CONTENTS

FIRST PART. THE ESSENCE OF INTERNATIONAL ECONOMIC RELATIONS BETWEEN AUTONOMOUS NATIONS

CHAPTER I. *Introduction; the Heterogeneity of World Economy*

Transfer (2b) is not frequent; it may occur as a consequence of political events. In the interwar period (2a) did not occur frequently either; by far the most important forms of intercourse are, therefore, (1) and (2c).

CHAPTER II. *Current Transactions*

II.1. Current transactions between countries are those in products, i.e. goods and services, excluding those in factors of production. Each country will export products which it is able to produce at lower cost than other countries. Low-price products not likely to move over long distances. Large countries likely to have a smaller percentage of foreign trade than small countries.

The structure of commercial transactions between four broad subdivisions of the world: surpluses and deficits.

II.2. Generally transactions will be *multilateral*. Distinction between (i) net surplus or deficit for any country, (ii) bilateral, (iii) circular and (iv) open flow component. In a situation of equilibrium (i) does not exist; for the world at large (iv) cannot exist.

II.3. Trade may be (i) *free*, (ii) *hampered* more or less arbitrarily or (iii) *controlled*. Trade may be hampered by quantitative restrictions, currency restrictions or import duties. There may be blocks of countries with free internal trade, and with a common tariff for the outside world *(customs unions)* or even groups of countries with completely free trade *(free trade areas)*. We speak of *integration* or an economic union if also other aspects of economic policy are unified so as to present an optimum of centralization.

II.4. With *free trade*, prices of international goods are — apart from transportation costs — uniform throughout the world; and trade will be multilateral. Even with free trade there may be *imperfect competition*, e.g. because of distances. The short-term elasticity of the share of any one country in world trade with respect to its relative price level appears to be no more than 2. The short-term elasticity of import quotas appears to be also rather restricted. Probably long-term elasticities are higher.

II.5. International trade as a consequence of differences between countries in relative efficiency in producing various commodities *(theory of comparative cost)*. Differences in standard of living as a consequence of differences in efficiency in producing all or most commodities.

II.6. *The fundamental thesis of the doctrine of free trade:* With full employment of all resources and marginal cost pricing free trade yields — in the long run — a maximum of total production and hence, apart form certain questions of distribution, a maximum of welfare. Every deviation from it therefore means, for small countries, a smaller prosperity; it can only be an advantage for some groups within those countries at the expense of other groups in the same countries. Large countries may, by tariff policy, improve their terms of trade and their real expenditure. Marginal cost pricing may not be possible in certain industries without subsidizing them. Subsidies to be preferred to protection. Without full employment being guaranteed beforehand protection may, in some country, cause an increase in employment and therefore raise prosperity. The maintenance of full employment requires a compensatory financial policy.

II.7. Protection may help to break the shock of a *sudden adaptation* to new circumstances or to stimulate infant industries. The danger of protection is in the possible maintenance of less productive units.

II.8. Liberalization of trade generally will also mean the disruption of bilateral equilibria; it can only be performed therefore if at the same time a certain convertibility of currencies is re-established.

II.9. Customs unions may, but need not, be a step towards world free trade: '*trade divertion*' versus '*trade creation*' (VINER).

CHAPTER III. *International Movements of Factors: Land, Labour and Capital*

III.1. Movements of *land* in the literal sense are of course impossible. The transfer of territory from one nation to another may, however, be considered as an example. So far such a transfer has not been considered a possible element of economic policy.

III.2. Movements of labour, i.e. of *population*, or migration, have been important for the areas of immigration, such as the United States of America, but as a rule only of minor significance to the areas of emigration. After 1914 the extent of migratory movements has been very restricted. It is to be hoped that, under certain guarantees, the less populated countries will be prepared to revise their policies.

III.3. From the economic point of view *capital* movements represent by far the most important form of international movements of factors of production. It may take the form of loans in the narrower sense or of participation; loans may be short-term or long-term loans. Long-term loans (in the wider sense, i.e. including participation) come down, in real terms, to the transfer of commodity stocks (durable and non-durable goods) from the lending to the borrowing area at the price of an annual 'mortgage' on part of the latter's production. Usually the lending area will be one of the highly developed countries and the borrowing area one of the under-developed countries, where the marginal productivity of capital will be higher. In this way a decrease in the inequality in living conditions may be obtained. So far, however, the divergency in living conditions between developed and underdeveloped countries has increased. Hindrances to capital movements are to be found in uncertain political conditions, unstable financial and monetary conditions, or low efficiency of production. The vicious circle of low productivity for lack of external economies and low capital formation; its possible break by an international investment policy.

III.4. Short-term capital movements are of much less direct significance for the trend of development but may contribute to the maintenance of financial stability and hence contribute indirectly to development.

CHAPTER IV. *The Mechanism of Financial Transactions*

IV.1. Only *gold* is legal tender everywhere; as payment in gold involves high costs, other means of payment have developed, namely paper money, the value of which is based on law and confidence and is therefore restricted to a certain area. Payment to foreign countries therefore requires a '*transfer*', i.e. a transformation of home into foreign currency. This is effectuated by exchanging the various currencies against each other at a certain market price (the *rate of exchange*).

IV.2. The set of all payments made in a certain period between a country and all other countries is called its *balance of payments*. It may be subdivided into the *current items* (balance of trade, or imports and exports of goods; and invisible imports and exports or payments for services: shipping, interest, tourism etc.) and the *capital items* (import and export of capital: long-term and short-term; and the balancing item of gold shipments). In addition *unilateral payments* may occur in the balance of payments, as e.g. foreign aid and reparation payments.

IV.3. If the equilibrating item is included, there is always equilibrium (*formal* equilibrium); if it is not included, the phrase 'the balance of payments' has a different meaning. It may or may not be in equilibrium (*material* equilibrium). In the long run there must be material equilibrium, otherwise there would be a permanent accumulation of gold somewhere and a permanent drain elsewhere. A modest drain may, however, be a permanent phenomenon. Long-run material equilibrium must also exist, and for similar reasons, for any part of a currency area.

IV.4. *Stability of exchange rates* is an advantage for economic calculations, but it may be non-compatible with stable prices, which are desirable for other reasons. Usually fixed rates, with incidental revisions, are preferred. With the '*gold standard*', there is a fixed price in each country against which the Central Bank buys or sells gold. The corresponding rate of exchange is called the *parity rate*. At both sides of parity there are rates called the '*gold points*', indicating the limits within which gold shipments are unremunerative. Only a rigorous material equilibrium in the balance of payments will keep the exchange rates between the gold points. If one of the gold points is reached, a movement of gold will follow, tending to keep the rate of exchange at that point. If it should go on for some time there is the threat of an exhaustion of the gold stock of one of the countries concerned. This can be prevented by (a) 'indirect' or (b) ' direct' action.

IV.5. Indirect action may be (1) automatic, resulting from the changes in the monetary circulation: a decrease in gold stock leading to a decrease in note circulation or deposits, a reduction in incomes and hence reduced imports and lower prices which will stimulate exports. This automatism does not, however, work very strongly and quickly. Indirect action may also be (2) deliberate interference, namely a *raising of the rate of discount* in the threatened country, owing to which partly the same results are obtained (though again only weakly and slowly), and partly more important changes, namely an inflow of short-term credits from abroad — provided there are no counteracting factors such as lack of confidence. This remedy can, however, only work temporarily: after some time a new equilibrium in the capital market will be reached. The 'defence of the Dutch guilder' during 1935/6.

IV.6. Direct action is equivalent to *stopping the sale of gold;* this means either the end of the free gold standard or of the previous parity. The old parity may be maintained at the cost of freedom. Of course, the danger of an exhaustion of the gold stock is smallest when a country has a large gold reserve.

IV.7. Apart from gold a country's currency system may be based upon (1) other currencies (gold exchange standard) or (2) other commodities (silver, raw materials). Consequences of a *raw material standard:* stabilization of the average price level of raw materials and reduction of cyclic movements as far as due to 'accounting errors' in income determination.

IV.8. In principle, the system of *flexible rates* operates in the same way as the gold standard. The limits between which the rate of exchange is allowed to fluctuate can be chosen wider or narrower. Smaller fluctuations may be counteracted by the operations of an *equalization fund*. In the longer run, changes in the rate of exchange will be helpful to equilibrate the balance of payments, since they affect imports and exports via the price system. By only permitting gradual movements the influence of speculation may be kept down, which proved disastrous in a number of cases (Germany 1923).

CHAPTER V. *Disequilibrium and Equilibrium in the Balance of Payments*

V.1. In this chapter some consequences of disequilibrium will be considered; the conditions for equilibrium will be formulated and some techniques of short-term adaptation discussed. With multilateral equilibrium, i.e. equilibrium in the balances of payments of all countries, there will be the possibility of *complete convertibility*.

V.2. If not every balance of payments is in equilibrium there will be deficit and surplus countries. The currency reserves of the deficit countries will gradually diminish. Once they are exhausted the currency of the country will be inconvertible or a '*soft currency*' as distinguished from '*hard*' *currencies*. The 'degree of softness'.

V.3. *Partial convertibility* may be instituted by decree, but can only be maintained if the country concerned is near to the equilibrium position which is relevant to the type of convertibility considered. It may bear on convertibility into some other currency, or for certain types of transactions. Convertibility with respect to current transactions with a given group of other countries requires that the total of these transactions — under the new circumstances — be in equilibrium. The 'new circumstances' imply the shifts in transactions as a consequence of convertibility itself.

V.4. Detailed examination of consequences.

V.5. Convertibility for all transactions, including *capital transactions*, is exposed to far greater risks, because of the incalculability of switches in capital assets that the public may desire. Example of the British convertibility attempt in 1947. Convertibility of currency A into currency B and of B into C has to imply convertibility of A into C also; there have to be groups of mutually convertible currencies, consisting of currencies of about equal strength.

V.6. Equivalence, for small countries, of *balance of payments* *equilibrium* and *monetary equilibrium;* inflationary and deflationary gap. Meaning of monetary equilibrium for small and for large countries. Regulation of national expenditure and of the price level needed in order to maintain balance of payments equilibrium at a level of high and stable employment.

v.7. Equilibrium, just described, to be understood as one *relatively to other countries*. Possibility of world inflation. '*Imported*' inflation and '*exported*' inflation.

v.8. In order to attain or to maintain equilibrium in the balances of payments various instruments are available.

A distinction may be made between:

(1) autonomous *changes in quantities demanded,* without changes in price ratios or absolute prices; and

v.9. (2) *changes in price ratios*, inducing changes in quantities, and themselves to be obtained by: (i) direct changes in absolute prices; (ii) indirect changes, i.e. changes in wage levels or rates of exchange.

A closer examination teaches that:

(A) sometimes price ratios need not be changed, if the automatic quantitative reactions upon the disturbing forces restore equilibrium already;

v.10. (B) in other cases price ratio changes do not work (the case of the *critical* or nearly critical *elasticities* of imports and exports);

(C) in still other cases price changes do work, but cannot be obtained by changes in wage or exchange rates (the case of purely static reactions);

(D) and hence price ratio changes, when necessary, can be obtained by wage or exchange rate policy only under certain conditions.

In case B, autonomous changes in quantities demanded (such as an 'austerity policy' or continued imports of capital or the cancellation of debts) are the only way out; in case C either direct price policy or autonomous changes in quantities will be necessary.

SECOND PART

INTERNATIONAL ECONOMIC INTEGRATION

Chapter VI. *Targets and Instruments of International Economic Integration*

vi.1. After having dealt with the nature of international economic relations between autonomous nations and the possibilities to regulate them, we shall now discuss how far we want to regulate them, or in modern terms, how far we want to *integrate* the various national economies. This problem of integration has to be seen as a part of the more general problem of the *optimum economic policy*. When making recommendations of economic policy we are to some extent leaving the territory of economic science. We shall be careful to warn the reader each time we do so.

VI.2. It is useful, in order to clarify problems of economic policy, to distinguish between *qualitative* and *quantitative* policy; qualitative policy being a change in organization and quantitative policy a change, within a given frame of organization, of certain data to be called *instruments*. Changes in organization may be of a very fundamental character and then be called reforms or even revolutions; or they may be changes in details of organization. Quantitative policies may either use numerous or a small number of instruments, and a distinction may be made between direct and indirect policies, where the former directly interfere with market forces and the latter only indirectly.

VI.3. An important aspect of qualitative changes in policy is the one of *centralization* or *decentralization*, especially in international affairs.

VI.4. Directives for the desirable degree of centralization in international economic policy: decentralization of *neutral*, or almost neutral, instruments and centralization of clearly *supporting* and clearly *conflicting* instruments.

VI.5. The choice of a policy has to depend on circumstances and will, in addition, be a question of taste. Necessity of a policy of intervention in cases of serious disturbances or of serious emergencies. Difference in tastes and pre-conceived ideas also determine the choice of instruments. Examples.

VI.6 The *aims* of economic policy cannot be formulated on the basis of economic science alone. Welfare dependent on individual wellbeing and the relations to other individuals. Incomparability of satisfaction of different individuals and the resulting difficulties. Almost generally accepted aims are those of *high production* and of a *more equal distribution* in case of strong inequality. High production requires the *use of all productive resources* (implying avoidance of instability) and the use of these resources in the *most efficient* way. The use of instruments of detailed intervention should be restricted to the *prevention of strong disequilibria*.

VI.7. The differences in economic policy between the communist and the non-communist countries may partly be explained by circumstances. They are strong enough to make it impossible to aim at one world policy. International relations with communist countries have to be highly centralized. Only relations between non-communist countries may be adapted to what we consider an optimum degree of centralization.

VI.8. Problem of integration to be studied, in succession, for national instruments and for international instruments of economic policy.

CHAPTER VII. *National Economic Policies and International Integration*

VII.1. Since the basic circumstances may be different from country to country economic policy or even the basic organization of economic life may be widely different. As far as centrally organized or highly interventionist, countries may accordingly organize their international relations. Less strongly centralized countries will prefer less organized international relations. The question of the optimum degree of decentralization then arises.

VII.2. In order to attain the general goals enumerated in ch. VI, national policies of such countries will have to satisfy certain conditions, i.e. a certain unification of their economic policy is required. In the terminology introduced before this means that they should adapt their use of supporting and conflicting instruments to the international requirements. Perhaps the most important condition is that they should maintain *monetary equilibrium at a high level of employment.*

VII.3. There are two main groups of instruments for this policy and a number of subsidiary ones. The first main group is that of *financial policy*, consisting of public expenditure policy and tax policy. By an appropriate manipulation of these instruments total internal demand will be kept at the desired level and its composition may be made optimal.

VII.4. The second group of instruments is that of *wages or exchange rates*. Either of them may be used to adjust the general price level of the country to its competitive strength and hence to regulate foreign demand.

VII.5. Necessity of understanding in business circles for measures just discussed.

VII.6. Desirability of a centralized use of the instruments of economic policy discussed. In view of the strong resistance to integration in this field the centralization might be confined to central decisions about the 'inflationary' or 'deflationary gap' in the public sector and the general price level of each country.

