵ the government can limit supply through the imposition of quantitative restrictions, or it can reduce demand by increasing local currency costs through the introduction of multiple exchange rates or tariffs. If a combination of supply and cost restrictions is employed, only one device will actually curtail imports of any individual product, although the other may contribute certain refinements of technique that are necessary for overcoming some of the difficulties to which reference was made in the preceding paragraph. The relative merits of multiple exchange

³ The merits and rationale of selective treatment of imports are evaluated in the next section; for the present it is assumed that a favorable decision has been reached on this question.

⁴ The term "discrimination" is used here in its general rather than economic sense, for the present section is concerned only with discrimination with respect to *types* of imports; consideration of discrimination with respect to *sources* of imports is deferred to the section on the geographical trade pattern.

⁵ The maintenance of a fixed exchange rate through central bank purchases and sales of foreign exchange is also a form of interference with the price mechanism of the foreign exchange market, but this interference is not selective.

rates can best be evaluated by comparing their effects, on the one hand, with those of supply restrictions, and on the other, with those of the tariff—the other major type of cost restriction.

Effects of a Simple Multiple Exchange Rate System

The two principal advantages of quantitative restrictions as an instrument for limiting foreign exchange disbursements are the comparative certainty of their effects and the relative rapidity with which these can be realized. If a foreign exchange budget is introduced and strictly followed, there seems to be very little doubt that imports can be curtailed to the extent planned and that this result can be achieved immediately, or at least fairly rapidly.⁶ The use of foreign exchange budgets is, of course, a comparatively recent development, exchange control having formerly been a haphazard procedure of introducing a few controls at a time. Yet even when a budget is used, there tend to be complaints of hardship and requests for special treatment for goods already in transit; exemptions may be granted, and time may elapse before the entire system of restrictions is finally put into effect.

The major difficulties inherent in quantitative restrictions arise because the allocation of exchange among different uses and among the various importers is *entirely* a function of administrative decision. Foreign exchange is distributed in accordance with the authorities' views of the real needs of the economy, and the chances that this procedure will produce more beneficial results than the price system depend to a large extent on the ability and honesty of the administrators. In the absence of a sufficient number of highly trained and competent technicians, a condition which is particularly prevalent in underdeveloped areas, the authorities are likely to make some serious errors of judgment in the allocation of exchange. If the administrators are also corrupt, the distribution of exchange and import licenses among

⁶ The curtailment of imports by any method always involves some uncertainty, for a decision must be made with respect to the degree to which imports have to be restricted. Because of the difficulties involved in estimating future import prices or foreign exchange receipts, there is always a rather large element of doubt that imports will be curtailed to the extent that is "necessary," but in the case of quantitative restrictions there appears to be very little uncertainty that they can be curtailed to the extent that is "planned."

importers may be largely determined by graft and favoritism, a circumstance which is likely to arise in some of the economically less developed countries as a result of the high propensity to bribe that is created by the windfall profits⁷ that are available to importers who obtain licenses. When the quantitative restrictions take the form of exchange controls, moreover, maladministration may also give rise to the postponement of the processing of applications and the effecting of payments abroad, thus causing costly delays, and perhaps higher prices, for the domestic consumer and at the same time leading to a deterioration of the external credit of the country.

The use of multiple exchange rates avoids many of the difficulties which are created by the existence of windfall profits and the danger of incompetent or dishonest allocation of exchange, but these advantages are gained at the expense of greater uncertainty and slower appearance of the effects on imports. The government, as in the case of quantitative restrictions, influences the composition of imports, but in doing so it merely raises the domestic currency costs of nonpreferred imports by introducing less favorable buying rates or imposing exchange taxes and surcharges; preferred imports continue to enter at the existing exchange rate. Since the authorities have at best only an uncertain knowledge of the elasticities of supply and demand for various types of imports, they may not set the penalty rates high enough to curb imports sufficiently or may place too many products in the preferred category. Moreover, because the effects of the new rates will be felt only after the market has adjusted itself to the changed circumstances, the reduction of imports may not occur for some time. Both of these factors would lead to a continued loss of international reserves—a contingency which would be very unfortunate in the cases of countries whose exchange resources were already substantially depleted prior to the introduction of the multiple rate system.

The distribution of exchange among competing importers is a function of the price mechanism rather than administrative

⁷ Windfall profits may, of course, be eliminated by the introduction of proper controls on domestic prices when they are workable and enforceable. See, however, p. 20 below.

discretion, and since the price paid by the importers (as well as the price paid by the consumer)⁸ rises, windfall profits tend to be eliminated.⁹ The allocation of exchange among uses is still basically a function of administrative discretion, for the authorities must classify imports into various categories of essentiality or preference. However, in this case—unlike quantitative restrictions—the price mechanism operates as a safety valve: all articles can be imported in unlimited quantities “at a price,” a feature that works to check many of the errors of judgment which are likely to result from purely administrative decisions.

The domestic price of a nonpreferred import will rise to an extent determined by the elasticities of demand and supply for that import, and the consumer demand for foreign exchange to purchase the import will fall provided that the elasticity of demand is greater than unity. For this reason intelligent policy would indicate that articles with elastic demands should be placed in nonpreferential categories.¹⁰ If this is the case, the decline in demand is likely to be relatively large in underdeveloped countries because the supply curves of importers are very elastic, even in the short run. The price of imported merchandise is the principal element in an importer's costs, and he will tend to take this as a datum because, in almost every instance, he (and all his competitors taken together) is in the position of an atomistic buyer for that commodity in the world market. As a consequence the rise in price which results from the introduction of an exchange tax is likely to be much larger than would be true in a situation where a tax is imposed on businesses with steeply rising cost curves.

Frequently, however, an increase in local currency costs does not have much effect on the demand for “luxury” imports in an

⁸ When quantitative restrictions are imposed, only the price paid by the consumer rises as a result of the curtailment of the supply.

⁹ Importers may sometimes find it possible to utilize exchange which they purchase at the basic rate for articles in the nonpreferred categories, but any such opportunities for cheating may be reduced by proper licensing arrangements.

¹⁰ If the elasticity of demand is smaller than unity, domestic currency expenditures for the import will increase, but foreign exchange disbursements will fall because a portion of the local currency expenditures accrues to the government in the form of an exchange profit which it makes by selling exchange at the penalty rate; however, the decline in foreign exchange disbursements will be smaller than in cases where the elasticity of demand is greater than unity.

economically less developed nation. This is in part a result of the "conspicuous consumption" psychology of the upper income groups in an economy of this kind, but it is also a consequence of the structure of the demand for luxuries in a country where the distribution of income is very unequal. The elasticity of demand for a commodity is determined by a combination of how many individuals are willing to purchase a commodity at any given price and how many units of the commodity each individual will buy at that price. In the case of luxuries, and particularly expensive luxuries, the first of these elements is frequently the more important, and the combination of this factor and the extremely uneven distribution of income in underdeveloped countries means that, even though the demand curve for a luxury may be elastic through the range of medium prices, it is likely to become rather inelastic at high prices. As a result, if the price of the luxury is already high, the price increase resulting from the imposition of a penalty exchange rate may produce only a negligible saving in foreign exchange.

A system of multiple exchange rates is subject to a number of other uncertainties that do not arise, or are less serious, in the case of a foreign exchange budget. In the first place, since importers and consumers of articles in the preferred categories tend to be in continuous fear that these products will be reclassified, they may anticipate reclassification by increasing their purchases of the articles with a view to stockpiling them, thus causing an unnecessary expenditure of foreign exchange.¹¹ Moreover, because the government makes a profit when it sells exchange at penalty rates, the expenditure of this revenue must be taken into account. To the extent that the government spends the proceeds on goods and services rather than holding a cash surplus or retiring obligations held by the banking system, additional foreign exchange leakages will occur; if the government increases its purchases from abroad, the leakage will be direct,¹² and if the funds are

¹¹ There is also some danger of anticipatory purchases taking place under a foreign exchange budget, but, since the existence of definite quantitative quotas places an absolute ceiling on these, unnecessary expenditures of foreign exchange could be much greater under a simple multiple exchange rate system.

¹² The significance of direct expenditures abroad is, of course, much greater when the principal aim of the multiple rate system is to curtail the level of im-

spent for domestic goods and services, part of the additional income accruing to the private sector will also be devoted to additional purchases of foreign goods and services.

The indirect or general equilibrium effects of the penalty rates cannot be overlooked, moreover. When an exchange differential is introduced on an article for which the demand is elastic, the resulting decline in the demand for foreign exchange leaves an amount of unutilized funds in the hands of the public, a portion of which will undoubtedly be used to increase purchases of other foreign goods and services. In the case of over-all depreciation this "elasticity effect" tends to be offset by a rise in the demand for foreign exchange for imports with an inelastic demand, but when selective depreciation (i.e., multiple exchange rates) is used, the offsetting "elasticity effects" tend to be very small because exchange taxes are generally imposed on commodities with more elastic demands.

The effectiveness of multiple exchange rates is much more closely related to other government policies than is that of quantitative restrictions. If the monetary authorities do not act to control inflation, for example, demand curves in various sectors of the economy would shift upward, thus tending to offset the effectiveness of the cost restrictions in the foreign exchange market.¹³ Exchange disbursements would increase unless steps were taken to revise the system: the spread between the basic rate and the various penalty rates could be increased;¹⁴ articles could be transferred from preferred to nonpreferred classifications, thus perhaps upsetting the social rationing objectives of the system; or the buying rate structure as a whole could be shifted upward, a process that would probably require time-consuming legislative action. In the case of quantitative restrictions, on the other hand, inflation would cause only increasing pressures on the

ports rather than to alter their composition; the government's purchases abroad would presumably be spent on the type of import which the authorities want to encourage.

¹³ Similarly, a system of multiple rates would not withstand the strong balance-of-payments pressures that would result from a cyclical fall in exports induced by a decline in economic activity in major world markets.

¹⁴ The effects of a larger spread between the basic rate and the various penalty rates are discussed on pp. 32-36 below.

controls and higher windfall profits, but would not lead to a rise in foreign exchange disbursements.¹⁵ A "pure" system of multiple rates thus works best when a country has a "margin of safety" in its international reserves and maintains some measure of price stability; unless these conditions are fulfilled, the advantages that are gained by making provision for the partial functioning of the price mechanism in the control of imports may be easily outweighed by the disadvantages.

Effects of Composite Systems

A number of countries have attempted to combine the benefits of multiple exchange rates with the dependability of quantitative restrictions by introducing composite systems of import control. These systems are essentially of two kinds: quantitative restrictions may either be combined with "fixed" multiple exchange rates, or integrated with a foreign exchange auction market, thus forming a type of "flexible" multiple rate system.

The mechanics of the auction market system, which has been used in Argentina and Paraguay and is a standby procedure in Guatemala, are as follows: The control authorities classify imports into one or more broad categories and permit articles on the preferred list (i.e., those which enter at the basic rate of exchange) to be imported without restriction. Foreign exchange which is not utilized for preferred imports is sold periodically in one or more auction markets in which importers who are interested in nonpreferred articles are permitted to bid.¹⁶ Since each importer would find it profitable to bid for exchange up to that point at which his profits would be at the same level as they were prior to the introduction of the system, any windfall profits that might be created would be taxed away effectively, and

¹⁵ Quantitative exchange quotas would also have to be revised downward in the case of a cyclical downturn, but the comparative certainty and rapidity of their effects would make them superior to multiple rates under such conditions.

¹⁶ Although in its simplest form the system has only one auction market, others can be included if additional discrimination between types of imports is desired; this result can, however, be obtained more easily by the imposition of additional surcharges or foreign exchange taxes on the exchange which is purchased for certain types of imports. A free exchange market may also exist in which exchange that is needed for nontrade purposes can be purchased from the proceeds of nonmerchandise transactions and exports that cannot be controlled effectively.

within each auction market the allocation of exchange among various uses and between competing importers would be wholly the function of the price mechanism.

In addition to the usual objections that are made to all forms of exchange control, two special groups of criticisms have been leveled against the auction market system. The first of these distinguishes between the practicality of this device in underdeveloped and developed economies; it points out that, while the rationale of the auction market is valid for economically less developed countries, which can differentiate easily and sharply between imports of luxuries and essentials, it is not applicable to industrialized nations, which have a more complex pattern of imports;¹⁷ it also argues that the system can most effectively be enforced in countries whose currencies are not used to finance a significant portion of world trade¹⁸ and whose economies are relatively undiversified—exports consisting of only a few staple commodities.¹⁹ The second group of criticisms stresses the inoperability of the auction market in a period of worldwide depression; not only would the device interfere with other forms of countercyclical policy,²⁰ but the undue pressure on exports at such a time would mean that surplus exchange might not be available to supply the auction market.²¹ Thus, while the auction market might be criticized as being unsuitable as an emergency measure, this objection would not necessarily hold when it is employed as an integral part of a continuous development program.

The auction market system is superior to a simple system of quantitative restrictions because it contains elements of cost restrictions; at the same time it has certain advantages over a simple system of "fixed" multiple exchange rates because the price mechanism is given greater play and the use of supply restric-

¹⁷ Balogh, "A New View of the Economics of International Readjustment," *op.cit.*, p. 86; Henderson, "The International Economy," *op.cit.*, p. 78.

¹⁸ *ibid.*, p. 77.

¹⁹ Haberler, "Comments on 'National Central Banking and the International Economy,'" *op.cit.*, p. 93.

²⁰ Harrod, "A Comment," *op.cit.*, p. 96.

²¹ Balogh, "A New View of the Economics of International Readjustment," *loc.cit.*; Haberler, "Comments on 'National Central Banking and the International Economy,'" *op.cit.*, p. 94.

tions for nonpreferred imports facilitates the curtailment of exchange disbursements to the extent that is planned. However, under certain conditions the auction market system may give rise to disorderly cross-rates,²² and in any event it functions properly only when there is an adequate cushion of international reserves²³ and some degree of price stability is maintained. In the case of preferred imports the expectations of downward reclassification that would be aroused by a rising price level would lead to an unduly large and unnecessary volume of imports. The danger of this could, of course, be eliminated by imposing quantitative restrictions on the preferred imports, but this would in turn encourage windfall profits, corruption, and mismanagement. Even then, however, the inflationary pressures would be reflected in a gradual depreciation of the various auction market rates; if the authorities wished to maintain a reasonable and manageable spread between the basic rate and the auction rates, they would be forced to support the auction rates by selling additional foreign exchange—a procedure that could lead to a considerable diminution of reserves.

The combination of quantitative restrictions and multiple fixed exchange rates is far more common than the auction market system; in fact multiple rates have almost invariably been accompanied by supply restrictions, although in many instances the combination has probably resulted more from historical accident and growth than from conscious attempts at integration.²⁴ There is an important difference between the two types of composite systems. Under the flexible rate mechanism of the auction market, cost restrictions serve as an allocating and taxing device but do not limit over-all expenditures for imports. In the case of fixed

²² The flexible exchange rate mechanism may result in one foreign currency selling at a discount relative to another; consideration of this question is deferred to the section on the geographical trade pattern.

²³ Because it contains an element of supply restriction, an auction market system requires a smaller cushion of reserves than does a simple system of multiple exchange rates.

²⁴ A number of countries have used both fixed and flexible rates in their composite systems; Argentina, for example, has combined an auction market system for certain types of imports with a fixed multiple rate structure for others, while Ecuador and Peru have levied an additional fixed surcharge on certain less essential imports which were bought under a flexible rate structure.

multiple exchange rates, however, either the rates themselves or the quantitative restrictions can be the element which limits imports.

Suppose, for example, that a particular article has been made subject to a quota limiting imports to a percentage of the volume that had entered in some previous period. The domestic price of the import would rise because supply has been restricted, but since the marginal cost curves of the importers would not be affected, a discontinuity in the supply curves would be created. If a penalty exchange rate or exchange tax is then imposed on the commodity, its domestic price would rise further only if the tax were large enough to increase the marginal costs of the importers to an extent sufficient to raise them above the discontinuity that had been created by the quantitative restriction.²⁵ If the tax were of this required magnitude, the cost restriction would become the factor limiting the importation of the commodity; otherwise the tax would be borne in its entirety by the importer, and no additional change in the domestic price of the import would take place.

