

THE HISTORY OF THOUGHT ON ECONOMIC INTEGRATION

by

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Note to the Reader

This is genuinely "work in progress." The pages distributed here are those on which critical comments and suggestions are most urgently needed. The selection includes the Table of Contents, the Introduction, Chapters II, III, and IV, the introduction to Part Three, and finally Chapter IX.

I intend to make considerable changes in Chapter II; to expand Chapter IV; and to make changes as well as additions to Chapter IX. Your suggestions will be especially helpful if I can receive them before I make the planned revisions and additions.

I count on receiving the benefit of your critical reading.

Fritz Machlup

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The Fourth World Congress of the International Economic Association, held in Budapest in August 1974, had as its theme "Economic Integration: Worldwide, Regional, Sectoral." The Presidential Address was on "The History of Thought on Economic Integration." In my research for this intellectual history, I had collected far more material than I could possibly pack into the limited space of a paper for oral delivery. I therefore selected only a few pages for full presentation and several sections for condensed presentation at the Congress and I briefly reported on the existence of additional material to be published soon at an appropriate place.

My address to the Congress will be published in the volume of proceedings. No matter whether that address will be considered an abridged version of this booklet, or whether this booklet will be regarded as an expanded version of the address, the historical survey which it offers is still incomplete in several respects. The chief limitation is that it covers publications in only a few languages: English, French, German, and a few items in Italian. This limitation is surely understandable, but since the Congress was attended by economists from 77 countries, I apologized for my disregard of the literature in other languages. I am painfully aware of another deficiency: even in the languages covered in this survey I have probably been rather arbitrary in the selections

II. The Meaning of the Term

Now that we know the history of the term in its new meaning, we must admit that this meaning is by no means clear. Let me quote a footnote from a historian's work:

"The term 'integration' came into general ECA usage... reflecting an adaptation to diverse currents of thought on both sides of the Atlantic. The word, though never precisely defined, connoted more than casual cooperation but less than full unification. Marjolin of the OEEC later /in a book published in 1953/ spoke of integration as embracing all the steps taken toward unification, even though they might fall far short of that ideal..."¹

If one could reasonably say, twenty years ago, that the term had never been precisely defined, one must say now that we suffer less from a lack of definitions than from an abundance of mutually contradictory definitions.

Unanimity, Consensus, Divergence

Users are virtually unanimous on one question: that integration can be understood either as a process or as a state of affairs reached by that process. Whether that state has to be the terminal point or an intermediate point in the process is not always clear, but this ambiguity can be taken care of by distinguishing between complete and incomplete integration. More difficult is the question as to what it is that is to be integrated: people, areas, markets, production, goods, resources, or what? If areas are meant,

¹Harry Boyard Price, The Marshall Plan and Its Meaning, (Ithaca, N.Y.: Cornell University Press, 1955), p. 122, footnote 7. - The reference in the quotation is to Robert Marjolin, Europe and the United States in the World Economy, Durham, N.C.: Duke University Press, 1953).

do they have to be national territories? The most important questions, however, ask what are the characteristics of such integration and by what indications, or symptoms, can one decide whether there is or is not a process at work, or a state of affairs attained? These are very different questions. Users of the term may agree on what the characteristics are and yet disagree on how one can find out or what one should observe; conversely, some might agree on possible indicators without agreeing on the essentials, on what it is all about. Just to give one example, there is fundamental disagreement on the relation between economic integration and equalization of incomes (or of the prices of productive services) in different areas, some writers regarding equalization as the characteristic of integration, others as a possible consequence, others as the main target, others as an indicator, and others as merely incidental or even unrelated to economic integration.

A wide consensus exists on three issues: one, that economic integration refers basically to division of labor; two, that it involves mobility of goods or factors or both; and three, that it is related to discrimination or nondiscrimination in the treatment of goods and factors (for example, with regard to origin or destination). This consensus does not imply agreement on a definition. We shall have to discuss all three issues before we can decide on their comparative significance.

Many disagreements about the most appropriate definition can be disposed of by the use of adjectives modifying the noun. When Bela Balassa presented

us with a very helpful review of definitions,² he proposed the rejection of some definitions as being too wide. Yet, one does not have to reject a definition on these grounds as long as the concept can be narrowed through the use of a qualifying adjective with the term. For example, Balassa wanted the definition of economic integration to restrict the process or state of affairs to different nations joining in a regional group or bloc. This is an unnecessary restriction (and an uneconomical one) because the economics of the matter is the same whether it is different provinces of a state that become "more integrated," or different nations within a bloc, or different blocs in the world as a whole. One can easily differentiate by speaking of national (interprovincial, intranational), regional (multinational) and worldwide (global, universal) integration.

Similarly, instead of arguing whether certain arrangements for coordination or unified management of particular sectors of two or more economies -- say, electricity, mining, transportation, communication, etc., -- deserve to be called economic integration -- I would be inclined to deny it --, one may agree to speak of such arrangements as sectoral integration, as distinguished from general economic integration. The use of "general" in contradistinction to sectoral or partial integration is intended to produce in the reader's or listener's mind an association with general-equilibrium

²Bela Balassa, "Towards a Theory of Economic Integration," Kyklos, Vol. XIV (1961), pp. 1-17; also The Theory of Economic Integration, (Homewood, Ill.: Irwin, 1961), pp. 1-3.

theory, a system of interactions and interdependences in the sense that any activity is directly or indirectly related to any other activity in the economy (seen as a system or region).

Again, instead of arguing whether a very small increase in the division of labor deserves or does not deserve to be regarded as economic integration (seen as a process), one may agree to speak of attaining higher and lower degrees of integration. On closer inspection, however, we shall find that the idea of degrees involves the possibility of quantification, measurement or estimation, and that we still have much to learn on these matters.

Several different techniques, forms, or aspects of general economic integration are hard to distinguish by mere adjectives or by a few explanatory words. For example, international economic integration can be attained -- this has been stated as one of the issues on which a wide consensus exists -- through movements of people, funds, and products, all three or any two, or only one. This has been well known long before the term economic integration was introduced, and some writers on integration have stressed the distinction, as, for example, Tinbergen in 1952. Balassa proposes that we distinguish trade integration, factor integration, policy integration, and total integration. One wonders, however, to what extent factor integration presupposes trade integration, and to what extent policy integration presupposes trade and factor integration. Moreover, one may ask whether factor integration refers to all

types of factors of production and to what extent it would co-exist with unrestricted movement of goods. (There will later be an occasion to reflect on the theory that free mobility of products across national frontiers can, under ideal conditions, achieve the same results as could be attained by perfect mobility of labor and capital.) It would be less misleading to speak of common (or integrated) product markets, labor markets, and capital markets. The term market integration was proposed by Vajda.³ It is a useful term, but one should understand that the economic implications of market integration are very different if only some markets -- say, for certain agricultural and industrial products, or for certain kinds of labor -- are integrated or if all markets are integrated. In the former case, there may be only little progress toward general economic integration, and perhaps even net retardation. The distortion in the economy through partial, selective, sectoral integration may be so serious that the effects may be damaging, rather than beneficial, on balance.

Division of Labor, Mobility, and Nondiscrimination

Complete integration of markets implies adequate mobility of whatever it is that is supplied in the markets in question and nondiscrimination in the sense that neither sellers nor buyers are influenced by the origin or destination of the thing bought or sold. Mobility need only be adequate (rather than perfect) because it is not necessary that every single unit of

³Imre Vajda, "Integration, Economic Union and the National State," in Imre Vajda and Mihály Sinal, eds., Foreign Trade in a Planned Economy, (Cambridge: University Press, 1971), p. 33. Vajda wanted "market integration" to be supplemented by "production and development integration" (pp. 35ff).

the product or factor of production be movable; it suffices for all practical purposes if a certain part of the total supply can be moved without undue cost or trouble.

Let us try to illustrate these statements separately for product markets, labor markets, and capital markets. One may regard the wheat market in the United States as fully integrated if the buyer does not care whether the wheat was grown in Iowa or in Kansas, and the seller does not care whether it is shipped to California or to New York. The wheat market in the European Community would be regarded as fully integrated if the buyer did not care whether the wheat was grown in France or in Germany, and the seller did not care where it was being shipped - both of which is made difficult because of a variety of formalities, restrictions, and border taxes or adjustments according to CAP regulations (Common Agricultural Policy).

One may regard a labor market, say, for unskilled factory workers in the United States, as fully integrated if the employer does not care whether the worker comes from Ohio or from Tennessee, and if the worker does not care (apart from the cost of moving) whether the job is in Pennsylvania or in Illinois. The market for the same type of labor in the European Community would be regarded as fully integrated if the employer did not care whether the worker came from Belgium or from Italy, and the worker did not care (apart from the cost of moving) in which of the Common Market countries his job might be. These conditions seem to be approachable, since there are no

governmental restrictions, but the language barriers make things more difficult.

The capital market in the United States is fully integrated if the buyer of shares of stock does not care whether the issuing corporation has its headquarters or most of its assets in Delaware or in Minnesota, and if the corporation does not care who its stockholders are and where they reside. The analogous indifference does not prevail in the European Community, where most stockholders hold shares of stock in corporations domiciled in the same country and where the acquisition of foreign securities and the sale of securities to foreign buyers may be subject to governmental restrictions and controls.

These illustrations may have given some idea of how both mobility and nondiscrimination are related to economic integration. It seems that it would be more to the point to look at both as necessary conditions rather than as the essentials in the definition of integration. If, for example, mobility of a part of the supply suffices to attain the allocation or distribution that corresponds to the economic optimization model, why should the definition of economic integration require mobility of the entire supply? However, if we are satisfied with "adequate" mobility, we obviously think of adequacy for a purpose, namely, for the attainment of complete general economic integration -- and this clearly marks integration as something else than mobility of products and/or factors. The same holds for nondiscrimination; it is a

necessary (though not sufficient) condition for economic integration.

Can we take division of labor as an essential part of the definition of economic integration? If we do, we carry out, I believe, the intentions of most, perhaps all, users of the term; I believe also that we thereby conform to the ideas of socialist as well as of free-enterprise economists. A very neat formulation in terms of an analogy helpful in explaining the essence of general economic integration has recently been offered by a Polish economist, Stanislaw Chelstowski. As he puts it, in an article on "CMEA and Integration" (Polish Perspectives, Vol. XV, December 1972), it means "tailoring the economic fabric of each country to the requirements of an international division of labour" (p. 10). But how much international division of labor has to be arranged for? Is there a minimum and/or a maximum of exchange of products that makes it economic integration?

Actual versus Potential: Opportunities Realized and Unrealized

I submit that the idea of complete integration implies the actual utilization of all potential opportunities of efficient division of labor. The notion of taking advantage of an existing but hitherto unused opportunity relegates the entire conception from the domain of recorded observations to the domain of delicate calculations based on data not publicly available and not recorded anywhere. For, alas, whether an unused opportunity for a beneficial exchange of potentially produced goods exists cannot be shown except by a benefit-and-cost analysis in which benefits as well as costs are hypothesized with the help of an imaginative marginal calculus.

If progress in the degree of international economic integration is made by increasing trade, but only such trade as benefits the economies affected, and if complete integration is attained when all opportunities for beneficial expansion of trade are exhausted, two important inferences follow. First, it is conceivable that some increase in the exchange of goods does not constitute a higher degree of integration, because the calculations of the opportunity costs of production and exchange may have been faulty or neglected. (Exports may have been subsidized at the expense of foregone alternatives.) Secondly, it is possible that in the cases of certain countries a relatively small volume of foreign trade represents complete integration between the countries concerned -- because there may not be any more opportunities for gainful trade left unused -- and that, in other cases, a large volume of foreign trade represents a still very incomplete integration of the economies in question, because so many opportunities for efficient division of labor remain unused.

