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A SURVEY OF INTERNATIONAL TRADE THEORY

GOTTFRIED HABERLER

Revised and Enlarged Edition

INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS

PRINCETON UNIVERSITY · 1961

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FRITZ MACHLUP, *Director*
International Finance Section

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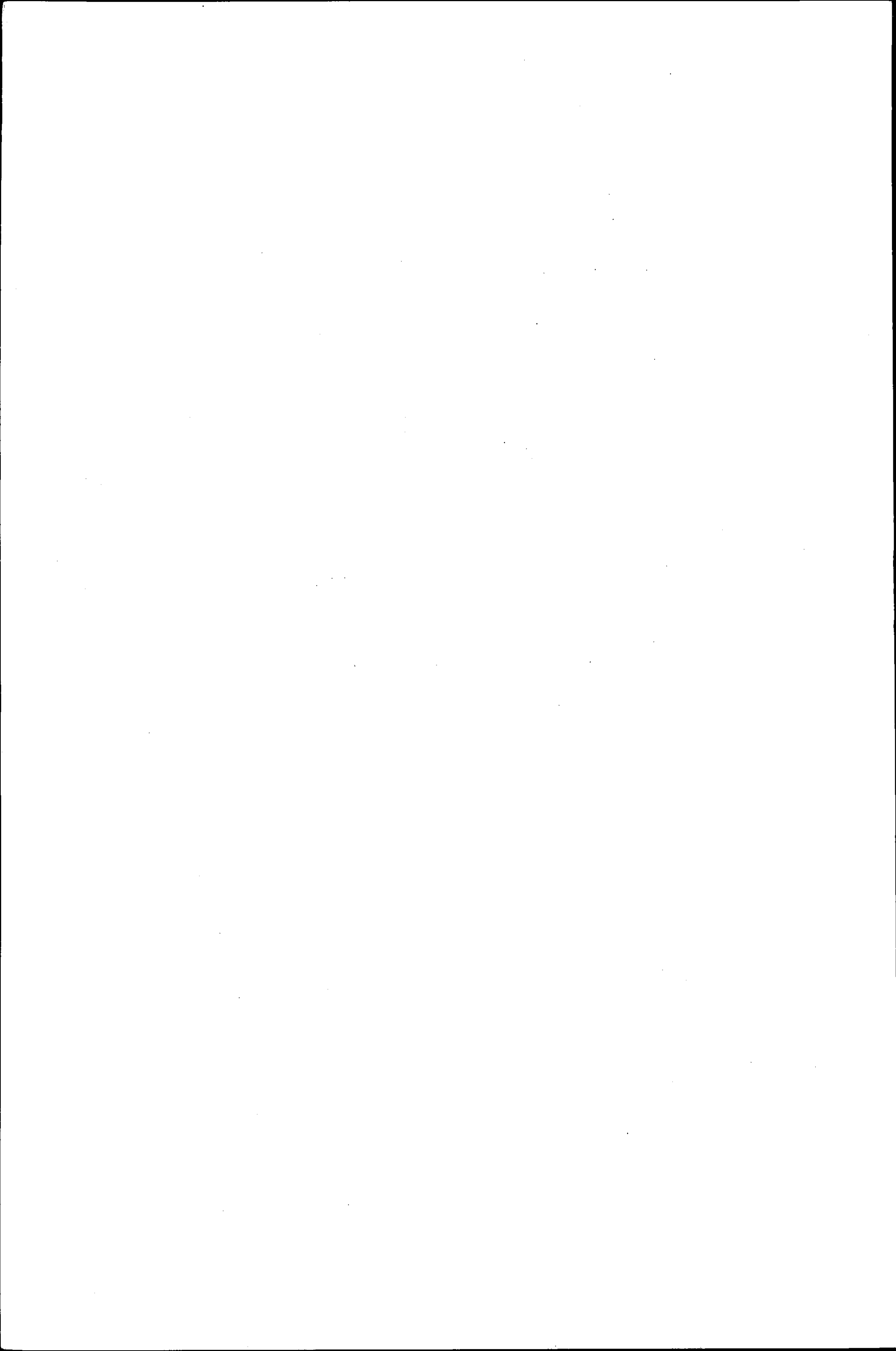


PREFACE TO THE 1961 EDITION

The first edition of this Survey appeared in 1955. It was an enlarged and improved version of an article written in 1952 in German which had appeared in 1954 in Volume I of the *Handwörterbuch der Sozialwissenschaften* (Gustav Fischer, Stuttgart; J.C.B. Mohr [Paul Siebeck], Tübingen; Vandenhock & Ruprecht, Göttingen). I was very grateful to the International Finance Section of the Department of Economics and Sociology of Princeton for suggesting that this article be translated and then published by them. Thanks are also due to the German publishers of the *Handwörterbuch* for generously granting permission to publish the paper in English. The new edition has been thoroughly revised and substantially enlarged.