Even when the exchange rate differential is large enough to be effective, it may not, of course, produce the same results as when no supply restrictions are imposed. The quantitative restrictions may be operated in such a manner as to alter the character of the market. If no system of quotas for individual importers is introduced, the number of competing importers may be reduced, with the possible result that the supply side of the market may be changed from one approximating atomistic competition to one where an oligopolistic or monopolistic situation prevails.²⁶ On the other hand, if some system of this kind is employed, the

²⁵ If quantitative restrictions are in effect, a type of exchange rate differential may be imposed by requiring importers to make deposits of varying amounts with the exchange applications that they submit for imports of different degrees of essentiality; this procedure, which has been employed in Costa Rica, creates an additional cost for the importer which is equivalent to the rate of interest he could have earned on the funds.

²⁶ Conceivably the imposition of a penalty exchange rate could force marginal importers out of business even in the absence of a quota system; in most instances, however, the chances of this occurring would be small because the price of foreign merchandise is the principal element in the costs of all importers.

incursions which an individual importer can make in a competitor's business through underselling are limited.

A combined system of quantitative restrictions and multiple fixed exchange rates may represent an improvement over the separate utilization of either technique. If the exchange rate differentials are large enough to make the cost restrictions the factor which limits imports, the quantitative restrictions serve as a secondary line of defense that protects the economy from the dangers of leakages and uncertainty that are found in a fixed rate system. If, on the other hand, it is the quantitative restrictions which effectively curtail imports, the fixed rates serve to tax away some part of the windfall profits that would have otherwise accrued to importers. It is debatable, of course, whether a taxation criterion alone provides sufficient reason for introducing the complicated apparatus of a multiple exchange rate system; the answer to this question depends to a large extent on the balance of political and social forces in each individual country. If the other advantages of cost restrictions are to be realized, however, it seems evident that some measure of price stability must be maintained and that the quantitative restrictions should be made liberal enough to become effective only in the event of a major rapid change in a country's balance of payments.

Comparison of Multiple Exchange Rates and Tariffs

Although the introduction of multiple exchange rates rests on the monetary power of the government to centralize foreign exchange reserves, they are economically similar to tariffs, the imposition of which is based on the government's taxing power. In both instances the government benefits through higher revenues, and if the exchange rate differential is of the same size as the tariff, static partial equilibrium analysis reveals that its influence on the price and volume of sales of an imported article is identical to that of the tariff. There are, of course, certain administrative differences which may prove to be economically or fiscally important in practice. Different costs of administration, for example, affect the relative net fiscal yields of the two devices, while dissimilarities in administrative flexibility determine the facility

with which the authorities can adjust cost restrictions to changing conditions.²⁷

Restriction of imports is usually best accomplished through a flexible control instrument because the balance of payments is dynamic; moreover, since the utility of imports for the economy is generally determined on the margin, flexibility of control also appears to be preferable in altering the composition of imports.²⁸ As a consequence, the use of exchange taxes or surcharges would appear to be superior to the use of tariffs because changes in the system can be effected by the relatively simple and rapid method of reclassification of imports by the administrative authority or central bank. Changes in the tariff, on the other hand, generally involve the legislative process, the very nature of which is time consuming.²⁹ It is true, of course, that multiple exchange rates work best when the domestic economy is relatively stable, and this gives rise to the apparent paradox that those conditions which are most favorable for multiple rates are also the conditions under which the advantages of these devices over the tariff are most limited. Even so, within certain limits the greater flexibility of multiple exchange rates is a definite advantage. The needs of the economy are always changing, and there are constant minor variations in the conditions governing the balance of payments.

The desirability and practical advantages of flexibility of con-

²⁷ The differences in terminology and administrative flexibility may also have entirely dissimilar effects on the psychology and expectations of the business community. See, for example, the discussion of effects on the structure of production (p. 35, below).

²⁸ No matter what the government's views of the real needs of the economy are, it seems clear that they should be changing constantly. If, for example, the authorities assign tractors to a preferential category (i.e., determine that tractors have a high "administrative" marginal utility), they have implicitly based this decision on the number of tractors in the country at that time. As additional tractors are imported, their "real" marginal utility tends to decline relative to that of other imports, and since the price mechanism is not fully operative under a system of cost restrictions, the authorities should take account of this decline by reclassifying tractors (i.e., by assigning to them a lower "administrative" marginal utility).

²⁹ The institutional arrangements of a country may also affect the selection of a cost restriction device. Freedom to raise tariffs is very frequently restricted by international treaties, while large exchange surcharges may be considered as an excessive tampering with the exchange rate. These factors probably explain the combination of surcharges and excise taxes that was employed in Costa Rica at one time.

control are limited, however, as are the benefits to be gained from having a large number of refined classifications and rates.³⁰ Frequent reclassification may lead to discrimination or graft,³¹ and—what is more important—tends to prevent rational planning on the part of the business community. In addition, since a complex system usually places too great a strain on the administrative authorities, the resulting distortions due to red tape and delays may easily outweigh any gains that are provided by the multiple exchange rates. As Professor Haberler commented when he pointed out the possibility of such dangers in the auction market system, “This is a far cry indeed from the simplicity of the theoretical scheme and begins to resemble a full-fledged exchange control system of the Schachtian type.”³²

A balance must be struck between an ideal theoretical system with constantly changing classifications and a large number of rates and a practical system which will not lead to costly red tape, delays, and distorted business planning. A simple system of multiple exchange rates can under certain conditions contribute to the economic development of a country, but a complicated system will probably never do so. Refinements and complexities will have to be provided through other means, such as the tariff.

III. MULTIPLE EXCHANGE RATES AND THE NATIONAL INCOME

In the preceding discussion, the relationship between multiple exchange rates and imports was treated within a relatively narrow frame of reference, and it was explicitly assumed that selective treatment of imports is economically and socially desirable in an underdeveloped country. The consideration of the effects of multiple rates on national income and prices offers a useful opportunity for dropping this assumption and for broadening the analysis to include the alternative possibility of a free exchange market coupled with appropriate fiscal and monetary policies.

³⁰ Greater refinement of classification can be introduced into the over-all system of multiple exchange ratios by means of the tariff and other forms of customs duties.

³¹ Certain articles may be reclassified temporarily in order to create windfall profits for a favored few who are “in the know” or who have bribed the authorities.

³² Haberler, “Comments on ‘National Central Banking and the International Economy,’” *op.cit.*, p. 94.

In comparing the effects of general and selective treatment of imports, the institutional and structural character of economically less developed countries should be considered. Traditionally, the administrative apparatus for controlling foreign trade has been developed far more highly and effectively in these countries than the apparatus for controlling domestic trade and production; and for this reason, as well as the relatively great dependence of these economies on international markets, the governments of underdeveloped countries have sometimes found it convenient to use foreign trade taxes and controls to perform functions that would ordinarily be effected through domestic measures in a more highly industrialized or self-sufficient nation. Perhaps the most striking example of this development has been in the field of taxation, where duties on imports and exports have been widely used as substitutes for the income tax for several reasons. One is the relative ease, and at low cost, with which they can be administered in countries which are characterized by untrained tax administrators, by a relative absence of modern bookkeeping methods, and by a low degree of fiscal consciousness on the part of the population. Of equal importance is the fact that, in economies in which a significant portion of the national income is nonmonetary and most nonessentials have to be purchased abroad, taxes on foreign trade provide a readily available method by which the government can tap the basic sources of monetary income and, more particularly, the incomes of the upper income groups.

Effects on the Price System

Within the domestic economy the most immediate impact of multiple exchange rates is on the pattern of relative prices; through changes in these, multiple rates affect such major economic factors as the general price level, the rate of capital formation, and the structure of production. Quantitative restrictions also influence the pattern of relative prices, but their effects tend to be more capricious. Because the authorities have only a limited knowledge of the elasticities of demand of individual imports, supply restrictions provide, as has been noted, a more certain method of reducing foreign exchange disbursements than cost restrictions, but from the point of view of influencing domestic

prices, the uncertainty with respect to elasticities favors the use of cost restrictions. In practice this difference in the effects of the two types of restrictions is likely to prove quite important, particularly in view of the frequency with which the two are found in combination.

The Peruvian experience during 1948 and 1949 offers a rather striking example of the difficulties which may arise when a government attempts to influence relative prices through a composite system. Prior to December 1948 the country's regulations permitted foreign exchange for the importation of certain essential chemical products and equipment to be purchased from the government at the official (i.e., preferential) exchange rate of 6.50 soles per dollar, but at the same time imposed drastic quantitative import restrictions on these articles. When these regulations were superseded, importers were required to buy exchange for these articles at the substantially higher certificate market rate, but the quantitative restrictions on them were concomitantly eased. This change produced startling results in almost every instance; the physical volume of the imports rose while their domestic prices fell substantially even though the articles were now being imported at a rate of approximately 18.5 soles. The prices of cement and galvanized tubing, for example, declined 57 and 38 per cent, respectively, while those of various types of nails fell to degrees ranging between 40 and 80 per cent, and that of bicarbonate of soda decreased by 60 per cent.¹ Although the old regulations had been designed so as to keep down the prices of these essential articles by permitting the purchase of foreign exchange for their importation at the preferential rate of 6.50 soles per dollar, the quantitative restrictions which were imposed in conjunction with the multiple rate system curtailed the available supply of these imports to such an extent that the liberal cost provisions were ineffective; in fact the effective exchange rate for these articles was higher than the certificate market rate of 18.5 soles, the difference between the official rate and the effective rate having presumably gone to importers and black market operators in the form of substantial windfall profits.

¹ *La Prensa*, Lima, Peru, June 27, 1949, p. 2.

It is apparent, however, that the lower prices for this group of imports were obtained at the expense of higher prices for other imports: as a result of the government's permitting exchange for the purchase of essential chemicals and equipment to be bought in the certificate market, the sol depreciated in that market from an average of 14.5 soles in September through November of 1948 to approximately 18.5 soles in June of 1949,² and domestic prices of other imports rose correspondingly. The over-all index of Peruvian import prices rose 34 per cent between December and May³ even though the prices of imported chemicals and equipment fell significantly during the same period.

Several other uncertainties complicate the task of using multiple exchange rates to influence the pattern of relative prices in the economy. A fear of reclassification may cause businessmen to raise prices in anticipation of higher replacement costs under any type of multiple rate structure, while flexible rate systems are subject to other difficulties.⁴ In the first place the functioning of the auction market system assumes a reasonable degree of competition, and since there are only a small number of importers in many underdeveloped countries, oligopolistic collusion may lead to a different pattern of relative prices from what the authorities had planned. Also, the fact that only a small number of broad import categories (i.e., auction markets) are administratively feasible implies that there is a danger that most of the exchange allocated to a given market may go for expensive luxuries desired by the upper income groups; the importers who deal for them may be able to bid up the price of exchange to a level at which the semiessentials desired by the lower and middle income groups are priced out of the market. Provision for this eventuality can, of course, be made in the multiple exchange rate regulations. The central bank may be permitted to sell additional exchange in the auction market in order to prevent the rate from rising to exorbitant levels,⁵ or the control authorities may be given the power to restrict the amount of exchange for which

² Banco Central del Perú, *Boletín del Banco Central del Perú*, July 1949, p. 28.

³ *ibid.*, p. 20.

⁴ The Peruvian experience of 1948 and 1949 is illustrative.

⁵ This policy may, of course, lead to a considerable leakage of foreign exchange (see p. 15 above).

any one importer may bid to a percentage of the foreign exchange that he obtained in some earlier period.⁶

Through their effects on relative prices, multiple exchange rates may also have an important influence on the general level of prices. The elimination of an import surplus always tends to be somewhat inflationary because a smaller volume of goods is available for consumption, but the extent of the inflation is very often determined by the manner in which the import surplus is reduced. The risk of inaugurating a cumulative wage-price spiral can be minimized by granting favorable treatment to imported essentials which are consumed by the lower income groups; if the prices of these articles can be kept down, the working population is less likely to demand wage increases when imports are curbed. In countries where internal price controls tend to be ineffective or mismanaged, there is much to be said in favor of using a policy of selective treatment of imports instead of over-all depreciation.⁷ Moreover, although either quantitative restrictions or multiple exchange rates can be utilized to keep the cost of essentials low, the latter are a more effective anti-inflationary device; because cost restrictions provide revenue for the government, they exert an additional disinflationary influence by tapping some consumer purchasing power.

Effects on Government Revenues

In assessing the fiscal effects of multiple exchange rates, it is important to remember that they are imposed on top of an already existing tax system and disturb the previously existing revenue producing pattern. Moreover, since exchange taxes or surcharges are most frequently introduced to effect balance-of-payments adjustments, their fiscal effects can usually be considered as a by-product.⁸ Effective curtailment of imports normally implies that penalty rates be imposed on articles with high

⁶ The first of these provisions was included in the Ecuadorian system, while the second is stipulated in the Guatemalan standby procedure.

⁷ Consideration of exports is deferred to the next section.

⁸ One type of multiple exchange rate, the "normal spread" between buying and selling rates, is usually employed for primarily fiscal purposes, however; although this device discriminates between exports and imports, it is not normally introduced to produce balance-of-payments adjustments but is used purely as a revenue producer.

elasticities of demand, while purely revenue considerations require that they be levied on imports with inelastic demands. As a consequence the indirect fiscal effects of multiple exchange rates are frequently almost as important as the direct revenue effects.

By influencing the pattern of income distribution in the economy, multiple rates induce changes in the yields of other taxes. If, for example, an exchange tax (or penalty rate) is made unfavorable enough to protect the domestic market for a particular article, its yield would probably be smaller than under a less onerous tax, but any increase in the domestic production of the article would mean the creation of new taxable income. A more general type of indirect effect occurs because the reduction of an import surplus usually tends to be inflationary and to induce higher money incomes. The increased government revenue yielded by this enlarged domestic tax base acts to offset the decline in import duties resulting from the restriction of imports. If the imports are curtailed by multiple rates rather than over-all depreciation, this fall in import duties is likely to be relatively large because high tariff luxury items would presumably be restricted first; under this circumstance, however, the yields of the multiple rates themselves would act as an additional compensating factor.

Over-all depreciation or currency devaluation may, of course, also yield direct revenues to the government, but since these take the form of a revaluation of gold and foreign exchange reserves, they have no contractive effect upon incomes in the private sector and differ from the receipts of multiple exchange rates. For this reason the expenditure of devaluation profits during a period of inflationary pressures is not consistent with sound counter-cyclical policy, and multiple exchange rates tend to be fiscally superior to devaluation even when the government neutralizes revaluation profits through a policy of repaying its debt to the central bank. During a depression, of course, the situation is somewhat different. If some unemployment of resources exists, the contractive effects of multiple rates may prove harmful, while the danger of starting an inflationary spiral through the expenditure of revaluation profits becomes concomitantly less serious.⁹

⁹ Since revaluation profits are created by the stroke of a pen, however, there is a danger that the funds will be spent prematurely on hastily conceived and improperly planned projects.

In a depression, a government of an underdeveloped country may sometimes have a financial interest in a system of multiple rates that provides preferential treatment for government transactions. Although the availability of foreign exchange is the factor which ultimately determines a government's ability to meet its foreign obligations, the opportunity to obtain this exchange at a more favorable rate should enable the authorities to meet important domestic needs at a time when revenues have fallen considerably. Of course, the government could achieve the same results by borrowing from the central bank and purchasing the exchange at the regular rate, and from a purely formal standpoint the only difference between the two types of transactions is one of accounting in the books of the central bank. In practice, however, a disguised form of deficit financing may offer certain advantages over the more open type; there may be legal limits to direct borrowing from the central bank, or the disguised deficit may be politically more feasible or have less unfavorable repercussions on the psychology of the business community.