The calculations relevant for the evaluation of actual and potential exchange are so delicate and complex because they involve an indefinite number of inputs and outputs indirectly related to one another by alternative employment and alternative production. General economic integration of the economies under consideration does not refer to particular industries or sectors, nor to particular factors or products, intermediate or final, but rather to the entirety of economic activities of the region (country, bloc,

or world). It is an integration of all productive resources available anywhere in the region for the production of all the many goods and services demanded under actually or potentially realized conditions. It is constituted by a complete interweaving and interdependence of all economic sectors, industries, branches, and any activities whatsoever, in the closest possible approximation to the theoretical model of general equilibrium in a system with unrestricted mobility of all movable factors and products, intermediate and finished.⁴

The essential criterion of complete general economic integration is commonly seen in equality of prices of equal goods and equal services. That is to say, that all means of production (original or intermediate) in the integrated economic region which are both perfectly mobile and perfectly substitutable for one another (hence, genuinely equal) will receive the same prices and will have the same marginal net value productivity in all their uses. Of course this also implies that unequal means of production (i.e., those not perfectly substitutable for one another) will not command equal prices (except by sheer coincidence). Equality of prices despite inequality of the marginal net value productivities -- for example, due to lower efficiency or unfavorable location -- is a typical form of discrimination, which may meet some standards of social justice but definitely violates the goals of general economic integration.

The economically optimal relationships among all costs and prices in the completely integrated area can be determined only in a system of perfect

⁴Fritz Machlup, "Integrationshemmende Integrationspolitik," Bernard-Harms-Vorlesungen 5/6 (Kiel: Institut für Weltwirtschaft, 1974), p. 43.

interdependence. This presupposes that all enterprises and all agencies in charge of planning and allocation have to make their calculations on the basis of opportunity cost. Every means of production, wherever actually used, has to be valued according to the social utility that could potentially be derived from alternative uses. Such alternative uses may be anywhere in the (supposedly) integrated region and in any sector, industry, or branch, however remote. All means of production have to "compete" for all possible uses, and all branches of production have to "compete" for all possibly usable means of production. In market economies this competition includes effective competition among enterprises; in comprehensively planned economies it involves competition among all conceivable alternatives in the considerations of the decision-making agencies or boards. Expressed in a slightly modified way: all inputs are considered eligible to compete for uses in the production of all conceivable outputs, and all outputs are considered eligible to compete for allocations of all conceivable inputs. In this inter-relatedness and interdependence among all economic activities I see the essence of general economic integration. This is the principle, and it applies equally to a single country, a group of countries, or the whole world.⁵

Freedom from Restrictions versus Selective Activism

While unrestricted movements of all kinds of labor, capital, and products may be necessary conditions of general integration of any economy or combination of economies, the freedom of travel and migration, capital

⁵Ibid., pp. 44-45.

transfer, and trade may not be sufficient for the attainment of full integration. Ordinarily, various institutions and policies are needed to secure the full utilization of all efficient possibilities of division of labor. This is most readily seen if one reminds oneself of the facts that trade calls for payments, that capital movements call for the exchangeability of different currencies, and that migrations on a large scale call for chances to take possessions along and to remit earnings. Hence an international payments system that allows payments and foreign-exchange transactions without restrictions or controls -- in short, monetary integration -- is an integral part of complete economic integration. One can understand, therefore, why several writers add policy integration and institutional integration to integration of the markets for labor, capital, and products.

If governments of countries with free enterprise are intent upon promoting international economic integration, regional or worldwide, they will have to act in these three ways: to remove restrictions on the movements of people, funds, and goods; to pursue policies designed to correct wrong signals of the free market and to strengthen the effects of correct signals; and to create permanent institutions without which the integrating forces of free markets may be too weak to be effective. Jan Tinbergen proposed to speak of the first of these techniques as negative integration, and of the two others as positive integration. He may only have wanted to contrast the removal of old governmental policies and institutions (namely, of those that prevent

integration) with the establishment of new policies and institutions (designed to aid integration). But the evaluative connotations of negative and positive make these into loaded words. The removal of discriminatory and restrictive institutions and thus the grant of freedom of economic transaction is called negative, while the establishment of policies and institutions endowed with the coercive powers of the state is called positive; ergo -- don't ever forget -- freedom is negative, coercion is positive.

Those who see in liberalization (of trade, payments, travel, migration, and financial transactions) the strongest force in general economic integration do not deny that certain governmental institutions are necessary if the profit motive is to call forth the right kind of spontaneous actions of free, private decision-makers. There is certainly need for a legal system that safeguards property rights and enforces contracts. There is need for a monetary system that facilitates foreign payments by securing the interchangeability of different currencies or, still better, by replacing the separate national currencies with an international one. Tax harmonization would avoid some distortions in resource allocation and consumption if indirect taxes, such as sales taxes or value-added taxes were made uniform for all goods and services all over the area to be economically integrated. Yet I have a strong suspicion that the actions recommended to or adopted by several governments in the name of monetary integration and fiscal harmonization are counter-productive. Let me state my reasons for saying so.

Monetary and Fiscal Integration

The most urgent prescription which the money-doctors (or money-quacks) gave to governments desiring monetary integration was fixed exchange rates with the smallest possible bands for permissible oscillations around parities. This prescription would be fine if the countries were prepared to give up their autonomy over credit policy. For it is not possible to pursue an independent monetary policy -- perhaps for purposes such as maintaining full employment, accelerating economic growth, counteracting fluctuations in business activity, or keeping price levels more stable than they are abroad -- and at the same time to maintain fixed rates for foreign exchange. Monetary economists have known this for hundreds of years. Fixed exchange rates were possible as long as governments did not pursue monetary policies designed to aim at other targets. With other targets proclaimed as national goals, a system of fixed exchange rates became inoperable. Yet, the advocates of fixed rates stubbornly stuck to their prescription and, in order to avoid or postpone adjusting them, resorted to foreign-exchange restrictions, to controls of capital movements, and even to outright impediments of trade. Thus, a policy advertised as instrumental to the achievement of monetary integration and as conducive to greater economic integration became in effect a "positive" obstacle in the way to integration, setting back general integration by many years. Even after most men in charge of national monetary affairs had realized that some kind of floating-rate system

was inevitable, they maintained much of the arsenal of control devices, continued to restrict international movements of capital, and prolonged the disintegration of capital markets to the best of their ability.

What should we, then, make of the term monetary integration? Should we allow it to be used for policies and institutions flagrantly impeding integration? We cannot prevent people from using words any way they like, but we may warn against misleading and deceptive usage. I propose that monetary integration be used only for policies or processes that facilitate monetary transactions by anybody or for any purpose. Absence of restrictions is the minimum meaning of the term; the maximum is monetary unification; coordination of national monetary policies is a practical-political impossibility under present-day ideologies concerning the functions of national central banks and, therefore, does not qualify for a place in the spectrum of meanings of monetary integration.

If a group of countries is determined to give strongest possible support to economic integration for the region, the member countries will have to abolish their independent national central banks and to adopt a uniform currency, issued by a Community Central Bank. If they are not prepared to do so without a lengthy transition period, they can speed up the process toward a uniform currency by adopting a parallel standard, with both national and regional (or international) currencies circulating side by side, not linked by fixed exchange rates, and with no restrictions on the use of the regional

(or international) currency in payments, contracts, and settlements, foreign or domestic. If the members of the group of countries are not prepared to follow such a plan of gradual substitution of an international currency for their own, the only contribution to the attainment of general economic integration which they can make through monetary arrangements is to continue to let their currencies float, but to remove all restrictions on payments and financial transactions.

Harmonization of fiscal institutions, particularly the tax system, has been an important subject of analysis, discussion, and positive government action in recent years. It is firmly believed that equalization of indirect taxes in all member countries of a common market is an important step on the way to higher degrees of general economic integration. This is an especially strong preconception with regard to sales taxes, turnover taxes, and value-added taxes; businessmen and bureaucrats in the finance ministries are convinced that these taxes ought to be refunded to exporters and collected from importers if they are not to deteriorate the competitive position of the industries concerned. That this is wrong, at least if the tax rates are not different for different goods, has been known since Ricardo and has been repeatedly restated, most recently by Gottfried Haberler.⁶ Yet, in deference to the practitioners' beliefs and pressures, the member countries of the

⁶Gottfried Haberler, "Probleme der wirtschaftlichen Integration Europas," in Bernhard-Harms-Vorlesungen 5/6 (Kiel: Institut für Weltwirtschaft, 1974), pp. 23-26.

European Community, although they abolished customs duties on intra-Community trade, make border tax adjustments, collecting from importers and refunding to exporters. These import taxes and export premiums have been established and maintained as compensatory adjustments in line with the principles of harmonization and integration. What these "positive" measures imply is the maintenance of check points at the frontiers between the countries of the presumably integrated group. These measures preserve some of the previous economic separation of the countries concerned. Any German product shipped to France will at the border be processed, with all due formalities, to arrange for tax refunds to the exporter and tax collection from the importer.

Would it be unreasonable to suggest that a highly significant trait or probe of economic integration may be the nonexistence of any check-points at the frontiers between member countries? What the authors of the Constitution of the United States of America recognized almost 200 years ago is far from being realized by the architects of the Common Market: that a shipment from Germany to France must not be treated differently from a shipment from Bavaria to Baden-Württemberg, or from Burgundy to the Normandy. Perhaps one may go even farther and say that full economic integration between two or more countries with market economies is not reached as long as they still know the volume of trade between them. No statistic tells us what the trade volume is between Pennsylvania and Ohio.

Degrees of Economic Integration

With so many different conditions helpful or harmful to the progress of economic integration it is difficult, or perhaps impossible, to find any comprehensive description, let alone any short formula, to express the combined effects to be expected. How much do the formalities and bureaucratic delays at the border interfere with the movement of goods? If, on balance, the border tax adjustments favor export to other member countries, are they possibly discriminatory and favor the wrong products? If controls on payments hinder monetary transactions with other member countries, how can the effects on trade and on capital movements be appraised separately? How can changes in people's propensities and in institutional arrangements, promoting or discouraging movements of people, funds, and goods, be analyzed for their separate and combined effects on mobility?

I wish I were able to propose a neat and concise verbal formulation describing the different degrees of mobility of different types of factors and products -- but I do not know how this could be done. And perhaps we ought to shy away from any attempt at devising numerical indices of the degree of economic integration achieved as a result of so-called "positive" policies and institutions and of the different degrees of mobility of factors and products effected by "negative" measures to remove restrictions. Yet, one should not give up. I look forward to studying the papers of Working Group A of the Congress of Budapest, which may give us new insights into the

problem of "Measuring the Progress or Degree of Economic Integration" or, more likely, of devising separate indices of different conditions and different effects that seem to be sufficiently relevant to give meaning to the confident assertions as to how far the existing regional blocs have progressed toward their professed objectives.

The difficulty or impossibility of measuring economic integration, or even of suggesting methods of doing it, is embarrassing. There are philosophers' dicta to the effect that a concept ought to be subject to operational definition and that propositions employing the concept ought to be subject to operational testing. I am inclined to disregard these dicta as neopositivistic prejudice, and to reject the still more extreme position which denies that anything but empirical operations can give meaning to concepts and to propositions involving them. Thus I insist that the concept of a degree of economic integration has meaning even if we do not know how to measure it. However, if one asserts that a concrete historical situation represents a higher degree of integration than another such situation, one cannot reasonably refuse to tell on what evidence his assertion rests. For example, if somebody compares the progress made or degree attained in the economic integration among the CMEA countries and the EEC countries (or among the states of the USA, or between the USA and Canada) he has to present statistical evidence - and present also the theoretical basis on which one can agree that it really is evidence for what is being asserted. This holds also for comparisons of the progress of integration in a given area over stated periods of time.