This paper is an attempt to present in a short space an up-to-date survey of international trade theory, including a short sketch of the monetary theory of the balance-of-payments mechanism. The Survey is confined to a presentation of the theoretical skeleton, with a bare minimum of institutional details and no facts or figures. It is, furthermore, a summary in words, without the aid of mathematics.

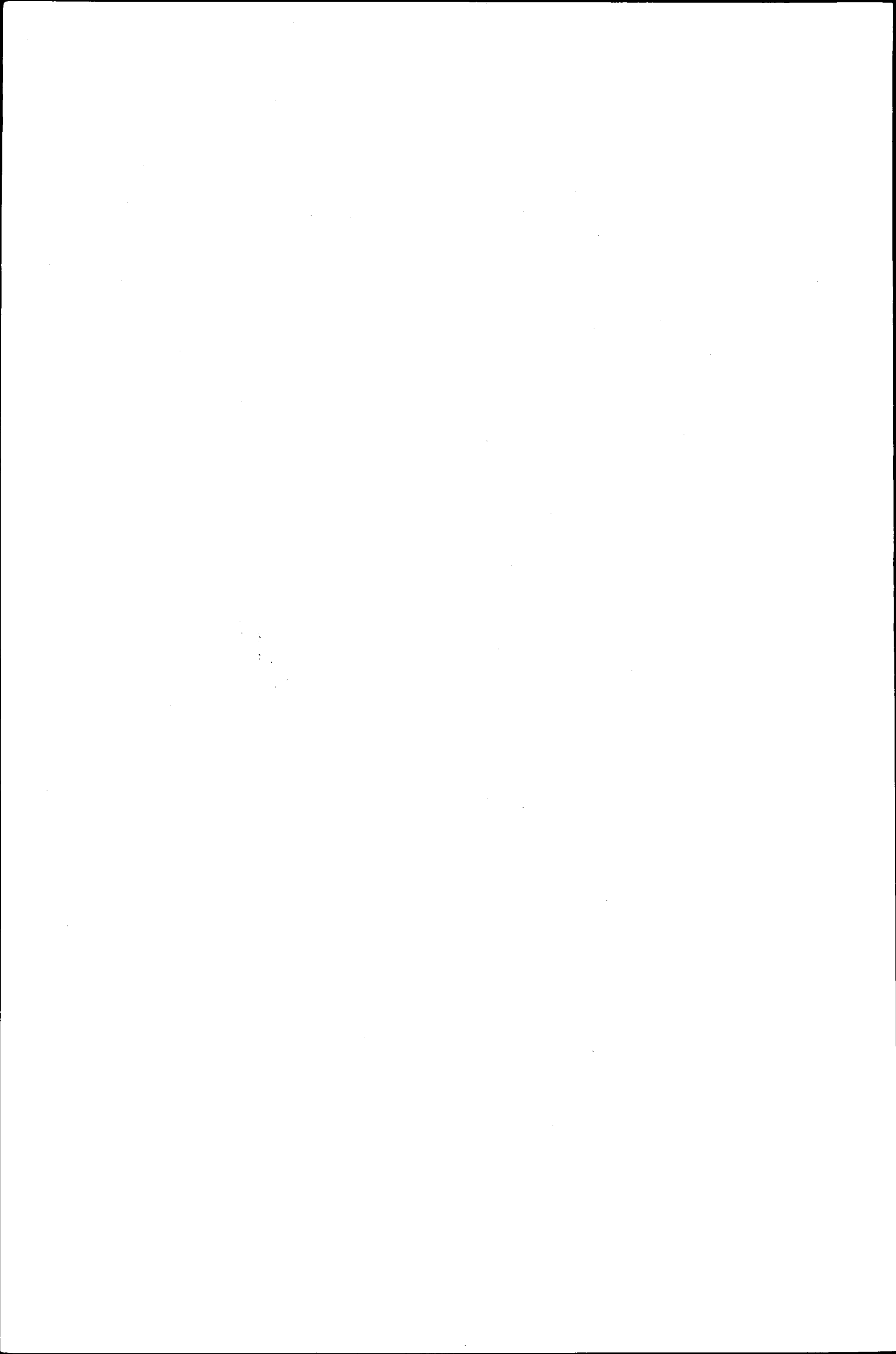
The source citations in the body of this Survey have been kept to a minimum, but a selected bibliography has been appended. This is not intended to be exhaustive. Rather, it is designed to include only those items which seem to be of the greatest importance in the development of the particular aspects of the theory discussed here.