Needless to say, currency devaluation does not necessarily take place in a vacuum but is often accompanied by domestic fiscal and monetary measures. In fact, measures of this sort, and in particular fiscal policies, may frequently serve as a substitute for either multiple rates and tariffs or over-all depreciation, for the decrease in disposable incomes that results from an increase in tax collections is almost always associated with a contractive effect on imports. As would be expected, however, taxes which are levied in the domestic market tend to be less effective as balance-of-payments correctives than multiple exchange rates and tariffs. The latter operate as cost restrictions rather than income restrictions, and their full effect works on the demand for imports, thus ensuring that the tax mechanism withdraws income from the import-using sector of the economy.

The smaller degree of shiftability of income taxes makes them better balance-of-payments correctives than other types of taxes which are levied in the domestic market,¹⁰ for high income groups

¹⁰ Excepting, of course, a domestic excise tax that affects the cost of imported articles. Since there are no close substitutes for most types of imported articles in the majority of underdeveloped countries, however, taxes of this type are for

usually spend a larger proportion of their incomes on imported goods and services.¹¹ In some instances, moreover, the price increases which are associated with the imposition of highly shiftable domestic taxes may make foreign products attractive as substitutes for domestic articles and/or stimulate an inflationary wage-price spiral by inducing demands for higher wages.¹² Of course, the full benefits of an income tax only accrue when the tax is properly administered since evasion and inadequate enforcement significantly reduce its effectiveness as a fiscal instrument and balance-of-payments corrective. As is widely known, income tax administration is not particularly efficient in most underdeveloped countries at the present time, partly because of the underdeveloped nature of the economies themselves. Unlike in an industrialized nation, where the corporate form of business organization is relatively common and the use of "checkbook money" is highly developed, the fiscal authorities do not benefit from the modern accounting standards and procedures which corporate stockholders usually require and are unable to utilize bank records to check the accuracy and honesty of tax returns.

Although the direct balance-of-payments effects of multiple exchange rates are more certain than those of the income tax, the latter does have certain obvious advantages when indirect effects are also taken into consideration. The income tax interferes with consumers' choice to a smaller extent than multiple rates and tends to be more progressive, particularly with respect to the highest income brackets;¹³ at the same time the curtailment of

the most part merely disguised tariffs which tend to be administratively less effective than direct import duties. Their effects are discussed further in the section on the structure of production (see p. 35 below).

¹¹ If an income tax is administered adequately, moreover, it will tend to reduce the skewness of the income distribution, thus acting to make multiple rates and tariffs more effective as balance-of-payments correctives (see pp. 10-11 above).

¹² The relatively large cyclical flexibility of income taxes tends to be somewhat disinflationary, on the other hand.

¹³ In spite of the great shiftable of import duties in underdeveloped countries, their burden frequently tends to be broadly progressive over an important range of the income distribution, and in those relatively unindustrialized countries which are characterized by a significant degree of self-sufficiency in the production of foodstuffs and clothing and do not have strong elements of protection in their tariff systems, import duties normally become regressive only in the highest income brackets, where savings become quite important. The reason for this is twofold: as the income level rises, consumer units (1) tend to substitute imported

imports through income taxation avoids any undesired protection of domestic industry and does away with the costly red tape, graft, and delays which may arise under a system of multiple rates. In the last analysis, however, the most important factor in a comparison of the two devices is their relative effects on the rate and direction of capital formation—the core of the economic problem facing underdeveloped countries.

Effects on Capital Formation

Multiple exchange rates influence the rate of capital formation through their effects on the pattern of relative prices. By influencing the relative costs of various classes of imported merchandise, the government may affect the local currency prices of capital equipment as compared with those of both imported and domestically-produced consumers' goods; and this in turn may help to determine the pattern of consumption and investment in the economy. Under a system of multiple exchange rates, in which the prices of capital goods are kept relatively high, the incentive to invest will be dampened—an effect that may prove to be economically desirable during a period of inflationary overinvestment. In the vast majority of instances, however, the multiple exchange rate systems in developing countries produce the opposite type of effect by maintaining relatively low prices for capital equipment. Cost restrictions of this kind can accomplish a great deal to encourage long-run progress in the case of economically less developed countries because industrial machinery and equipment for the most part have to be imported. Their effects on the rate of capital formation are, moreover, likely to be more certain than those of the income tax; for, although it is difficult to determine the relative impact of the income tax on consumption and investment in any type of economy, this is

products for domestic goods even though they may concomitantly consume a smaller proportion of their incomes; and (2) tend to devote a higher percentage of their expenditures for imports to high-tariff items. (For a statistical analysis of the incidence of import duties in an underdeveloped economy, see E. R. Schlesinger, "Distribution of the Tax Burden by Family-Income Groups in 1946" [Appendix G to H. C. Wallich and J. H. Adler, *Public Finance in a Developing Country: El Salvador, a Case Study*, Cambridge, Harvard University Press, 1951].)

particularly true in the case of underdeveloped economies, where a great deal of uncertainty exists with respect to both the degree of shiftability of this type of tax and the extent to which taxpayers meet their tax liabilities.

With the obvious exception of totalitarian countries, the basic objective of most economic development programs is not to maximize the absolute rate of capital formation but rather to achieve a high rate of economic progress within a social framework that is consistent with individual freedom and political stability. For this reason not only the aggregative amounts of consumption and investment but the composition of that consumption and investment are of major significance in developing countries. From the standpoint of the social pattern of consumption, the effects of multiple exchange rates compare favorably with those of indirect taxation and inflation, the two principal methods of curtailing the level of consumption in these countries.¹⁴ Because a large proportion of the luxuries which are consumed in economically less developed countries must be imported, and since foreign travel is an important form of conspicuous consumption by the upper classes, cost restrictions on imports limit consumption in areas that are frequently regarded by the authorities as socially less desirable. Furthermore, multiple exchange rate systems can be useful, as has been noted, in preserving social and political stability by granting preferential treatment to imports of essentials and thereby mitigating the danger of starting an inflationary wage-price spiral.

The very nature of most economic development programs contains an element of paradox since there is often an apparent clash between social and economic objectives. Although the ultimate aim of the programs is to raise the living standards of the population, this cannot be done to any important degree without increasing investment, and hence lowering consumption and living standards. Once a program gets underway it may be possible to reconcile these conflicting aims, however. The increase in national income that has already been achieved can be utilized to finance further economic progress by preventing consumption from ris-

¹⁴ The effects of multiple exchange rates on the composition of investment are discussed below (see pp. 30-31).

ing, or at least from rising as much as incomes. Multiple exchange rates are readily adaptable to a program of this kind, for an important part of the rise in consumption that accompanies higher incomes will probably be reflected in an increased demand for imports.

The reason for the deliberate attempts of the governments of underdeveloped nations to prosecute economic development programs is that the private sector of the economy has not achieved the rate of progress which society demands or has not obtained it in ways which public opinion considers socially desirable. At the same time many of the governments find themselves unable to accomplish very much directly because the number of trained, capable government officials and technicians is limited.¹⁵ One readily apparent possible solution of this dilemma is for the authorities to attempt to facilitate economic development through a program of negative planning or framework controls. That is to say, the government can discourage the private sector from consuming or undertaking investment projects that are assigned a low priority from the standpoint of the over-all economic development of the country, and can at the same time encourage the prosecution of projects deemed preferable by the limited group of trained personnel. This type of program appears more desirable than one in which the government actually requires the completion of preferred projects, for framework controls might be expected to be more successful than direct controls in economies in which the main business and financial institutions are privately owned and managed; they interfere less with the freedom of action of the managers of these institutions and avoid the disincentive effects and personal frictions that are likely to arise under more direct forms of controls.

As has been pointed out, however, in many underdeveloped countries the apparatus for controlling foreign trade is frequently more fully developed and easier to operate effectively than the apparatus for administering either modern types of qualitative

¹⁵ In terms of traditional public finance theory, this means that, even though the marginal social cost of taxation is relatively small in most underdeveloped countries, the marginal social benefit of government development expenditures is also quite small or becomes small at a relatively low level of expenditures.

credit controls or taxes which differentiate with respect to source of income. As a consequence the governments of some of these countries may have a vested interest in the maintenance of an overvalued exchange rate, at least in the immediate future. An exchange rate of this kind may be the most effective instrument available for implementing a program of negative planning. Let us suppose, for example, that the total foreign exchange receipts which accrue to a developing country in a given period of time amount to 1,000 currency units. If the exchange rate were overvalued with respect to imports during this period, total applications for foreign exchange would be equal to, let us say, 2,000 currency units, with requests for foreign exchange to purchase capital equipment amounting to 500 currency units. In such a situation the authorities could give first priority to the imports of the 500 currency units of investment goods, thereby reducing the consumption of the economy commensurately. But if the exchange rate were permitted to depreciate to a level at which the supply and demand for foreign exchange were equal, the lever of overvaluation would be lost, and the government would be deprived of this method of encouraging capital formation.

The relationship between a program of economic development and an overvalued currency thus appears to be a reciprocal one. Not only does economic development frequently lead to the overvaluation of the exchange rate, but such overvaluation may actually play an important part in the effective prosecution of a development program—at least until such time as tax administration in the underdeveloped countries is improved substantially. There is, of course, an important question with regard to whether it is preferable to maintain an overvalued exchange rate for all imports and accomplish social rationing by means of quantitative restrictions or to retain overvaluation for only certain classes of imports through the imposition of a system of multiple exchange rates. Although this question can, to a very large extent, be answered on the basis of the conclusions which were previously reached in the section on imports, the comparative effects of cost and supply restrictions on the direction of domestic investment must also be considered.

In many of the underdeveloped countries, the problem of re-direction is essentially one of rechanneling investment from real estate ventures to industrial ventures. But this obviously does not imply that all that is needed is a policy of favoring imports of machinery at the expense of those of building materials, for the latter are also necessary for plant construction. Accordingly, even though a finer classification of imports is possible under a system of quantitative restrictions than under an effectively run system of multiple exchange rates,¹⁶ exchange licensing does not appear to be superior to multiple rates as a method of redirecting domestic investment, unless, of course, the government institutes a comprehensive follow-up system to determine the actual ultimate use to which imported building materials are put. To an important degree, moreover, the question of the direction of investment is also determined by the effects of the two types of restrictions on the profitability of various sections of the economy and hence on the structure of production.

Effects on the Structure of Production

An analysis of the effects of multiple exchange rates on the composition of production is made rather difficult by the problem of determining a valid frame of reference. Since currency devaluation also results in an altered composition of production, should the "new structure" which would result from the imposition of multiple rates be compared with the existing composition of production or with the structure that would result from a devaluation of the currency? In the case of a developing country, the second basis of comparison appears to be the more realistic one, for the balance-of-payments pressures which normally accompany economic development indicate that some action will usually be necessary to curtail imports. Rather than compare the "new" division of the market between foreign and domestic producers with that which prevailed at the old single exchange rate, it thus seems preferable to compare it with the division that would exist at an "equilibrium rate"—that is, the exchange rate which would have been established if the government had resorted to over-all rather than selective depreciation with respect to imports.

¹⁶ See p. 19 above.

The competitive positions of domestic producers of articles which enter at the basic exchange rate are usually relatively weak under a multiple exchange system; since the basic or preferred rate must by definition be more favorable than the "equilibrium rate," foreign producers of the article benefit from an artificially imposed reduction of the differential between foreign and domestic costs.¹⁷ Although this subsidization of foreign competition would tend to undermine some existing domestic industries, it seems unlikely that a government would permit—or would be permitted—to allow such a situation to develop. Far more probable is the danger that the emergence of certain new types of domestic industry may be prevented under a pattern of multiple rates. As has been noted, capital equipment and essential consumers' goods are the categories of imports which are assigned to the basic rate in the majority of multiple exchange rate systems, and although it does not appear likely that the natural-resources bases and labor skills of most underdeveloped countries are at present adaptable to capital goods industries, there is a risk that the subsidization of imports of certain types of consumers' goods may actually retard the economic development of a country. In fact this has reportedly occurred in the case of the Ecuadorian wheat-flour and the Peruvian meat industries.¹⁸

When imports enter at an exchange rate which is less favorable than the so-called "equilibrium rate," existing or prospective domestic producers of competing articles may benefit from what may be termed a "protective effect."¹⁹ Whether or not the artificially imposed increase in the differential between foreign and domestic costs leads to a significant redivision of the market between domestic and foreign producers depends on the closeness

¹⁷ The competitive positions of domestic producers of articles which enter at the more favorable penalty rates may also be weak; for, when a system includes a large number of exchange rates, several may be more favorable than the "equilibrium rate."

¹⁸ Cf. Bernstein, "Some Economic Aspects of Multiple Exchange Rates," *op.cit.*, pp. 230-231.

¹⁹ If one of the rates in the multiple exchange rate system should by chance be equal to the "equilibrium rate," there will be no protective effect; however, since the local currency prices of other types of imports will differ from what they would be if all imports entered at the "equilibrium rate," the division of the market between foreign and domestic producers would probably differ from that which would have existed if the currency had been devalued.

of domestic substitutes for the affected imported articles. In view of the natural-resources bases and level of technical skill in many underdeveloped countries, the danger of protection does not appear very great in the case of such consumers' goods as automobiles, luxury textiles, and the various types of consumers' durables—although there is of course always a possibility that assembly plants can be constructed. On the other hand, the development of protected industries seems quite likely in the case of less expensive grades of textiles and semiprocessed raw materials and foodstuffs. Regardless of the composition of the natural-resources base of a country, however, the chances of the protective effect becoming important will increase significantly as the differential between foreign and domestic costs becomes wider; prospective marginal domestic producers will tend to find that their local currency costs of production compare more favorably with those of foreigners, while prospective intramarginal producers will become more certain that future balance-of-payments developments cannot reduce the cost differential to the extent necessary to eliminate their advantage. To an important degree, however, the outcome will also depend on whether or not the differential is achieved through the imposition of multiple exchange rates or some other device.

A comparison of the impact of multiple exchange rates on the composition of production with that of other methods of limiting the demand for imports is complicated by the fact that protective effects are desired by the government in some instances and unwanted in others. If a country has no restrictions on international trade, it will import a product from another country when both a cost condition and a demand condition are fulfilled; the cost of production in the second country must be low enough to offset any differential in transportation costs, and a demand for the article in question must exist in the first country. If the government should then decide to restrict the importation of the product, it will do so in most instances for one of two reasons:²⁰ it may

²⁰ Although the government may also interfere with the free working of the foreign exchange market for such other purposes as the provision of revenue for the government and the conservation of international reserves, they need not concern us in the analysis of the present section.

desire to foster domestic production of the article by offsetting the comparative cost advantage that the other country enjoys through the imposition of a cost or supply restriction;²¹ or it may wish to divert the foreign exchange which is spent on the article to another type of import, having decided that the importation of the first product is not in the best interests of the economy. In the first instance the authorities embark deliberately on a program that will lead to an uneconomic allocation of resources, at least in terms of traditional "comparative statics" theory,²² for they are attacking the cost condition for international trade. In the second case, no such intentional economic misallocation of resources is planned; the authorities are attacking the demand condition for trade, and the question of what is and what is not "proper" demand is ethical rather than economic. Unfortunately, however, while determining demand the government simultaneously influences comparative cost conditions—an action that may give rise to undesired fostering of domestic production and a consequent malutilization of resources.

Multiple exchange rates, as would be expected, create these

²¹ Alternatively, domestic production could be fostered by the payment of a subsidy to domestic producers.

²² Protection may not necessarily lead to misallocation of resources in a dynamic sense, however, since traditional trade theory abstracts for the most part from the effects of the business cycle and economic growth and progress. The fluctuations of the international trade cycle have, for instance, tended to vitiate the theoretical advantages to be obtained from the international division of labor. By emphasizing the comparative advantage of certain nations in the production of raw materials, classical trade theory minimized the importance of the losses to primary producing countries which have resulted from their external dependence and consequent cyclical instability. Through diversification of their production, these countries might be able to achieve a more rational allocation of their resources over the entire period of the international trade cycle.