VII.7. These two main groups of instruments may have to be supplemented by others, in order to make minor adjustments.

Temporary subsidies, specific taxes or even *temporary import duties* may be necessary to support industries or regions whose competitive force falls short of the requirements. In the case of sudden disturbances of equilibrium or of particular industries, *quantitative* regulations may be needed. None of these policies should in the long run hamper the correct use of the productive resources from the international point of view.

CHAPTER VIII. *The Integration of Current Transactions*

VIII.1. This chapter deals with the *non-monetary* instruments of economic policy which are relevant in particular for the current items on the balance of payments: trade and current transactions in services. It discusses the policies needed to integrate these transactions between nations. The instruments are in particular *quantitative restrictions* and *import duties*, the primary subjects of (negative) integration.

VIII.2. Certain preliminary conditions have to be fulfilled: the *full use of productive resources* should be warranted by an appropriate national policy. As a supplement to these internal policies and a further condition to economic stability, international co-operation in order to stabilize raw material prices is advocated. This stabilization may be obtained by a system of commodity agreements or by the introduction of a *'raw material standard'*.

VIII.3. Since the optimum division of labour is obtained mostly by free trade, *abolition of quantitative restrictions and of import duties* is advocated. Because of inevitable losses of transition a *gradual* abolition will be optimal.

VIII.4. Certain well-known exceptions (agriculture, infant industries) may be admitted. *Subsidies preferable*, however, in so far as organizational difficulties are not too large.

VIII.5. Abolition of duties will require adjustments in the *rates of exchange*.

VIII.6. Abolition or reduction of quantitative restrictions and import duties may be effectuated for the economy as a whole or for one sector after the other *(partial integration)*; in the latter case there are dangers, however, of disequilibria and tensions.

VIII.7. Alongside negative integration there is a need for *positive integration:* the need for the equalization of certain duties and taxes and the need for a deliberate organization of the optimum division of labour. The latter need not be a task of public authorities.

VIII.8. Attempts to estimate the extent of the consequences of integration.

CHAPTER IX. *Monetary Integration*

IX.1. This chapter deals with the *monetary* instruments, i.e. with the techniques of international payments and their integration. The simplest theoretical solution would be the introduction of a *world currency*, but political unity would be its prerequisite. It is probable, moreover, that capital flight from war-threatened countries would disturb such a monetary sytem. Impossibility to liberalize capital transactions completely.

IX.2. A system of national currencies almost equivalent to a world currency. *Flexible exchange rates*, as advocated before World War II, seemed useful during the confusion of the Great Depression, but imply more arbitrariness than seems desirable. Something more similar to the gold standard, with a *minimum of autonomous changes*, seems more attractive.

IX.3. The changes should be under international control, but in practice this is difficult. Their frequency will be reduced if equilibrium in the balances of payments is preserved as much as possible. National *reserves* and an international equalization fund, such as the I.M.F., will be helpful to overcome short-term disequilibria. In order to warrant long-term equilibrium national policies should be directed towards *monetary equilibrium* and a *competitive price and wage level.*

IX.4. Apart from these policies *capital movements* may help to maintain equilibrium. Short-term capital movements are not always helpful ('hot money'), and long-term movements might be used for this purpose to a greater extent, as in the case of dollar scarcity and of the Italian balance of payments. The distribution of a country's assets and liabilities over the various degrees of liquidity should be such as not to disturb equilibrium.

IX.5. The Second World War caused heavy disturbances in financial equilibria that have only partly been overcome; the question of the *sterling balances* being the most important example. In large parts of the world current items of the balances of payments were thrown out of equilibrium too, necessitating numerous restrictions in trade and payments. Early attempts at restoring convertibility of sterling by decree were not successful.

IX.6. In 1950 mutual convertibility between European currencies was introduced by the establishment of the *European Payments Union*, which was prolonged in 1952 and 1954. The system was not completely self-contained, however. Nevertheless the Western European situation as a whole was very near to equilibrium in 1954. Dollar convertibility for a number of European countries would seem possible; there remains the question of some of the weaker European countries as well as of many underdeveloped countries. A complete solution of the world's payments problems would have to be based on (a) a programme of capital transfers, (b) further reductions in tariffs of the strong countries, (c) more orthodox financial policies in a number of weaker countries.

CHAPTER X. *The Integration of Development*

X.1. So far international economic policy has been discussed on the basis of a given distribution of resources over nations. As was discussed already in ch. I this distribution, however, is far from satisfactory. Its extreme unevenness may be source of important future tensions: the *divergency of living standards* threatens political unity.

X.2. *Factor price equalization* only works to a limited extent as long as factors are not permitted to move. Necessity for factors to move, i.e. of capital transfers and population transfers. Necessity also, to integrate the process of growth. Impossibility to neglect *population problem.*

X.3. Raising the standards of life of the poorer countries by decree is an economic impossibility: prescription of higher wages e.g. will lead to more unemployment. Rise in production needed, requiring a simultaneous increase in *capital* and training and spread of *technical knowledge.* Nature of investments needed first. Impossibility to increase capital formation inside the countries concerned to as sufficient degree.

X.4. Order of magnitude of capital transfers needed in order to stop divergency of living standards. Order of magnitude of present capital transfers. Impossibility to attract private capital from abroad. Desirability of an '*international budget*'. Necessity of an efficient use of capitals involved.

CHAPTER XI. *The Agencies of International Economic Co-operation*

XI.1. In the preceding chapters a system of international economic policy and the corresponding tasks in various fields were described. We will now discuss what agencies will have to be charged with these tasks. To what extent will the existing national agencies be able to perform them, to what extent will they have to be switched over to existing or new international agencies? The problem is intimately connected with the problem of *political integration.* The common economic policy itself may be less or more interventionist which should also depend on circumstances. As long as the preparedness to co-operate falls short of the degree of co-operation needed, less effective methods will have to be followed. Tasks of local or national interest only should of course be left to local or national organs. It is primarily where one government may adversely or favourably affect the interests of other nations that a central agency will be needed. With the former, the central agency will be a supervising rather than an active agency. Agencies to be arranged according to instruments of economic policy. General and partial instruments and agencies. From our survey it has become clear that general agencies will be needed for six groups of tasks, to be discussed in succession. In principle all these tasks should be performed on a world basis. With the unhappy controversy between the Communist and the Non-Communist countries incomplete provisions may be unavoidable. Moreover, regional integration may be useful as an example or because of differences in technical level. In principle, agencies have been created by the United Nations for each of the six main tasks indicated, but various difficulties have been encountered.

XI.2. The *supervision and reduction of trade restrictions* should have been the task of I.T.O., which has not, however, come into existence. Although the tasks with regard to trade restrictions have been taken over by the G.A.T.T., the main difficulties are (i) the unwillingness of many countries to go faster into the direction of free trade, and (ii) the extremely complicated technique adopted to negotiate reductions in tariffs. Although considerable advance has been made on a European basis, within O.E.E.C., to reduce quantitative restrictions, the gains are not permanent. The difficulties encountered point to the necessity of financial integration.

XI.3. The *regulation of raw material markets* is in principle entrusted to the F.A.O. and to the Raw Materials Conference, created after the Korean crisis. A considerable degree of success has been obtained with the Wheat Agreement which succeeded in keeping prices of wheat at a stable and moderate level since 1949. Activities with regard to raw materials have not been too promising. Various U.N. experts' reports stress the importance that more be done in this field. It is less the machinery that is lacking than the preparedness of governments to commit themselves. Possibly the 'Raw Material Standard' might be a simpler solution.

XI.4. The *supervision of the convertibility of currencies* and a number of related tasks are the tasks of the International Monetary Fund, which represents an international reserve bank though with only limited competence and very limited means. Among the international institutions created by the United Nations the Fund is no doubt the best prepared and the best equipped, qualitatively speaking. The possibilities for the Fund are, however, far too restricted: as the experts just quoted emphasize, a reserve of about $ 3 milliards in hard currency is much too little when moderate cyclic fluctuations may easily create a temporary need for about $ 10 milliards. This is why these experts rightly propose an increase in the quota and a more liberal use of the means. By E.P.U. and the Sterling Area arrangements convertibility within restricted non-dollar areas was established. If sterling and some continental currencies are made convertible, some assistance to the remaining inconvertible currencies will be needed.

XI.5. The *supervision of monetary equilibrium* is less clearly the task of an existing agency. Together with other elements of *employment policy*, monetary equilibrium of the member countries is now annually being discussed in the Economic and Social Council of the U.N., on the basis of extensive reports asked from the governments. Although such a discussion in public may certainly have some positive influence on the governments that may be in default, there is no direct competence of any institute to give directives to the governments concerned. This seems to be too weak a construction. A similar situation prevails at the European level. There have been discussions on the internal and external financial stability of the co-operating countries. In case a country shows either an accumulated deficit or a surplus of a certain size and wishes to restrict its imports it will have to explain its policy to the other members. But also in the O.E.E.C. a firm employment policy is lacking.

XI.6. The most important instrument in influencing both the employment situation and development generally is *public finance*. Desirability of an international agency prescribing the inflationary or deflationary gaps in public finance. Sanctions might be found in restricting credit facilities for the weaker countries and non-participation in the execution of international investment projects for the stronger countries. Importance of a '*common budget*'.

XI.7. The task of *supplying capital for development* pertains to the International Bank, and some partial schemes (Colombo Plan, Technical Assistance, Point Four). Limitations to the Bank's activity have led to the proposal to create a Special U.N. Fund for Economic Development; but more resources than have so far been promised are needed. Importance, also for this purpose, of a *common budget*. The same applies to the European situation, especially in view of the problems of Southern Italy.

An international regulation of migration would seem to be farther ahead than any of the other tasks mentioned. The problem cannot be separated from the population problem, an undogmatic approach to which is needed.

XI.8. Summary of findings; centres of activity from which fresh initiatives may emanate; the desirability of financial integration the most important single conclusion reached.

TABLES

DIAGRAMS

MAP

FIRST PART

THE ESSENCE OF INTERNATIONAL ECONOMIC RELATIONS BETWEEN AUTONOMOUS NATIONS

CHAPTER I

INTRODUCTION

THE HETEROGENEITY OF WORLD ECONOMY

1.1. This book is an attempt to clarify the main problems of international economics and of international economic policy for those who are not economists by profession, but take an interest in these problems. Not being written for specialists, it tries to give a simple approach to the problems without neglecting, however, some of the complications that have proved to be of importance to practical problems of international economic co-operation. For the same reason it also deals with some common misunderstandings about the subject.

The *desirability of international co-operation* is taken as the starting point of this book. International co-operation is conceivable in nearly every field of human activity. Economic co-operation is only one of its aspects. It has sometimes been considered as the basic aspect, particularly by those who consider economic relations generally to be basic to human relations. The big and dramatic interruptions of international co-operation which we call wars have, in this same train of thought, been explained by economic causes. The occurrence of the Second World War has shown the limits of this philosophy only too clearly. Certainly autonomous factors of another kind are at work in the causation of war and hence other forms of co-operation than purely economic co-operation will be very important in the struggle for peace. Nevertheless economic factors remain of importance too, by the simple fact that economic activity must necessarily, in a poor world, take up a large part of total human life. International economic co-operation therefore still constitutes an essential part of international co-operation generally. This text deals with its nature and problems. In Part I we will consider the essence of international relations in the economic field; Part II is devoted to the question in what respect these relations should be the subject of deliberate regulation; in a modern terminology it deals with international economic *integration* where this term is taken to express the optimum of international economic co-operation.

1.2. International economic relations are a subject by itself because of the fact that *world economy is not homogeneous*. On the contrary, the world is divided in sixty national economies showing wide differences in their more relevant features and being even themselves often not very homogeneous. In several respects these national economies are almost independent from each other; in other respects, however, they are intimately connected, as will be clear from our further analysis.

In order to get a first rough picture of the heterogeneity of world economy we may describe the national economies by taking their *population* and their *wealth*. It is well known that populations show large differences in quantity as well as in quality. The wealth of any nation consists of two components: (i) its *natural wealth*, such as land for agricultural purposes, minerals, natural means of communication, geographic position and climate, and (ii) the *capital goods* it owns, i.e. the goods partly produced by human labour which are used for further production or consumption: buildings, roads, harbours, machinery, raw material stocks, stocks of consumer goods. Table I gives some figures about the population and the wealth per head of some national economies, among which the most important.

TABLE I

POPULATION, AREA PER HEAD AND CAPITAL PER HEAD FOR SOME COUNTRIES

Countries	*Population on 31 Dec. 1938 in millions*	*Area in sq. kil. per 1000 inhabitants*[1]	*Capital in I.U.*[2] *per head of the working populations*[3]
U.S.A.	131	61	4360
Canada	11	870	4240
Gr. Britain and N. Ireland	48	5.1	5000
France	42	13.1	2740
Netherlands	9	4.0	2910
Germany and Austria	76	7.5	2670
Italy	44	7.3	1460
Poland	35	11.3	1200
Australia	7	1130	4400
Russia	170	124	1130
Japan	73	5.5	1350
India and Pakistan	395	12.8	580
China	500	133	180

Apart from differences in physical wealth there are differences in *abilities* of the population, in *market* and *social organization* and in *social climate* which may account for the differences in output per head. A big and uniform market e.g. enables a population to apply large-scale methods of production which cannot be used in small areas; free competition may be a better stimulus to pro-

[1] Around 1936; Statistisches Jahrbuch für das Deutsche Reich, 1937, p. 7.
[2] Dollars with the purchasing power of 1925–1934.
[3] Colin Clark, The Economics of 1960, p. 80.

duction than rather rigid forms of social organization; countries with good 'industrial relations', i.e. good relations between management and employees, may show better productivity figures, etc. Very little is known yet about the exact influence of each of these factors on the level of productivity; important attempts to determine them have recently been made, but they seem to be inconclusive as yet.

1.3. In view of the big differences in wealth (in land as well as in capital goods) WAGEMANN, the well-known German statistician, has divided the world into four areas. By the area of 'high-capitalism' he means the countries with a dense population and a high degree of capitalization (high figures for capital per head). As the density of the population is the reverse of the quantity of land available per head, it may also be said that these are the areas with relatively little land or 'space' and with relatively much capital. They are chiefly Europe and the United States; also Japan. A second group of countries constitutes the area of *'half-capitalism'*, they are poor in land *and* in capital; chiefly China and India. A third group consists of the *'new-capitalistic'* countries; here there is comparative wealth of capital and land; they are the British 'dominions' and South America. The remaining territory, which in view of its population may be called insignificant and is chiefly formed by large parts of Africa, WAGEMANN called the *'non-capitalistic'* area. It is rich in land, but poor in capital.