The indices offering themselves for comparisons of this sort refer either to conditions or to effects. Among the conditions are those that are likely to affect mobility, and among the effects are actual movements. Both mobility (the elasticity of responses to stimuli) and actual movements refer to goods, people, capital funds, and enterprise and management. Mobility of goods can be affected by tariffs and customs formalities (with their delays and chicaneries), quotas, license requirements, payments restrictions, currency allocations, deposit requirements, and all sorts of controls, regulations, and their operations. One can furnish similar lists for conditions affecting travel, migration, trade credits, capital transfers, securities purchases, direct investments, and whatever else may contribute to economic integration.

The effects of mobility may be seen not only in actual movements of goods, people, and capital funds but also in relative prices; hence, comparisons of relative prices of goods, labor services, loanable funds, and securities in the supposedly integrated countries are valuable tests of the adequacy of mobility, on the one hand, and on the degree of integration achieved, on the other. For standardized products such tests are easier than for differentiated ones. The simplest tests are based on the rule that, in the absence of restrictions, prices for the same commodity will not differ from one place to another by more than the transport cost between these places and, if one of the places in question is the site where the

good is produced, the prices should not differ by less than the transport cost. Tests for prices of the same securities on different stock exchanges are even simpler, whereas tests of interest rates for loanable funds are complicated by the fact that various risks -- risks of default or future restrictions on payments, exchange risks, etc., -- are involved and may be differently evaluated by different lenders for different borrowers. Tests for prices of the "same" kind and quality of labor in different countries are very difficult, first because one can never be sure that the efficiency of the workers is really the same, secondly because differences in working conditions, fringe benefits, and nonpecuniary advantages and disadvantages of residing in different places and countries are hard to take into account, thirdly because variations in exchange rates may play havoc with the comparisons, and fourthly because adjustments of existing differences in earnings through migration are very slow, what with the risky investment in moving expenses and the psychological obstacles to deciding on moving to a foreign country.

One of the most widely used tests consists in comparisons of various trade ratios: what portion of total purchases in any part of a supposedly integrated (or intentionally to be integrated) region is of goods and services produced in that same part (province, state, country), what portion is of goods and services produced in other parts of the region, and what portion is of things produced in the rest of the world? Analogous tests are made for total sales of output: what portion is sold to residents of the

same part of the region (province, state, country), what portion sold to other parts of the region, what portion to the rest of the world?

Numerous studies of this sort have been made with most surprising results. they show a remarkable provincialism in Europe, where the bulk of all purchases are of goods and services produced in the same country, and the bulk of all sales are to residents of the same country. Analogous estimates for the United States yield very much larger shares of purchases and sales, respectively, from suppliers and to buyers residing in other states of the union.

Translated into the thinking of the man in the street, this type of provincialism is reflected in the fact that in Europe everybody is aware of the origin of his motor car: he is fully conscious of his driving a French, a German, an Italian car; in the United States nobody ever thinks of the fact that he drives a car made in Michigan or assembled, say, in Maryland.

The tests discussed, and probably several other tests not discussed here, with all their weaknesses, probably shed some helpful light on the meanings and connotations of economic integration. Yet, none of the tests can be admitted as conclusive in an attempt to measure the degree of economic integration attained. The main reason for this skepsis lies in the fact that integration is essentially, as I have said before, a relative achievement, a ratio of actually realized to potentially realizable opportunities for

effective division of labor. We may have learned how to measure actual trade, actual migration, actual capital movements, but we have not yet learned how to measure the unused potential.

Degree of Integration versus Extension of Area Integrated

Additional difficulties of a conceptual nature arise from the fact that economic integration is relative not only to unknown potentials but also relative to the area under consideration. We must distinguish the degree of integration achieved in the use (allocation) of the productive resources and in the organization of economic activities within a given territory from the extension of the territory to be integrated.

If new territory is added to a region with the intent of having the resources and activities in the new territory integrated with those of the "old" area, one must expect a reorganization of some of the activities and a reallocation of its resources in both parts and, of course, more trade between the old and the new parts of the extended region. This calls for caution in appraisals of the degree of integration, especially if actual movements of goods and factors are measured and the results considered as aids in such appraisals. The increased division of labor between the old and the new parts of the region should express itself in new trade flows which increase the share of intraregional trade in total trade. Of course, the shares of domestic trade and of intraregional trade counting only the old region would

then be lower. This reduction should not lead to wrong conclusions concerning either the degree of integration in the old or in the extended region. As the network of trade widens and the share of trade among the closest neighbors is reduced in the process, it would surely be erroneous to infer from this that the extension of external trade and the smaller relative share of internal trade mean a lower degree of general economic integration of the original "home area."

If we accept the idea that the degree of integration may be estimated (or at least a rough impression formed) separately for each area and for each combination of areas, we shall find it possible to speak of a relatively high degree of integration within area A, a lower degree with area A+B, a still lower one within A+B+C, and so on until we have the entire world. This is not inconsistent with expressed policy statements of several governments. They are, as a rule, determined to take advantage of all efficient opportunities for division of labor within their own country; they very much want to utilize many such opportunities within the regional group of which they are a member; they hold that considerable gains could be derived from trade with other regional blocs (for example, East-West trade); and they are not prepared to forego promising opportunities for trade with the rest of the world. It would be unnecessarily confining to estimate the degree of integration just for the economic activities within the regional bloc. The concept makes sense for any and all combinations of territories, even if we are still far from knowing how to measure it.

Positive Economics versus Welfare Economics

Several times in this discussion I have used such words as beneficial and gainful in connection with extensions of trade and opportunities for division of labor. As long as nothing but a "more efficient" use of resources is involved and efficiency is understood to refer to additional output (measured at given prices) without regard to its distribution, the relevant propositions may still be regarded as being within the limits of positive economics. As soon as we realize that gains from trade are divided among the partners, and that changes in the terms of trade may increase the gains of one country at the expense of another country, we enter the domain of welfare economics. How much of the analysis of economic integration will be welfare economics?

It is often considered best professional practice to avoid value judgments - judgments as to whether a change is for the better or for the worse - and stay within positive economics. In the theory of economic integration one cannot get very far with such purity. Any reallocation of resources, any reorganization of economic activity will be beneficial to some, harmful to others. Thus the attempt to judge whether a particular change will be "on balance" helpful or harmful to the residents of an area, a combination of areas, or the whole world, cannot help being "evaluative," that is, welfare economics.

Judgments of the beneficial or harmful effects of economic integration depend therefore on the interests which the economic advocate has most at heart.

He may be concerned with local, provincial, national, regional interests or he may be cosmopolitan and think chiefly of the world at large. Some "classical" economists were staunch cosmopolitans and would regard a change as beneficial even if their own country were a loser in the deal, provided some net benefit accrued to the inhabitants of the world. Several of these authors made strong pronouncements about the "desirability" of some measure or development without even realizing (or at least without warning) that they were thinking of the world community, not of the narrow interests of the nation. Since all plans for more extended economic integration assume that gains will be derived from it, it will be necessary to make clear, more than has been done in much of the literature, which parts of the world will be major beneficiaries, which minor beneficiaries, and which possibly losers.

The possibilities are so manifold, depending on a host of conditions and circumstances, that the task of distributing the gain in even the simplest of theoretical models is most demanding; it calls for analytical skills of the hairsplitting variety. Assume, to indicate the type of reasoning to be employed, a world of four countries, A,B,C, and D, each of them having some trade with the other three, and each using tariffs to protect some of its domestic producers. Now, recognizing the advantages of more extended trade, A and B join in a customs union and abolish the duties on imports from each other. A will now buy from B some goods which it used to make at home and some which it used to import from C. The substitution of imports

from B for domestic production represents an increase in foreign trade and, therefore, "trade creation," whereas the substitution for imports from C represents "trade diversion," to use the important dichotomy introduced by Jacob Viner.⁷ Thus far things are not too difficult, especially if we confine ourselves to the effects on the efficiency of production: the trade creation has involved the displacement of a less efficient source of supply, (namely, the previously protected domestic producers in A) by a more efficient one in B; and the trade diversion has meant that a more efficient source of supply (namely, producers in C who were the most competitive suppliers of A as long as A's tariffs were the same regardless of the origin of the goods have been displaced by less efficient producers in B (who became A's supplier only because the duty on their products was abolished while that on C's product was kept). If the volume of trade creation exceeded that of trade diversion, welfare will have increased in A and probably also in three countries combined; it cannot be said yet how B and C have fared, for thus far we do not know how B will deal with its export surplus and (perhaps) overemployment and what C will do with its trade deficit and unemployment. The story, therefore, must go on and, alas, there are too many plots to choose from.

Let us see what some of our choices have to offer. Assume that B has previously had unemployed labor and excess plant capacity, which it now

⁷Jacob Viner, The Customs Union Issue (New York: Carnegie Endowment for International Peace, 1950), pp. - .

uses to produce its new exports to A; that C suffers an increase in unemployment because of its losses of exports to A; and that A too suffers an increase in unemployment because its domestic production was reduced. What will B do with its new income and what will C do with its unemployed resources? The simplest plot would be to let B use its additional income to buy something from A and something else from C. This would restore balance in their trade and put the unemployed in A and C to work. But this outcome is too simple and too dull; let us assume instead that B uses its extra income to buy from D, and C uses its extra workers to make something to sell to D; since D's exports to B exceed its imports from B, it has still some income left to buy enough from A to absorb A's unemployment. Still too simple? More interesting plots would bring us some good complications arising from various ordinary or extraordinary elasticities of supply and from especially entertaining income- and price-elasticities of demand for domestic products and various imports.

In the preceding paragraph only positive economics was involved. But now let us call in our best experts in value judgments and have them first reach an agreement on what is most likely to happen and then what the net benefits and net losses will be for A, for B, for C, for D, for A and B together, for C and D together, for A, B and C together, and for all four.

The task sounds formidable. The question is whether one may be satisfied with one of the simpler plots and with some simple rules of thumb for

judging the effects on welfare. Most of the economic advocates seem to think so and I can only hope that they are right.

A Taxonomic and Semantic Summary

I have proposed that much of the ambiguity of the term economic integration may be avoided by the use of qualifying adjectives, and I have also discussed some of the adjectives that have attained wide currency. A warning may be in order, however, not to expect that the proposed adjectives remove all vagueness. Unfortunately, some of the adjectives have been used as ambiguously as the noun. Here is a sample:

Regional has been used to mean

- (i) provincial, any part of a state,
- (ii) multinational, two or more states but less than the world,
- (iii) any territory, such as a province, a nation, a group of nations but also the whole world.

Viner can be cited as one who used region in the first sense, that is, to mean a part of a country;⁷ Ohlin used region most often in the third sense, that is, to refer to the area that happened to be relevant in the context;⁸ in the last two or three decades most writers have been thinking of groups or blocs of countries, hence, of regions in the second sense.

⁷Jacob Viner, Studies in the Theory of International Trade, (New York: Harper, 1937), p. 595.

⁸Bertil Ohlin, Interregional and International Trade (Cambridge, Mass: Harvard University Press, 1933), p. 67.

Global has been used to mean

- (i) worldwide, comprising the entire globe,
- (ii) comprising all activities and all sectors of any region.

In the first sense global is meant to be the opposite of regional in sense (ii), in the second sense global is meant to be the opposite of sectoral.

Universal has been used to mean

- (i) worldwide,
- (ii) comprising all parts (or sectors) of the relevant region.

In the first sense universal is a synonym for global in sense (i), in the second sense it is the opposite of partial.