At the same time, economic progress in primary producing countries has tended to proceed at a slower rate than in more industrialized nations. By assuming complete internal mobility of the factors of production, traditional free trade theory granted a theoretical equality of opportunity to all countries, but in practice, equality of opportunity has meant that the more developed nations with highly organized capital and labor markets, well-developed business organizations, large pools of skilled labor, and adequate power, transportation, and communication systems have advanced more rapidly. (For a comprehensive statement of this modern rationale of the old "infant industry" argument, see among others: J. H. Williams, "The Theory of International Trade Reconsidered," *Economic Journal*, Volume XXXIX [June 1929], pp. 195-209; and T. de Scitovszky, "A Reconsideration of the Theory of Tariffs," *Review of Economic Studies*, Volume IX [Summer 1942], pp. 89-110.)

unwanted protective effects to a smaller degree than some other methods of restricting imports, but at the same time they provide less secure and less lasting protection to the domestic producer. Since the problem of protective effects obviously does not arise in the case of those domestic excise taxes which affect the cost of imports, taxes of this type are, in theory at least, the best of the selective devices for altering the composition of imports, particularly when a government also desires to curb the existing domestic output of the taxed commodity. In some instances, however, the authorities may actually wish to avoid contracting domestic output, and in any event, practical opportunities for achieving the simultaneous social rationing of foreign exchange and domestic production are limited in most underdeveloped countries, where no close domestic substitutes are produced for a large variety of imports. Apart from their avoidance of protective effects, therefore, those excise taxes which influence the cost of imports are very often in effect merely a cumbersome form of disguised tariff and tend to be less flexible and more difficult to administer and coordinate than multiple exchange rates.

Some conclusions with regard to the comparative severity of the protective effects that are created by the various methods of interfering with the operation of the foreign exchange market may be obtained if it can be assumed that the administrative authorities and legislative authorities are equally open to political pressure and that the government announces and adheres to a definite policy of refusing to grant additional protection when it is demanded. Under these assumptions it seems clear that supply restrictions tend to provide more lasting protection than cost restrictions, for when import or exchange quotas have been imposed, foreign companies are unable to recapture the market which they have lost even if their costs are reduced substantially. Moreover it is evident that tariffs, which are subject to legislative revision, produce greater protective effects than multiple exchange rates, which are subject to administrative revision; intelligent investors are less likely to risk capital in hazardous ventures which are offered only temporary protection that is dependent on the uncertain caprices of the administering officials.

The severity of the relative protective effects of multiple exchange rates and tariffs also varies with the individual types of devices which are introduced. *Ad valorem* tariffs, for example, furnish a surer degree of protection than specific tariffs, for fluctuations in the world price level induce variations in the *ad valorem* equivalent of specific duties and in the degree of protection which they provide. For the same reason fixed multiple exchange rates, which are analogous to *ad valorem* tariffs, afford more protection under certain circumstances than flexible rate systems. The significance of this disadvantage should not be exaggerated, however, because inflationary pressures may cause the spread between the auction rate and the basic rate to grow so large that prospective investors will feel secure even in the light of any anticipated fluctuations in the auction market rate. Moreover, if the fixed multiple exchange rates are combined in a composite system with quantitative restrictions, there is a danger that prospective investors will realize that the supply restrictions may ultimately become the effective restricting factor.

Although multiple exchange rates probably minimize undesired protective effects to a greater extent than either supply restrictions or tariffs, it does not necessarily follow that the various types of cost restrictions furnish a less desirable form of protection than supply restrictions. One basic danger inherent in a policy of furthering economic development through the protection of domestic industry is that the high costs and technical inefficiency of a domestic producer may be subsidized permanently, or at least beyond the time needed for an industry to develop.²³ Because of this factor, cost restrictions, and particularly the tariff, may—paradoxically enough—also be considered preferable to supply restrictions from the point of view of furnishing protection, provided of course that the government does not grant additional protection to domestic producers whenever foreign enterprises increase their efficiency sufficiently to be able to recapture the market. If cost restrictions are employed, the domestic producer usually has an incentive to increase his

²³ There is also a danger that the authorities may select the wrong sector of the economy to encourage, but since this is a problem of what to protect rather than of how to protect, it does not concern us here.

technological and sales efficiency since he must always be prepared for the eventuality that his foreign competitors may be able through innovation to offset the existing differential between foreign and domestic costs.

Since direct subsidies to domestic producers are normally paid from the general revenues of the government, they are sometimes considered a better method of providing protection than cost restrictions. The burden of a subsidy is usually less regressive than that of multiple exchange rates or tariffs, and the danger of any unnecessary subsidization of inefficiency is often more remote because the sizes of direct subsidies are more directly apparent to the public. However, in view of the tight government revenue situations which prevail in many underdeveloped countries, the use of protective cost restrictions may sometimes enable the government to devote its revenues to other objectives. When this factor is considered of importance, one possible way out of the dilemma of unnecessary subsidization may be to provide for a gradual removal of the protective tariff differential over a number of years (although estimating the period of time in which an individual industry can become competitive is a rather ticklish and difficult problem).²⁴

IV. MULTIPLE EXCHANGE RATES AND THE LEVEL OF FOREIGN EXCHANGE RECEIPTS

The balance-of-payments difficulties which usually accompany economic development programs need not, of course, be attacked only from the import side. The pressures on a country's international reserves can also be alleviated by a program of increasing the level of foreign exchange receipts through an expansion of exports and the encouragement of investment by foreign enterprises and individuals. Policies of this type are likely to prove rather difficult to implement in a developing economy, however,

²⁴ An experiment with this technique was started by the government of Guatemala in 1949. In order to foster a domestic match industry without subsidizing inefficiency, the match tariff law stipulated that the duty be reduced each year so that at the end of four years the rate was at the same level as before protection was introduced. See "Decreto Número 543 del Congreso de la República de Guatemala," *Labor Revolucionaria*, Boletín Número 14 (1949), pp. 166-167.

particularly since the development process also places pressures on the existing level of exports if appropriate action is not taken to protect the economy from this contingency.

The rise in real incomes that is associated with economic progress tends to increase the attractiveness of the domestic market, and in order to exploit this new and perhaps more reliable source of demand, some exporters may find it profitable to divert a portion of their sales from foreign markets. The actual amount of sales diversion that will occur in many underdeveloped countries will be quite small because of the specialized nature of export industries, but even in this event, the profitable domestic investment opportunities that are induced by the higher incomes may cause some factors of production to transfer from the export sector. These tendencies will be intensified if the rate of capital formation is high, for the higher domestic cost structure that results from inflationary pressures may reduce the country's exports still further by worsening their competitive position in the world market. Furthermore, should the government attempt to curb the increased volume of imports that is induced by the expansion of monetary and real incomes, it may compound the difficulties of the export industries by reenforcing the general inflationary pressures and/or more directly by causing a rise in the prices of those imported materials which are consumed by the export sector.

Many of these difficulties, needless to say, can be mitigated by intelligent government policy. The rate of capital formation can, for example, be slowed down, with rapid economic progress still being achieved by shifting the emphasis of the development program from the over-all expansion of domestic investment to the redirection of that investment into what the authorities consider more productive domestic channels. Or, as a supplement or alternative to this program, an important part of the new investment can be concentrated in projects that are either export-increasing or import-reducing.¹ Very often, however, there are definite limits

¹ For an excellent analysis of the importance of export-increasing and import-reducing projects, see J. J. Polak, "Balance of Payments Problems of Countries Reconstructing with the Help of Foreign Loans," *Quarterly Journal of Economics*, Volume LVII (1943), pp. 208-240.

to the effectiveness of policies of this kind. The redirection of investment from urban real estate to industrial ventures may, for example, prove to be import-increasing in many instances, for the "foreign exchange content" of industrial investment tends to be much higher than that of real estate investment. At the same time, the alleviation of balance-of-payments pressures by investing in projects that are export-increasing and import-reducing frequently occurs only after the passage of time; for, although the types of investment which are generally believed to be most needed in economically less developed countries—the construction of transportation, power, and irrigation facilities—tend to increase exports and reduce import requirements in the long run,² they do not bring forth immediately additional production of goods destined for exportation or for the domestic market.³

For these reasons some developing countries have also made attempts to prevent the level of exports from declining by the intelligent administration of multiple exchange rate systems. In fact a few governments have actually tried to expand exports through the use of this device. The effectiveness and rationale of these attempts are evaluated in the first two parts of the present section, which investigate the effects of various types of multiple exchange rate systems on the maintenance and growth of exports. This discussion is followed by an analysis of the effects of multiple rates on investment by foreign enterprises and individuals. Foreign capital is, of course, not only another major prospective source of foreign exchange for a developing economy but also an important reservoir of investible funds.

The Maintenance of Exports

When the government of a developing economy is interested in maintaining the present level of the country's terms of trade,

²The effects of the construction of transportation facilities on the balance of payments are rather complicated, since transportation costs of foreign as well as domestic goods are reduced; improved transportation may thus prove import-increasing in the case of commodities for which the demand is elastic.

³An interesting illustration of the effects of this "slowness of response" in the case of Costa Rica and the construction of the Inter-American Highway is given by Javier Marquez in "Notes on Balance of Payments Problems in Relation to Economic Development in Latin America," *Inter-American Economic Affairs*, Volume I, Number 2 (September 1947), pp. 104-117.

it may sometimes have a stake in an exchange control system which stipulates different exchange rates for exports and imports. For, although many of the economically less developed countries are atomistic buyers of imports in the world market, quite a few of them find themselves, because of the specialized nature of their production, in the position of nonatomistic sellers of exports. Under these conditions, over-all exchange depreciation with respect to both imports and exports might not influence the world market prices of imported articles, but could very easily, especially if the supply of exports were elastic, induce a fall in the foreign currency prices of exports and a consequent worsening of the terms of trade. If, however, the depreciation were restricted to imports alone, any balance-of-payments deficit could probably be eliminated without a deterioration of the terms of trade.

In view of the tight balance-of-payments position which normally accompanies economic development, however, the governments of developing nations usually tend to be more interested in obtaining a high level of exports than in maintaining favorable terms of trade. Differentiation between buying and selling rates may also prove helpful in achieving this objective, as is shown by the operation of the multiple exchange rate systems which were used in several of the Latin American countries during the post-war years. The standard argument of the proponents of these systems was two-pronged: although the exchange rates which were in effect at the time did permit an excessive flow of imports, they did not, in view of the high world prices of primary products, hamper the sale of exports,⁴ and because production for export was generally at capacity levels during this period, depreciation would not have resulted in the expansion of the real volume of export sales but would only have served to increase the windfall profits of the export sector and intensify the already existing inflationary pressures.⁵

⁴ J. S. de Beers, "Some Aspects of Latin America's Trade and Balance of Payments," *American Economic Review*, Volume XXXIX (1949), pp. 384-395.

⁵ E. M. Bernstein, *Current Exchange Situation in Latin America*, Speech before the Inter-American Council of Commerce and Production, Drake Hotel, Chicago, September 28, 1948; and F. Pazos, "Inflation and Exchange Stability in Latin America," *American Economic Review*, Volume XXXIX (1949), pp. 396-405.

Under these conditions the maintenance of the exchange rate for exports, while depreciating with respect to imports, would clearly be superior to over-all depreciation, and action of this sort was taken by such countries as Ecuador and Costa Rica.⁶ Alternatively, of course, much the same effects could be obtained by devaluing the currency and imposing a tax on exports. Such a policy was followed by the Mexican government, which levied a 15 per cent tax on all exports when the Bank of Mexico abandoned its policy of supporting the peso on July 22, 1948 and permitted the currency to seek its own level.

The relative desirability of these two alternatives depends on whether or not the government wishes, at the same time, to grant selective exchange rate treatment to different types of imports. If this is the case, a full-fledged exchange control system is necessary, and the government might just as well introduce an exchange rate system which differentiates between exports and imports. When selective treatment of imports is not desired, however, it would appear to be preferable to avoid the dangers and administrative difficulties that are inherent in exchange controls. The desired effects could be obtained by a combination of over-all currency depreciation and export taxation, and the "readily available" exchange reserves of the economy would still benefit to a certain extent, because some funds which would have otherwise gone into "hidden" foreign exchange hoards would now be repatriated.⁷

Very frequently, however, combinations of exchange rate and tax policies of this sort are likely to prove unsatisfactory in the case of developing economies, for the growth process may cause the existing exchange rate to hamper the flow of exports, even at a time when a high level of demand prevails abroad; rising real and monetary incomes tend, of course, to increase the relative attractiveness of the domestic market and/or induce cost-price

⁶ For a description of those multiple rate systems to which reference is made in this section see the International Monetary Fund's *Annual Reports on Exchange Restrictions*.

⁷ In the absence of exchange control, exporters frequently accumulate a portion of their receipts in foreign bank accounts, but if an export tax is introduced, they are forced, sooner or later, to return a larger share of their foreign exchange earnings to their native country.

squeezes in various export industries. Under these circumstances a government could take steps to maintain the level of exports by either eliminating or reducing export taxes, or making changes in the multiple exchange rate system. Selective depreciation with respect to different types of imports, for example, might prove useful in increasing the profitability of export industries by granting preferential treatment to the raw materials and equipment which are consumed by the export sector, and by giving favorable treatment to essential cost of living imports in an attempt to mitigate the danger of strong pressures for wage increases. More effective and certain, however, would be the introduction of some depreciation with respect to exports into the system; the government could, for instance, grant subsidies⁸ to exporters of basic commodities, as was done in Colombia prior to the devaluation of the peso on December 16, 1948, or exporters might be permitted to sell a certain percentage of their foreign exchange earnings in some form of freely fluctuating foreign exchange market, as has been done in Peru.

Since cost-price maladjustments are likely to injure some export products more seriously than others, the degree of relief that is needed by the various export industries may vary significantly. As a consequence the reduction or elimination of export taxes may sometimes prove a particularly satisfactory method of mitigating domestically induced pressures on exports, for it is relatively easy to make different adjustments in the rates of tax which apply to individual products. The usefulness of such tax concessions is, of course, quite limited in cases where profit margins are traditionally small, and additional relief might sometimes have to be granted in the form of subsidies or exchange rate adjustments.

Another and perhaps more significant consideration which should determine the choice of policy is the apparent superiority of an approach that leaves the problem of determining the actual extent of the cost-price squeeze to the functioning of a flexible and automatic market corrective over an approach that places

⁸ Favorable fixed exchange rates for certain types of exports may frequently represent a form of government subsidy. The question of subsidization of exports is discussed in the section on the expansion of exports.

the burden of determination entirely on administrative discretion. It is from this point of view that export tax reductions do not appear very satisfactory, even when changes in tax rates are adjusted automatically in accordance with a predetermined "sliding scale"; since the basis of such a scale is most often the price of the taxed commodity in a major foreign market, the reduction of export taxes is better suited to the automatic easing of any pressures on exports when these result from a decline in foreign demand than when they are caused by domestic supply maladjustments.

Since a similar criticism applies to the granting of subsidies or the determination of new fixed exchange rates for exports, it would appear that the device of permitting exporters to sell a given share of their earnings in some form of free market is the most satisfactory from the standpoint of providing an automatic corrective. Whenever, under an arrangement of this kind, there is a tendency for exports to decline in the face of a continuing high demand for imports, the equilibrating mechanism of the market would induce a depreciation of the exchange rate and a concomitant easing of the pressure on exports. It is relatively simple, furthermore, to grant varying degrees of relief to exporters of different products by permitting them to sell different percentages of their exchange earnings in the free market.

The use of free market sales can be considered an extension of the auction market system of allocating exchange for imports, which was discussed in an earlier section. Under that arrangement, it will be recalled, exporters are required to sell all of their exchange proceeds at the basic rate of exchange, and the government, after allocating sufficient exchange for what it considers the basic needs of the economy, sells the rest to importers in a freely fluctuating market. Under this variation of the system, however, exporters are permitted to retain a portion of their foreign exchange receipts, thus obtaining a more favorable over-all rate of exchange by being able to sell this exchange to importers or to use it to import scarce products for their own use. In this way the exchange profits which accrue to the government under the pure auction system are effectively diverted to the export sector.