1.4. In each of the national economies there is a complicated *process of production* going on: goods and services are created with the aid of the three so-called factors of production: labour, nature or land and capital. These three factors are the same elements which we have already discussed. Labour is supplied by the population and the natural forces are especially those of the soil. As is well known, very different goods and services are being produced: agricultural products such as wheat, rice, potatoes, cotton, butter, etc., mineral raw materials, such as coal, oil and iron; finished products such as clothing, houses and transport equipment, and services, such as the traffic of goods, the distribution of consumer goods, the cinema or ladies hairdressing; and an enormous number of semi-finished intermediary products. If we want to get an idea of the total quantity of goods produced by a country, we may calculate the total net value produced, or *national product*. In order to yield comparable figures, the value of each product has to be calculated by applying the same prices in all countries, e.g. the price a commodity had, in a certain period, in the United States. We sometimes call such figures 'real' values, as against the 'nominal' figures, where in each country current prices are applied.

COLIN CLARK, the well-known British statistician, who has made many investigations in this field, has expressed the production of all countries in the amount of dollars for which these goods could be bought in the United States on an average during the period 1925–1934, i.e. a period with five prosperous years and five years of depression[1]. The quantity of goods worth one dollar in that period he calls an International Unit (I.U.). When calculating the net value of production we have — apart from some complications which will not interest the layman — to deduct the value of goods absorbed by the production process, such as imported raw materials, worn-out parts of machines, etc. The result of our calculation is called the real net

[1] Colin Clark, The Economics of 1960, London 1942.

geographical product (in 1925/34 dollars) or real income from home production. (Of course the use of other units than the I.U. would also be permitted.) Income from home production is, for all countries, by far the largest part of national income, which includes also income from other sources, such as foreign investment. Real income from home production calculated per head appears to diverge largely for different countries. COLIN CLARK states that calculated per head of the population and assuming everyone is working 2500 hours per year income, in I.U., was in 1925/29:

TABLE II

REAL INCOME PER 2500 HOURS OF WORK, IN I.U. 1925/29

United States	590
Canada	550
United Kingdom	502
Netherlands	357
Germany and Austria	292
Poland	117
Russia	95
India (incl. Pakistan, Birma and Ceylon)	64
China (incl. Korea and Formosa)	44

Currently figures are being calculated by the United Nations which in various respects are more accurate but in others less appropriate for our purpose, although also illustrative of the lack of homogeneity in world economy. Such figures are e.g. the figures of national income per head expressed in one currency, namely dollars. They are not so well comparable since they disregard price differences; but the differences in prices are much less than those in incomes and therefore they still have some illustrative power. The most recent of these figures are given here:

TABLE III

INCOME PER HEAD IN $, 1949

United States	1453	Israel	389
Canada	870	Czechoslovakia	371
Sweden	780	Western Germany	320
United Kingdom	773	U.S.S.R.	308
Norway	587	Italy	235
Belgium	582	Egypt	100
Netherlands	502	India (1948/49)	57
France	482	China	27

Source: Nat. and per Capita Incomes of Seventy Countries-1949, U.N. (Stat. Papers, Series E no 1, New York 1950).

Of these figures those for Western Germany were in rapid development and may therefore be less comparable. It appears from this table, as it did from table II, that the most important underdeveloped countries among the larger nations are China and India.

1.5. It has been observed already that there are various *reasons* for these differences. One, as we saw, is the difference in *capital per head and land per head* available for production. The low figure for China, e.g., is partly connected with the fact that in that country only about 4 acres (1.6 hectare) is available per farmer, whereas 13 acres is the most economic size. This makes it compulsory to follow methods of production leading to a much lower return than would otherwise have been obtained. Moreover the quantity of capital goods, i.e. agricultural machinery, cattle etc. per head is very low; all in all, the Chinese farmer produces only 1/14 of what his American colleague produces.

As already noted, the extent of the quantitative influence of the various factors is not yet known quite exactly. Some investigations suggest that the influence of capital per head is rather important; an increase by 1 per cent of capital per head may yield an increase in product per head by 1/4 or 1/3 per cent (P. DOUGLAS).

It has become customary, in recent years, to use the concept of the 'capital coefficient', i.e. the ratio between total capital of a country and its total income, or, as the case may be, between an increase in capital and the accompanying increase in income. The former ratio might be called the average capital coefficient; the latter the marginal capital coefficient. Since the increase in capital over a certain period represents the country's net investments, the marginal capital coefficient may also be defined as the ratio of net investment to the increase in income. The numerical values of capital coefficients are only known very crudely and are between 3 and 6. It is interesting to note that they do not show, in countries for which older statistics are available, very much change over the last century. It should be kept in mind that the increase in income need not necessarily be caused by an increase in capital only.

It is also obvious that, within certain boundaries at least, an increase in land available per head will also tend to increase production per head. Formulated in another way, population density will affect productivity, and hence welfare, in an inverse way. There is some difference of opinion about this point; it is sometimes maintained that the relation is more complicated and that up to certain densities an increase in population density will increase productivity; since in the end the opposite tendency will prevail, there will be at least one point in which productivity is a maximum. This point of density is called the optimum density or *optimum population* point. The reason why up to that point an increase in density may be favourable to productivity may be that certain activities can be organized more efficiently. This will be true for industries where mass production is much more productive than small-scale production; it will also be true e.g. for the transportation of commodities. Whether these tendencies are important enough to counteract the opposite tendencies in the other industries has so far hardly been investigated. The impression of the present author, obtained from statistical analysis, is that the optimum is very near to the lowest densities registered for countries as a whole and that therefore by far the larger part of world population is living in countries with more than an optimum population.

Investigations as to the influence of another important factor, the *innate skill* of the population, are contradictory. In a number of cases it is reported that rather primitive populations can easily be trained in modern industrial activities. On the other hand it is only too well known that the business spirit of several oriental populations is very little developed, leading to a pronounced indifference towards increasing their standards of life as soon as some customary level has been reached. One should be careful, however, not to confuse the consequences of a lack of capital or land with those of the innate personal abilities of the population. The apparent 'backward' methods of the Chinese farmer, for example, are to a great extent a result of that lack of equipment; in the given circumstances they still yield the best return.

Recently some attempts have been made to measure the influence of a third factor, *the extent and organization of the market*. The impression is that the stimulus given by free competition is very powerful and has been underestimated by European politicians. A fourth factor, the '*social climate*' or the '*industrial relations*', the human relations between management and workers, is also of considerable importance.

1.6. The total product of a country is finally spread over the various *groups of the population* by means of a process of exchange. The proportions going to labour, capital and land are not always known very exactly, although an increasing number of investigations has recently been published. As far as our information goes there is the curious tendency for these proportions to be about the same under very different conditions. This is true in particular e.g. for the distribution of income in the United Kingdom and the United States during the last half of the nineteenth and the first quarter of the twentieth century. But within certain limits it is equally true for a number of other countries and for recent years, although there is a tendency for labour income to rise in comparison to the other incomes. The ratios observed for the period just stated were 70 per cent for labour, 20–25 per cent for capital and 5–10 per cent for land owners. The relative constancy of these figures implies that in periods or countries where one of the factores is scarce its renumeration per unit is very high in comparison to other periods or countries. Capital income per unit of capital was much higher in 1850 in the United States than in 1910 or 1940; labour income per hour of work was very much lower in 1850 than it is nowadays. Labour income is also much lower in China than in France; and much lower in France than in the

United States, according to the different relative scarcities of labour in these countries.

1.7. Between these national economic units of so widely diverging a character there are *various forms of economic intercourse*. They may, for the sake of convenience, be roughly subdivided in:

(1) Exchange of products against products, i.e. current trade in commodities or goods or services;

(2) Transfer of factors of production, i.e. of

(a) persons or migration;
(b) land, which occurs as a consequence of changes in territory; and
(c) capital, known as capital exports and imports.

From the economic point of view (b) is not a common form of intercourse, but a consequence of political events. If it occurs, it is accompanied by transfers of type (2a) and (2c). In the interwar period (2a) did not take place to any appreciable extent either, contrary to what happened in earlier periods. By far the most important forms of intercourse are those under (1) and (2c). In the following chapters we will consider more closely each of these forms of intercourse; in addition we shall study their financial aspects.

Chapter II

CURRENT TRANSACTIONS

II.1. When speaking of current transactions between countries we are thinking of *imports* and *exports* of products, i.e. *goods and services*, and not of factors of production. They may be exemplified by the exports from tropical areas of cotton, cane sugar, coffee, cocoa, coprah etc. to the temperate zones and the imports, the other way round, of textiles, machinery, ships or motor cars. From countries with rich ore deposits iron, copper, zinc and many other metals flow in a continuous stream to other regions; agricultural districts will ship their butter, cheese, meat, hides and wool; horticultural areas supplying fruits and vegetables. From these examples the underlying reason for these transactions — to be discussed more fully later — may already be clear. One country is more appropriate, in view of its climate, the special skill of its population or its capital resources, to supply one type of goods, another country is better equipped to supply another kind of goods. There will be all the more reason to convey such goods along vast distances if they are of high value in proportion to their transport costs. Very heavy goods of comparatively little value, such as coal, iron ore or potatoes, will in general not be transported very far; they seldom cross the oceans (cf. diagram 1).

Every good has a certain maximum distance — slightly varying according to circumstances — beyond which it will hardly be able to compete. Generally speaking, therefore, large countries have smaller imports and exports in proportion to total production than small countries. This is

COMPOSITION OF WORLD TRADE (T) IN, AND WORLD PRODUCTION (P) OF THE PRINCIPAL BASIC PRODUCTS (1936/7).

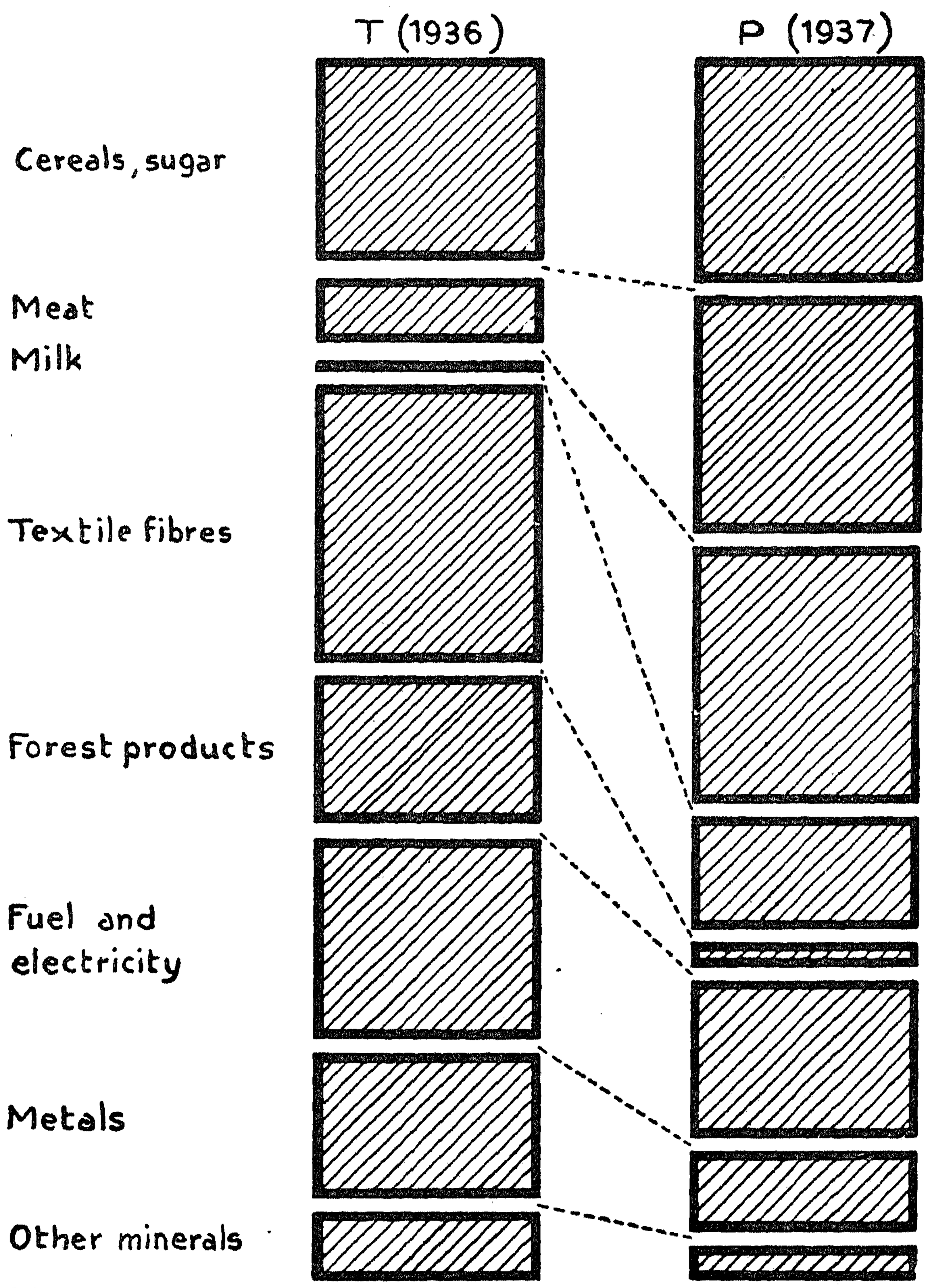


Diagram 1.

Badly transportable goods such as milk play a much slighter part in international trade than in international production; for easily transportable and specifically highly valuable goods, such as textile fibres, it is just the other way about.

illustrated by diagram 2, giving a survey of international trade compared with the national incomes of the principal countries. In the column of imports one can compare the

NATIONAL INCOME AND IMPORTS OF A NUMBER OF COUNTRIES, 1930.