Sectoral has been used to mean

- (i) limited to particular industries or sectors of the economy or economies concerned,
- (ii) gradual, proceeding successively from sector to sector.

In the second sense sectoral was used in a report prepared for an international conference.⁹

⁹Fritz W. Meyer, Die Europäische Agrargemeinschaft und ihre Auswirkungen auf die gegenwärtige und zukünftige Handelspolitik und das Transferproblem. Gutachten für die deutsche Delegation bei dem Vorbereitenden Arbeitsausschuss der Konferenz für die Organisation der Europäischen Agrarmärkte. 15 September 1952.

Functional has been used to mean

- (i) gradual, proceeding successively from sector to sector,
- (ii) by means of price incentives operating in the free market.

In the first sense, functional is equivalent to sectoral in sense

(ii); it is so used by many political scientists.¹⁰ However, political scientists have also used functional in the second sense, roughly equivalent to "liberalist."¹¹

Institutional has been used to mean

- (i) by means of "dirigist," administrative commands and prohibitions,
- (ii) by means of adaptations of national or international institutions (in the widest sense of the word, for example, monetary practices and arrangements).

In the first sense, institutional is the opposite of functional in sense (ii) and has been so used by the writers who wanted to stress this pair of antonyms. The second sense has been more customary.

The Inclusion of Public Goods

Definitions of integration that stress the opportunities for division of labor in the production of goods and services are likely to focus on

¹⁰P. G. Bock, "Functionalism and Functional Integration," International Encyclopedia of the Social Sciences (New York: Macmillan, 1968), Vol. 7, pp. 534-541.

¹¹Rolf Sannwald and Jacques Stohler, Economic Integration: Theoretical Assumptions and Consequences of European Unification (Princeton: Princeton University Press, 1959, 2nd ed., 1961), p. 84.

economic criteria and to leave political and other aspects aside. A disregard of political concerns disturbs those who like to integrate all social sciences into a unified science of society. A good way to satisfy some of these unitarians is being shown by Richard Cooper, when he, in a most stimulating paper prepared for the Congress, widens the focus of our economic analysis to include public goods (usually intangibles) besides the private goods which have long monopolized the economic theorists' attention.¹²

Many of these public goods are what social scientists (economists included) have regarded as the satisfaction of noneconomic, social or political objectives (of groups, communities, nations, or groups of nations). If the attainment of widely held collective objectives -- such as nationalism (anticosmopolitanism), national or international egalitarianism, or the cultivation of particular artistic and literary tastes -- is regarded as a public good, the most effective division of labor in producing this public good may well call for very different territorial delimitations than would be compatible with efficiency in the production of private goods and services. Some years ago, Harry Johnson, and Charles A. Cooper and Benton F. Massell (in independent articles to be cited later in Chapter IX) called attention to these matters; now Richard Copper does us a great service by incorporating them into a conceptual framework for our thinking about the geographic extension of international economic integration.

¹²Bananas are private goods, most cheaply acquired in exchange for a domestic product; but the pride of having bananas grown at home, rather than acquired by trade, is a public good. Some non-conformists may not share this pride. To their tastes, this public good would be a nonsense and a nuisance.

The trouble with most of these public goods is, in my view, that they are wanted by a public that does not know their costs. Even if we presented the most sophisticated benefit-and-cost analyses for each of the public goods, we could not make most people comprehend that they must pay for them and how much. Many things that flatter the nationalistic sentiments of a people are fervently and zealously wanted as long as people think that the cost is reasonable or is being paid by others. If each of the public goods had to be paid for out of taxes and each citizen knew how much his own share of the cost would be, we might see that the effective demand for many public goods is not so strong as the proponents had thought it was. I cannot furnish empirical support for this statement, but I am highly skeptical about the strength which the demand for public goods would have if the citizens were fully cognizant of the unavoidable assessments of the individual contributions to the cost of providing many of these public goods. My doubts refer to a large variety of collective undertakings, ranging from defense and armament via national airlines and protected steel mills to subsidized arts and sciences.

As we learn that many public goods can be more efficiently provided by a smaller club of provinces or countries than by a larger (more cosmopolitan) group of countries, we ought to take notice of the fact that the opportunity cost of providing these collective goods will be increased by the decision to forego the greater efficiency with which private goods could be produced if division of labor were extended over a much larger territory,

probably the entire world. In other words, the provision of public goods in the smaller geographic area that appears optimal for their production may be subject to heavy external costs which burden the production of private goods for an unduly limited market. These external costs would surely escape the attention of the tax accountants, but would probably be missed also by the benefit-and-cost accountants looking at their items and numbers through rose-tinted glasse

In the history of the idea of economic integration not much has been written on public or collective goods in an explicit fashion, except when some arguments against free trade, and in favor of protection of domestic production, were made with reference to collective objectives such as military preparedness for the next war (to secure an ample supply of soldiers from a robust rural population and of arms from a strong defense industry). The overwhelming part of the literature, when the cases for national, regional, or global integration were argued, focused on short- and long-run economic efficiency in the production of ordinary (that is, private) goods and services as the major objective.

PART TWO: THE IDEA AND ITS DIFFERENT STRANDS

In this part I shall first engage in some general reflections on the task before us, especially on the differences between economic thought and economic analysis and on the relation between political and economic thought. I shall then proceed to the job of breaking up the complex idea of general economic integration into its many elements or, to use another metaphor, the job of disentangling the many different strands with which its ideological yarn has been spun. Finally, I shall present samples of contributors to the strands of ideas, ordered in a somewhat unusual scheme of classification.

III. Economic Thought, Economic Analysis, and Political Aims

In distinguishing economic thought and analysis I follow the example of Joseph Schumpeter. There had been many comprehensive works on the history of economic thought or economic doctrines, but Schumpeter found their scope too wide for the careful theoretical dissecting that he meant to do on the economic literature. There was more than enough to say on economic analysis alone, unencumbered by discussions of applied economics and broader economic thought that was not sufficiently sharp, clean-cut and generalized to be regarded as analysis.

In a history of the idea of general economic integration it would surely be too restrictive and too pretentious to limit oneself to pure economic analysis. However, one may still recognize Schumpeter's distinction by sorting the contributions into different

categories, one of which is labeled "Economic Theory." It will contain economic analyses of the abstract issues raised in the theory of economic integration, ranging roughly from the theory of division of labor and comparative costs via the theory of customs unions to the theory of second-best and other theorems of welfare analysis.

Just as economic analysis wants to be segregated, perhaps somewhat snobbishly, from broader economic thought, so economic thought often wants to be separated from social and political thought, notwithstanding the fashionable bow to interdisciplinary research. This separation, however, is difficult to carry through in a history of the idea of national and international economic integration, because social and political issues are inseparably linked with economic ones. Indeed, the fundamental question of means and ends may militate against monodisciplinary thinking and require interdisciplinary inquiry. The literature is full of statements contradicting one another in the identification of target and instrument. There are many for whom peace and political unity is the target, and economic integration the instrument; but there are others who see in economic integration the target and in political integration (federation, confederation, supra-national authorities, etc.), the required instrument.

One might think that on this question economists and political scientists are neatly divided, but this is not so. We find mixed company on both sides of the issue. A good many economists have declared that a customs union was politically impossible without

simultaneous, or from preceding, political integration. Other economists, however, were convinced that closer political relations and, eventually, peace among the nations, could be achieved only by means of economic cooperation and coordination ahead of political unification. For example, Vilfredo Pareto, speaking at a Peace Congress in Rome, in 1889, saw customs unions and other international economic arrangements as means to better political relations and eventual pacification.¹ Similar statements were made in 1900 at a Political Science Congress on "Les Etats-Unis d'Europe."

Several apodictic assertions about the impossibility of customs unions in the absence of political unification have been disconfirmed by historical events: first by the formation of the German Zollverein and again by the formation of the European Common Market. Other, more vaguely formulated propositions claiming much weaker preconditions were not falsifiable. For example, claims that some unspecified measure of "national sentiment" or "cultural affinity" is a necessary condition for achieving closer economic ties, can neither be proved nor disproved. What was the role of national sentiment in the economic unifications of the kingdoms on the British Isles, of quadrilingual Switzerland, or of the multilingual, pluricultural Austria of the Hapsburgs?

For some targets of integration it is difficult to decide whether they are economic or political. I admit to serious confusion

¹Atti del Congresso di Roma per la pace e per l'arbitrato internazionale, Maggio 1889, (Citta di Castello, 1889).

when I read a few eminent economists who include equality (or "less inequality") of income among the criteria of integration. If this is to refer to the earnings of labor, it would be a serious blunder to forget that the homogeneous factor L (of uniform quality) is a purely mental construct designed to explain the equalization of factor prices in an abstract model of imaginary countries under perfectly free trade and under several other counterfactual assumptions. This factor L is neither the same as nor related to real-world labor of various types working with different efficiency under different conditions in different real-world countries. Yet we find that a substantial reduction, if not removal, of existing national and international differences in the earnings of labor is stipulated among the targets of economic integration or among the indices of their being approached or attained. Perhaps I have misunderstood Jan Tinbergen² and Gunnar Myrdal³ and their heavy emphasis on redistribution within and between countries. I cannot help thinking of Jacob Viner's⁴ reference to the income differentials of farmers within the United States, where the average income per man was more than 39 times higher in the richest agricultural county than in the poorest. With perfectly free interstate trade and a

²Jan Tinbergen, International Economic Integration (Second, revised ed., Amsterdam: Elsevier, 1965), p. 78.

³Gunnar Myrdal, An International Economy: Problems and Prospects (New York: Harper, 1956), p. 1-4.

⁴Jacob Viner, International Economics and Economic Development, (Glencoe, Ill.: Free Press, 1952), p. 65.

common market for products, with perfect mobility of capital, and substantial mobility of labor within the United States, this nation had surely attained a higher degree of internal economic integration than any larger region or the whole world is likely to achieve in decades to come. Should we as responsible theoretical and political economists encourage or even entice our students to jump from idealized explanatory models to practical (or impractical) political problems of the real world?

IV. The Main Strands of the Idea

Every serious discussion of economic integration, national, multinational, or global, is based on some fundamental principles of international trade. After all, trade is the quintessence of economic integration, and both involve division of labor. This holds for intranational as well as international trade. The advantages of division of labor have been expounded for at least 400 years, though the rigorous analysis of these advantages is only 200 years old.

Specialization. Specialization had much to do with the increased output of appropriately divided production. Some of the division of labor was dictated by natural differences ("soil, climate, and situation"), some was based on differences in the relative endowments with productive resources of the same type, and some was "artificial" in the sense that acquired skills increased the efficiency of specialized producers.

The Extent of the Market. An early insight was that the possibilities of division of labor were limited by the extent of the market and that the extent of the market, in turn, was limited by the natural and artificial barriers to transportation. Tolls, taxes, and customs duties were the major artificial barriers, and economic integration was therefore promoted by the reduction and abolition of such imposts. The question of the optimum size of the integrated territory arose very early in the game: I shall later quote a pertinent statement made in 1691. Yet for several centuries the main

concern of the promoters of economic integration was to unite the counties, provinces, and splinter states into an integrated nation state. Although there were some forward-looking proposals of international and even worldwide integration, the discussion of such plans was largely a matter of the 19th and 20th centuries.