As a means of avoiding foreign exchange hoarding or the occurrence of leakages in the exchange control system, the government may require exporters to turn in all foreign exchange and give them a foreign exchange certificate in lieu of that portion which they are permitted to sell on the free market. Frequently these certificates are valid for only a limited period of time, so that speculative factors can be prevented from intruding and causing differences between the supplies of foreign exchange and of exports. When an official free exchange market forms part of a multiple exchange rate system, it is usually not a substitute for an exchange certificate market and frequently performs an entirely different function. Markets of this kind were, in the cases of countries like Colombia and Ecuador, actually employed as an exchange control device which provided incentives for the return to the country of exchange proceeds arising from transactions that are not easily controllable.

The basic weakness of an exchange certificate market as a method of affording relief to exporters is that this objective often comes into conflict with the government's desire to achieve social rationing of foreign exchange on the import side. If, for example, the percentage of exchange earnings that exporters are required to sell at the basic rate is determined by the authorities' views of the needs of the economy for preferred imports, the average effective rate of exchange that exporters obtain from their sales may be too low to grant them the desired amount of relief, or may, on the other hand, provide them with substantial windfall profits. Conversely, if proper relief is given to the exporters, this may mean that too little (or too much) exchange has been made available for the priority import needs of the economy.⁹

Aside from the problem of reconciling import and export objectives, however, it seems clear that the introduction of an exchange certificate system may prove unusually successful in maintaining the level of exports when the tendency for the exports of a developing country to decline is entirely the result of internal

⁹ In view of the government's limited knowledge of the elasticity of demand for foreign exchange to purchase nonpriority imports, moreover, it cannot determine very accurately to what extent the certificate market rate will be affected by any given change in the required percentage of exchange receipts that must be sold at the basic rate.

maladjustments which cause the domestic cost-price structure to grow out of line with the level of world prices. Under these circumstances the objective of government policy is merely one of increasing the domestic currency prices of exports, relative to their foreign currency prices, so that the export sector can maintain its production and sales at the existing world market prices. When, however, a fall in exports is induced by developments abroad, the effectiveness of depreciation as a method of maintaining the level of foreign exchange receipts is, of course, much more debatable. What is needed in this instance is the stimulation of foreign demand through the reduction of the foreign currency prices of exports, and worldwide rather than purely domestic factors determine the successfulness of depreciation under these conditions.

The most common external cause of a decrease in exports is a cyclical change in foreign demand, and although a decline of this sort is usually not the direct result of a country's development program, its consideration does fall within the framework of the present study because cyclical fluctuations in foreign demand set limits to the rate of economic progress which a developing economy can achieve. A decline in foreign demand may also, of course, be the result of a long-run change in the tastes of consumers or may reflect the growth of new low-cost or synthetic sources of supply in other countries. But since developments of this kind are more properly considered as an aspect of the problem of expanding exports, they are treated as such when that subject is discussed in the next section.

In the case of a cyclical decline of exports, exchange depreciation or the reduction (or elimination) of an export tax can influence the foreign exchange receipts from an individual export favorably only if the elasticity of demand for that export good in general is greater than unity¹⁰ or if the country's share in the world market is so small that it is in the position of an atomistic seller and can capture a larger share of the market at

¹⁰ Only the short-run balance-of-payments effects of depreciation are considered here. In the long run the fall in export prices could induce a change in the tastes of foreign consumers with the result that foreign exchange earnings from products with inelastic demands might increase, or those from commodities with elastic demands might decrease.

the expense of competing countries. In all probability, only some of the exports of an individual country would satisfy one or the other of these conditions, and a policy of over-all exchange depreciation could consequently result in a decline of foreign exchange receipts. By introducing a policy of selective depreciation with respect to exports, however, a country can obtain the benefits of depreciation for those exports which do fulfill one of the conditions; the granting of differential treatment to different kinds of exports represents another important type of multiple exchange rate pattern and may alternatively be described as a tax on the nonpreferred export, a subsidy for the preferred export, or a combination of the two.

Selective depreciation with respect to exports, as has been noted, can easily be introduced into flexible multiple exchange rate systems by varying the percentages of the foreign exchange proceeds that exporters of different products are permitted to sell in the certificate market. But since some selective depreciation with respect to imports is usually also desired under a system of this kind, the exchange certificate market would tend to become overly cumbersome to administer, with the problem of reconciling the effective rates for exports and imports becoming even more complicated than when selective depreciation with respect to exports is not desired by the government.¹¹ For this reason the centralization of all foreign exchange receipts in the hands of the administrative authority would appear to be a more feasible procedure.

Discrimination among different types of imports could be accomplished by either multiple fixed rates or auction sales, while discrimination among different types of exports could be accomplished by tax exemptions, subsidies, or multiple fixed rates. Since the government's profits from the exchange taxes or sales could be used to defray the cost of the various types of export subsidy, no novel principle would necessarily be involved in this procedure; depreciation of any sort can be considered as a subsidization of exporters at the expense of importers, and in the present case this result is merely achieved with the government

¹¹ See p. 44 above.

acting as a formal intermediary. The subsidies which are granted to favored export industries could, furthermore, be counteracted by the imposition of higher export taxes during boom periods, and no net subsidy would have to be granted to any industry over the period of the international trade cycle; the chances of these taxes being shifted would be small since the industries involved would either be in the position of an atomistic seller in the world market or would face a highly elastic foreign demand. No long-run discrimination among different export products would be implied, and the foreign exchange receipts of the country might be maximized over the period of the business cycle.

It should be realized, of course, that in numerous cases the practical benefits that can be derived from such a program are quite limited. World demand for many crude materials and food-stuffs is notoriously price-inelastic, while the concept of an "atomistic seller" is not too meaningful in a period of declining economic activity. The export sectors of many underdeveloped economies are of a specialized nature, and countries which specialize in the exportation of similar products would also be facing a decline in demand. Thus, for example, even though a nation like Guatemala is normally in the position of an atomistic seller in the world coffee market, depreciation of her currency would not necessarily be effective during a period of declining world income, for the various other coffee countries would also have some incentive to depreciate.

This does not mean, however, that selective depreciation with respect to exports is ineffective under all circumstances. In the case of some underdeveloped countries, it can mitigate some part of the decline in foreign exchange earnings that results from an external decline of demand, and may, of course, also prove useful in alleviating the pressure on marginal export industries that may take place when a development program causes the domestic cost-price structure to grow out of line with the world price level. Moreover some governments have occasionally granted preferential exchange rate treatment to certain types of exports in an attempt to stimulate their long-term growth and expansion.

The Expansion of Exports

The utilization of multiple exchange rates as a means of encouraging the *expansion*, rather than maintenance, of exports raises the problem of the subsidy element which is sometimes present in selective exchange rate treatment for exports. As was true in the case of protective effects,¹² the existence of a subsidy can best be determined by comparing the effective rate of exchange which an exporter actually obtains with the "equilibrium rate" that would have existed if balance-of-payments equilibrium had been achieved through over-all depreciation.¹³ If the present exchange rate is more favorable than this equilibrium rate, the exporter would be receiving a subsidy; conversely, if it is less favorable, he could be considered as being subject to an export tax.¹⁴ But so long as the existing official rate of exchange is maintained for certain preferred imports, the export sector as a whole would not be subsidized, and only the exporters of those few products which receive exceptionally large exchange rate relief might possibly obtain true economic subsidies.

When the objective of selective exchange rate treatment for different types of exports is the maintenance of the level of exports, there is only a limited risk that such a policy will lead to a misallocation of resources through the long-run subsidization of inefficient methods and producers. But this danger becomes far more acute when the aim of the selective exchange rate treatment is the expansion of exports. In part this is because the objective of policy is to furnish long-run—rather than short-run—relief to certain exporters. To an important extent, however, it is also a result of the need for a government to employ a different type of multiple rate system when encouraging the

¹² See p. 31 above.

¹³ The same argument applies, of course, to the various ways in which multiple rates have been utilized as an incentive to gold production. In Colombia and Ecuador the central bank bought newly mined gold at the official price of 35 dollars per ounce but paid for it in the form of exchange certificates which were negotiable in the free market. In Chile, on the other hand, the foreign exchange derived from gold production could be used to import articles which were otherwise on the prohibited list.

¹⁴ Accordingly, the difference in the rates of exchange received by exporters of different products might be composed of both a subsidy to the preferred exporter and a tax on the nonpreferred exporter.

growth of exports. The caprices of a flexible exchange market would, under these circumstances, probably not provide the selected producers with adequate or certain subsidies, for the need for assistance would presumably even exist at the equilibrium rate of exchange. The introduction of fixed differential export rates might thus prove to be a more effective method of encouraging exports, and the government of Venezuela, to take one example, has used such a system in an attempt to stimulate the exportation of coffee and cocoa.

There are, however, definite disadvantages to the use of fixed differential buying rates as a method of encouraging the long-run growth of exports. The prosecution of such a policy does not really belong among the objectives of an exchange control system, for unlike that of maintaining exports, it is not concerned with the short-run exchange position of the country; there is nothing to be gained from coordinating its administration with that of social rationing of imports. But even apart from this consideration, the advantages of multiple rates are limited in this connection, for by its very nature exchange rate relief can be granted only to commodities, with no distinction being made between old and new enterprises. In addition, the introduction of fixed differential buying rates may sometimes lead to uneconomic reexportation when the export rate for a product is more favorable than the import rate.¹⁵ This risk, to be sure, may be avoided by proper administrative control, but at the expense of introducing one more complication into the system.

Of very great importance is the fact that an effective expansion of the exports of an underdeveloped economy usually implies the development and introduction of new types of export products and of new more efficient methods of producing existing products. The burden of this task would probably have to fall mainly on new entrepreneurs and firms, for the present export interests in many underdeveloped countries tend to be hidebound by traditional practices and to lack a spirit of innovation. Under these conditions no oversimplified panacea like a subsidy would induce any significant expansion of exports. What would appear

¹⁵ Cf. Bernstein, "Some Economic Aspects of Multiple Exchange Rates," *op.cit.*, pp. 229-230.

necessary is a program of realistic cooperation between the government and private individuals; research would have to be carried on, and the new projects would have to be financed. Then and only then might subsidies or some other method of granting preferential treatment to new types of exports and new export enterprises prove effective.

Even if these satisfactory preconditions for subsidies are fulfilled, however, any aid would preferably have to be limited to the years of early growth, and direct and open subsidies financed from general tax revenues, and—to a lesser extent—tax exemptions, would appear to be superior to the more sophisticated and disguised forms of subsidy that can be achieved by the manipulation of multiple exchange rates. If the citizens of the country realize that the funds are actually coming from their pockets, the danger of uneconomic subsidization of new export ventures and products may be minimized. For this reason, as well as those enumerated above, the advantages to be gained from utilizing multiple exchange rates as a means of encouraging the growth of exports are quite limited and are not nearly so impressive as those to be obtained from using them as a device for maintaining the level of exports.

The Rate of Private Foreign Investment

Closely related to the question of the effects of multiple exchange rates on the level of exports is the problem of their impact on the rate of private foreign investment; indeed, since private foreign capital has traditionally shown a preference for the export industries of primary-producing countries, a decrease in the flow of foreign investment is also likely to have an adverse effect on exports.

It seems perfectly evident that the introduction of multiple exchange rates will have disincentive effects on the over-all rate of foreign investment, but the magnitude of these effects will vary with the type of multiple exchange rate system that is utilized. To a very important degree, moreover, the significance of investment disincentives will depend on the government's estimate of what the rate of foreign investment would be under the most favorable circumstances and its judgment as to whether or not such invest-

ment would flow into channels which have priority from the standpoint of the country's over-all economic development.

Under a pure system of multiple exchange rates—that is, one in which exchange is granted for any purpose whatsoever “at a price”—only a risk of exchange rate *conversion loss* is theoretically involved for a prospective foreign investor, but since such a system implies the establishment of a complete framework of exchange controls, the risk of not being able to *transfer* profits or capital at any price may also be anticipated. Both types of risk appear less applicable to the profits of export industries than to the revenues of those foreign companies which produce for the local market; the receipts of the former are already in the form of foreign exchange, while the prospective investor in an export industry would also expect to benefit from any depreciation with respect to exports that might be introduced into the multiple rate system. Since, however, transfer and conversion loss risks are also applicable to the repatriation of capital, the advantages of investment in the export sector are not quite so marked. Moreover the prospective investor in an industry which produces for the local market would expect possible conversion losses to be partially offset by the increased profit opportunities that are created by the inflationary and protective effects of import restrictions.¹⁶

In theory conversion losses can be smaller under a multiple rate system than under over-all currency depreciation, for it is possible for a government to permit exchange for profit remittances to be purchased at a preferential rate. In practice, however, the opposite type of system has been employed more frequently, and governments have assigned low priorities to foreign investment by requiring that exchange for profit remittances be purchased at penalty exchange rates. Even if the first type of policy were followed, moreover, and it were combined with one of guaranteeing the availability of exchange for a given rate of

¹⁶ The imposition of exchange controls on merchandise imports may also influence the rate of foreign investment, for any delay in the processing of exchange licenses, which leads to the building up of a backlog of private commercial indebtedness, would tend to affect private investment incentives adversely. On the other hand, a foreign company which does not want to lose an important export market for its products when cost or supply restrictions are imposed by a country might then find it profitable to manufacture for the market locally.

remittance of both capital and earnings, it is not certain that foreign investment would still not be impeded. There is always the fear that subsequent manipulation of the exchange control system or infringement of promises may work to the detriment of the interests of foreign investors.

In calculating the probability of this eventuality, a prospective investor would probably give less weight to purely financial considerations than to the general political and social climate of the country and would concern himself with such imponderables as the degree of nationalistic fervor and the power of existing labor unions. Even from the point of view of purely financial considerations, moreover, the flow of foreign capital may be impeded to a far greater extent by the development program itself—with the expectations that it induces with respect to future balance-of-payments changes—than by the particular devices which are used to mitigate the effects of these changes.

Although, for these reasons, it seems rather fruitless to explore all the possible combinations and permutations of the interaction of multiple rates and the flow of foreign investment, one additional feature of some multiple rate systems seems to warrant special mention, particularly because its use is directed toward foreign-owned export industries and may consequently have a dual effect on a country's foreign exchange position. In an attempt to ensure that some of the profits of these industries accrue to the benefit of the domestic economy, countries like Chile and Venezuela have required foreign companies to purchase the domestic currency that they need to meet local expenditures at special unfavorable rates of exchange, thereby forcing additional foreign exchange into the country. Since the profits of the export sector represent a major source of potential savings in economies of this type, much can be said for a policy of this kind provided that it is kept within reasonable limits. Chile, however, has probably exceeded these limits in her dealings with the copper industry, which is primarily American-owned. In addition to the excess profits tax of 50 per cent which is levied on copper exports,¹⁷ the government has required the copper companies to

¹⁷ The excess profits of the copper companies are defined as profits that are earned when the New York (f.o.b.) copper price is over 9¼ cents per pound.

purchase the pesos necessary to pay their local currency costs at an especially unfavorable rate of exchange, with the result that it appeared, paradoxically, as if rising production costs would benefit Chile's balance of payments. In the long run, however, the American companies would probably have tended to migrate from the country by failing to replace and maintain depreciated equipment, or would have made Chile a nonfavored source of supply in which production would be curtailed first when the demand for copper slackened; some indication of this second possibility was evident during the sharp break in copper prices which occurred in the spring of 1949.

V. MULTIPLE EXCHANGE RATES AND THE GEOGRAPHIC TRADE PATTERN

The relations between the balance of payments and the rate of economic development have thus far been studied under the assumption that unlimited convertibility exists between the currencies of a country's trading partners, and the impact of multiple exchange rates on the commodity composition and over-all volume of trade has consequently been analyzed without taking account of their effects on the geographic structure of trade. When such unlimited convertibility of currencies does not exist, the effects of multiple exchange rates on the geographic composition of exports and imports cannot be disregarded, for the geographic pattern of trade may sometimes set limits to the rate of economic progress which a developing country can achieve. Accordingly an attempt is made in this section to investigate the effects of various types of multiple exchange rate systems on the geographic structure of trade and to determine to what extent, if any, such effects can be utilized to increase the rate of economic development. In order to isolate the study of these problems, it is assumed for present purposes that an over-all balance exists in a developing country's trade. Under this condition the only possible threat to external stability would stem from the limited convertibility of the currencies of the country's trading partners.