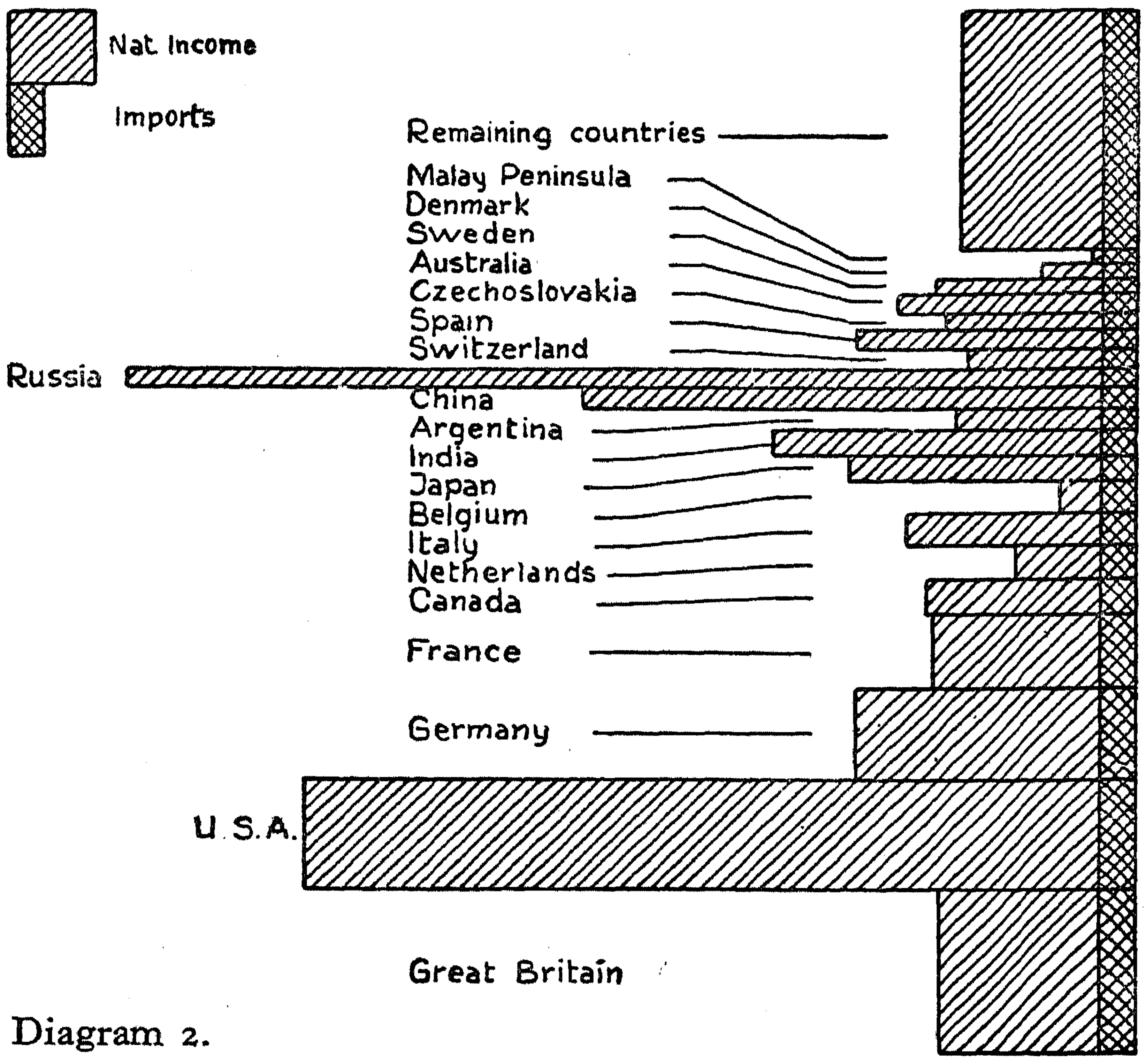
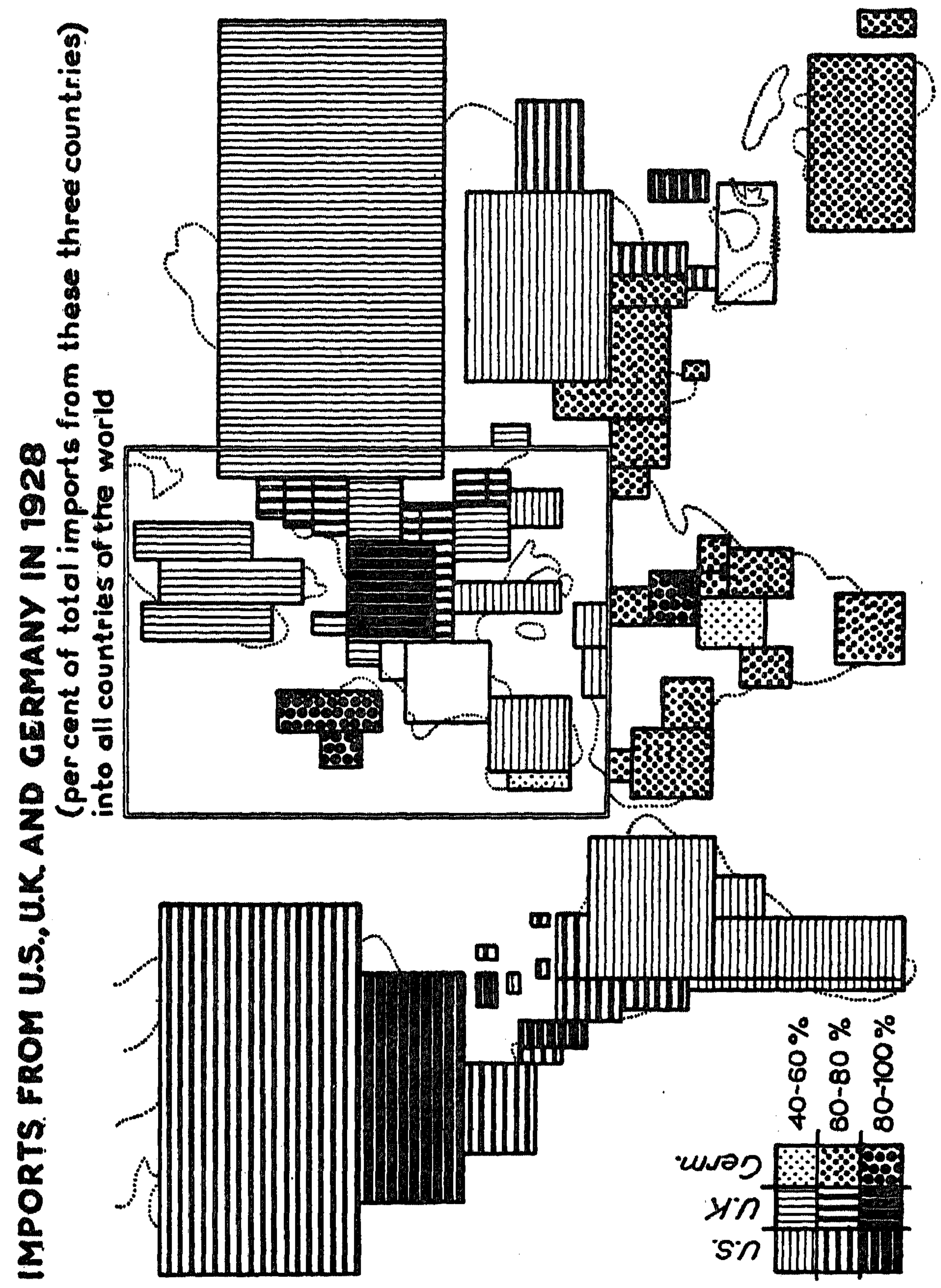


Diagram 2.

The parts of the right-hand column show the significance of each of the countries to world trade, the two quadrangles in each horizontal bar show the extent of the imports of the country concerned with respect to the national income of that country.

relative importance of the different countries for world trade, while every horizontal quadrangle gives an idea of the ratio between imports and national income for each country. Although, therefore, a country such as the U.S.A. is of great importance to world trade, yet the imports of that country are only small if compared with its national income.

The influence of distance on the choice of suppliers is illustrated by the map below which will be selfexplanatory.



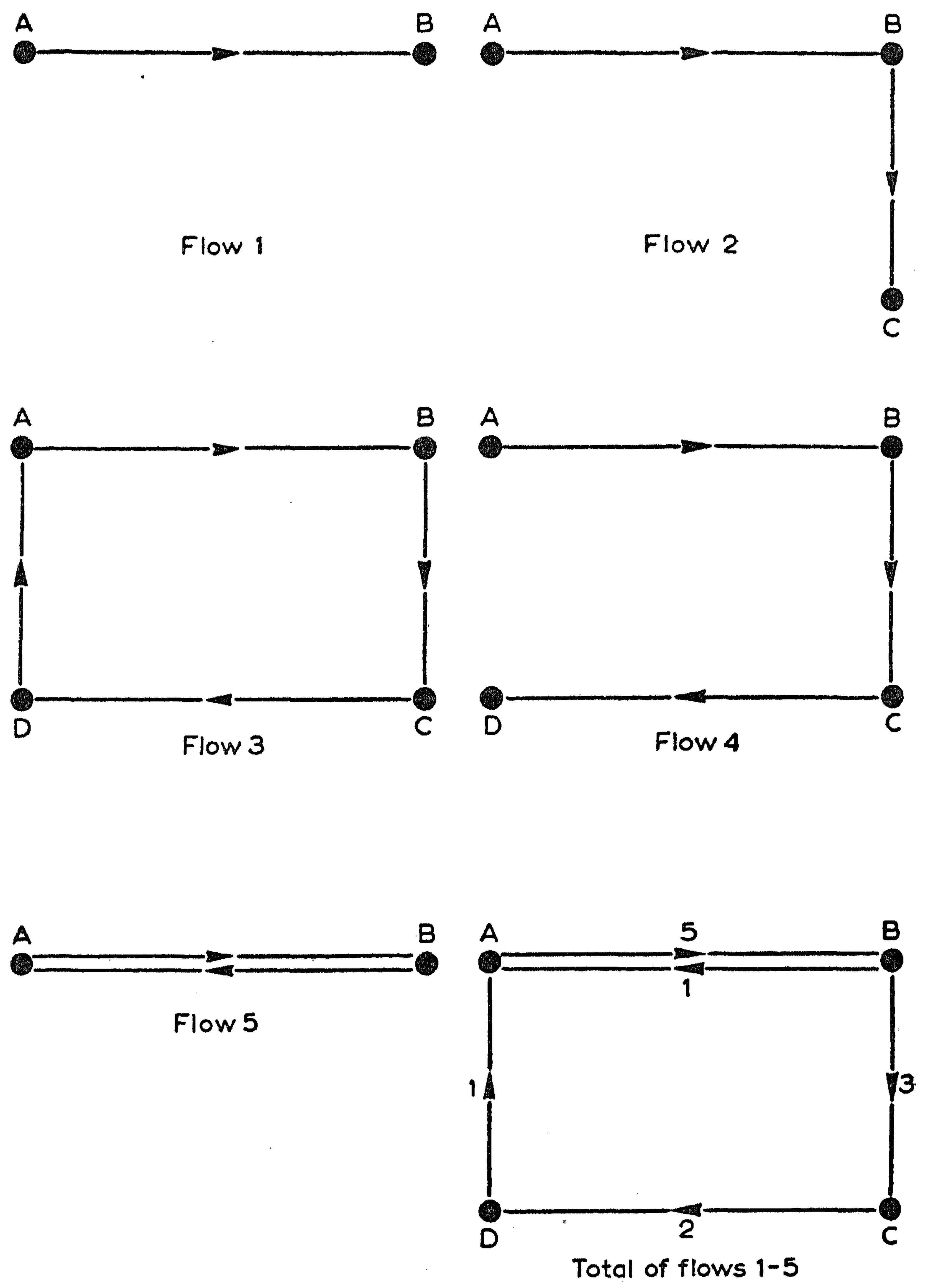
II.2. The flows of current transactions may be represented by the total *money value of these transactions*. Between the

large number of countries in the world there is a network of such flows. They will, as a rule, be *multilateral*, i.e. each country imports from and exports to a large number of other countries. In the short run, there is no necessity for equilibrium between the imports and exports (both taken in the widest sense) of any one country; each country may have an 'overall' deficit or an 'overall' surplus. A deficit will have to be paid for from the reserves of the country or from credits granted by other countries. Even if there is equilibrium in transactions as a whole, there is no necessity for an equilibrium between imports from and exports to any other country separately; there need not be '*bilateral* equilibrium'.

In order somewhat better to understand the nature of a network of flows we may imagine how such a network could be built up from a number of elements. As elements we may use flows of different length. The shortest flow conceivable are those between two countries only, i.e. starting in one country A and finishing in another country B. There may be flows of increasing length, passing along intermediate stations; the *length* may be indicated by the number of countries they connect, minus one. In figure 3, flow 2, running from A to B and from B to C, would have a length 2. There are, in principle, flows of any length. We may, in addition, introduce the concepts of *closed* or *circular flows* or *circuits* (flow 3) and *open flows* (flow 4). With closed flows the starting country and the finishing country are identical; with open flows they are not. The simplest type of a closed flow is one of length 2, ending in the same country in which it starts and having only one intermediary station (flow 5); it will also be called *bilateral equilibrium flow*.

All these elementary flows may be of different *strength* or *width* (i.e. in our case, money value).

COMPOSITION OF A NETWORK OF FLOWS FROM ELEMENTARY FLOWS.



Figures indicate intensities of flows

Diagram 3

1: Flow of length 1; 2: flow of length 2; 3: closed or circular flow of length 4; 4: open flow of length 3; 5: closed flow of length 2 (bilateral equilibrium flow).

In order that a network of flows be a complete *equilibrium network*, i.e. that for each country total imports are equal to total exports, it should be composed only of closed flows. A network may be an *incomplete* equilibrium network, if equilibrium exists only for a certain group of countries; then open flows would also be permitted, provided they start and end outside the group.

Whereas a network can be built up from its elements in one way only, the decomposition of a given network into simpler flows is not an easy operation and not an unambiguous one either. Different alternative sets of circular flows may lead to one and the same network and hence the network may be decomposed in different ways. Only the bilateral equilibrium flows can be determined in a univocal way by taking, of the two total flows between any two countries, the smallest of the two and adding one of equal size but opposite to that smallest. After deducting these bilateral equilibrium flows one obtains the bilateral surplus flows, which are the sum total of the open flows and the circular flows with length above 2. If a country is not in equilibrium, its 'net position' will be equal to the sum total of all open flows which start or finish in that country.

The concepts just introduced are of some importance for the organization of payments between a set of countries (cf. ch. IV).

The geographical structure of world trade is illustrated by the following figures[2] which indicate the intensity of the total flows between any of the four areas distinguished. It will be clear that the net positions of each area can be

[1] Excl. of U.S.S.R.

[2] Taken from Dr F. Hartog, 'Het probleem van de optimale protectie-eenheid', Econ.-Stat. Ber. 39 (1954) p. 28 and p. 46 (Source: Monthly Bull. of Statistics, U.N.).

Importers:	Exporters				
	Europe[1]	*North America*	*Latin America*	*Other Areas*	*Total*
Europe[1]	13.1	4.4	1.6	6.8	25.9
North America	2.3	5.2	3.8	1.5	12.8
Latin America	1.7	3.6	0.6	0.3	6.2
Other areas	6.7	1.7	0.8	2.1	11.3
Total	23.8	14.9	6.8	10.7	56.2

found by comparing their import total (last line) and their export total (last column). The bilateral equilibrium components are 2.3 between Europe and North America, 1.6 between Europe and Latin America, 3.6 between North America and Latin America, etc. Trade between Europe and North America and trade within these areas, together cover half of the world trade.

11.3. As to the organization of trade three states may be distinguished: it may be (i) completely *free*, i.e. not subject to any permission or payment, or it may be (ii) *hampered* by one or more of such impediments, in a more or less arbitrary way, or finally it may be (iii) *controlled*, i.e. completely subjected to permissions. The first state has hardly ever existed in pure form, but was approached during the last century and a half by a number of countries following a free-trade policy. In scientific discussions it plays an important role, to be examined below. The state of complete control, meaning that all transactions are subject to government decisions, is to be found in the countries of the communist block and is approached by other countries in war time. That control will, under those circumstances, be directed on the basis of some general program or plan derived from the aims of economic policy in general. The intermediate form of 'hampered' trade is the one existing in most non-communist countries at present; it is applied somewhat more incidentally and as a corrective on free trade. The very fact that they are only applied incidentally sometimes makes them more arbitrary or seem to be so than in the case of complete control. In both cases the foreign tradesman feels that he lacks any certainty or influence as to vital aspects of his existence.