Absolute and Comparative Advantage. The early writers on international trade had explained the advantages of international division of labor by pointing to "absolute" differences (in terms of factors used) in the costs of production of different goods. The invention of the law of "comparative" advantage may be regarded as one of the greatest achievements of economic theory. The law can best be expressed in two propositions. The first is that the money prices of goods and services in fully competitive markets, in the absence of external economies, and under perfectly adjusted exchange rates reflect the comparative advantages in producing these goods and services. The second is that all that it takes for a country or a region to have comparative advantages in the production of some things is to have worse disadvantages in the production of other things. Since it is practically impossible for any economic region (province, country, group of countries) to be equally inefficient in all conceivable activities, it is virtually certain that every region will have comparative advantages in some of them. To understand the logic of this and its practical implications is a prerequisite of any intelligent discussion of economic integration,

though of course the implications for commercial policy may be offset by other considerations.

Dividing the Gain. One such consideration is the division of the gain from trade. Early economic analysts made several errors of reasoning on this subject. How the additional product due to an extension of division of labor is distributed among the trading partners depends on the terms of trade; and how these terms were determined in competitive markets was not easy to figure out.

Optimum Tariff. After this was at last comprehended to the theorists' satisfaction, it was found that an artful set of tariff rates could, through clever exploitation of monopolistic or monopsonistic market positions, improve the country's terms of trade in order to squeeze the trading partner and thereby gain for itself a larger share of the joint increase in total output, though that total may be reduced in the process. Thus the theory of the "optimum tariff" was worked out and it gave protectionists a new argument. Its use in the theory of the customs union added some fascinating facets to an intellectually challenging analysis. Whether it is operationally significant in the sense that it may be helpful in actual tariff setting and tariff bargaining is very doubtful. Moreover, one may doubt the moral acceptability of schemes of national enrichment at the clear expense of one's trading partners.

Infant Industries and Underdeveloped Countries. The strongest argument for tariffs or subsidies is the case of the infant industry, first clumsily suggested by opponents of free trade, but later developed and formulated in tenable propositions by staunch free-traders. With certain reformulations, the argument has been used to support the use of tariff protection for developing countries and also for groups of developing countries trying to achieve closer integration in customs unions or free-trade areas.

Independence, Power, Income Distribution. The use of tariff walls surrounding a bloc of integrating economies is also advocated for reasons other than faster development; for example, to achieve more "independence" from economically more advanced countries, to gain economic and, with it, political power vis-à-vis some supposedly stronger countries, and to influence the distribution of the national or regional income among economic sectors, classes or ethnic groups. Every one of these issues has its place in the theory of economic integration. While the issues of power and economic independence (autarky) are rather old and were debated as early as 200 years ago, if not earlier, the distributional effects of tariff protection, tariff preferences, customs unions, and other forms of economic integration and disintegration entered the economic literature, the halls of academe, and the negotiations among community partners only in recent times.

International Mobility of Factors. Early writers on international trade assumed that neither labor nor capital was able to move abroad. This assumption was less contrary to fact as it would be

nowadays and it allowed the theorist to build himself a much simpler model for his analysis. The modern theorist knows full well that international migration of labor and international movements of capital have become facts of life. However, he knows also that the effects of trade and the effects of factor movements have to be studied separately before one can proceed to study them in combination. Thus, "trade integration" without international movements of factors remains a subject of analysis.

Factor Prices without Factor Movements. Indeed, this has become the subject of a mathematically fascinating analysis on an exceedingly high level of abstraction. Under a set of very strong assumptions this analysis has yielded the theorem of the equalization of the prices of the same productive factors in the different trading countries. (In Teutonic English, this is called the "factor price equalization theorem"). That without any movement of any factors across the border their real prices would become equal in the countries concerned, merely as a result of free trade in their products, would be a phenomenon of great significance for testing the degree or progress of integration -- if the theorem were applicable under real-life conditions. Unfortunately, it is not -- not even as an approximation to "reality" -- though it may have misled a few economists to use it for testing purposes.

Obstacles to International Movements of Factors. Closer approximation of factor prices to equality in different countries can be expected

only through their unrestricted movement within the entire area to be integrated. International integration of capital markets would be more easily achieved than a fully integrated labor market, which rarely exists even within countries. High costs of moving, high psychic costs of getting uprooted and re-acclimatized, obstacles due to ethnic and cultural differences and differences in learning abilities and, finally, restrictions, if not exclusion, through rules and practices of labor unions, would keep the international mobility of labor far below perfection, even if governments were prepared to open the frontiers and allow unrestricted migration.

Intraregional Migration and Immigration from Outside. We have had occasion to observe that, where the governments permit it, migration of labor is far more likely from very poor to rich countries than among countries where the differences in real wages are small. This is not surprising, but it is worth noting that in the European Community the movements of labor are not from the partners in the common market but from outside the region which is supposed to be integrated.

Transfer of Technology and Enterprise. One type of economic integration that has often been emphasized is the international transfer of technology and enterprise. In recent discussions this problem has been dealt with in connection with multinational companies and with governmentally organized cooperation in industrial projects. The problem, however, is not of recent origin and the classical

writers did neither overlook nor disregard it.

Transport and Communication. That cheap transportation and speedy communication are among the most fundamental conditions of economic integration is one of the oldest insights. It was known to princes, governors, traders, and economists, in fact to every one concerned with commerce. The degree of integration -- within a given geographic area as well as the extension of integration over larger areas -- were seen to depend on cheap and reliable transportation. No wonder that historians, both those reporting on the economic integration of nation states and those reporting on the expansion of world trade, have assigned to the successive revolutions of transport technology a major role. No wonder, also, that theorists analyzing the effects of tariffs were wont to simplify their models for purposes of comparative statics by assuming transport costs to be zero. No wonder, too, that at least one economist tried to elucidate the effects of tariffs on prices and production by speaking of them as "negative railways" (Bastiat).

The Transfer of Money. Equal to cheap transport as a precondition of economic integration ranks cheapness and reliability of transfers of money. This requires a monetary system that allows importers to make payments to their foreign suppliers with a minimum of bother, risk, and other costs, and likewise capitalists to remit funds to their foreign borrowers or correspondents, and debtors to pay interest and principal to their foreign creditors. Needless to say,

the oldest literature dealt chiefly with easy payments in foreign trade; the freedom and ease of capital movements entered the discussion only later. The importance of easy payments has been extensively discussed in mercantilist writings about unification of the nation state, when large numbers of different coins, made of gold and silver of different weight and different fineness, circulated within the provinces, principalities and splinter states. After the establishment of nation states, the formation of monetary unions to guarantee the interconvertibility of national currencies became an object of public discussion, governmental negotiations and actual agreements, none of which has proved a lasting success. The discussion continues. No economist will question that monetary integration may make a significant contribution to general economic integration, but many will disagree on the best sequence of steps to bring it about. Questions such as the stability or rigidity of foreign-exchange rates, the autonomy of national monetary authorities, the coordination of national monetary policies, the use of governmental restrictions and controls of foreign payments and transfers of capital, and the eventual replacement of national currencies by a uniform money for the entire economic union, all these questions have remained controversial. To some economists, the existence of free markets for currencies, unencumbered by controls and restrictions, secures all the monetary integration that is needed to achieve a very high degree of general economic integration.

Competition, Oligopoly, Monopoly. While most economic analysts have developed their generalizations about trade and production under the assumption of free competition, a good deal of attention has always been given to the existence of monopolistic market positions. Indeed, 198 years ago it was said that it was the "spirit of monopoly" that was behind the invention of import barriers to protect domestic producers. And the same writer advocated the freeing of the "colony trade" from the trading monopolies granted by the state; he wanted to open it "to the competition of all other nations."¹ Many writers, recognizing the imperfections of competition in domestic markets, saw one of the greatest benefits of free trade in the competition from foreign producers. Competition from abroad could end the oligopolistic sinecures of domestic firms and force them to work with greater efficiency.

Forced Efficiency. The probability of "forced efficiency" under the pressure of foreign competition is now one of the most respected arguments for the formation or extension of customs unions. This forced efficiency is often taken to outweigh the induced inefficiencies through trade diversion from cheap external sources of supply to more expensive producers located in a member country of the customs union.

Trade Creation and Trade Diversion. The distinction between trade

¹Adam Smith, An Inquiry into the Nature and Causes of the Wealth of Nations (1st ed. 1776) New York, Modern Library 1937, p. 574.

creation and trade diversion had its formal debut in 1950. It was the beginning of the modern theory of customs unions. The first issue centered on the effects of the formation of a customs union upon the utilization of comparative advantages in production. If countries A and B form a union by removing the tariffs on imports from each other but retain a tariff on imports from C, it is possible that a new import from B, no longer subject to duty, will displace in A either a home-made product of A or an import from C. If it displaces A's domestic product, new foreign trade (though it is intra-union trade) is created. If it displaces a previous import from C, no new trade is created, but trade is diverted from a cheaper source of supply to a more expensive one, which (thanks only to the tariff discrimination) becomes more competitive. From the point of view of greatest possible economy in production, the customs union will increase economic welfare only to the extent that the effects of trade creation outweigh those of trade diversion.

The Consumption Effect of Lower Tariffs. The theory was incomplete and new strands were added to it in quick succession. The first was the "consumption effect" of the price reduction due to the removal of the duty on imports from B. Even with no shifts to make better or worse uses of opportunities for comparatively more advantageous production, indeed even if production remained unchanged everywhere, the changes in relative prices charged to consumers would induce them to rearrange the pattern of their consumption in

line with their preferences. If the taxes on imports had caused worse distortions of the price structure relative to the cost structure of the goods and services produced than will be caused by any new taxes which the governments will have to raise in order to replace the lost revenues from import duties, consumer welfare will have increased by the formation of the customs union. Favorable consumption effects of this sort may conceivably outway any adverse production effects of trade diversion from lower-cost to higher-cost sources of supply. It was in the analysis of comparisons of this sort that the "theory of second-best" was developed.

Economies of Scale. Another strand in the twining of the idea of economic integration over extended areas, and therefore with extended markets, is the theory of economies of scale in production activities for which particularly large plants are required. Although this theory has now been built into the theory of customs unions, it had existed for a long time -- at least for 126 years. That economies of large-scale production could be exploited only where markets were sufficiently wide was recognized long before technological developments gave serious practical relevance to the issue. Ingenious attempts have been made recently to measure the economies of scale that were attained with the enlargement of the market afforded by the European Community. One may question, however, the justification of attributing to the customs union effects that could be had even better by any move toward freer trade without the formation of regional blocks. Many who recognize this correction of the causal attribution are nonetheless willing

to credit customs unions with the effects achieved, because they doubt that any country could have been persuaded to adopt free trade or even substantially freer trade had it not been for the schemes being limited to small groups of countries.

A Compromise between Free-Traders and Protectionists. A customs union may be seen as a compromise between free-traders and protectionists. The former are happy about the abolition of barriers in intra-union trade, the latter about the continuation of barriers against extra-union imports. The height of these barriers determines who has made the greater concession. Some of the free-traders were not even much concerned about the tariff walls around the region, because (as eternal optimists) they counted on both a gradual lowering of the walls and on a gradual pushing outward of the walls: more countries would join the union and a continuing growth of world trade would be admitted or even promoted.

Political Integration. The two groups of friends of the customs union, those aiming at regional protection and those aiming at eventual worldwide trade integration, were greatly aided by a third group: those who cared far less about economic integration as an objective but saw it as a catalyst of political integration. They were hoping that closer economic relations among the members of a customs union would lead to closer political ties and eventually to political unification.

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I have now completed the task of pointing out some of the most

important strands that have been twined together to the idea of general economic integration.* A history of ideas undertakes to present the ideas and their component strands together with the persons who put them forth in their published works, either as vague or raw suggestions or in refined and consistent formulations. The contributors to the idea under review have come from many quarters, and I shall find it helpful first to propose a system of classifying the sources from which the thoughts have sprung.