The bibliography is divided into sections comparable to sections of the Survey. However, many publications have dealt with several aspects of the matters considered in this Survey and so do not fit neatly into any one section. In such cases, they have been included in Section 1 of the bibliography.

In the new edition, the bibliography has been revised and brought up to date with the help of John Brandl. Section VI has been added containing literature on the Theory of International Trade Policy. Unavoidably, there is considerable overlapping between Section III and Section VI.

G. H.

Cambridge, Massachusetts
April 1961



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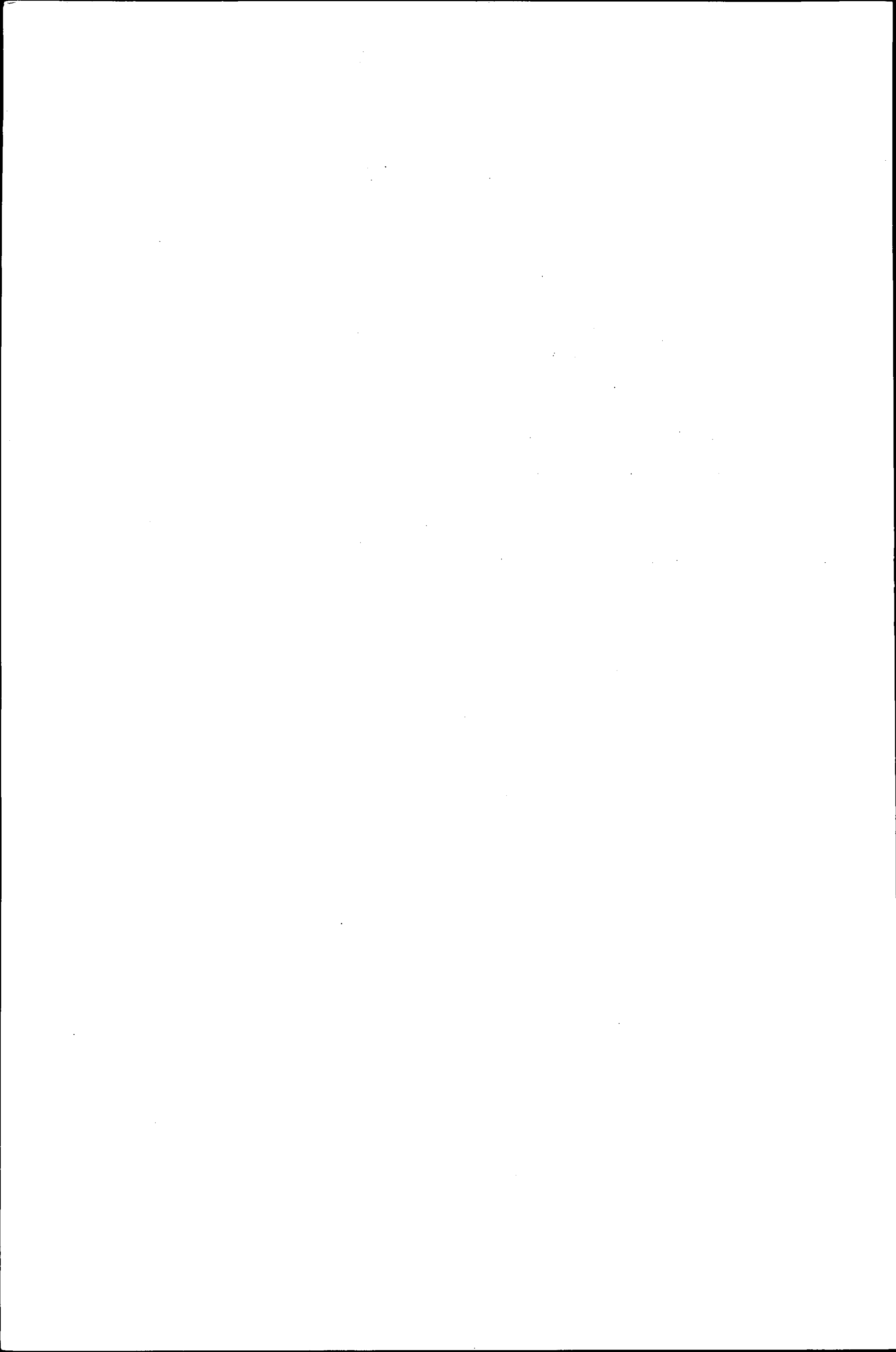