The 'permissions' just mentioned may be based either on a system of *quantitative restrictions* or *quotas* or on a system of *currency restrictions;* the payments to be made are usually *import duties*, and incidentally other payments. Quantitative restrictions are imposed if only a certain quantity and no more of a certain commodity is admitted per year; currency restrictions if only a certain amount of certain types of foreign currency (e.g. dollars) is made available. To the trader who does not get his permission to import it hardly matters on what ground: both restrictions restrict trade. Quantitative restrictions are also sometimes applied to exports; evidently this happens in time of scarcity of goods, whereas the tendency to restrict imports prevails in time of scarcity of foreign currency or severe competition. Payments sometimes may take the form of extra payments to obtain foreign currency, meaning that a concealed devaluation is applied; there may also sometimes be export duties; or there may be 'compensatory duties' to be paid with imports, if the commodity considered is taxed inside the country by an excise or a custom. In the latter case the intention of the compensatory duty is the equal treatment of foreign and home producers.

Whereas quantitative restrictions have been severe during the Great Depression and shortly after World War II, they are now, at least between the member countries of

TABLE IV

AVERAGE IMPORT DUTIES IN A NUMBER OF COUNTRIES, 1913, 1925[1] AND 1953[2], EXPRESSED IN PER CENT OF THE PRICES OF THE COMMODITIES

	All articles			*Industrial prod.*		
	1913	*1925*	*1953*[3]	*1913*	*1925*	*1953*
Argentine	26	26	.	28	29	.
Australia	(17)	(25)	.	(16)	(27)	.
Austria	18	12	.	18	16	.
Belgium	6	8	12[4]	9	15	10[4]
Canada	18	16	.	26	23	.
Czechoslovakia	18	19	.	18	27	.
Denmark	9	6	7	14	1	5
France	18	12	21	20	21	17
Germany	(12)	(12)	26[5]	(13)	(20)	15[5]
Great Britain	0	(4)	16	0	(5)	17
Hungary	18	23	.	18	27	.
India	4	14	.	4	16	.
Italy	17	17	.	18	22	.
Netherlands	3	4	12	4	6	10
Poland	.	23	.	.	32	.
Spain	33	44	.	41	41	.
Sweden	16	13	9	20	16	7
Switzerland	7	11	.	9	14	.
United States	33[6]	29	12[7]	44[8]	37	12[7]
Yougoslavia	.	23	.	.	23	.

[1] Taux-Indices des Tarifs, publ. League of Nations, 1927 II 34, p. 16.

[2] Moyenne des tarifs (Tome I, II, III, IV), Brussels 1950, Groupe d'études pour l'Union Douanière Européenne, with correction for tariff changes during the intervening period.

[3] Semi-manufactures and finished products.

[4] Belgium and Luxembourg.

[5] Western Germany.

[6] In 1914: 16

[7] 1951; covers the same articles as the League of Nations figures.

[8] In 1914: 25.

the Organization of European Economic Co-operation (O.E.E.C.), reduced to a percentage of total trade lying below 10 per cent, with the exception of French imports. Import duties are still considerable in a number of countries; some data are found in table IV.

There may be blocks of countries with free internal trade and with a common tariff for the outside world or even without any import duties vis-à-vis the outside world. In the first case we speak of a *'customs union'*; the German countries in the latter part of the 19th century and after formed such a union, Belgium and Luxembourg did so after the First World War and since 1948, Belgium, Luxembourg and the Netherlands together form the Benelux union. Trade between the states of the United States of America is also practically free. In the case where no tariffs are applied vis-à-vis the outside world at all we speak of a *'free trade area'*. A customs union may develop into an *economic union* if further steps towards integration are taken. Usually we think of a unification of further taxes and of other aspects of economic policy when speaking of an economic union or of integration. In this text we will define the state of economic integration as the economic policy which shows an *optimum of centralization* (cf. ch. VI). An optimum is not necessarily a maximum; and it depends on many elements of the problem to which extent and in what matters centralization should be aimed at.

II.4. For a correct understanding of the essence of international economic relations it is useful to consider the extreme case, namely the one of *free trade*. In addition it will often be assumed, when investigating the state of free trade, that transportation costs can be neglected. For low-value goods this will not be possible and sometimes therefore we will try to take account of the consequences of transportation costs. Disregarding transportation cost we may state that with free trade, prices of one and the same commodity will be *equal in all countries*. Another characteristic of free trade is that it is *multilateral*: if there are no difficulties in paying for trade transactions it would be pure co-incidence if there were bilateral equilibrium between any two countries (cf. II.2). A country may therefore have, and usually has, deficits with regard to some and surpluses with respect to other countries.

Free trade is not equivalent to what the economist calls free competition. Free or perfect competition has become the scientific term for competition between a large number of competitors, where no single competitor feels able to influence the price level of the market by his acts. Competition is called imperfect if one or more of the competitors are able to influence prices, i.e. if there are monopolistic elements in the market. In international as well as national trade, market imperfections are very common; they may be caused by natural and other monopolistic factors. One of the competitors may have a natural monopoly by finding himself at a short distance from his customers; or his product may have special features which the other producers are unable to supply completely. As a consequence international trade appears, for short-run variations, to show characteristics of rather *imperfect competition*. This is shown by the so-called short-term elasticity of a country's share in world trade with respect to its relative price level. A relative fall in a country's export price level with regard to the export price level of all countries together of, say, one per cent appears to be followed — in the first year or so — by a decrease in that country's share in world exports by no more than 2 per cent. The figure 2 in this case represents the elasticity just mentioned. In the case of perfect competition it should have been, theoretically, infinite. It is often even less than 2. The same applies to the short-term elasticity of imports as a ratio to total home demand with respect to the ratio of import prices to home price level. Both tendencies are connected, it seems, with the difficulty to switch from one supplier to another for the reasons quoted. It is natural and probable that long-term elasticities are higher; and the same applies to the elasticities referring to one single type of goods, especially staples. By short-term reactions in this context we mean reactions taking no more than one or two years. Although, therefore, free trade does not necessarily imply free competition, we will in theoretical analysis often assume them to co-exist.

II.5. International trade may be said to be a consequence of a certain *division of labour:* if everybody produced everything he consumes himself, there would be no trade. The basis of this division of labour is that there are differences in the *relative* efficiency of different industries between countries. In each country there are different factors of production; let us, however, to start with, only speak of labour and later amplify our argument so as to include other productive effort also. With free trade and neglecting transportation costs, there will be one single price on the world market for each product. We choose the units of these products so as to have a price of \$ 1 for each commodity. The efficiency of each industry in each country may now be indicated by the quantity produced in one hour. Suppose we have two countries and two industries only; and let their efficiencies be given in the following matrix:

DATA FOR A VERY SIMPLE MODEL OF INTERNATIONAL TRADE

Quantity produced by one man-hour:		
	Product 1	*Product 2*
Country 1	1	0,91
Country 2	0,42	0,50

In these circumstances it will be clear that country 1 will do wisely to produce only product 1 and country 2 only product 2. A man-hour used by country 1 in industry 2 would yield only \$ 0.91 of worth, whereas one man-hour in industry 1 yields \$ 1.—. If country 1 wants to consume product 2 it can obtain one unit of it by producing good 1 and exporting it, while buying good 2 for the proceeds. For country 2 a man-hour used in industry 2 will yield \$ 0,50 of worth and by exchanging it on the world market, ½ unit of 1 may be obtained which is more than would be got by producing good 1 directly. What matters is that relative efficiencies are decisive, not absolute. Country 1 is more efficient, in absolute terms, than country 2 in producing good 2; but nevertheless it should not produce good 2. The above reasoning will have made this clear. In addition it could be observed that country 1, although producing more units of 2 per man-hour than country 2, does not produce it more cheaply. For wages will be much higher in country 1 than in country 2. They will be, if there is perfect competition between employers, almost \$ 1.— per hour in country 1 and almost \$ 0.50 in country 2. Our little model could be extended to the cases of more industries, more countries and more factors of production without changing the basic conclusions on what products will be exported and what the level of wages (and other incomes) will be.

It illustrates what is called the *'theory of comparative cost'* (cf. also appendix 1).

Similar, but somewhat more complicated statements may be made on the 'division of labour' between a larger number of countries, or a larger number of products, or a larger number of factors of production. With more factors of production the tendency will be to produce as high a total value of production as possible with the help of all factors available. It will be possible to use all units of all factors (say labour, land and capital) only if either (i) the proportion in which these factors are needed are the same for all products and for the country as a whole, or (ii) when this is not so, there is a sufficient 'spread' in these proportions for the various goods. The meaning of this latter condition may be clarified with a simple example of two factors only: labour and land. If a country has 100 units of labour for every unit of land and products exist which, respectively, require 50 and 150 units of labour in combination with one unit of land, it will be possible for the country, by producing equal quantities of both products, to use both factors fully. If, however, only products are known for which the proportions are 50:1 and 75:1 the country concerned will not be able to use all its labour. We shall come back to this problem later; it will not present itself if, in the process of production, there is an unlimited possibility to replace one factor by the other.

II.6. We are now on our way to the *fundamental thesis of the doctrine of free trade* which a long time determined discussions on trade policy and in a way still does. It says that *under certain conditions free trade leads to maximum welfare.* The conditions are just as important as the thesis itself. The most important ones will be dealt with here:

(1) All productive resources are supposed to be used in production, i.e. there are *no idle resources* (unemployed workers or idle capacity);

(2) Prices of products are equal to their *marginal costs*, i.e. to the cost of producing the last unit;

(3) The temporary consequences of adaptations of productive resources to changes in demand are neglected;

(4) Welfare is measured by the *total value of production, at free-trade prices*. This method of measuring welfare is only one of several; one might conceive of the total value of *expenditure* (for consumption and investment) at free-trade prices. It is also significant to note that welfare is assumed to be independent of the distribution of production over individuals or groups of the population.

Under the conditions summed up it is easy to prove the thesis. A system of free trade implies that every country is using its productive resources in the most efficient way, as was illustrated by our little model. Alternative uses would be those resulting from some form of protection or from another method of pricing. They would always result in using the resources in a less efficient way; in our example e.g. in the use of labour in industry 2 by country 1, or in the use of labour in industry 1 by country 2. The interesting point to note is that not only total welfare would decline, but also the welfare of any one country involved. If protection therefore is an advantage for some groups of the population, it must at the same time be a disadvantage for other groups of the same population. This latter part of the proposition only applies, however, as long as we measure welfare by the value of production at free-trade prices. If we measured it by the value of expenditure at free-trade prices, it would no longer be valid for countries *large enough to be able to influence their terms of trade,* i.e. the ratio of prices at which they import and export. Indeed large countries may, by imposing a tariff, depress demand of some import products and so get them, as a nation, cheaper than without such a tariff. And they might apply tariffs in such a way as to maximize the volume of goods they obtain by production and trade. The tariff which makes this volume a maximum has been called the '*optimum tariff*.' The optimum of course refers to the country concerned. Since the imposition of whatever tariff always decreases the total value of production of the world at large, any advantages obtained by one country would be at the expense of other countries. There may be cases where this might by itself be a positive contribution to welfare, if welfare is to imply certain aspects of *distribution* also. The same advantage to the first country might, however, have been reached in other ways also, namely by producing according to a free-trade régime and by subsidizing that country.

Marginal cost pricing may not be possible in some industries, without subsidizing them. If marginal costs are below average costs, this method of pricing would imply permanent losses to the industry concerned. Marginal costs should be taken to mean long-term marginal costs, however, and then it is doubtful whether there are many industries for which these are lower than average costs. Even if they were, however, certain types of subsidies would be preferable to protection from a purely economic point of view — i.e. disregarding possible difficulties of administrative organization. They would be preferable if they left prices equal to free-competition prices of which it can be proved that they maximize welfare; the use made of productive resources would yield a higher utility.

Full use of resources has also been mentioned as a condition for the validity of the free trade doctrine. If they are not fully used, tariffs may contribute to their fuller use and so increase production. For practical political purposes this condition may be interpreted to mean that the full advantages of free trade (through division of labour) can only be reaped if the full use of resources is warranted by an appropriate policy of full employment, or at least of high and stable employment. Such a policy, which may be largely a 'compensatory' financial policy, will be discussed in chapter VII.

II.7. The propositions so far discussed all referred to *long-term adaptations;* as was expressed in our condition (3), temporary consequences of adaptations may be neglected if the advantages to be obtained are of a lasting character. In reality they never are; and temporary adaptations do count therefore, especially since they represent disadvantages that have to be suffered before any advantages will be observable. An *optimum policy* leading from a state of protection towards one of free trade will therefore always have to be a policy where such a period of adaptation will have to be taken such as to maximize *net* advantages (discounted over time in some acceptable way). Here, net advantages are the advantages obtained from free trade, minus the disadvantages of adaptation, such as the cost of retraining workers and of extra investments.

Protection may therefore be acceptable for periods of adaptation to new circumstances. It may even be acceptable if it did not exist previously, if import duties are by far the simplest device to temporarily support an industry whose sudden disappearance would be too difficult an occurrence.

The same applies to the use of import duties in order to support an '*infant industry*'; here one could say that by so doing the efficiency of that industry may be raised and that it therefore represents a case where efficiency is not given beforehand as was the case in our matrix in section II. 5. It remains to be seen, nevertheless, whether the same effect cannot be obtained by subvention instead of protection. The danger of protection lies in its 'invisibility' to the public and to the tax-payer and the tendency to maintain it and so to lack the wholesome forces of competition for less productive units.

II.8. After a *period of isolation* as, for example, created by a war, the liberalization of a country's trade presents a subtle problem. It will have to be solved gradually and with great care in order to prevent the sudden disruption of the many partial equilibria on which a war economy is built, before the conditions to general equilibrium are fulfilled. The conditions of such a general equilibrium will be discussed in chapter IV. Only some examples of the problems involved are mentioned here. Before liberalizing foreign trade in a certain commodity the home market should be more or less in equilibrium, which may be tested by the abolition of rationing, if in existence. It is no use anyhow to liberalize trade if there is still rationing and the controls needed for rationing are even in direct contradiction to free trade. Before any more general liberalization of imports is undertaken it should be ascertained that the general price level inside the country is competitive on the world market: otherwise there is a real danger that imports will grow very fast and outgrow exports.

Liberalization of trade will generally also mean the disruption of bilateral equilibria with individual countries which are likely to exist as a consequence of unequal softness of the currencies in war time. There should be parallelism therefore between steps towards a freer trade and steps towards convertibility of money (cf. ch. VIII and IX).