*After I had gone some way in my research for Part Three, I realized that this chapter on "The Main Strands of the Idea" is really incomplete. Several more "strands" have to be added to, or rather worked into, the presentation. Suggestions from the readers of this draft will be welcomed. Please tell me what you think ought to be included (or treated more extensively than it has been treated here).

IX. Economic Theorists

As we come to the fifth group of contributors, those among my audience who are chiefly interested in economic analysis may at last get what they have been patiently (or impatiently) waiting for. In Chapter IV a review of the theoretical issues was offered without indication of the parentage of the ideas; now the names of the authors will be given together with their "intellectual offspring." But first a few general principles regarding the inclusiveness, selectivity, and general arrangement of this survey should be set forth.

General Guidelines

We should bear in mind that virtually all economic propositions about international economic integration are part and parcel of the theory of international trade and finance and, obversely, that most of this body of theory is directly relevant to issues of economic integration. I doubt that one could find any proposition in trade theory that had no bearing on some of the implications of economic integration. To demonstrate this for individual contributions to the theory would be too tedious and I shall therefore take it for granted.

Where an author has written a comprehensive book on international economics it would be quite arbitrary to pick out those of his contributions which may be most relevant to our present concerns. Nearly everything regarding the effects of extending or restricting trade, free trade or protection, customs unions and other forms of discrimination, the gains from trade and their distribution, the terms of trade and their implications, the prices of productive factors and their divergencies in different countries, tendencies toward an international equalization of factor prices, international movements of labour and capital, international payments and their balance or imbalance, mechanisms of adjustment and transitional financing of imbalances, exchange rates and monetary policy, and so on and so forth -- everything that has been said on any of these matters bears on the analysis of the implications of general economic integration. Only deliberate arbitrariness and ruthless selectivity can help us keep this survey down to acceptable proportions.

This arbitrary selectivity will make the survey vulnerable to charges of misplacement of emphasis. For example, several authors may have made equally important contributions to the theory of comparative advantage, but one of them may have addressed the customs-union issue; the latter will then be cited or quoted on his propositions on customs unions while his work on the more general and more fundamental points may remain unmentioned. Or, some authors may have dealt with matters of economic integration through abolition of trade restrictions, coordination of monetary policies, and harmonization of fiscal institutions; chances are that their work on trade integration will be reviewed while their contributions to other issues may be disregarded. Finally, many authors in the field surveyed will be left out for no other reason than that their work has not been widely referred to by other writers and, thus, apparently has not made any impact on this discussion. The number of omissions from this survey is probably a multiple of the number of inclusions.

Where should we begin? How far back should we go in this review? Who were the first economists to understand the economic benefits obtained from trading freely with others than one's immediate neighbors in the same locality or province? We have learned from Jacob Viner that we must not attribute these insights to the physiocrats, for they advocated foreign trade not for the advantages to be derived from more extended division of labor; they saw in foreign trade the fulfillment of liberty and justice and, before all, of divine providence, which had endowed nations with

very different natural conditions.¹ (Incidentally, I shall rely on Viner's Studies as the major guide and principal source for virtually all classical contributors to the theory of international trade.) My list of authors must begin with one who clearly saw a genuinely economic advantage in extending the area of trade.

1691-- 1874

Sir William Petty (1623-1687), in his Political Anatomy of Ireland (London: Brown and Rogers, 1691), ridiculed those who wanted "to keep Ireland a distinct kingdom" as he asked them "why was there ever any union between England and Wales? and why may not the entire Kingdom of England be further cantonized for the advantage of all?" (Petty, 2nd ed., 1719, p. 34).

Charles Davenant (1656-1714) may have anticipated later theorists in understanding the law of comparative advantage in his Essay on the East-India Trade, (London: J. Knapton, 1696, reprinted in 1771); but this is a matter of how his brief allusions may be interpreted.

Isaac Gervaise (16 -1739) published a pamphlet on The System or Theory of the Trade of the World (London: Woodfall and Roberts, 1720, reprinted Baltimore, Md., Johns Hopkins Press, 1954), which anticipated in several respects not only Hume but also Ricardo.

Anonymous. An unknown but widely quoted author of a pamphlet on Considerations on the East-India Trade (1701, reprinted in John

¹Jacob Viner, Studies in the Theory of International Trade, New York: Harpers, 1937.

R. McCulloch, ed., A Select Collection of Early English Tracts on Commerce, 1856, pp. 541-629), showed that the fundamental advantage of acquiring cheap imports lies in the saving of domestic resources.

Patrick Lindsay (1699-1746), in his pamphlet The Interest of Scotland Considered, (Edinburgh: R. Fleming Co., 1733) drew the practical conclusion that Scotland ought to concentrate on making linen and buy its woolen goods from England, because Scotland was losing by using its labour for making its own woollens.

David Hume (1711-1776) in his Essays: Literary, Moral, and Political (1741-42) gave a detailed explanation of the mechanism of adjustment of the balances of trade and payments. He surely understood the idea of absolute cost advantages in production and trade. Whether he had also grasped the idea of comparative advantage is open to question. When he wrote "Of the Jealousy of Trade" (1758) and stated that "Nature, by giving a diversity of geniuses, climates, and soils, to different nations, has secured their mutual intercourse and commerce" (p. 79), absolute differences in real costs would suffice to make this true. When he added that no country need fear that its trading partners "will improve to such a degree in every art manufacture, as to have no demand" for its products, this sounds almost like an inference from the law of comparative advantage. Yet, a conditional clause in the same sentence spoils it again. The reservation was "so long as it [the nation] remains industrious." After all, even the laziest and most indolent nation would probably be less inefficient in some activities than

in others, and hence have comparative advantages in the latter.

Adam Smith (1723-1790), in his Inquiry into the Nature and Causes of the Wealth of Nations, (London: Strahan and Cadell, 1776), pronounced explicitly on the mutually useful division of labour between areas on different levels of development; like Hume before him, and Josiah Tucker in his correspondence with Hume, Smith had no reservations about the full application of the principle of free trade in such situations.¹ This position, however, can be arrived at without support from comparative advantage; of course, the volume of mutually beneficial trade would be smaller if only absolute cost differences -- that is, costs in terms of factor inputs -- were exploited, but there would still be foreign trade. Interpreters of what Adam Smith really knew and really meant differ on just how the advantages from international trade are to be explained. "By opening a more extensive market for whatever part of the produce of their labour may exceed the home consumption, it [foreign trade] encourages them to improve its productive powers, and to augment its annual produce to the utmost..." (Smith 1876, Mod. Lib. ed., 1937, p. 415). Was this improvement of productive powers an increase in efficiency either through acquired skills or through production on a larger scale, or was it due to a reallocation of labour from branches now cut down as a result of cheaper imports from abroad? or did it perhaps consist only in the exchange of a surplus commodity

¹Samuel Hollander, The Economics of Adam Smith, Toronto: University of Toronto Press, 1973, p. 291.

for something not produced at home? The latter was John Stuart Mill's interpretation of Smith's thought and he called it the "vent-for-surplus" argument for free trade. A new interpretation has recently been offered to the effect that "trade economizes capital and therefore allows a faster increase in the demand for labour as capital is released for additional ventures."² None of the several explanations of the benefits from international trade that have here been mentioned would be inconsistent with the later explanation of the advantageous pattern of trade among nations that arises from relative differences in the "scarcity" of the major productive factors. These relative scarcities may be caused by differences in supply (endowment) or demand (tastes) in the markets for productive factors and may give rise to trade-inducing comparative advantages and disadvantages, even in the absence of any technological, climatological, physiological, psychological or attitudinal differences. An anticipation of this "modern" idea can be found in Smith's discussion of the mutually beneficial trade with the American colonies, where land was cheap and labour dear relative to the price ratios prevailing in the countries of Europe (Smith 1776, 1931, p.). In any case, Smith's dictum that "The division of labour is limited by the extent of the market" (Smith 1776, 1931, p.), together with his conviction that extensions in the division of labour would increase its productivity, made him infer that every extension of the market will increase the

²Samuel Hollander, op. cit., p. 276.

product in all countries, regions, or continents involved and thus be advantageous to all.

Robert Torrens (1780-1864) was the first undisputed expositor of the law of comparative advantage. Through his books, The Economist Refuted (London: S. A. Oddy, 1808), An Essay on Money and Paper Currency (London: J. Johnson Co., 1812), and An Essay on the External Corn Trade (London: Hatchard, 1815), Torrens' priority is clearly established. However, in contrast to Ricardo, who made this law the major premise for an unqualified endorsement of free trade, Torrens, in the course of a later discussion on the international division of the gains from trade, was unwilling to concede that unilateral reduction of tariffs would benefit the liberalizing country. (More on Torrens later, in connection with the division of the gains from trade.)

David Ricardo (1772-1823) saw the explanation of the "general benefit" to be derived from international trade almost exclusively in the more efficient allocation of productive resources that was associated with the extension of trade: In his book On the Principles of Political Economy and Taxation (London: John Murray, 1817) he wrote: "Under a system of perfectly free commerce, each country naturally devotes its capital and labour to such employments as are most beneficial to each. This pursuit of individual advantage is admirably connected with the universal goods of the whole. By stimulating industry, by rewarding ingenuity, and by using most efficaciously the peculiar powers bestowed by nature,

it distributes labour most effectively and most economically: while, by increasing the general mass of productions, it diffuses general benefit, and binds together, by one common tie of interest and intercourse, the universal society of nations throughout the civilized world" (Sraffa edition 1951, Vol. I, pp. 133-134). The "diffusion" of the benefit was attained by commodity prices falling relative to labour as a result of "the better division and distribution of labour" (p. 94). Again, as Ricardo wrote in a letter to Malthus between 1820 and 1830, "In proportion as the market is extended, the people of every country are enabled to make the best division of their labour, and the most advantageous use of their exertions" (ed. Sraffa, Vol. II, p. 360).

James Mill (1773-1836) found that neither Ricardo nor his immediate followers had solved the problem of how the gains from trade -- that is, the additional output produced thanks to the more efficient allocation of resources -- would be divided among the trading countries. James Mill made a famous error when he, in the first edition of his Elements of Political Economy (London: Baldwin, Cradock and Joy, 1821), counted the gains twice: each of the two countries was assumed to gain the entire increment in output. He corrected this error in the third edition (1826) but naively believed that each of the two countries would gain one-half of the increment. James Mill's idea of a fifty-fifty sharing of the gains from trade was set aside and a solution found when the principle of reciprocal demand was developed by John Stuart Mill.

John Stuart Mill (1806-1873) wrote the puzzle-solving essay

in 1929-30, but published it only in his Essays on Some Unsettled Questions of Political Economy (London: J. W. Parker, 1844, p. 12).