I. Introduction

International economic transactions are defined as economic transactions, including financial transactions and capital movements, among independent countries or states. *Foreign* or *international trade*, on the other hand, is defined to mean the exchange among such states of goods and services only. Although the definitions—when framed in this manner—are not stated in purely economic terms and are encumbered by the vagueness of the concept "country" or "state," this need not concern the economist unduly; for we do have a fairly clear notion, at least with respect to recent times, of what is meant by independent "states."

There has been and continues to be much discussion in the economic literature regarding the manner in which foreign trade differs from domestic trade and whether a separate theory of international trade is possible or necessary. Why can we not simply make use of the general theory of production, prices, money, employment, etc., when dealing with foreign trade problems?

Strictly speaking, it is neither possible nor essential to draw a sharp distinction between the problems of foreign and domestic trade.[1] If we examine the alleged peculiarities of foreign trade, we find that we are dealing with differences in degree rather than with such basic differences of a qualitative nature as would warrant sharp theoretical divisions.

The classical economists regarded the international immobility of the factors of production as the most important distinguishing characteristic of international trade. Obviously, this fact alone does not really present us with any sharp distinctions. In the first place, complete mobility of the factors of production frequently does not exist in the domestic sphere either. Secondly, considerable movements of capital and labor often occur across national boundaries. As a matter of fact, both of these situations were recognized by the classical writers, especially by John

[1] In terms of the labor theory of value, however, it is necessary to make such a distinction inasmuch as the prerequisites of this theory, occupational and geographical mobility, clearly do not exist at the international level.

In the course of development of the theory, the artificial separation of international trade theory and the general theory of value and price, of the "theory of international values" and of "domestic values," has gradually disappeared and the theory of international trade has become a part of general theory as applied to international problems. Historically, in that process of assimilation of international trade theory in the body of general theory, the theory of international trade has often been the pioneer and inventor of new analytical tools which later were used for general theoretical purposes. This was especially true in the earlier phases when progress in general theory was still hampered by adherence to tenets of the labor theory of value. In the international sphere the labor theory could not be applied. This explains why the theory of comparative cost has stood up much better than other parts of the old classical theory.

Stuart Mill and Bastable. From this it was then inferred, on the one hand, that where immobility of the factors of production existed *within* a country (Cairnes' "non-competing groups") the theory of international trade would be applicable, and, on the other, where there was capital and labor mobility at the international level, a separate theory of international trade would be superfluous.

It must be recognized, however, that particularly since 1914 national immobility of capital and labor has increased markedly as compared with the second half of the 19th century. This development carries with it considerable economic significance. It is therefore not surprising that even modern writers who are not steeped in the classical tradition repeatedly emphasize this immobility and cite it, for example, as one explanation for the fact that the adjustment process in the balance of payments often functions less smoothly at the international than at the interregional level.

The second most frequently cited distinguishing characteristic of foreign trade is the existence of independent monetary systems. Differences in currency systems usually do coincide with political boundaries, but here too we are often merely dealing with differences in degree. The existence of such independent currency systems may in itself be of varying significance. Under the gold standard, for example, the existence of different currency units is no more than an unimportant technical detail. But variations in currencies which result in independent and different monetary and credit policies and so influence the international movement of capital are of great significance.