In the recent experience of the underdeveloped countries, the problems arising out of their geographic patterns of trade have

generally been associated with the fact that the relative economic positions of Western Europe and the United States have altered significantly since 1938. During the early postwar years the unavailability and high cost of European goods was particularly acute, but as the postwar period progressed, the recovery of production and subsidence of inflation in Western Europe, when reenforced by the currency realignments of September 1949, eased the pressure on the dollar positions of "third areas" considerably. Nevertheless it seems likely that the inconvertibility of European currencies may be a continuing phenomenon, partly because of the economic development policies which are being pursued by many "third area" nations.

In view of the natural-resource patterns of most underdeveloped countries, industrialization generally takes the form of building up light consumers' goods industries which are likely to be substitutes for important European products rather than major American exports. Moreover, by encouraging the importation of machinery and equipment through the imposition of preferential multiple exchange rates and other types of exchange control, the governments of developing economies are seeking to alter the composition of their imports as compared with the prewar period, and this also entails a basic change in world trade relations. Immediately after the war the United States was the only source from which capital goods could be purchased in significant quantities, and the heavy goods field is the one in which the United States probably will continue to have the greatest comparative advantage.¹ Under these conditions the multiple exchange rate and tariff systems which are associated with the development programs have worked, and will presumably continue to work, in the direction of increasing the volume of "third area" imports from the United States at the expense of imports of consumers' goods from Europe.

Difficulties arising from the geographical trade pattern affect some underdeveloped countries more than others, for considerable

¹ Although Germany virtually disappeared from the international trade scene during the immediate postwar years, she is now gradually beginning to reemerge as an important trading nation and in the future will presumably resume, at least in part, her prewar importance as a supplier of capital goods.

variation exists among "third area" nations with respect to the relative shares of the United States and Western Europe in their export trade, the stage of industrialization already achieved, and the deliberateness and rate with which they are pursuing economic development. The countries in the southern part of South America have, for example, suffered more from the inconvertibility of European currencies than have the other Latin American nations. Argentina, Brazil, Chile, and Uruguay have already achieved a relatively advanced stage of industrialization and now manufacture many products that are substitutes for the light consumers' goods industries of Europe. At the same time the meat and grain exports of Argentina, Paraguay, and Uruguay and the cotton exports of Brazil and Peru are directly competitive with important agricultural products of the United States while Bolivia, Chile, and Peru are, respectively, nonpreferred sources of supply for United States purchases of tin, copper and nitrates, and sugar.

The governments of these countries have thus occasionally found themselves losing gold and dollar reserves at a time when they were accumulating inconvertible European currencies.² Under circumstances of this kind there are a large variety of policy alternatives which the government can introduce when the gold and dollar reserves of the economy approach what is considered a minimum level.³ In choosing between these alternatives the government must, of course, weigh the relative advantages and disadvantages of various methods of influencing the geographical trade pattern both with regard to their effects on the international

² This was true, for example, of Argentina in 1946 and 1947, Brazil in 1948, and Peru in the first half of 1949.

³ Although this study is concerned only with the policies of underdeveloped countries, it is clear that action by the European nations could mitigate many of the difficulties which arise from the geographic trade pattern. The currency devaluations of September 1949 certainly marked a forward step in this direction, but from a longer-run point of view, the most rational solution might be the realization by the European countries that many of the underdeveloped nations no longer wish to purchase the same types of imports as in the prewar period. Instead of attempting to modernize their existing export industries, the European nations might attempt to develop export industries that would supply the types of capital equipment that the economically less developed countries of the world now desire.

economic position of the country and their influence on the over-all development program.

Shaping the Geographic Trade Patterns: Two Case Studies

Since sterling is a "key currency" from the point of view of the over-all structure of world trade, the limited convertibility of the British pound has been especially injurious to some underdeveloped countries during the postwar era, and more or less typifies the problems which may arise in connection with the geographic structure of trade. For this reason an analysis of the techniques that the governments of two countries, Argentina and Peru, have employed in an attempt to achieve a dollar-sterling balance provides an excellent framework for an evaluation of the relative effectiveness of multiple exchange rates as a method of shaping the geographic trade pattern.

1. THE PERUVIAN EXPERIENCE

The financial experience of Peru during the first six months of 1949 provides a very interesting example of the difficulties faced by a peripheral trading country when its monetary authorities were confronted by the inconvertibility of sterling during a period when that currency was in effect unusable because of the high prices of sterling exports. Although the gold and net foreign exchange holdings of the Banco Central de Reserva del Perú rose from the equivalent of 18.3 million dollars on December 31, 1948 to the equivalent of 22.4 million dollars on June 30, 1949, this increase actually represented the algebraic sum of a loss of 2.8 million dollars in dollar holdings and a gain of 6.9 million dollars in sterling holdings.⁴ The accumulation of sterling is not surprising in view of the high cost of sterling goods relative to dollar goods that prevailed at the time and the usual geographic pattern of Peruvian foreign trade. In 1948, for example, the United States had purchased 25 per cent of Peru's exports and supplied 54 per cent of her imports, while the United Kingdom had bought 16 per cent of the country's exports and furnished only 7 per cent of her imports.⁵

⁴ *Boletín del Banco Central de Reserva del Perú*, July 1949, p. 24.

⁵ International Monetary Fund, *International Financial Statistics*, Volume II, No. 10 (October 1949), p. 173.

A more illuminating analysis of the sterling accumulation can be obtained by considering the problem of inconvertibility within the framework of Peruvian multiple exchange rate regulations. Since December 1948 exporters had been required to sell 45 per cent of their foreign exchange receipts to the central bank at the official rate of 6.50 soles per dollar, but were given the other 55 per cent in the form of exchange certificates which they could use to purchase imports for their own account or sell in the exchange certificate market.⁶

The government was to use its share of the foreign exchange to meet its own foreign currency requirements and to purchase essential foodstuffs and medicines abroad. Since transactions in both dollars and sterling were made at the official rates in this government exchange market, the full impact of the inconvertibility of sterling and the high prices of British exports was felt by the Peruvian government. Official dollar expenditures totaled 11.6 million during the first half of 1949, while sterling expenditures amounted to the equivalent of only 118 thousand dollars.⁷ At the same time the government's share in the proceeds of exports to the United States amounted to 9.0 million dollars, and its share in exports to the United Kingdom reached the equivalent of 5.1 million dollars.⁸ If transactions with other dollar and sterling countries are disregarded, these figures indicate that while only 13 per cent of all the sterling and dollar exchange which accrued to the government was accumulated, 86 per cent of the sterling accruals remained unspent. This accumulation is particularly surprising because the exchange control authorities practiced disguised administrative discrimination during this period by providing informally for more lenient exchange licensing requirements for sterling imports. Some indication of the extent of this discrimination is given by the fact that monthly official sterling expenditures averaged 222.9 thousand dollars during the

⁶ Decree Law 10905 of December 3, 1948.

⁷ Source: Ministerio de Hacienda y Comercio de Perú.

⁸ That is to say, 45 per cent of total Peruvian exports to each of these countries in the first half of 1949. See Statistical Office of the United Nations, *Direction of International Trade*, Volume I, No. 3 (October 13, 1950), p. 31.

second quarter of 1949 as against an average of 11.7 thousand dollars in the first quarter.⁹

The portion of total foreign exchange receipts that was traded in the exchange certificate market was subject to the working of market forces which tended to equilibrate supply and demand. In theory, therefore, no sterling could have been accumulated through the operation of this market. Some exporters might, of course, have held sterling certificates off the market, but the possibility of this was small because the certificates were valid for only a limited period of time. In early 1949, moreover, exporters probably would have been concerned about a possible depreciation of the pound and would consequently have attempted to dispose of their sterling certificates within a very short time even if this meant selling them at an unfavorable rate of exchange. That this actually did happen to a significant extent is indicated in Table I, which shows that during June 1949 sterling certifi-

TABLE I
AVERAGE EFFECTIVE PERUVIAN EXCHANGE RATES DURING JUNE 1949
(In soles per unit of foreign currency)

Type of exchange rate	Essential imports*	Unessential imports†	Exports‡
Trade with the United States (in soles per dollar)	6.50	18.45	13.07
Trade with the United Kingdom (in soles per pound sterling)	26.20	56.51	42.87
Dollar-sterling cross-rate (in dollars per pound sterling)	4.03	3.06	3.28

* Official exchange rates.

† Monthly averages of selling rates in exchange certificate market.

‡ The effective exchange rate for exports was a weighted average of the 45 per cent of exchange proceeds that exporters received at the official rate and the 55 per cent that they obtained at the certificate market rate; for the sake of simplicity, the difference between the certificate market buying and selling rates is disregarded.

Source: Superintendencia de Bancos de Perú.

cates sold at an average rate of 56.51 soles per pound as compared with a rate of 18.45 soles per dollar for dollar certificates. Sterling was in effect selling at an exchange rate of 3.06 dollars

⁹ Source: Ministerio de Hacienda y Comercio de Perú.

to the pound instead of the official rate of 4.03 dollars to the pound, and although the existence of this cross-rate was an indication that the dollar was being discriminated against, the cross-rate itself was not the actual cause of the discrimination. The equilibrating mechanism of the exchange certificate market was the ultimate source of this.

During the first half of 1949, therefore, Peru's sterling balances increased by the equivalent of 6.9 million dollars even though two distinct types of discrimination were practiced by the government. This failure to achieve a sterling balance was, as has been noted, primarily the result of the limitations of administrative discrimination in the official exchange market, for the exporters were ensured of disposing of all of their sterling in the exchange certificate market. The government took steps to remedy this situation in the early part of August. A new exchange decree¹⁰ provided that exports which were payable in a foreign currency that might be declared surplus and which were destined to the country whose currency was thus declared surplus would no longer fall under the provision of the law of December 3, 1948, which prescribed the mandatory sale of 45 per cent of the exchange receipts from exports to the government. On August 11 the central reserve bank declared the pound sterling to be in excess of Peruvian requirements; thereafter Peruvian exporters to the United Kingdom were to be permitted to retain 100 per cent of their foreign exchange receipts.

Under this new arrangement the government would no longer obtain any portion of the exporters' sterling earnings and would presumably draw on its existing sterling holdings to pay the sterling expenditures arising from its own requirements. The equilibrating mechanism of the exchange certificate market would, on the other hand, enable exporters to dispose of their sterling, although the increase in the supply of sterling certificates would result in a decline of the local currency price of sterling and a further divergence in the dollar-sterling cross-rate. However, since the authorities did not know the exact elasticities of supply and demand for sterling, they probably could not have prede-

¹⁰ Decree Law 11076 of August 5, 1949.

terminated whether there would be an appreciation or depreciation of the effective exchange rate for sterling exports: if the price for sterling in the exchange certificate market had fallen from the existing rate of 56.51 soles per pound to 42.87 soles (see Table I),¹¹ no appreciation or depreciation of the effective exchange rate for sterling exports would have occurred. If, however, as is assumed under Alternative A of Table II, the price had fallen

TABLE II
 IMPACT OF PERUVIAN EXCHANGE DECREE OF AUGUST 5, 1949
 UNDER ALTERNATIVE ASSUMPTIONS
 (In soles per unit of foreign currency)

<i>Alternative A</i>	<i>Essential imports*</i>	<i>Unessential imports†</i>	<i>Exports†</i>
Trade with the U.S. (<i>in soles per dollar</i>)	6.50	18.45	13.07
Trade with the United Kingdom (<i>in soles per pound sterling</i>)	26.20	40.00	40.00
Dollar-sterling cross-rate (<i>in dollars per pound sterling</i>)	4.03	2.17	3.06
<i>Alternative B</i>			
Trade with the U.S. (<i>in soles per dollar</i>)	6.50	18.45	13.07
Trade with the United Kingdom (<i>in soles per pound sterling</i>)	26.20	48.00	48.00
Dollar-sterling cross-rate (<i>in dollars per pound sterling</i>)	4.03	2.60	3.67

* Official exchange rates.

† Foreign exchange from exports to the United Kingdom and for all unessential imports was traded at the certificate market rate. The effective rate for exports to the United States was a weighted average of the 45 per cent of exchange proceeds that exporters received at the official rate and the 55 per cent that they obtained at the certificate market rate.

Source: Superintendencia de Bancos de Perú.

to 40 soles per pound, the new sterling buying rate would have been lower than the old effective rate of 42.87 soles, and the resulting appreciation would have tended to divert exports to the United States, thereby contributing directly to the amelioration of the dollar-sterling imbalance. If, on the other hand, as is assumed under Alternative B of Table II, the local currency price of sterling had fallen to only 48 soles per pound, the resulting

¹¹ The actual results of the new law cannot be determined, for the devaluation of the pound on September 18 prevented the market mechanism from working out fully the new price on a *ceteris paribus* basis.

depreciation of the effective exchange rate for sterling exports would have tended to divert exports from the United States to the United Kingdom and would have apparently worked at cross-purposes to Peru's commercial policy objectives.

This apparent paradox becomes somewhat understandable when it is considered in the light of other legislation and the relationship between the geographic and commodity composition of Peru's trade. The major exports of the country are cotton, sugar, nonferrous metals, and petroleum products. In the middle of 1949 the Peruvians had had trouble in disposing of all but the petroleum products at the prevailing world market prices. As a consequence, in conjunction with the passage of the exchange decree of August 5, the government issued a decree which permitted the exporters of mineral products (excepting petroleum) to retain 100 per cent of their foreign exchange receipts in all currencies;¹² this reform was intended to work in the direction of increasing the main mineral exports, for which the United States is an important customer. Moreover, since the Peruvians are for institutional reasons able to sell only very limited amounts of cotton and sugar in the United States, it is apparent that, even if the provision for selling all sterling proceeds in the exchange certificate market had induced a depreciation of the effective exchange rate for sterling exports of sugar and cotton, the effect would probably have been to increase total sugar and cotton exports rather than to divert them from the dollar to the sterling area.

2. THE ARGENTINE EXPERIENCE

During the postwar period Argentina attempted to solve the problems resulting from her geographic trade pattern in several ways. Administrative discrimination against imports from the United States was practiced by the exchange control authorities, and bilateral trade and payments agreements were made with various countries. The most important of these pacts were with the United Kingdom, Argentina's principal trading partner, and since they were usually enacted without regard to the competitive

¹² Decree Law 11077 of August 5, 1949.

position of United States prices, they also embodied a significant element of discrimination.

The most recent of the basic trade pacts with the United Kingdom was signed on June 27, 1949 and provided for an approximate balancing of exports and imports at 3.6 billion pesos yearly for a period of five years.¹³ In the first year Argentina undertook to supply the United Kingdom with 300,000 tons of beef and large quantities of grains, oilseed, and oilseed cake, and to purchase substantial amounts of light consumers' goods from that country. The United Kingdom in return agreed to deliver 5.7 million metric tons of crude petroleum and petroleum products, 1.5 million tons of coal, and 30,000 tons of tin plate, together with substantial amounts of machinery and steel products. Under the terms of the agreement the Argentine government hoped that, instead of accumulating inconvertible sterling balances, the economy would obtain essential raw materials and machinery which previously had to be purchased in the dollar area. The British government, on the other hand, expected to obtain a steady supply of foodstuffs and to ensure a market for part of the country's production of light consumers' goods—although these benefits did, of course, cost the United Kingdom the opportunity of earning dollars from the sale of the sterling area's exportable petroleum surplus.

On September 18, 1949 the United Kingdom revalued her currency from 4.03 to 2.80 dollars per pound. Since Argentina conducts a large proportion of her trade with and in competition with the sterling area, she had to adjust the value of the peso in order to take account of this 30.5 per cent devaluation of the pound sterling. The Banco Central de la República Argentina introduced a new exchange-rate structure on October 3, 1950. A comparison of this structure with the system of multiple exchange rates which existed prior to September 18 is presented in Table III. As may be noted, the peso-dollar and peso-sterling rates in each category were adjusted to conform to the new dollar-

¹³ *Agreement on Trade and Payments between the United Kingdom of Great Britain and Northern Ireland and the Argentine Government of June 27, 1949*, London, His Majesty's Stationery Office, 1949.