There was a letter from James Pennington to Kirkman Finlay, Esquire "on the importation of foreign coin," which also contained the solution of the problem. It was printed in 1840, but when it was written is unknown. Thus there is a question of priority, though it may well have been an instance of multiple invention. In any case, Mill's exposition is the one from which later generations of economists have learned that the division of the gains from trade is determined by the terms of trade, which in turn are determined by the reciprocal demand for each other's product. This was only one of several important contributions John Stuart Mill made to the theory of international trade, some of them in the first edition of his Principles of Political Economy (London:

, 1848), others in later editions. (See Ashley edition, 1909; and University of Toronto edition, 1965, to which the subsequent page references go). There was a clear understanding of the economies of large-scale production, as Mill said that the possibility of "substituting the large system of production for the small, depends, of course, in the first place, on the extent of the market" (p. 140). Chapter XVII of Book III of his Principles treats entirely "Of International Trade"; ¶ 1 deals with the international immobility of factors; ¶ 2 with comparative cost; ¶ 3 explains that the "advantage [of trade] consists in a more efficient employment of the productive forces of the world," ¶ 4 criticizes Smith

for his narrow view of foreign trade as a country's "vent for its surplus"; ¶5 shows how long-run, indirect benefits are combined with direct benefits: "A country which produces for a larger market than its own, can introduce a more extended division of labour, can make greater use of machinery, and is more likely to make inventions and improvements in the processes of production" (p. 593). [This emphasis on development is nowadays discussed under the heading of "dynamic" considerations and set against the alleged one-sidedness of "classical" and "static" considerations.] Another indirect benefit of trade is seen in the international transfer of technology, enterprise, and industrial discipline, if one may thus translate Mill's statement that a nation may borrow from others "not merely particular arts and practices, but essential points of character in which its own type is inferior" (p. 594). [One may wonder how the dynamic critics of classical statics can reconcile their feelings of superiority with this statement of Mill's.] In Chapter XVIII, Mill treated "Of International Values", and presented his theory of reciprocal demand. The exposition was largely in terms of two countries exchanging two goods only. From the third edition on (1852), Mill recognized that, with only two goods traded, it would be possible for the entire gain from trade to accrue to only one of the two countries (p.). In such a case, trade would quickly be extended to a greater number of goods and both countries could get some of the benefits, (p.).

William Ellis (1800-1881), a minor writer in the circle of

J. S. Mill, was among the earliest to observe that the theory could not be kept confined to two countries and two commodities. In an article on "Exportation of Machinery" in Westminster Review, Vol. III (1825, pp. 388-89), he pointed to an extension of the theory of comparative costs to more than two countries. [The task was obviously beyond the technical capabilities of the time. Most teachers of international trade will admit that even now, 150 years later, we have serious difficulties with such extensions -- especially if we extend the model also to three or more factors of production, something the classical economists avoided by sticking to labor as the sole factor.]

Samuel Mountifort Longfield (1802-1884) attempted to extend the theory of comparative costs to more than two goods. In his Three Lectures on Commerce and One on Absenteeism (Dublin: William Carry, 1835), he was able to show that comparative money wage rates in the two countries would determine the precise line of division between exported and imported commodities. He did not correctly explain, however, how the wage differentials were determined. On the other hand, he anticipated Heckscher and Ohlin when he stated that "independent of every difference of soil or climate, the exchange between two countries...will consist principally of articles produced by that species of labour which in each country is relatively cheapest" (p. 240); and again when he remarked that "commerce which exchanges the production of human labour has the same effect as if the labourers themselves could remove from one country to another..." (p. 239). On a different issue, Longfield greatly ad-

vanced the understanding of the adjustment mechanism in international payments and trade as he showed the interactions of what we today call income effects and price effects. See his "Banking and Currency," Dublin University Magazine, Vol. XV, (1840), p. 10.

Robert Torrens (1780-1864) should again be mentioned for his attempt to analyze the case of trade in several commodities. In his book on Colonization of South Australia (London: Longmans, Rees, Orme, Brown, Green, and Longman, 1835), he made progress toward solving the problem of the determination of the money wage rates that would, with given reciprocal demand of the countries' concerned, separate the exportable goods from the importable ones in such a way that trade is balanced (pp. 148-174). The terms of trade and the division of the gains from trade would be determined in the process.

John Elliott Cairnes (1823-1875) finally provided an essentially correct solution to this problem in his book Some Leading Principles of Political Economy Newly Expounded, (London and New York: Macmillan, 1874, pp. 334-41), but it was rather vague and not easy to comprehend.

Hans Karl Emil von Mangoldt (1824-1868) had anticipated Cairnes in presenting the solution of the problem of the simultaneous determination of wage rates, exchange rates, relative prices, exports and imports, and, as a result, the division of the gains from trade. It was contained in his book Grundriss der Volkswirtschaftslehre (Stuttgart: J. Maier, 1863), but became more widely known only

through an article by Francis Y. Edgeworth, "The Pure Theory of International Values," Economic Journal, Vol. IV, 1894, pp. 35-50, 424-443, 606-638. [In his Papers Relating to Political Economy, Vol. II, p. 4, Edgeworth says that "Of all the writers, classical or mathematical, who are passed in review in the article of 1894, Mangoldt is the one who emerges unscathed from the critical examination."]

A Digression: 1837 - 1861

Having proceeded with this survey to 1863 and 1874, we must pause to consider three authors, a German, an American, and a Frenchman, whose publications preceded the previous two entries: List, Carey, and Bastiat. List has been mentioned in an earlier section among the political economists who proposed or promoted economic integration through customs unions, but his omission from the rank of economic theorists might be resented by some. Bastiat is sometimes regarded as a journalist and excluded from the rank of economic analysts. The three writers have in common that they have taken very firm positions regarding free trade and protection.

Friedrich List (1784-1857) published his major work in two similar versions in 1837 and 1841; there were also later editions, several volumes of his collected writings, speeches, and letters (Berlin 1927) and an English edition of his 1841 volume under the title The National System of Political Economy (London 1928).

List's entire work was a rejection of the "principle of absolute

free trade," (1908, p. 21). He even attacked the famous illustration of the mutually beneficial exchange of British cloth against Portuguese wine and argued that it was beneficial to England only, but disadvantageous to Portugal. Not that he tried to refute the law of comparative advantage -- indeed, there is no indication in his book that he had comprehended it -- but he believed that the "theory of productive powers" was more important than the "theory of value." A country had not reached the maximum development of its productive powers until it had developed its manufacturing industries sufficiently not only to meet its own wants for industrial products but also to produce a surplus of exports. [Since it would be logically impossible that all countries have an export surplus in manufactured products, one may assume that List would be satisfied if every country had an export surplus in some kinds of manufactured products.] Countries that had not yet reached this stage of industrialization should protect their national industries. [No hint is given as to the optimum degree of industrialization: of how many manufactured products should a country be a net exporter?] List evidently was thinking about underutilized potentials for industrial production; he thus championed the cause of what others called the temporary protection of infant industries, and the cause of protected industrialization of underdeveloped countries. His arguments, however, lacked the necessary analytical support. His assertion that free competition between two nations can be mutually beneficial only if both of them are in a nearly equal position of industrial development is completely unfounded. [What about several parts of

a nation with different degrees of industrialization?]

Henry C. Carey (1793-1879), American economist and publisher, championed protectionism, using a variety of arguments against free trade. His major books in which he expounded these views were The Past, the Present, and the Future (Philadelphia: Carey & Hart, 1848), and The Harmony of Interests, Agricultural, Manufacturing, and Commercial (Philadelphia: Skinner, 1851).

Frédéric Bastiat (1801-1850), French writer, became famous for his simplified and popularized formulations of libertarian economic principles. Best known is his parable in which he shows the absurdity of protection, a mock petition of the candlemakers. Its full title is "Petition from the Manufacturers of Candles, Wax-lights, Lamps, Chandeliers, Reflectors, Snuffers, Extinguishers: And from the Producers of Everything Used for Lights." It first appeared as a pamphlet in 1845 and was later included in the volume Sophismes Economiques of his complete works (Paris: Guillaumin, 1863), English translation Sophisms of the Protection Policy (New York: Putnam, 1848). In this satire the candlemakers and allied manufacturers complain about the unfair competition from free sunlight and point to the great increase in employment and domestic production that would result if the manufacturers were protected against the free importation of sunlight.

1892 - 1952

From the digression on writers who were somewhat outside the mainstream of trade theory we return to classical and neoclassical

analysis of international division of labor. Perhaps my reference to "classical" theory, ought to be qualified (or even disqualified) in view of the different meanings attached to this designation. Karl Marx, who was the first to use it, meant to refer only to economists before John Stuart Mill, whereas John Maynard Keynes included almost all economists writing before 1936. But there are also more subtle distinctions; for example, Bertil Ohlin, whose work our survey will reach in this section, believed that his fundamental assumptions (about the conditions which determine trade) were so different from those made by earlier economists as to set him apart from them as a dissenter from classical theory. Subsequent writers have not seen such a wide gulf and have had no misgivings when they included Ohlin among the neoclassical economists.

In this section we shall come to writers who addressed themselves directly to issues raised by the establishment of customs unions or other techniques of greater economic integration among different countries. There would seem to be little justification in carrying this section only to 1950 or 1952 and devoting a separate section to subsequent contributions. I submit that there is a reason for such a break: the appearance in 1950, of Jacob Viner's work on The Customs Union Issue, which shunted the train of economic thinking onto a new track.

Charles F. Bastable (1855-1945) published in 1892 a book on The Commerce of Nations (London: Methuen, 1st ed. 1892, 10th ed.; revised by T. E. Gregory, 1927), presenting the arguments for and

against protection. In his brief textbook, The Theory of International Trade: With Some of Its Applications to Economic Policy (Dublin: Hodges, 1887; 4th ed. London: Macmillan, 1903), he retained the conclusion of earlier writers that large countries may fail to derive any gains from their trade with small countries (Ch. II). In an article on "Some Applications of the Theory of International Trade," Quarterly Journal of Economics, Vol. IV (1889), pp. 1-17, he discussed the adjustment mechanism of the balance of payments and emphasized, not the level of money wages or the rate of efficiency earnings, but rather the "aggregate of money incomes" as the decisive element in restoring balance.

Frank W. Taussig (1859-1940) exerted for many years a wholesome and most important influence on the development of international economics through his teaching and writing. Among his books were The Tariff History of the United States: A Series of Essays (New York: Putnam, 1892), Some Aspects of the Tariff Question (Cambridge: Harvard University Press, 1915), Free Trade, the Tariff and Reciprocity (New York: Macmillan, 1920), and International Trade (New York: Macmillan, 1927), a work in pure and applied theory in the classical tradition. Taussig stressed the imperfections in the labor market and the resulting barriers to domestic mobility and efficient allocation, but did not conclude that tariff protection could be justified on such grounds. [This entry will be expanded.]

Eli Heckscher (1879-1952), Swedish economist and historian, published in 1919 a seminal article on "The Effect of Foreign Trade

on the Distribution of Income," Ekonomisk Tidskrift, Vol. XXI, pp. 497-512. His starting proposition was that differences in the relative scarcities (reflected in relative prices) of the same factors of production in different countries and differences in the proportions in which the factors are used in different commodities are prerequisites for international trade. If the same techniques are used and free trade equalizes the prices of commodities in the trading countries, each country will import products for which relatively more of its scarcer factors are used and will export products for which relatively more of its abundant factors are used. As a result, the scarce factors become less scarce, and the abundant ones less abundant. Trade will thus affect the prices of the factors-- and, hence, the distribution of income -- and will expand until the relative scarcities (relative prices) of the factors in the trading countries have become equal. The original differences in comparative costs of products will have disappeared when all potentialities of profitable trade are fully utilized. Should the effects on income distribution be considered undesirable, the rational policy to avoid them would be taxation, not protection.

Gustavo Del Vecchio (born 1883), in his book Teoria del commercio internazionale (Padova: LaLitotipo, 1923), came close to Heckscher's theory that, since each country exports goods made largely with its relatively cheap factors of production, trade will increase the demand for these factors and raise their remuneration. Del Vecchio did not, however, pursue this argument to the conclusions which Heckscher had reached.

Frank D. Graham (1890-1949) published in 1923 an important article "The Theory of International Values Reexamined," Quarterly Journal of Economics, Vol. XXVIII, pp. 54-86, in which he corrected or qualified several conclusions of Mill's and later theorists regarding the division of the gains from trade. Generalization from an analysis of only two countries' trade in but two commodities were disconfirmed by analyses of models with more countries and more commodities. Graham showed that it is not always the smallest or poorest country that gains most from trade, but rather the country, large or small, whose price ratios are most drastically changed by trade. He also showed, rather surprisingly, that a country with but one export commodity stands to gain more than a country that exports a large variety of goods. As to a country's share of the total gain, "it makes no difference whether this variation [in price ratios] is due to great superiority in the production of the goods which are exported or to great inferiority in the production...of the goods which are imported." Graham developed his analyses further in his book The Theory of International Values (Princeton: Princeton University Press, 1948).