11.9. In an attempt to restore free trade various alternative methods may be followed, to be discussed in some more detail in chapter VIII. One of the so-called partial forms of integration is the establishment, already mentioned, of a customs union between a limited number of countries. It is an interesting question, whether such a *customs union does or does not represent a useful step towards world free trade*. Whereas it is clear that in the end, if world free trade is to be reached, all countries will have to follow the steps taken by the members of some customs union, doubt may arise as to the contribution to the best division of labour which it implies. Probably it will in fact in some ways improve the division of labour. If shoes can be made more cheaply in Holland and glass in Belgium, elimination of trade impediments between these two countries may contribute to a more rational production pattern. But it may also, by the existence of a tariff at the outside frontier of the union, lead to an erroneous increase say in butter production in Holland, if the cheaper potential supplier would have been Denmark. It very much depends on the data of the actual circumstances whether one or the other aspect is more important. A happy formulation of the two aspects of a partial customs union has been VINER's distinction between the *trade-creating* elements and the *trade-diverting* elements of a union, the two elements just exemplified.

CHAPTER III

INTERNATIONAL MOVEMENTS OF FACTORS: LAND, LABOUR AND CAPITAL

III.1. As observed in chapter I (cf. I.7), products may not only be the object of economic intercourse between nations, but also movements of factors, be it to a much lesser degree. They will briefly be discussed in this chapter.

Movements of *land*, in the literal sense of the word, are impossible of course. The transfer of territory from one nation to another may, however, be considered an example. This sometimes has assumed considerable dimensions, as may be exemplified by the cases of Austria, Yougoslavia and Rumania after the First World War, the history of Poland and the Baltic States and the reduction in German territory after the Second World War. The common characteristic of all these examples is their political rather than normal economic nature. Considerable increases in territory of course have also occurred in colonial areas, by means which cannot now be considered to be very different from the ones previously mentioned. The more satisfactory examples of any extent are the examples of the exploration and consequent use of newly discovered empty territories, as was almost the case with the United States. The creation of new land by reclamation presents the most attractive form of occupation where not even the slightest chance of depriving other peoples of their resources is involved, but its extent so far has been very modest only. And in a way we are leaving the concept of movement of factors between nations if we are thinking of these one-sided additions to territory.

It may be stated anyhow that transfer of territory is not now considered a normal element of international economic policy.

III.2. Movements of *labour*, i.e. of population, known as *migration*, have been important above all for certain areas of immigration, where they constituted the larger part of the increase in population during some periods. This was particularly the case with the United States of America between 1850 and 1924, when some 30 millions moved to that country. For the countries from which these emigrants moved the significance of the decrease in population pressure was usually only modest: the largest percentage of a population that ever emigrated in one year having been somewhat above 1 per cent.

After 1924 the extent of international migration has been very much reduced. The reason is obvious: to the mass of the workers in an immigration territory it is a disadvantage if workers from poorer countries come in and increase the supply of labour, the consequence being a *pressure on wages*. This conclusion might be erroneous as far as the United States would in fact have a population below the optimum population (cf. Ch. I). But there are reasons to doubt that proposition. This opposition against immigration constitutes a serious example of a conflict of interests between the workers of a wealthy territory and the rest of the world. In general it may be said to be to the advantage of world production if labour is being transferred from countries where its productivity is low to countries where it is high. This conflict is a tragic one. Its solution is hampered by the fact that the supply of labour in the overpopulated areas in the Far East is so endless that the American worker does not see a solution in the admission of immigrants unless at the same time some prospect existed limiting the supply of labour. In India the government h recognized officially the importance of *'family plannin* and thus a beginning of understanding for this side of tl problem has been shown. It is to be hoped that at a lat stage, the less populated areas will be prepared to revi their immigration policy under certain guarantees of check to population increases.

III.3. In the present circumstances, and in fact alreac since the middle of the nineteenth century, the most in portant form of international movements of factors is, froi the economic point of view, presented by *capital move ments*. It may take the form of loans granted by on country to another, upon which regular amortizations an interest have to be paid, or it may take the form of partici pations, on which no amortization, but dividends are bein paid. Loans may be subdivided into short-term and long term loans. For the process of production long-term loan and participations are the more important types: they com down, in real terms, to the transfer, from one country to th other, of commodity stocks of either durable or non durable character. Durable commodities like railway equip ment, machinery etc. make it possible to create productiv enterprises and non-durable supplies to put them int operation. Once they operate they will have to be able t pay their workers from the proceeds of their production the non-durable supplies are necessary to bridge the gap between the moment when operation starts and the moment when sales are at their normal level. The annual payments of interest and amortization or of dividends represent an annual 'mortgage' of part of the increased production which in the case of a productive investment can be

TABLE V

SOME DATA ABOUT THE NATIONAL WEALTH AND FOREIGN INVESTMENTS OF FOUR COUNTRIES
(000,000,000's omitted)

Country	*Year*	*Currency*	*National Wealth*	*Foreign Invest-ments*	*Further data about the figures in column 5*
1	*2*	*3*	*4*	*5*	*6*
France	1913	Frs	300	45	Russia 11.3; rest of Europe 16.2; Fr.[1] col. 4.0; remainder 13.5
Germ.	1913	Marks	350	23.5	Austria-Hungary 3.0; rest of Europe 9.5; America 7.5; remainder 3.5
Gr. B.	1914	£	16	3.76	Empire 1.78; U.S.A. 0.76; So. and Cent. Am. incl. Mexico 0.76; remainder 0.46
	1929	£		3.7[2]	
	1935	£	21.5	3.8[2]	
	1938	£		4.0[2]	
U.S.A.	1914	$	107	1.9[2]	
	1930	$		15.2[3]	Europe 4.9; Asia 1.0; Canada 3.9; Cent. and So. Am. 5.2
	1938	$	220	11.8	
				11.1[2]	Canada 3.7; So. Am. 2.5; Europe 2.3; Foreign property in U.S.A. 7.9
	1943	$		13.3	Canada 4.4; Gr. Britain 1.0; other British countries 0.4; Cent. and So. Am. 3.3; Germany 1.3; Italy 0.3 Foreign property in U.S.A. 13.15

[1] Germ. = Germany, Fr. = France, Gr. B. = Great Britain; U.S.A. = United States.

[2] Long term investments only.

[3] Only private-long term investments. In addition, a balance of short-term investments of -1.1 and loans by the government to foreign governments (war loans) 7.7.

actually borne. Usually the lending area will be one of the highly developed and the borrowing area one of the less developed countries. Capital is flowing, in such a case, from countries where it is less productive to countries where it is more productive. These movements of capital contribute, in this way, to a decrease in the inequality of living standards. Whether the process has ever been sufficient to stop the divergency in living standards is doubtful. It is probable that in order to do so these movements would have to be much more important.

Private capital movements, which were an important part of total capital movements before World War I (cf. table V) have diminished because of increasing political uncertainty about the possibilities to receive dividends or interest and amortization. In the colonial era there was, for a number of countries at least, practical certainty about these transfers, whereas in recent periods the tendency to take autonomous decisions increased. These decisions are partly a consequence of decreased monetary stability in the countries concerned and partly of a certain aversion towards private foreign capital.

There is another important aspect to the problem of investment in underdeveloped countries. In a number of cases such investments are not as remunerative as might have been deduced from the scarcity of capital in such countries. In other words: the efficiency of production sometimes is so low as to make such investments hardly attractive. This seems to be due to some extent to the absence of certain general facilities such as energy supply, a good transportation system, reasonable housing conditions and a certain minimum of training of the workers. One may speak, in this connection, of a vicious circle: if for some reason the capital stock per head is low it is difficult to increase it; once the circle were broken, it might be easier to increase capital intensity further. The only way to attain this higher level that seems possible is an international effort, in the *public* sphere, to supply the basic equipment in the sectors just indicated.

III.4. *Short-term capital movements* are not able to contribute in a direct way to the long-term increase of equipment or of commodity stocks of a country. Their action is therefore not to be expected in the commodity sphere but rather in the financial sector. Short-term credits may help to overcome temporary difficulties in the financing of foreign payments and so prevent interruptions in the smooth functioning of the economy. They may promote, by so doing, financial stability, i.e. before all the maintenance of exchange rates during periods of depression and so indirectly contribute to the development process.

Chapter IV

THE MECHANISM OF FINANCIAL TRANSACTIONS

IV.1. The organization of production and consumption in the larger part of most countries is based on a fargoing division of labour, as we have seen, and a complex network of transactions is the consequence, for which payments have to be made. These are made with the aid of various *means of payments*, differing between countries. The only means of payments that is accepted everywhere is *gold;* or, as we express it, gold is 'legal tender' everywhere. Using gold for all payments to be made would, however, be rather expensive in two ways: a considerable value would have to be 'invested' in a country's stock of money in circulation and, in addition, the shipment of gold to other countries requires relatively high costs of transportation, insurance etc. Using paper money is cheaper in both respects and more convenient in many ways. Since paper money has, however, no intrinsic value, it has to derive its value from legal provisions, which link it up with a certain government. and therefore restrict its validity to a certain country. Payments from one country to another therefore require a '*transfer*', i.e. transformation of home money into foreign money. This is effectuated by exchanging the various currencies against each other at a certain market price, called the *exchange rate.*

IV.2. The set of all payments made in a certain period (e.g. a year) between a country and all other countries is called that country's *balance of payments* (cf. table VI). Usually this 'balance' is presented in the form of a table showing on one side all payments made by the country and on the other side all payments received (the debit and the credit side, respectively). It may further be subdivided into the *current items*, which are payments for current transactions in goods and services, and the *capital items*, being payments for property titles in the widest sense, and gold shipments. Among the current items the payments for commodities (imports and exports) together are also called the *balance of trade*, whereas the payments for services, including shipping freights, interest and dividends as payments for 'capital services', tourist receipts, insurance premiums, fees for free professions, etc. are summarized as the *'invisible items'*. As a third category, *unilateral payments* or *donations* may occur in the balance of payments, i.e. payments not offsett by material transactions. Well-known examples of such payments are the foreign aid as received from the United States under the European Recovery Program (Marshall Plan) by European countries and the reparation payments made by Germany after the First World War.

IV.3. Of the various items the gold shipments are often considered to be the *'balancing item'*, necessary to 'pay for the deficit in the other items' (or, as the case may be, receivable because of a surplus in the other items). As a first approximation it may be stated this way, but it should be added that sometimes also short-term capital movements of a certain type perform this function, e.g. short-term credit obtained by some international financial agency or centre. To the extent that a state of disequilibrium influences certain of the items in an automatic way, the gap may partly also be filled by parts of the other items.

If the equilibrating item is included it is obvious that

TABLE VI

EXAMPLE OF BALANCE OF PAYMENTS; UNITED STATES, 1953, IN MILLIARDS OF $

(*A* equals total of 1–8; *B* of 9–10; *C* of 11–19)

	Credits		*Debits*
A. Goods and Services (net)	*4.5*		—
1. Merchandise. Exports, f.a.s.	16.4	Imports, f.a.s.	11.9
3. Foreign travel	0.5		0.9
4. Transportation	1.3		1.1
5. Insurance	..		..
6. Investment income	1.9		0.4
7. Government, n.i.e.	0.5		2.1
8. Miscellaneous	0.7		0.3
B. Donations (net)	—		*6.5*
9. Private	—		0.5
10. Official:			
10.1 Military (net)	—		4.3
10.2 Other	—		1.8
Net total (1 through 10.1)			*0.2*
Net total (1 through 10.2)			*2.0*
C. Capital and Monetary Gold (net)	*1.7*		
11, 15 Long-term liabilities (net)	0.1		
12, 16 Short-term liabilities (net)	1.0		
13, 17 Long-term assets (net)			0.7
14, 18 Short-term assets (net)	0.2		
19 Monetary gold	1.2		
Net errors and omissions and mult. settlements	0.3		

Source: Balance of Payments Yearbook, edited by the International Monetary Fund.

there will always be equilibrium, which for this reason will be called '*formal equilibrium*'. If it is not included, the phrase 'balance of payments' has a different meaning. Thus conceived, it may or may not be in equilibrium. If it is, this balance of payments (second definition) is said to be in *'material equilibrium'*. Under these circumstances the balancing item therefore is equal to zero. In the long run, i.e. as an average over a long period, the situation must be near to material equilibrium: otherwise there would have to be a permanent accumulation of gold somewhere and a permanent drain elsewhere. There may be, however, a modest deviation from material equilibrium for quite some time, e.g. if a country is gradually liquidating a large gold stock, or if a country is producing gold itself. In a way the production of gold could, however, in the latter case, be considered to be a normal economic activity of the country and then the corresponding gold shipments might be classified as exports, which would restore material equilibrium as understood here.

IV.4. The rates of exchange against which foreign money can be obtained are not exactly constant. In this respect there are different systems of organization for foreign payments, some with almost completely stable rates, some with more fluctuating rates. *Stability of exchange rates* is an advantage for economic calculations, but it may be non-compatible with stable prices or with long-term equilibrium in the balance of payments or with other objectives still, which may be considered more desirable. Usually systems are preferred which show very little changes in rates. Incidental revisions may be necessary in the case of 'fundamental disequilibrium', the term used in the Charter of the International Monetary Fund, to indicate situations of a more lasting disequilibrium.

The organization that existed a long time and was known as the *'gold standard'* worked in about the following way.

Under this system there is a fixed price against which the Central Bank buys or sells gold. For each foreign currency, say the dollar, there is one rate of exchange, say in the Netherlands *f* 3,80, which corresponds to this price of gold. It is called the *'parity rate'* or *'parity'*. With the rate at or very near to parity it is more advantageous to pay an American firm by buying dollars than by buying gold and sending this, since transportation of gold is more expensive than a bank transfer. The rate of exchange under the gold standard was not, however, completely stable and responded to fluctuations in demand and supply. If during a certain time unit demand for dollars surpasses their supply, the rate of exchange will rise. Payment in gold may then become relatively more attractive and beyond a certain rate definitely more attractive. This rate is called the *'upper gold point'*. Conversely, if demand is low, a rate may be reached, the *'lower gold point'*, where it becomes more advantageous, for Americans, to ship gold towards the Netherlands. We may summarize this by saying that between the gold points gold shipments are unremunerative. Only a rigorous material equilibrium in the balance of payments will, however, keep the exchange rates within the range of the gold points. *The first line of defence* against disequilibrium thus is a movement of the exchange rate to one of the gold points, and the *second* consists of the automatic shipment of gold. As long as gold is shipped, the rate will remain at one of the gold points. But there is a threat of exhausting the gold stock of the weaker of the two countries if the movement goes on. This may be prevented by further lines of defence. We will speak of (a) 'indirect' and (b) 'direct action'.

IV.5. *Indirect action*, being the *third line of defence*, may be of two types again, to be called automatic and deliberate.

Automatic action occurs as a consequence of the changes in monetary circulation which accompany the gold shipments. If gold is sent by the country considered (Holland) national means of circulation (notes or bank deposits) are offered to the Central Bank for the purchase of gold and so the monetary circulation is drained. The consequences will be, in principle, a reduction in incomes, leading to reduced imports and lower prices. In principle, too, the latter will stimulate exports. It should, however, be observed that this automatism does not work very strongly and quickly. Gold shipments are not usually very important in comparison to total imports and exports and hence their influence on imports and, via prices, on exports will be small. In addition the operation of this mechanism requires time, probably several months. It will be discussed somewhat more extensively in chapter V.