A third characteristic often mentioned is the fact that the existence of political boundaries carries with it controls and regulations of international trade and payments, in the form of customs duties, quotas, exchange control, foreign trade monopolies, the more subtle measures of control referred to as "administrative protectionism," and so forth, which do not generally exist in the domestic trade area.

The importance of this factor is obvious, but it is clear that this too does not contribute more than a difference in degree, because on the one hand international trade is sometimes free, and on the other hand there often exist restrictions, though usually milder ones, on trade between regions of the same country.

Fourthly, many authors see the existence of greater geographical distances and the resulting increases in transport costs as the distinguishing characteristic of international trade. Quite clearly, this too is at best only a difference in degree. The implications of geographic distance and transportation cost have not been entirely neglected by international trade theory, but they have been more systematically explored by location theory. The logical relation between trade theory and location theory will be briefly discussed below. (See p. 4.)

The theory of international trade deals with the consequences of all of these alleged differentiating factors. It is therefore not necessary to concern ourselves, especially in a short account such as this, with the question as to which of the enumerated factors is the "essential" distinguishing characteristic of foreign trade.

International trade theory has never been satisfied merely with explaining, but has always aimed at *evaluation* and policy recommendation. Quite frequently concern with problems of economic policy has given rise to innovation and improvement in the theory itself.

Pre-classical writers, particularly the mercantilists, were strongly policy oriented. Classical theory not only served to explain the trade taking place but at the same time also provided the economic justification for free trade ideas. The newer "neo-classical" theory also generally leaned toward the free trade side, but as time went on more and more exceptions to the free trade rules were recognized so that by now, for many theorists, the position of "rules" and "exceptions" seems to be reversed.

A clear separation of explanation and evaluation, of theory and policy recommendation, frequently has been demanded and attempted. Typical of this trend is Ohlin's criticism of the classical theory on the ground that it intermingles in an unacceptable manner "normative considerations" and "objective analysis." That his demand for not just a clear distinction between political evaluation and theoretical explanation, but for actual separation of these two areas by putting them into separate books or chapters, is easier postulated than accomplished is demonstrated by Ohlin himself. Thus, in an early passage of his celebrated treatise,[2] in the midst of "objective theory," he proves in typical classical manner that interregional trade and division of labor results in an increased social product without making it clear that this statement implies a value judgment on his part and is not merely "objective analysis."[3]

The right attitude, I submit, is that one need not shy away from the application of theory to problems of economic policy as long as one recognizes the nature of the value judgments implied. This is the point of view which emerges with increasing clarity in modern welfare economics. In this respect also, the theory of international trade has done valuable pioneering work for modern theory generally. (For further comments on the issue of analysis versus policy, see Chapter VI below.)

A distinction is commonly made between the "monetary" and "pure" (or "equilibrium") theory of international trade. The former deals with

[2] B. Ohlin, *Interregional and International Trade*, 1935, p. 40.

[3] The possible retort that his argument does not in effect imply such a value judgment (an argument which I could not accept) can be answered by pointing out that if this were true the classicists also would not be guilty of such mixing of value judgment and explanation.

the methods of adjustment in the balance of payments and with the determination of exchange rates. The latter abstracts from the monetary mechanism and attempts to describe the conditions of equilibrium in "real" magnitudes. How the two types of theories are interlocked has by no means been fully explained. Similarly, in economic theory in general the logical integration of monetary theory, macroeconomic employment theory, and the theory of business fluctuations on the one hand, and of price and value theory on the other, continues to present us with many unsolved problems. The monetary theory of foreign trade is in part a dynamic theory and is closely related to business cycle theory and to the modern theory of the determination of income and employment levels associated for many with the name of Keynes. The pure theory of international trade, however, is a part of general value and price theory. Furthermore, the classical theory of "comparative costs," and the more modern version which succeeded and elaborated it, are static general equilibrium theories. Partial equilibrium analysis also may be applied to the problems of international economic transactions. The attempt to assess the effect of a customs duty on one commodity on the particular industry concerned (not on the economy as a whole) would be an example of this. There exist only rudiments of truly dynamic analysis in the field of non-monetary trade theory.