TABLE III

CHANGES IN ARGENTINE EXCHANGE RATES INTRODUCED ON OCTOBER 3, 1949

Exchange rate	Prior to Sept. 18		After Oct. 1		Percentage change*	
	pesos per Dollar Sterling		pesos per Dollar Sterling		in pesos in terms of Dollar Sterling	
<i>Buying</i>						
1. Preferential "A"			4.8321	13.53	-17.6	+18.6
2. Preferential "B"	3.9801	16.04	5.7286	16.04	-30.5	no change
3. Special	5.0000	20.15	7.1964	20.15	-30.5	no change
4. Basic	3.3582	13.53	3.3582	9.40	no change	+43.9
5. Free	4.7975	19.32	9.000	25.20	-46.7	-23.4
<i>Selling</i>						
6. Preferential "A"			3.7313	10.45	no change	+43.9
7. Preferential "B"	3.7313	15.04	5.3714	15.04	-30.5	no change
8. Basic	4.2289	17.04	6.0857	17.04	-30.5	no change
9. Auction	4.9350	19.89	fluctuating		indeterminate	
10. Free	4.8025	19.35	9.020	25.26	-46.7	-23.4

* Minus sign (-) signifies depreciation of the peso; plus sign (+), appreciation. Shifts of commodities from one assigned rate to another further affect percentage changes.

PARTIAL LIST OF ITEMS TO BE TRANSACTED AT THE NEW RATES

Buying rates

- (1) *Preferential "A"*: wool, hides, vegetable oil, oilcakes, tallow, meat extract, some prepared meats, poultry, live animals, minerals (except tungsten).
- (2) *Preferential "B"*: combed wool, cheese, butter, casein, powdered milk, quebracho extract, pork, eggs, pulses, shark-liver oil, glycerine.
- (3) *Special*: leather goods, footwear, selected textiles, salted meats, ground bones, fresh fruits, tripe, gelatin, stearin, tung oil, tungsten, and mica.
- (4) *Basic*: beef, mutton, wheat, corn, barley, rye, oilseeds.
- (5) *Free*: receipts from all nonmerchandise transactions.

Selling rates

- (6) *Preferential "A"*: coal, coke, and petroleum and by-products.
- (7) *Preferential "B"*: raw materials and articles of popular consumption.
- (8) *Basic*: articles the import of which is considered less essential.
- (9) *Auction*: imports of permissible luxury goods.
- (10) *Free*: remittances for all nonmerchandise transactions.

Source: Banco Central de la República Argentina.

sterling cross-rate of 2.80 dollars per pound, but in doing so the central bank took advantage of the occasion to introduce what was in effect an increased degree of discrimination against imports from the dollar area and exports to the sterling area. In some instances the peso was depreciated *vis-à-vis* the dollar in order to counteract the effects of the sterling devaluation, but for other categories the value of the peso was maintained *vis-à-vis*

the dollar, thus allowing the full effects of the sterling devaluation to be operative.¹⁴

In making the changes in buying rates the Argentine central bank authorities appear to have had the following major aims in mind: (1) to counteract the effects of the sterling devaluation on the competitive position of those Argentine exports to the dollar area which competed with sterling area exports; (2) to encourage those exports whose sale in the United States seemed capable of expansion; and (3) to maintain or increase the foreign exchange equivalent of those basic Argentine exports for which the United Kingdom and other European countries constituted the main market.

The adjustment of the two preferential buying rates was intended to effect the first of these objectives, namely, to safeguard the competitive position of those Argentine exports that went mainly to the dollar area in competition with sterling area exports. In the case of preferential buying rate "B," which applied to such commodities as combed wool, dairy products, and quebracho extract, the devaluation in terms of dollars amounted to 30.5 per cent and thus exactly matched the sterling devaluation. The preferential buying rate "A," on the other hand, was devalued by only 17.6 per cent relative to the dollar and was, therefore, actually appreciated 18.6 per cent relative to the pound. However, since wool and hides, two of the most important exports to the United States in competition with sterling area exports, were transferred to this group from the category in which the basic buying rate applied, the effective peso-dollar rate for these commodities was actually changed from 3.3582 to 4.8321 pesos and represented a devaluation of 30.5 per cent, which exactly matched the sterling devaluation.

The second major goal, that of encouraging those exports whose sale to the United States seemed capable of expansion, was effected by a similar devaluation relative to the dollar in the special buying rate. This rate applied to a large number of manufactured and semimanufactured articles (including leather goods,

¹⁴ In terms of pre-September 18 sterling, the maintenance of the value of the peso *vis-à-vis* the dollar meant an appreciation in the value of the peso of 43.9 per cent relative to the pound.

footwear, tung oil, and certain minerals such as tungsten). United States demand for these products was believed to be very elastic since their prices had previously tended to be higher than those prevailing on the world market.

Perhaps the most interesting characteristic of the new exchange rate system was the fact that the basic buying rate was left unchanged in terms of dollars with the result that the peso was appreciated by no less than 43.9 per cent in terms of sterling. This rate applied to agricultural exports such as cereals, meat (except pork), and oilseeds for which the United Kingdom and other European countries constituted the most important markets. Since the exportation of these commodities was under the control of the state trading agency (IAPI),¹⁵ they were most often sold under the provisions of trade agreements. As a result the less favorable exchange rates at which the exchange receipts from these exports were now to be negotiated did not necessarily have to impede the export of these commodities since IAPI determined the peso price received by domestic producers and negotiated the export price with foreign buyers. It appears, on the other hand, that, since foreign demand and particularly British demand for cereals and meat was relatively inelastic, the appreciation of this peso-sterling rate was primarily an attempt to increase the foreign exchange receipts from these basic exports by forcing a rise in their foreign currency prices.

In making the changes in selling rates the Argentine authorities appear to have had the following major objectives: (1) to reap the full benefit of sterling devaluation in the case of raw material imports from the United Kingdom; (2) to make the prices of all but the most essential imports from the United Kingdom the same in terms of pesos as before the sterling devaluation with a view to protecting Argentine producers against increased competition by British and other European exporters; and (3) to make all except prime essentials imported from the United States more expensive, thus reenforcing through the price mechanism the direct limitations on dollar imports which were already in effect.

¹⁵ Argentine Institute for the Promotion of Trade.

The maintenance of the preferential selling rate "A" at 3.7313 pesos to the dollar resulted in a 43.9 per cent appreciation relative to sterling; since this rate applied to the purchase of essential raw materials such as coal, coke, and petroleum and its by-products, of which the United Kingdom was the major supplier under the terms of the Anglo-Argentine Trade Agreement of June 27, 1949, this move was clearly designed to enable Argentina to benefit fully, in the form of lower prices, from the sterling devaluation. With respect to the somewhat less essential imports that were negotiated under the basic selling rate and the preferential selling rate "B," on the other hand, the Argentines adjusted the exchange rate structure in such a way as to offset fully the sterling devaluation, thereby achieving a depreciation of 30.5 per cent *vis-à-vis* the dollar; this action was probably intended to reestablish the competitive relationship existing before the sterling devaluation between domestic Argentine and imported British and European goods and, at the same time, to reduce the amount of the dollar expenditure for unessential American imports by making them relatively more expensive.

The Argentine government thus took steps to mitigate the difficulties arising out of the country's geographic trade pattern by utilizing the opportunity created by the sterling devaluation of September 18 to discriminate between the dollar and the pound. The sterling and dollar buying and selling rates at which exports and imports were negotiated were readjusted in such a way that the peso was for many purposes depreciated relative to the dollar, but for other purposes the Argentine currency was appreciated and brought into conformity with the pre-September-18 parity *vis-à-vis* the pound. That there was a significant element of discrimination in this change may be seen by comparing the changes in the export and import rates with the adjustment of the free buying and selling rates at which all non-merchandise transactions were to be negotiated. In the latter case (see Table III) the peso was depreciated with respect to both the dollar and pound, presumably with the double aim of attracting new foreign investments and tourists and of reducing the foreign currency cost of remitting profits and dividends on foreign capital which was already invested in the country.

Discrimination and Economic Development

Having analyzed some of the techniques which two Latin American countries have employed to shape the geographic structure of their trade, we can now proceed to utilize them as case studies in an investigation of the relative advantages and disadvantages of various methods of changing the geographic composition of exports and imports. In the consideration of this question particular emphasis is, of course, given to the relationship between the geographic trade pattern and economic progress in an underdeveloped economy.

Each of the case studies typifies one of two basic methods of altering the geographic structure of trade through a pattern of multiple exchange rates. The exchange regulations may embody actual "currency discrimination" by directly granting differential treatment to different foreign currencies, as was done in the case of the Peruvian multiple rate system; or the government may attempt to shape the geographic pattern of trade indirectly by changing the over-all commodity composition of exports and imports, as was true of the Argentine multiple rate structure. In view of differences in the natural-resources bases, levels of technical skill, and economic structures of the various nations with which a developing country conducts trade, the product composition of trade with each trading partner tends to differ, and changes in the commodity composition of exports and imports usually imply changes in the geographic composition of exports and imports. In some instances these induced changes may, of course, be relatively minor, but when there are large differences in the commodity composition of trade with different countries, they may be of the first order of importance.

When an underdeveloped country tries to shape the geographic pattern of imports indirectly, i.e., by changing the over-all commodity composition of imports, such a policy may sometimes interfere with the rate of economic development because the United States is by far the most important supplier of capital equipment in the world market. In other words, if the authorities have already curtailed imports of durable consumers' goods, in the production of which the United States also has a comparative

advantage, further attempts to curb imports from that country by altering the commodity composition of imports would probably mean that the developing country would have to increase imports of nondurable consumers' goods at the expense of imports of investment goods, thereby retarding its rate of capital formation. Under these conditions the government of such a country might find it advisable to resort to direct currency discrimination and deliberately grant preferential treatment to imports of nondurable consumers' goods from countries other than the United States. In this manner the government could mitigate the problems arising from the geographic pattern of trade and at the same time leave itself free to encourage investment imports at the expense of consumption imports.

When the destination of export sales is controlled indirectly, there is, unlike in the case of imports, no direct clash with the objectives of economic development, and if a government of a developing country wishes to avoid resorting to direct currency discrimination, it should give priority to a policy of influencing the destination of exports rather than affecting the origin of imports. In numerous instances, however, there may be definite limits to the degree to which the treatment of exports can correct maladjustments arising from the geographic trade structure, particularly when the imbalance between two "key currencies" like the dollar and pound sterling is large. For this reason both the Peruvian exchange certificate market and the Argentine bilateral agreements put more emphasis on the import than the export side of the trade pattern; sugar and cotton in the case of Peru and grain and meat in the case of Argentina account for approximately one-half of each country's total exports, and as has been noted, the United States market for these exports is very limited.

A strong *a priori* case can thus be made for a policy of currency discrimination by the government of a developing economy if (1) the degree of imbalance between two "key currencies" that are inconvertible in terms of one another is large, and (2) the alternative policy of shaping the origin of imports by altering their composition would result in a slowing up of the rate of investment. Whether or not these theoretical advantages of a

program of currency discrimination are more than offset by the practical operating disadvantages of such a program is a more debatable question, however. To an important extent its answer depends on the manner in which the currency discrimination is achieved.

In the ensuing discussion of the relative effectiveness of the various types of multiple exchange rate systems as discriminatory devices, it has been found useful to frame the analysis in terms of three different concepts of discrimination: unilateral vs. bilateral discrimination, automatic vs. imposed discrimination, and open vs. disguised discrimination. The discussion is based on the assumption that the only objective of currency discrimination is to advance economic development by increasing the rate of capital formation; whenever a government resorts to such a policy for other less laudable purposes like the waging of economic warfare or the granting of concessions to special interest groups, other important disadvantages are, of course, present.¹⁶

In a world where the fundamental conditions for multilateral trade and unlimited convertibility of currencies do not exist, currency discrimination may lead to a higher volume of trade in the short run by preventing the accumulation of "soft currencies." Since, however, such a policy frequently tends to postpone the making of more basic adjustments and to freeze the existing trade pattern, it may prevent the long-run establishment of the more mutually beneficial and economically rational system of multilateral trade. For this reason, even though there is some risk of freezing trade channels under any form of discrimination, unilateral action against United States products by a developing country would appear to be preferable to discrimination through bilateral agreements with European nations, which commit *both* signatories to a relatively inflexible policy.

The risk of preventing the reestablishment of multilateral trade is much more applicable to a key trading country like the United Kingdom than to peripheral trading nations like Argentina and Peru, for there is a basic difference in the nature of a dollar

¹⁶ For a fairly comprehensive list of the objectives of currency discrimination see H. Ellis, "Exchange Control and Discrimination," *American Economic Review*, Volume XXXVII (1947), pp. 877-888.

shortage in the two types of economies. The United Kingdom could presumably (in theory at least if not in the light of political reality) have made the basic internal adjustments that were prerequisite to the restoration of unlimited convertibility of the pound sterling at any time during the postwar transition period, and as more normal conditions returned, these adjustments became proportionately smaller in magnitude and easier to make. To countries like Peru and Argentina, however, the inconvertibility of a "key currency" like the pound sterling in terms of the dollar is a datum. The passive member of a trade triangle cannot, to more than a very minor extent, influence the over-all trade relations between the two active and key members, and even if Argentina and Peru had made the necessary internal and external adjustments, they could not have eliminated the dollar-sterling imbalance because this condition had in effect been imported from abroad.

Since the Peruvian approach to the difficulties arising out of the inconvertibility of sterling avoided committing the United Kingdom to a definite policy, it was probably more desirable than the Argentine approach. However, even a policy of unilateral discrimination may be dangerous if it is relatively inflexible, for it tends to grant some local groups a vested interest in the continuation of discrimination. What may be termed a policy of "automatic" discrimination is, for this reason, often to be preferred to a policy of "imposed" discrimination.

In a "third area" economy, automatic discrimination operates only when one key currency is not fully convertible into another and when at the same time this currency is in effect unutilizable due to its overvaluation; imposed discrimination, however, produces results even when these conditions do not exist. Prior to August 11, 1949 discrimination in Peru quite obviously contained elements of both these types. If there had been no surplus of sterling, the exchange control authorities would have had no legitimate incentive to offer more lenient exchange licensing requirements to imports from the United Kingdom, but this does not mean that they would have refrained from taking discriminatory action. However, if sterling had not been overvalued with respect to the dollar, the operation of the exchange certificate market would

not have produced a sterling-dollar cross-rate that discounted the value of the pound.

When the changes in the exchange regulations were introduced in early August, however, the discrimination in Peru became entirely of the imposed type. Under the new arrangement imports from the dollar area would have received unfavorable treatment even if the private sector of the Peruvian economy no longer considered sterling overvalued *vis-à-vis* the dollar. In the event of this development, of course, the Peruvian authorities would presumably have desired to revise the exchange regulations, but there would then have been a danger that the creation of politically powerful vested interests during the period of discrimination might have effectively prevented this action. If the discrimination had been of the fully automatic type, however, this risk would not have existed, or at least not to nearly the same extent as under a policy of fully imposed discrimination.