More can be expected, at short notice, from the *deliberate* type of action, which therefore represents the real 'third line' of defence. Its usual form under the gold standard was the raising by the Central Bank, of the *discount rate*, i.e. the interest rate the Bank charges for short credits (on commercial bills). (Some other rates usually were varied at the same time). This rate influences the other, 'free' interest rates in the country and acts in two ways. First, it tends to have similar consequences as just described for automatic action; but these again will be only weak and slow. Secondly, and this is probably the most important consequence, it will attract foreign short-term capital or prevent home short-term capital from being invested elsewhere. To be sure this inflow of short-term capital will only occur if no counteracting 'psychological' factors work, i.e. if a lack of confidence in the future of the currency of the country considered does not offset the purely economic

AN EXAMPLE OF CLASSICAL DISCOUNT POLICY (DISCOUNT RATE OF THE NETHERLANDS BANK BETWEEN APRIL 1935 AND MARCH 1936).

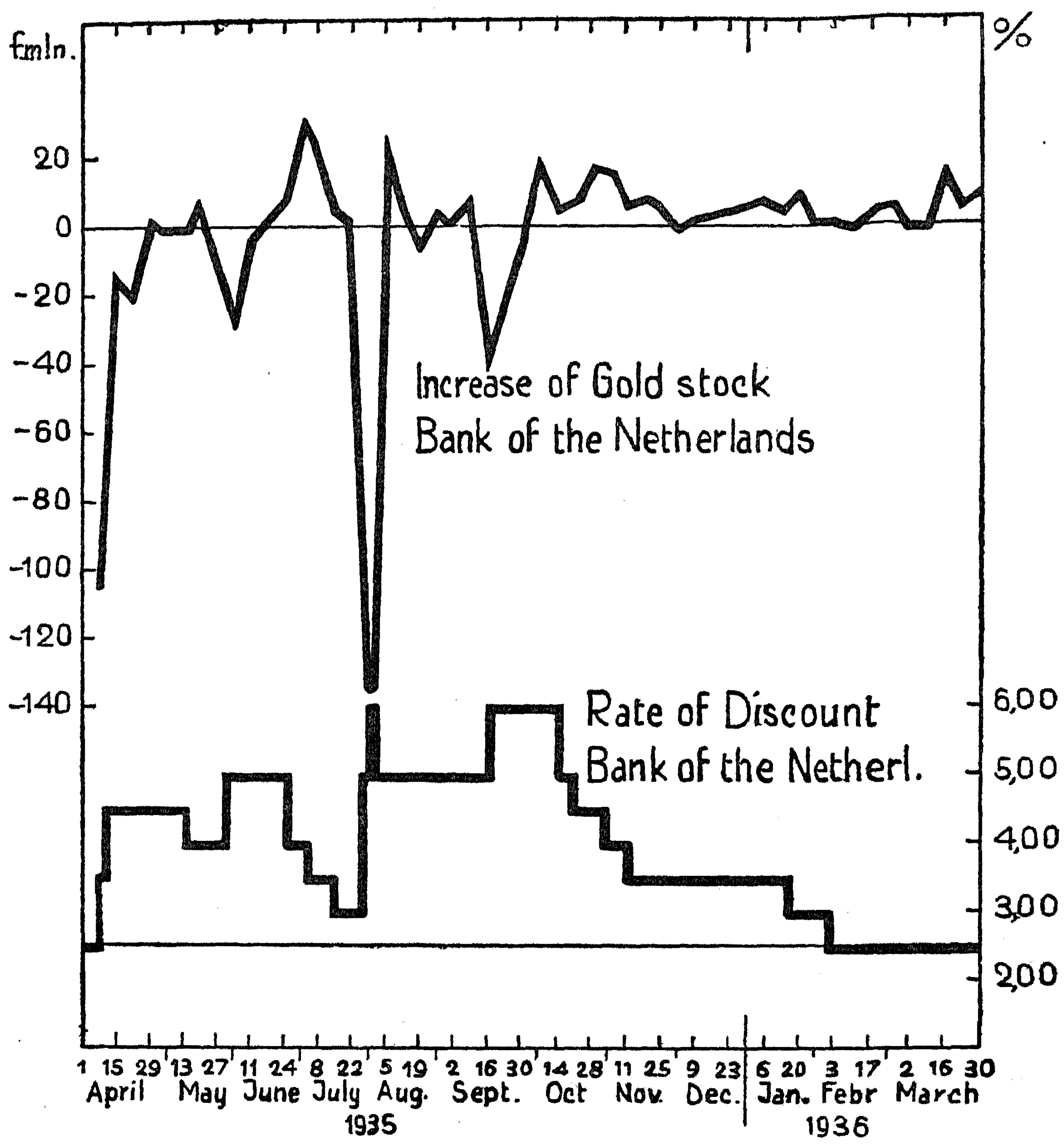


Diagram 4

The rate is raised after every heavy fall in gold stock and lowered after a recovery in gold holdings.

considerations of yield. The remedy provided by this inflow can only be a temporary one, since it represents a shift in the distribution of existing assets, i.e. in the distribution of 'stocks' and not a continuous flow. It may be an acceptable remedy for a short-term disequilibrium therefore, but it cannot remedy a lasting or 'fundamental' disequilibrium.

The operation and results of 'deliberate indirect action', or, in the usual language, of discount policy, may be well exemplified by the 'defence of the Dutch guilder' during 1935/6 (cf. diagram 4). It will be seen how decreases of the gold stock of the Netherlands were followed by rises in the discount rate which, in their turn, led to a temporary restoration of the reserve. Nevertheless, in September 1936 the decision to devalue had to be taken, together with the only two remaining members of the 'gold block', France and Switzerland.

IV.6. '*Direct action*' may be the only way open and hence the last or *fourth* line of defence, if indirect action appears to be unsuccessful or unpromising. This may be so especially in the case of a 'fundamental disequilibrium', i.e. a disequilibrium in the underlying economic variables, such as the price and cost level of the country concerned.

Such direct action may either consist of a change in the gold price and hence in the parity rates; or it may consist of stopping the sale of gold. In the former case the currency concerned has *devalued;* in the latter case the old parity may be maintained, but the currency will have become *inconvertible:* the parity has then been maintained at the cost of freedom. Both these steps will be a shock to confidence and may therefore disturb the financial structure of the country, at least for a short period. Central Banks and governments will evidently try to avoid them as long as possible; one of the ways to do so being the possession of a large gold reserve. As will be discussed in chapter V, even the largest gold stock will be insufficient, however, if the country is in fundamental disequilibrium.

With a situation of inconvertibility international payments have to be regulated on a basis of *'clearing'*. The simplest form of clearing is possible with respect to the payments for a bilateral equilibrium flow (cf. section II.2): here a direct compensation, without any 'payment' is possible. But also for circular flows of a greater length (cf. II.2) clearing, be it on a multilateral basis, is possible. For open flows the situation is still less easy: here evidently clearing is only possible if the first country in such a flow grants a credit to the last country, which then is able to pay the last but one; this country can pay the last but two, and so on, until the first country obtains payment from the second in the flow. The series of payments just mentioned was made possible, under the European Recovery Program, by a chain of 'drawing rights' of each of the countries concerned on its successor in the chain. No provisions are possible, in a system of clearing, for the remaining 'net positions'.[1]

IV.7. The *'reserve'* or *'cover'* of a currency system represents part of the assets which the Central Bank possesses against the liabilities represented by its note circulation and deposits. The remaining part of the assets usually consists of government bonds of one type or another, which are of no significance, however, as international means of payments. The reserve need not only consist of gold; it consisted, for quite some time, also of silver. And it is conceivable that

[1] Cf. M. H. Ekker, 'Equilibrium of international trade and international monetary compensations', Weltw. Archiv 64 (1950), p. 204.

other commodities be used as well. One special form that has been advocated recently is the system of a *'raw material standard'*, where part of the reserve would consist of warehouse bonds representing the property of certain quantities of raw materials, in a specific composition. The consequences of a raw material standard, i.e. the preparedness of central banks to buy or sell at fixed prices certain 'baskets of raw materials' would be a stabilization of the average price level of the raw materials included. Such a stabilization could contribute to the stabilization of the trade cycle, since that cycle is partly due to variations in the general price level. This is particularly true of the variations in income as calculated by many business firms: changes in inventory prices are often wrongly considered as an element of income. This represents the so-called 'accounting error' to which the business cycle has partly been ascribed by various authors. This error would be considerably reduced by a stabilization of raw material prices.

IV.8. Usually a system of *'flexible exchange rates'* is presented as the opposite of the 'gold standard', though in principle the differences are not large. It operates in a similar way. But quantitatively the differences may be considerable. The main difference of principle is that no automatic shipment of gold is applied: gold is only used by an *Exchange Equalization Fund* run by the government in order to influence exchange rates. If current demand for dollars, e.g., is so much higher than the current supply of dollars as to depreciate the rate of exchange below a certain lower limit, the Fund will supply dollars or gold in order to support the rate. Conversely it may buy dollars or gold during periods of relatively low demand. Usually the lower and the upper limit show a much wider margin — and this is a quantitative difference — than with the gold standard, e.g. 20 per cent as against perhaps 1 per cent.

It should not be forgotten, however, that there is not only one system of flexible rates or only one system of the gold standard. Both occur in a number of alternative versions; and often there has not been any system at all, especially under circumstances where disequilibrium is such that the authorities loose control of the situation. This is particularly so in the case of '*hyperinflation*'. The standard case in modern Western history has been the hyperinflation in Germany in 1922 and 1923. After an initial disequilibrium as a consequence of post-war developments (government deficits financed by money creation) demand for foreign currencies increased more and more because of speculation against the mark and of vanishing confidence in its ultimate recovery. The process became a fall of its exchange rate to one billionth (in the Continental sense of that word, i.e. $1:10^{12}$) of the parity rate.

One of the functions of an Exchange Equalization Fund is the prevention and counteraction of destructive speculation. It can do so only, however, if there is not a fundamental disequilibrium; its function is one of bridging temporary gaps. It cannot bridge permanent gaps.

Chapter V

DISEQUILIBRIUM AND EQUILIBRIUM IN THE BALANCE OF PAYMENTS

V.1. In this chapter some consequences of disequilibrium in the balance of payments will be considered; the conditions for equilibrium will be formulated and some techniques of short-term adaptations discussed.

In a state of *multilateral payments equilibrium* between nations there will be equality between the payments any country has to make to other countries and the receipts it has to expect from other countries. This does not necessarily imply, as we discussed already, bilateral equilibrium between any two countries. Country A may have to pay more to country B than country B to country A; there will, then, be a deficit of country A with regard to country B in bilateral intercourse. But if they have 'overall' equilibrium, A will have a surplus with some other country and B a deficit, and both can use their surpluses to pay for their deficits. In such a situation there will be no difficulty to declare any currency fully convertible into any other; demand for and supply of each currency are equal to each other.

V.2. This easy situation vanishes if the balances of payments are *not* in *equilibrium*. Even then convertibility may for some time be maintained, if all countries are in the possession of gold or equivalent reserves. In a situation of disequilibrium there will be surplus and deficit countries. The reserves of the former will increase, and those of the latter decrease and finally get exhausted. After this exhaustion the currency of the country concerned will no longer be convertible at the existing rate of exchange. Certain portions of the demand for foreign currency can no longer be satisfied and the currency will be *'soft'* as distinguished from the *'hard'* currencies of the surplus countries. Convertibility could — perhaps — be restored if the exchange rate was lowered, i.e. the price of one unit of that currency in terms of the others was lowered. The ratio of this equilibrium rate to the actual rate may be considered a measure of the 'degree of softness' of the currency concerned. The possibility to define this degree depends on the existence of an equilibrium rate; we will assume this to exist, although under certain circumstances such an equilibrium rate might not be attainable in the short run. In order not to disorganize international economic intercourse completely, payments of a soft currency will have to be regulated; this means that certain demands for foreign currency will have to be cut off by *'currency regulations'*; these are, in their material consequences, equivalent to quota systems imposed on trade. An important example of a complicated set of regulations was supplied by the monetary organization of the Sterling Area after World War II, of which a simplified scheme is given in table VII.

v.3. After a *disturbance of pre-existing equilibria* as for example caused by a war, a currency may be soft for some time because of a fall in general productivity of the country or because of exceptional demand (as far as financed by inflationary means). With a gradual restoration of productivity and of a sound internal financial situation, the question may come up whether convertibility can be restored, perhaps even at the pre-existing rates. For tempo-

TABLE VII

TRANSFERABILITY OF STERLING FOR DIRECT CURRENT TRANSACTIONS AMONG NON-STERLING, NON-DOLLAR COUNTRIES

To / *From*	*Members of Transferable Accounts Area* and *E.P.U.*[1]	*Members of Transferable Accounts Area but* not *E.P.U.*[2]	*Members of Bilateral Group* and *E.P.U.*[3]	*Members of Bilateral Group but* not *E.P.U.*[4]
Members of Transferable Accounts Area *and* E.P.U.	Yes	Yes	Yes	No
Members of Transferable Accounts Area but *not* E.P.U.	Yes	Yes	No	No
Members of Bilateral Group *and* E.P.U.	Yes	No	Yes	No
Members of Bilateral Group but *not* E.P.U.	No	No	No	No

Key to membership of each group:

[1] Austria, Denmark, German Federal Republic, Greece, Italian Monetary Area, Netherlands Monetary Area, Norway, Sweden.

[2] Sudan, Chile, Czechoslovakia, Egypt, Ethiopia, Finland, Poland, Spanish Monetary Area, Thailand, U.S.S.R.

[3] Belgian Monetary Area, French Franc Area, Portuguese Monetary Area, Switzerland, Turkey.

[4] Argentina, Brazil, Bulgaria, China, Hungary, Iran, Israel, Japan, Lebanon, Paraguay, Peru, Rumania, Syria, Tangier, Uruguay, Vatican City, Yugoslavia.

Source: J. R. Sargent, 'Convertibility', Oxford Economic Papers 6 (1954) p. 55.

rary disturbances this is likely to be so; and this likelihood is one of the reasons why regulations are applied during the period of softness. Another reason may be that there is no certainty about the existence of a short-run equilibrium rate.

In order to answer the important question whether, in the circumstances just indicated, the moment has come to *re-establish convertibility*, the conditions have to be found which should be fulfilled in order that it can persist. Evidently these conditions are dependent on the exact type of convertibility envisaged. Usually it will be, in one or more respects, *partial* convertibility which is aimed at. It may be partial in that only some groups of transactions are involved, e.g. only current transactions and not capital transactions. Or it may be partial because convertibility in some other but not all other currencies is aimed at. Evidently the relevant conditions are that demand for and supply of the currencies with which convertibility is restored should be equal. This demand and supply refer to the items in the balance of payments bearing on the *currencies and type of transactions concerned, under the new circumstances*. The 'new circumstances' are on the one hand that the currency restrictions are now eliminated and that 'free' demand and supply should be estimated; on the other hand they imply certain shifts in transactions likely to occur as a consequence of convertibility. These consequences may even be the re-imposition of certain trade restrictions if it was felt that otherwise demand for foreign currency might rise too much.