The non-monetary theory of international trade occasionally has been identified as a type of *location theory*, for example, by Ohlin. This is correct in a formal sense, since it is one of the major goals of the theory of foreign trade to explain the international division of labor, or, in other words, the geographical location of the various lines of producton. It must be recognized, however, that a different type of location theory, independent of trade theory, has grown up and has reached a high level of refinement. The logical relationship of these two related theories, trade theory and location theory, can be characterized in the following manner: The traditional theory of international trade is at a higher level of abstraction; it treats the separate countries or regions as spaceless points (markets) and abstracts (with occasional exceptions) from the spatial characteristics of the domestic markets and from intraregional transportation costs. Location theory, on the other hand, emphasizes the space factor and operates "closer to reality." For the very reason that it is less abstract, however, this theory has as yet been unable to develop a comprehensive general equilibrium system. It is still largely partial equilibrium analysis. Lösch and Isard have gone further than anyone else in the direction of setting up a general equilibrium system of location. Only when this theory succeeds in developing a system of general equilibrium will the theory of international trade become merely a special case within such a general framework. It would seem advisable to approach this goal from both directions, by giving more

consideration to the space factor and transportation cost in trade theory and by generalizing location theory into a fully interdependent system.[4]

[4] Walter Isard, the most prominent living location theorist, has done more than anyone else to combine trade and location theory in a comprehensive general equilibrium model comprising more than two countries and commodities as well as the space factor ("distant input"). Isard's model is, however, still drastically simplified, highly abstract and formalistic and as yet hardly fit for useful application. Isard admits that traditional location theory is partial equilibrium theory. "For the most part, demand has been taken as given" and emphasis has been on the cost side. Isard is, however, mistaken when he goes on to say that trade theory "has placed greater emphasis on the [demand] blade of the scissors." He overlooks the fact that "reciprocal demand," to which he obviously refers, is just as much a matter of cost as of demand. See Isard and Peck, "Location Theory and International and Interregional Trade Theory." *Quarterly Journal of Economics*, February 1954, p. 105 and *passim.*

II. The Classical Theory of Comparative Costs and International Values–from Hume to Marshall

No attempt will be made here to give an account of the *pre-classical theories,* commonly characterized as mercantilistic. The reason for this is not that the pre-classical literature is without interest to us, nor, as has been claimed so frequently, that one cannot speak of a theory of mercantilism as distinguished from mercantilistic policies. Pre-classical theories offer a great deal that is of interest, and the transition to the classical system is by no means as sudden as brief treatises on the history of doctrines often present it to be. The mercantilists did much indispensable pioneering work for the classical writers. But it is not surprising that most of the mercantilist literature is at a low scientific level compared with the classical writings, and deals to a great extent with economic policy matters rather than with problems of theory.[1]

The pre-classical literature of mercantilism must be divided into strongly divergent national groups and periods. For this reason no short summary of this material is feasible without doing grave injustice to it. We shall, therefore, begin our sketch of the history of doctrines with the classical writers; their work in the area of international trade theory, more than in other fields of economics, forms the basis of modern economic theorizing.

The brightest and best known stars on the firmament of the classical theory of international trade are David Hume, Adam Smith, Henry Thornton, David Ricardo, and John Stuart Mill. Grouped around them are numerous less influential, though in part highly original writers, such as Torrens, Malthus, Blake, Wheatly, Longfield, and Senior.

Hume's contribution to the theory of international trade *(Political Discourses,* 1752) is without question more significant and more original than the work of Smith *(The Wealth of Nations,* 1776), although the latter's influence on economic theory and practice proved much greater. Hume deals primarily with the international monetary mechanism. He not only refutes some mercantilistic errors but also develops the functional relationship, based on quantity theory of money considerations, between the circulation of money, prices, and the balance of payments. In this connection it is interesting to note that he does not overlook dynamic elements. Thus, he admits that during the period of

[1] On the pre-classical literature compare the standard works, by Heckscher, Viner and Wu, for which complete citations are given in Section I of the bibliography at the end of this paper.

transition from one equilibrium to another, following a disturbance in a previous equilibrium situation, an increase or decrease of the quantity of money may well have a temporary influence on the volume of production. This notion later assumed great importance in the work of Malthus and, more recently, in Keynesian theory.

Adam Smith's description of the balance of payments adjustment mechanism hardly goes beyond Hume's theory. However, Smith's refutation of the errors of the mercantilists, as well as his presentation of the advantages of free international movements and the division of labor, is much more detailed and better illustrated with historical examples than are the concise presentations of Hume. This probably explains, to a large extent, the greater subsequent influence of A. Smith.