In view of the particular type of exchange control and multiple exchange rate regulations which were in effect in Peru, the switch to a policy of fully imposed discrimination also represented a change from a policy of partly administrative or disguised discrimination to a policy of wholly open discrimination, and this in turn actually meant a change from unsuccessful to successful discrimination. With different types of exchange control systems, on the other hand, administrative or disguised discrimination could have successfully mitigated the difficulties arising from a surplus of sterling and a shortage of dollars, especially in cases where the magnitude of the dollar-sterling imbalance was not as serious as in Peru. As a general rule, however, open discrimination has one important advantage over the disguised type. Under the latter those business and export groups in the United States which are being discriminated against¹⁷ cannot plan rationally

¹⁷ Discrimination against United States products by an individual country need not necessarily cause a greater contraction of American exports than that which would result from a currency devaluation or any other form of discriminatory action, for a country's purchases of United States goods are ultimately limited by its dollar earnings, gold and dollar reserves, and borrowing capacity. Since the policy of discrimination would bring about a changed composition of American exports, however, certain United States producers would undoubtedly suffer even though the American economy as a whole might not be affected adversely.

with respect to their dealings with customers in the country introducing the policy of discrimination; the degree of unfavorable treatment which they receive is entirely subject to the whims and administrative discretion of the exchange control authorities and may change radically and suddenly. With open discrimination, on the other hand, the degree of discrimination is much more ascertainable, and the affected American business interests would thus be enabled to plan on a more rational basis.

When the superiority of unilateral over bilateral discrimination, the preferability of automatic to imposed discrimination, and the advantages of open over disguised discrimination are all taken into account, it is evident that no discriminatory device satisfactorily fulfills all three criteria. A unitary exchange rate that is permitted to fluctuate freely *vis-à-vis* all foreign currencies would, of course, avoid the various pitfalls. But such a rate would fail to meet the other requirements for a "proper" type of foreign exchange market in a developing country.

It would thus appear that a flexible type of multiple exchange rate system comes closest to meeting the three criteria. A system of this kind represents unilateral action by the exchange control authorities, and if the basic or preferential category of imports is disregarded, any discrimination which exists would be both open and automatic. Fixed multiple exchange rates also meet the criteria of being unilateral and open, but fall down with respect to the very important criterion of being automatic; without the free working of market forces there is no valid basis for determining what degree of discrimination, if any, is necessary.

Some types of flexible rate systems are, as is to be expected, superior to others in this connection. If, for example, no quantitative restrictions are imposed in conjunction with the system, the dangers of imposed and disguised discrimination are also avoided in the case of preferential imports, although this would probably mean that some accumulation of "soft currencies" would occur. In many instances, moreover, the auction market type of flexible rate system is to be preferred to the type which has an exchange certificate market. For, as was seen in the analysis of the Peruvian experience, there may frequently be a clash of

objectives when a flexible rate is made applicable to both imports and exports.¹⁸

VI. OVER-ALL EVALUATION OF MULTIPLE EXCHANGE RATES

On the basis of the preceding analysis it is now possible to formulate our major conclusions with regard to the role which multiple exchange rates can play in the economic policies of underdeveloped countries. As was indicated at the outset, the principal aim of the study has been to analyze the various reasons that can be advanced for believing that our traditional distrust of these devices may have to be modified somewhat in the light of the nature of the developmental process itself, the economic structure which is characteristic of most underdeveloped nations, and the alternative policies which are open to the governments of these countries.

1. It has generally been recognized that a deliberate program of economic development usually induces serious balance-of-payments difficulties, particularly where such a program gives priority to rapid industrialization. In view of the inflationary bias and relatively full employment of resources which characterize most underdeveloped countries, any balance-of-payments pressures which may arise can frequently be attacked more effectively by selective means rather than through over-all currency depreciation. In addition the fact that these economies are dependent on imports for virtually all their capital equipment, and for most luxury consumers' products as well, indicates that rational interference with the free working of the foreign exchange market can prove to be a useful way of influencing the size and direction of consumption and investment. Since, moreover, the apparatus for controlling foreign trade has traditionally been developed more fully than the instruments of modern fiscal and monetary policy in these countries, such interference may actually be the most effective method available for influencing the income stream. Thus, although the imposition of exchange controls in underdeveloped countries is open to the same dangers of currency manipulation and the creation of vested interests as

¹⁸ See also pp. 44-46, above.

in developed countries, their introduction in some form or another may, nevertheless, prove to be a calculated risk that is well worth taking.

2. No matter what conclusion is reached on the desirability of a developing country interfering with the free working of the foreign exchange market, it is clear that a comparison of the relative advantages and disadvantages of multiple exchange rates with those of other forms of exchange control is of definite practical importance; many countries insist on going ahead with exchange controls in spite of the canons which traditional economic thought has laid down in favor of free trade. Multiple exchange rates tend to be preferable to quantitative restrictions on exchange disbursements from the standpoint of providing social rationing of foreign exchange, but they are decidedly inferior as a monetary instrument for influencing a country's international reserve position. They reduce the risk of graft and administrative favoritism, eliminate windfall profits, minimize the appearance of unwanted protective effects, and check errors of administrative judgment by permitting the price mechanism to remain partly operative; but they are relatively less certain and selective in producing their effects than quantitative restrictions and are influenced to a much greater extent by changes in national income and prices. As a consequence multiple rates work satisfactorily only (1) when there is an adequate cushion of gold and foreign exchange reserves and (2) when a measure of relative stability exists in the domestic economy.

3. Attempts to obtain the advantages of both multiple rates and quantitative restrictions by combining them into composite systems are not likely to prove highly successful unless the second of the two conditions above is fulfilled. Quantitative exchange restrictions can serve as a secondary line of defense for multiple exchange rates when the price level remains relatively stable, but if this is not the case, the whole elaborate mechanism of multiple rates may degenerate into a device for taxing windfall profits. The so-called "auction market" system also functions most effectively when prices are relatively stable, but this type of composite system has definite advantages over a simple system of

multiple rates in that it is less open to foreign exchange leakages and permits the price mechanism to function to a greater extent. Its principal shortcoming, if this can be considered one, is that the flexibility of the market frequently gives rise to a pattern of disorderly cross-rates.

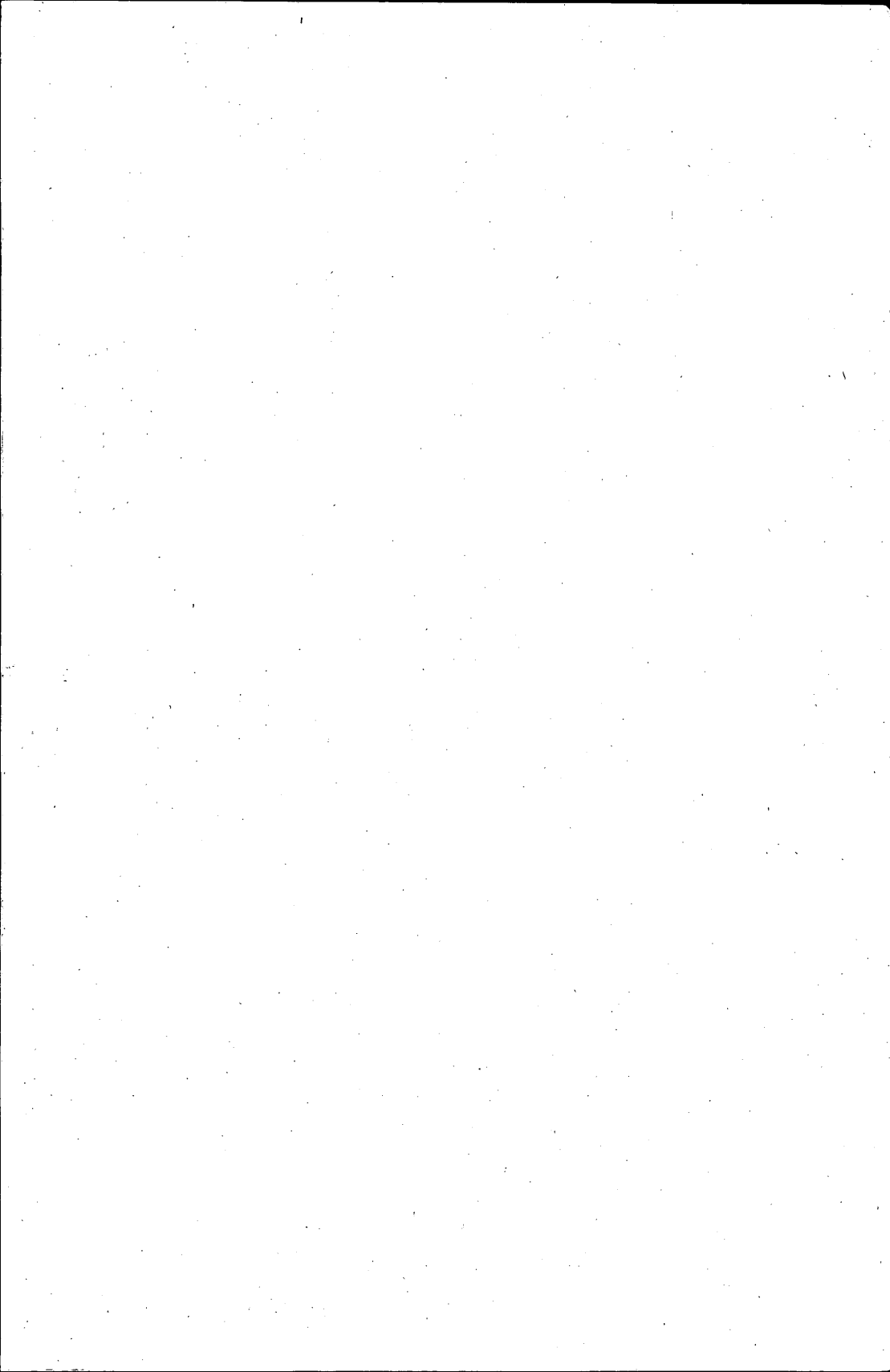
4. Any view which regards the existence of disorderly cross-rates as undesirable overlooks to some extent the fact that, of the various discriminatory devices which are available to the government of a developing country, it is the auction market system which comes closest to producing discrimination that is unilateral, automatic, and open. Such a view, moreover, necessarily implies that there is no place in an economic development program for a policy of currency discrimination. That an implication of this kind is not always tenable is clearly brought out by cases in which the currencies of two of a developing country's trading partners are inconvertible in terms of one another; the degree of trade imbalance may be so large that any attempts to eliminate it by nondiscriminatory means—that is, by altering the commodity composition of imports and exports—would prove ineffective unless the policy led to a substitution of consumption imports for investment imports and a retardation of the rate of capital formation.

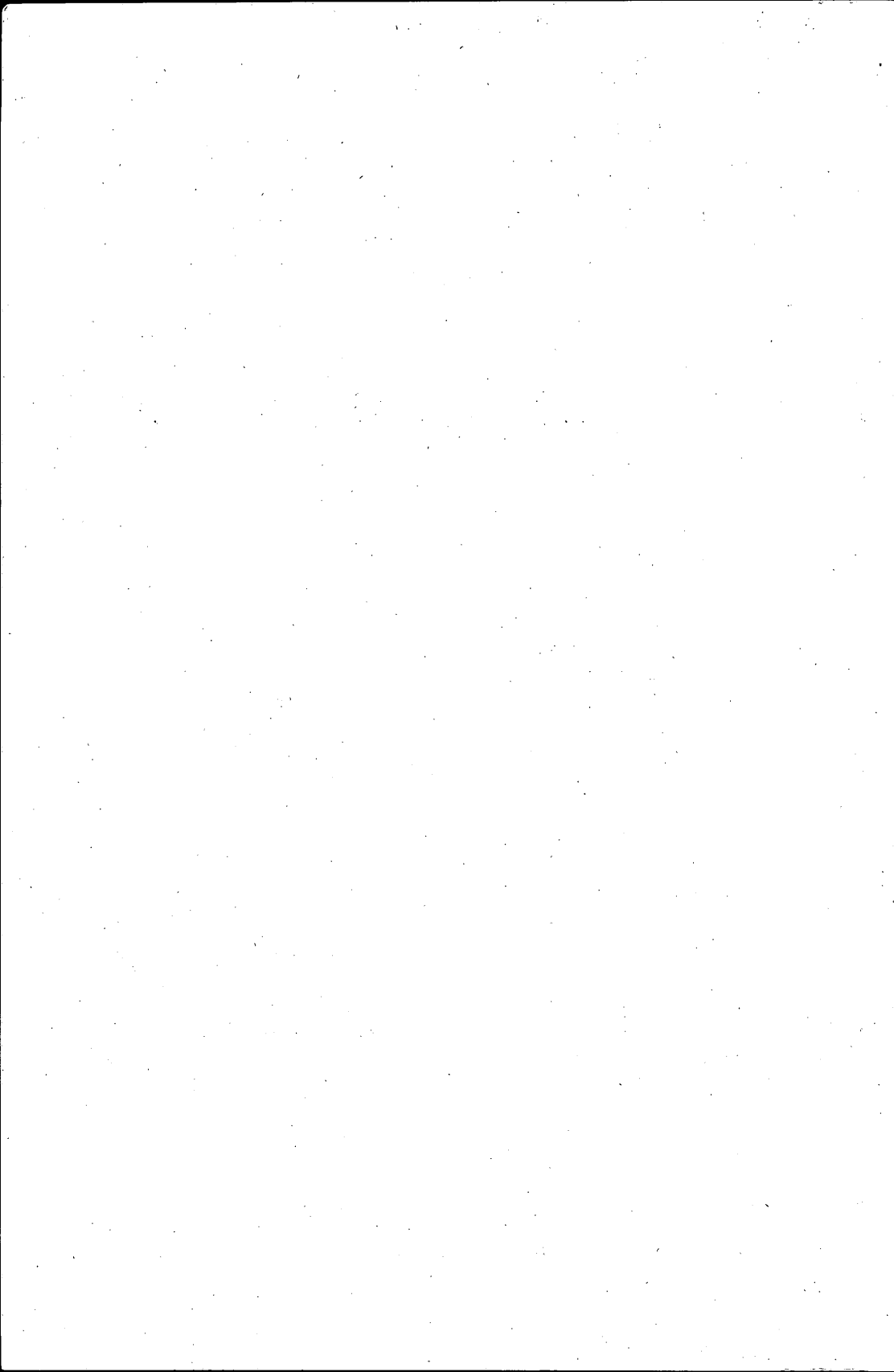
5. The advantages of utilizing multiple exchange rates to maintain or expand the level of exports are less marked than the benefits that can be derived from employing them to curtail the volume of imports and alter their composition. When the objective of policy is the maintenance of exports, a system which permits exporters to sell a portion of their foreign currency receipts in an exchange certificate market would automatically induce some depreciation of the buying rate when conditions require it, thereby granting exporters a measure of relief from the pressures which normally accompany an accelerated development program; but in view of the interdependence of exports and imports under this type of arrangement, any attempt to afford exporters the "proper" degree of exchange rate relief could very easily result in a drastic interference with the social rationing of exchange for imports. The limitations on the use of multiple rates are even greater

when the objective of policy is to stimulate the long-run growth of exports. Apart from the fact that the subsidization of exports does not really belong among the objectives of an exchange control system, it seems evident that subsidies can actually be provided more effectively through the medium of the fiscal system; furthermore, it is debatable whether subsidies of any kind can accomplish very much to stimulate the development of new export commodities and improved production techniques.

6. The introduction of multiple exchange rates, or of any other form of exchange control for that matter, will affect foreign private investment incentives unfavorably, the actual degree of adversity depending on the particular type of system that is used. Although the risks of conversion and transfer losses are smaller under some systems than others, foreign investors may still shy away because of fear and uncertainty about subsequent manipulation of the system—unless, of course, they feel that the political and social climate of the country is favorable to foreign capital and believe that its balance-of-payments position will not undergo further deterioration. Frequently it is the deliberate domestic development program itself which creates expectations of future balance-of-payments difficulties, and for this reason the decision of a government to introduce multiple rates may merely reflect its pessimism as to the benefits that would have been derived from any foreign funds that would have entered in the absence of the multiple rates.

7. On balance it would appear that there is a definite but limited rationale for the inclusion of multiple exchange rates in the economic programs of underdeveloped countries; indeed, their use in economies of this kind is decidedly more justifiable than in highly developed countries. If the systems are kept relatively simple and are not overloaded with a large number of conflicting objectives, they can satisfactorily accomplish some of the purposes for which they have been designed—provided, of course, that certain basic economic preconditions are simultaneously fulfilled. It is, however, equally clear that multiple rates are unsuited for a number of the tasks which they have been asked to perform.





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