V.4. The concepts just mentioned may be somewhat more specified by considering in some more detail the balance of payments of the country concerned. The items of that balance may be subdivided according to two criteria simultaneously, namely, whether referring to countries S with which there is a surplus or countries D with which there is a deficit and whether referring to countries C with which convertibility is to be restored or to countries N with which it is not to be restored. It will be assumed that the type of convertibility envisaged is to make the country's money convertible into *currencies themselves already convertible into gold* (to call 'convertible money'). This is not the only type of convertibility conceivable. Let the net transactions with the four groups be as indicated in the table below, where a and c therefore represent surpluses and b and d deficits:

Net transactions (before convertibility)

with countries	S(urplus)	D(eficit)
C(onvertible)	$+a$	$-b$
N(on-convertible)	$+c$	$-d$

Before convertibility the country considered receives a in convertible money (say dollars, for convenience's sake) and c in non-convertible (say soft) money, i.e. in money not yet convertible in \$. After convertibility the country will again receive a in \$ and c in soft money. Before convertibility it paid b in \$ but d in soft money; after convertibility it will have to pay, as a maximum, both in \$. Primarily there is a disadvantage therefore which is exactly the point at stake: an amount d may have to be paid in \$ now. This disadvantage is the smaller, the smaller group N is, i.e. the larger the group of countries which, together with the country considered, also plan to make their currency convertible. In a way the condition to be fulfilled therefore is that the country can supply an extra amount of d in \$.

There are, however, other consequences to be taken into account. The country's own currency, say guilders, will be in higher demand as a consequence of the considered convertibility. This means that there will be a tendency for foreign countries to supply commodities at a somewhat lower price and to demand somewhat less products. This will change the balance of payments, be it in an unknown direction. In addition, and partly in response to the tendency just described, a tendency for the country studied to introduce further restrictions on trade with country N will develop, since this will reduce the obligation to supply dollars to those countries.

V.5. The above analysis may have exemplified how to judge the conditions that have to be fulfilled in order to warrant persistency. It will also be clear that the risks involved in complete convertibility, i.e. including capital items, are far larger than those involved in convertibility on current items only. Especially the switches in capital assets that the public may desire to perform are very difficult to foresee. Some of these risks have been demonstrated by the attempt in 1947 to make sterling convertible. The attempt was unsuccessful and had to be discontinued because of too heavy drains on the gold stock of the Sterling Area.

A last remark on convertibility we want to make is that the decisions taken by different countries should be *consistent* one with the other: convertibility of currency A into currency B and of B into C has to imply convertibility of A into C also; there have to be groups of mutually convertible currencies and these should be of about equal strength.

V.6. Since it will be clear that universal convertibility, which is a great advantage for international trade, is only possible if *balance of payments equilibrium* is warranted, we will now consider somewhat more closely the conditions for such equilibrium and the instruments that may be used to attain or to maintain it. Balance of payments equilibrium is the financial expression of an equilibrium in the 'real' economic sphere, i.e. in production and trade.

We will discuss, in succession, the *general characteristics* of an equilibrated situation and the *possibilities*, in concrete situations, to *attain and maintain equilibrium.*

Equilibrium in the balance of payments of any country is *equivalent to equality between total income and total expenditure*. This equivalence is most easily understood as a consequence of the definition of income of a national economy. In order to fix the ideas we have to specify the nature of the economy; but our conclusion will not depend on that nature. We will assume that imports are only imports of raw materials and semi-finished articles; in a way this is always correct, since it may be maintained that practically no article at the moment of importation is finished in the economic sense of the word: it has almost always to pass some stage of trade at least. This assumption means that the nation's expenditures (i.e. its spending of income) only consists of expenditures to nationals. Indicating now by:

Y — the nation's income
X — total expenditure
E — exports of goods and services
M — imports of goods and services

the definition of income runs:

$$Y = X + E - M$$

In fact, $X + E$ represent the *gross value of all production,*

M the costs of the nation's production and hence their difference represents income. The word gross should be specified, since it has different meanings; it does not, in our case, mean gross as far as investment expenditure is concerned. If so, we would have to deduct depreciation as a separate item, and the definition would then run

$$Y = X' + E - N - M$$

where X' is expenditure including gross investments and N is depreciation allowances.

The formula may be written in a different way:

$$X - Y = M - E$$

telling that the excess, if any, of expenditure over income equals the excess of imports over exports (in the widest sense), or the import surplus. It follows that equality between E and M implies equality between Y and X, or, as it is sometimes called, *monetary equilibrium.* In the absence of monetary equilibrium, the figure $X - Y$ will be called the *inflationary gap*, if it is positive; if it is negative, the positive figure $Y - X$ will be called the *deflationary gap*.

An important gap between Y and X can only exist for countries with a considerable portion of foreign trade. In a closed country (and hence for the world as a whole), Y will always, by its definition, be equal to X, since X has to be spent completely inside the country and an increase in X will therefore result in an increase in Y. The criterion for monetary equilibrium just given therefore is less practical for big countries; one would have to be very precise about the time lag between Y and X in order to apply it correctly. What should be compared is X with the value of Y shortly before. If one compared simultaneous values of X and Y they would always be equal; if the volume of production cannot adapt itself to X, the price level will do the rest of the adaptation. For a big country a more practical criterion will therefore be the *constancy of prices*, which in its turn would be an inaccurate criterion for small countries: the latter cannot influence the price level much and will never raise prices if even X exceeds Y by much.

This *equivalence between balance of payments equilibrium and monetary equilibrium for small countries* is very important since most countries are, in this sense, small. It implies that one certain way of attaining balance of payments equilibrium is to make national expenditure equal to national income or 'to live within the limits set by income'. One should, nevertheless, be careful in using this formula; changes in expenditure very often cause changes in income and an attempt to cut expenditures may not always lead to the expected effect. We will come back to this point below. Be it sufficient for the moment to say that the country can regulate the *autonomous part of its expenditure*, not the part which depends on its income.

Apart from it, there is the other characteristic of equilibrium which matters, namely, *the level of production* and hence of employment, with which it corresponds. Equilibrium in the wider sense implies a volume of production where no productive agents are unused, or only a small portion which may be necessary as a reserve for effectuating shifts. This is especially desirable for labour and is equivalent to '*high and stable employment*'. Since with a higher level of production also a higher level of imports corresponds, high production requires high imports and, because of equilibrium in the balance of payments, also high exports. The latter have to be saleable if they are at all to be obtained and the condition of a high-level equilibrium, therefore, is that *prices are sufficiently low* to make exports saleable. Prices are thus the second important factor, alongside with national expenditure, whose level has to obey a certain condition if equilibrium at a high level is to be realised.

v.7. It should be realised that the position of equilibrium as specified in the previous section is one of *equilibrium relatively to other countries*. In order that the set of all countries be in equilibrium, they have all to satisfy the conditions indicated, namely, that their balance of payments be in equilibrium and that their price level be 'in line with the world market'. Now if we have a 'world' of say ten countries, there are ten balance of payments surpluses (positive or negative), but of these only nine are independent from each other. The tenth must always add up with the nine other to zero since, by definition, there cannot be a surplus or deficit for the world as a whole. Therefore the ten figures of the autonomous expenditures of the ten countries are not all of them relevant to what will happen to the balances of payments. It is only their relative level which matters: nine relative figures determine the nine balance of payments gaps. They may, in addition, 'blow up' their absolute expenditures without affecting their balances of payments. Such 'blowing up' will lead, for the world as a whole, to higher levels of production, as long as there are idle resources, and to higher absolute prices, if full employment has been reached. If the latter phase were attained there may be said to be 'inflation' in the world at large — as in war time — without any balances of payments being in disequilibrium or more in disequilibrium than before. Also, the price levels may be kept 'in line' with each other, and nonetheless all may rise. In such a process small countries can only more or less follow the others; a 'world inflation' can only be avoided by a concerted action or possibly by some of the large countries.

It also follows that a disruption of equilibrium in a small country may either be 'due' to the country's own policy or to the policy of other countries. In this connection we may speak of *'imported' inflation* and *'exported' inflation*. By the former term we understand the price rise in a small country which occurs as a consequence of excessive expenditures elsewhere, causing import prices of the small country to rise; an exported inflation of a small country being a deficit on that country's balance of payments caused by its own excessive expenditure. This latter may not lead to a price rise (small countries can hardly influence world market prices), especially if the balance of payments deficit can be financed. The small countries have the disadvantage of being exposed to imported inflation, without being able to prevent it, but they have the advantage of being able to 'export' their own inflation, in this sense, as long as they have reserves or as long as they are granted credits.

v.8. Having formulated the conditions for balance of payments equilibrium in a general way, we are now going to discuss some possibilities of adaptation in case of disruption of equilibrium. The adaptations to be discussed are those in the realm of national expenditure and price fixation as distinct from the adaptation in the sphere of the central bank, discussed in chapter IV. As already indicated, these adaptations take somewhat more time; the quickest may act after a few months and some ultimate consequences may only occur after years. Apart from short-term capital transfers which have already been discussed in ch. IV and apart from long-term capital transfers which have been discussed in ch. III, and will be considered as given for the moment, maintenance of balance of payments equilibrium means equality in changes of imports and exports in the widest sense, i.e. of commodities and services. If disrupted, the equilibrium will have to be restored by reductions or increases in one or both of these items. The question thus arises how such adaptations can be obtained. The following discussion may be seen as an application of the general remarks just made on the determinants of the balance of payments. For both imports and exports it may be said, as is true of the transactions in any market, that changes may be the consequences of

(1) autonomous changes in demand or supply, without changes in price ratios or absolute prices, and

(2) changes in price ratios, inducing changes in quantities demanded or supplied.

Autonomous changes may be exemplified, on the demand side, i.e. with imports, by reductions in the autonomous expenditures of the nation. Usually these are supposed to be certain investment expenditures and certain state expenditures; partly they are also certain expenditures for consumption. Their common characteristic is their independence from income or prices. If they are reduced, a reduction in import demand will also result. Autonomous reductions in imports may also be obtained, to some extent, by the application of quantitative restrictions (also called quotas). Their net extent is not necessarily equal to the direct restrictions applied, since income may seek other outlets. This is why either an almost complete system of import quotas or reductions in income will be needed. If the former policy is not desired, reductions in income will be the only way; and these can only be obtained by reductions in autonomous expenditure, being the determinant of income.

Autonomous changes on the supply side may be effectuated by rises in productive capacity, leading to increased supplies of export commodities. In the long run these changes will be the most satisfactory ones since they increase rather than restrict production and the standard of life. In the short run their influence will only be restricted since they require new investments and these are limited to a rather modest portion of national income.

V.9. Changes in *price ratios* are the other road towards an adjustment in the balance of payments. They may take the form either of

(i) direct changes in absolute prices of certain commodities, or

(ii) indirect changes, i.e. changes obtained by changes in wage level or rates of exchange.

There are two important sets of problems connected with their application. First, it may be asked whether they are *at all necessary;* secondly, whether, if necessary, they *do work.* They may not be necessary if the changes in autonomous demand and supply which have caused disequilibrium or are feared to cause disequilibrium do themselves already restore equilibrium; or if other changes in autonomous demand or supply are the normal method to overcome disequilibrium. There has been much discussion about the first question — whether price changes are at all necessary — in connection with two topics. One was the influence of capital exports or imports on the balances of payments of the countries concerned; the other the influence of reparation payments required from Germany after the First World War. The general reason why, under certain conditions, no price adaptations would be necessary, is that the shifts in autonomous demand connected with the transfer discussed would by themselves be just sufficient to offset these transfers. Such appears to be the case, upon closer investigation, if the behaviour of the nation is 'classical' in the Keynesian sense, i.e. if the nation spends an increase in disposible resources completely. If the spending behaviour, however, was Keynesian, i.e. not the complete increase in resources would be spent, a disequilibrium in the balance of payments will remain which will have to be eliminated in another way.

Even if the shifts in financial resources which are the origin of a disequilibrium have not, by themselves, already brought about the adaptation in demand, it may be judged that they will do so in the long run or that the most natural return to equilibrium will be another change in autonomous demand or supply, as discussed before.

But there are circumstances under which autonomous changes cannot be hoped for or would have undesirable consequences for, say, the volume of employment. Then the second question becomes relevant, namely, whether changes in price ratios, i.e. in the ratios between national and international prices will be able to do the job. This depends on the reaction of imports and exports to such changes.

V.10. The total *influence of a change in price ratios* on the balance of payments consists of three components: (i) a change in the volume of imports; (ii) a change in the volume of exports; and (iii) a change in the terms of trade. A fall in national prices in relation to foreign ones will raise the volume of exports and so influence the balance of payments favourably. Its influence on the volume of imports is composed of two opposite effects; the rise in export volume will raise the volume of imports also; but the price change will tend to reduce it. The outcome depends on various elasticities. Finally, the influence on the terms of trade will be unfavourable to the balance of payments. Since the different partial effects involved are of opposite signs, the total effect may be negative, zero, or positive. If it is negative, zero or slightly positive, it will be insufficient. The case where it is exactly zero is called the case of *'critical elasticities'*; under certain further assumptions this is the situation if the sum total of the price elasticities of exports and imports equals one. If the elasticities happen to be in the neighbourhood of this situation, price ratio changes cannot therefore help to restore payments equilibrium. Even if they are considerably higher, the response of the balance of payments to changes in price ratios that are within the realm of practical possibilities may be insufficient. This is the case for quantitative restrictions as the only way out of balance of payments difficulties.

The elasticities to which this applies are rather low. There is some evidence that such elasticities actually exist, although opinions among statisticians diverge rather widely. There is quite some evidence, however, that in the long run elasticities will be considerably higher. It may be, therefore, that the critical situation only applies or nearly applies to short-term reactions. This would mean that quantitative restrictions would only be needed as a temporary device and could, afterwards, be removed.

Even if changes in price ratios worked, as far as elasticities of demand and supply are concerned, another question may arise, namely, how to obtain such changes. Direct changes in absolute prices of export products cannot be set by governments in a free economy. If only indirect influencing of these prices is considered feasible, the question is whether the available instruments, namely wage changes and changes in exchange rates, will have the desired effects. Also here situations may occur, where no sufficient response is obtained, since there are other consequences to be expected in addition to those aimed at. A wage change cannot surpass a certain limit and may for that reason be insufficient. A change in the rate of exchange will have consequences for the internal price and wage level and it depends on their extent whether the net effect is sufficient. Statistical investigations have shown, in this case also, that under boom conditions changes in exchange rates do not alter price ratios of national to foreign prices. Here again quantitative restrictions are the only way out. The two cases therefore where either elasticities are low, or price changes cannot be large enough represent cases in which such restrictions are justified; they are the basis for what was called the British 'austerity policy' under the Labour government after the Second World War.