Henry Thornton dealt primarily with the international monetary mechanism. Together with Hume, he was one of the originators of that version of the classical *transfer theory* which stresses the role of shifts in international price levels as against those transfer theorists who deny the necessity of price shifts and emphasize instead changes in incomes, purchasing power, and (more recently in Keynesian theory) levels of employment. Malthus, John Stuart Mill, and, subsequently, Taussig, and Keynes (in the debate over the German reparations problem), all belong to the school of Hume and Thornton. The other type of transfer theory, originating with Ricardo and Wheatly, which of late has frequently been called the "modern" theory (Iversen), emphasizes changes in "income" and "buying power" (of course, these words make their appearance only much later) and does not consider price shifts as always necessary for transfers. This version was stressed particularly by Wicksell and, more recently, by Ohlin, as well as in the theories based on Keynes' *General Theory of Employment, Interest and Money.*

The pure theory of international trade begins with Ricardo's Theory of Comparative Costs, set forth in Chapter VII of the first (1817) edition of his *Principles.* Parenthetically, it is to be noted that the theorem had already been formulated by Torrens in 1815, who, however, does not seem to have been fully aware of the implications of his idea.[2] According to this theory, under free trade each country will specialize in the production of those goods which it can produce relatively cheaply and import those goods for the production of which foreign countries possess a comparative advantage. Based on the labor theory of value, the theory assumed complete mobility of the factors of production internally and complete immobility internationally. In the strict sense, the labor theory of value assumes that the factor "labor" is the sole means of production. For it, the existence of several factors of production, used in different and varying proportions, results in insoluble complications. (See Section III, below.)

The theory is best illustrated with the aid of Ricardo's famous ex-

[2] See J. Viner, *Studies in the Theory of International Trade,* 1937, pp. 442-443.

ample: In England a gallon of wine costs 120 and a yard of cloth 100 hours of work, while in Portugal the real cost (labor cost) of wine and cloth amounts to 80 and 90 hours of work respectively. Portugal thus has an absolute advantage over England in the production of either commodity, but a comparatively greater one in the production of wine, since $\frac{80}{120} < \frac{90}{100}$. Without trade the internal ratio of the prices of wine and cloth (as expressed in labor, in terms of some "numéraire," or in terms of money) would be proportional to their costs of production, that is, 120:100 in England and 80:90 (or 88.8:100) in Portugal. Thus, cloth is comparatively cheap in England and wine is comparatively cheap in Portugal. After trade is opened between the two countries, England will export cloth and import wine. Ignoring transport costs, an equilibrium price ("real exchange ratio" or "terms of trade") will result which will lie between the limits of 120:100 and 88.8:100. Let us assume, for example, that the equilibrium ratio of exchange is 100:100. If England now specializes in the production of cloth and transfers labor from agriculture into industry, it can produce 1.2 units of cloth for each unit of wine which it no longer produces. These units of cloth could now be exchanged for 1.2 units of imported wine from Portugal—with a resulting net gain of .2 unit of wine for each unit of cloth exported; alternatively, the same quantity of goods produced before trade occurred could now be procured at lower total real costs.

Ricardo's presentation of this theory is extremely compact. He eliminates only few of the numerous simplifying assumptions, most of which are implied in his analysis and are not stated explicitly. A good part of the later theory of international trade has been devoted to the task of stating explicitly and then dropping one by one these simplifying assumptions so as to render the theory of comparative costs more precise and more generally applicable.

Ricardo himself demonstrated how labor costs could be translated into money costs and money prices. To do so, it is necessary to make assumptions about money wages in the two countries and the rate of exchange, and to introduce a condition concerning equilibrium in the balance of payments. In the event of disequilibrium in the balance of payments, money will flow from the deficit to the surplus country, resulting in a change in prices and money incomes in both countries until equilibrium is reestablished.

Thus an integration of the "monetary" and the "real" theory, is, in fact, accomplished although under the much simplified static assumption of "neutral money," in other words, under the assumption that money either does not affect the real magnitudes in the economy at all or does so only temporarily and superficially. It must not be overlooked, however, that the classical writers did not, in effect, make such assumptions in their writings on problems of domestic money and credit policy.