Jacob Viner (1892-1970) is regarded as the greatest scholar in the history of preclassical and classical theory of trade and as a pioneer in the theory of customs unions. His first publication in the area was Dumping: A Problem in International Trade (Chicago: University of Chicago Press, 1923). In January 1931, he published an article on "The Most-Favored-Nation Clause," Index (Svenska Handelsbanken, Stockholm), Vol. VI, (reprinted in his book International Economics (Glencoe, Ill.: Free Press, 1951, pp. 94-108),

in which he argued that nondiscrimination in tariff protection would be less injurious than a discriminatory reduction of tariffs. His Studies in the Theory of International Trade (New York: Harper, 1937) became the standard history of thought in the field. His book on The Customs Union Issue (New York: Carnegie Endowment, 1950) will be annotated separately further below.

Jean Marchal (born 1905) published a book on Union Douanière et Organisation Européenne (Paris: Recueil Sirey, 1929) for the Comité français d'études sur l'Union douanière européenne. Probably written as a doctoral dissertation, the study offers a valuable historical survey of the history of customs unions and of the relevant literature. The book gives an excessive number of citations of pronouncements by Lucien Brocard, who apparently supervised the study, provided a Preface to the book, and evidently influenced the author in a direction toward protection against American competition through tariffs and toward regulation of intra-European competition through agreements among producers. (See pp. 135-148, esp. p. 141)

Mihail Manoïlesco (1891-19), Rumanian economist, published a book on The Theory of Protection and International Trade (London: 1931) with several reformulated arguments against free trade and in favour of protection. His chief case for protection relates to differences in marginal productivities and wage rates in different occupations or sectors of the economy.

Gottfried Haberler (born 1900) reformulated the theory of comparative advantage, which had first been based on labor cost and later on various notions of "real cost," in terms of opportunity cost, which allowed its use for any number of factors of production

employed in variable proportions. See his articles "The Theory of Comparative Costs Once More," Quarterly Journal of Economics, Vol. XLIII, (1929), pp. 376-381, and "Die Theorie der komparativen Kosten und ihre Auswertung für die Begründung des Freihandels," Weltwirtschaftliches Archiv, Vol. XXXII (1930), pp. 349-370. His formulation of the determination of the exchange ratios among different goods on the basis of their substitution costs yielded a consistent theory of the gains from trade. Haberler published what was at the time the most up-to-date text on Der internationale Handel (Berlin: Springer, 1933) and its English translation The Theory of International Trade (Edinburgh: Hodge, 1936). Leaving aside those of Haberler's statements that bear indirectly on the problems of economic integration and discrimination in trade, I confine myself here to his specific observations on customs unions. He held that "Customs Unions are always to be welcomed, even when they are not between neighboring or complementary States. A Customs Union must be especially advantageous for small States, since these are particularly injured if they exclude one another's goods..." On the other hand, he argued that a customs union could not bring with it any advantages that could not be attained in a still fuller measure by "a general removal of duties" (p. 390). In a later essay on "The Political Economy of Regional or Continental Blocs," in Seymour E. Harris, ed., Postwar Economic Problems (New York: McGraw Hill, 1943), Haberler repeats that "the economic arguments for...regional blocks are identical with the old classical argument for free trade,"

namely, "the advantages of mass production and of full division of labour" (p. 330).

Bertil Ohlin (born 1899) in his book Interregional and International Trade (Cambridge, Mass.: Harvard University Press, 1933), followed Eli Heckscher in taking differences in the endowment of different regions with productive factors as the chief "cause of interregional division of labour," since "each region is best equipped to produce the goods which require large proportions of the factors relatively abundant there" and "least fit to produce goods requiring large proportions of factors existing within its borders in small quantities or not at all" (p. 12). Exchange-rate adjustments or demand adjustments play an indispensable role in adapting relative money costs and money prices to the task of determining which products are exportable and which importable (p. 19). However, "the list of relative factor prices in the isolated state does not tell us how high the exchange rate will be [when trade has been opened], and therefore we cannot say which or how many factors will be cheaper in the one region than in the other" (p. 21). Since exports make the abundant factor less abundant and imports make the scarce factor less scarce, the effect of trade is "a tendency towards equalization of the prices of the [same] productive factors" in different regions or countries (p. 36). We cannot expect "complete equalization," not only because of transport costs and artificial impediments to trade, but also "because the industrial demand is always the 'joint demand' for several

factors" and "their combination cannot be varied at will" (p. 38). But it "is not worth while to analyze in detail why full equalization does not occur" (p. 38). "The price differences...are reduced but they do not disappear" (p. 40), as they would if factors were as mobile as to make one region out of separate regions. But "the mobility of goods to some extent compensates the lack of interregional mobility of the factors" (p. 42). All regions or countries gain from trade, since "only if trade did not change the relative scarcity of factors in [a country] at all is it conceivable that the terms of exchange would be unaffected," but "such a case is impossible" (p. 43). It "can be taken for granted that the [average] level of factor price [in terms of commodities] will rise in all regions. Consequently a relative decline in the price of one of them, say labour, compared to another, land, does not necessarily mean that the wage level is lowered in terms of goods" (p. 44). "Wages are such a substantial part of the total income that it is almost unthinkable that a considerable rise of the [total income] could fail to raise total wages also, even if the percentage going to the labourers became somewhat reduced" (p. 44). Such reasoning, however, based on a comparison between no trade and free trade may not be conclusive for a comparison between more or less trade. In any case, "interregional trade serves as a substitute for...interregional factor movements" (p. 49).

Lionel Robbins (born 1898), later Lord Robbins, discussed the economic effects of customs unions in his book Economic Planning and International Order (London: Macmillan, 1937). He argued that

"the gain from regional regrouping or wider units of any kind" does not come from the increase in self-sufficiency on the part of the larger union but rather from the reduction in "self-sufficiency on the part of the areas which are thus amalgamated.... From the international point of view, the tariff union is not an advantage in itself. It is an advantage only in so far as, on balance, it conduces to more extensive division of labour. It is to be justified only by arguments which would justify still more its extension to all areas capable of entering into trade relationships" (p. 121).

Wilhelm Röpke (1899-1966) was probably the chief influence on the adoption of the term "economic integration," especially through his book International Economic Disintegration (London: William Hodge, 1942). He had circulated earlier versions in German and had published in 1939 an article on the same theme in Economisk Tidskrift. He found that "world economy" had been "an interdependent and intercommunicating system," chiefly through actually and virtually multilateral trade almost free from obstacles and restrictions (pp. 14-17). With the outbreak of the war in 1914 a period of economic disintegration set in, characterized by nationalism and restrictionism, and associated with socio-political disintegration in the international field (p. 76). In a later essay on "Integration und Disintegration der internationalen Wirtschaft" in Wirtschaftsfragen der freien Welt (ed. by Frankfurt: 1957), Röpke made it clear that economic re-integration could be achieved only through uni-

versal liberalization of trade and payments (p. 500). In two other articles in German, published in 1958 and 1959 in *Ordo*, Vols. X and XI, he discussed the schemes of regional economic integration devised through EEC and EFTA. The first of these articles appeared in English under the title "European Free Trade -- The Great Divide," The Banker, Vol. 108 (September 1958), pp. 580-588. Röpke held that "The common market and the free trade area alike can improve the use of resources and raise productivity only to the extent that the removal of tariffs hurts producers inside, not outside, the union.... However, ...the distortions of the common market are likely to be much more enduring or harmful than those of the free trade area: for they will be aggravated by the effects of its supranational economic planning" (p. 587). Finally, in his book on International Order and Economic Integration (Dordrecht: Reidel Publ. Co., 1959), Röpke offered additional arguments for integration by competitive market forces and against integrating efforts through dirigist techniques.

John Sterling de Beers (born 1914) published an article on "Tariff Aspects of a Federal Union," Quarterly Journal of Economics Vol. LVI (November 1941), pp. 40-92, in which he raised four of the decisive questions in an analysis of the economic effects of a tariff union between countries A and B: "1. Before the tariff reduction, did A have a revenue, protective, or prohibitive tariff? 2. Under free trade, would B supply all, some or none of A's imports? 3. Is there a constant, increasing, or decreasing supply-

price schedule for C's exports? for B's exports, for A's production? 4. In a customs union, will the external tariff (against C) be the same as, higher than, or lower than the previous tariff of A?"

Wolfgang Stolper (born 1912) and Paul A. Samuelson (born 1915) published an article on "Protection and Real Wages," Review of Economic Studies, Vol. IX (1941-42), pp. 58-73, in which they demonstrated that, since an extension of trade will raise the prices of relatively abundant factors of production and reduce the prices of relatively scarce factors, a restriction of trade through the imposition of tariffs on imports may benefit workers in countries where labor is the scarcer factor. In such countries, therefore, protection may raise not only money wages but also real wages, and increase the share of labor in national income both absolutely and relatively. [The argument was made on the basis of assumptions of two factors producing two goods in two countries, with no country specializing, that is, with both goods being produced in both countries with the same techniques. Moreover, the argument rested on the assumption that the tariffs would leave the terms of trade unchanged.]

Kurt W. Rothschild (born 19) in an article "The Small Nation and World Trade," Economic Journal, Vol. LIV (April 1944), expressed concern that small nations would suffer from "the growth of a monopolistic and oligopolistic environment" even as members of regional blocks, indeed, even under free world trade. "If a

laissez-faire policy is pursued, the creation of a federal union will tend to reinforce and perpetuate the economic structure of its constituent members. The larger "industrial countries will become the centers of heavy and other monopolistic industries. The smaller countries will find opportunities in the small-scale industries and in agriculture. Backward countries will remain backward just because they were backward before" (p. 31). Rothschild concluded that small and/or backward countries would need not merely temporary but permanent tariff protection.

Jan Tinbergen (born 1903) published his book on International Economic Cooperation (Amsterdam: Elsevier, 1945), the revised edition of which appeared under the title International Economic Integration (Amsterdam: Elsevier, 1954). In 1952 he published an essay "On the Theory of Economic Integration" in Les Cahiers de Bruges (pp. 290 ff), which was later reprinted in his Selected Papers (Amsterdam: North Holland Publ. Co., 1959). He distinguished three kinds ("phases") of integration: (i) trade in commodities without transfers of capital or people, (ii) with transfers of only capital, and (iii) with transfers of both capital and people. He introduced a further distinction between "negative" and "positive" measures to promote economic integration, the former being the "elimination of institutions" [restrictions], the latter the establishment of institutions. In the second edition of International Economic Integration (Amsterdam: Elsevier, 1965), Tinbergen regards "a customs union between a limited number of

countries" as only a "partial form of integration" (p. 28) and speaks of "economic integration" only if countries centralize "at a supra-national level" numerous "instruments of economic policy" (p. 67).

Luigi Einaudi (1874-1961), professor, senator, central-bank governor, budget minister, and finally President of Italy, published a book I problemi economici della federazione europea (Milan: La Fiacola, 1946), 112 pages, in which he discussed the economic implications of European federation. He attempted to dispel widespread errors and anxieties regarding the removal of protective tariffs.

Raul Prebisch (born), noted economist from Argentina, was the author of a report on The Economic Development of Latin America and Its Principal Problems, published by the Economic Commission for Latin America, United Nations (1949). He rejected the application of the theory of comparative advantage to less developed countries and supported protective tariffs to promote the industrialization of developing regions.

Herbert Giersch (born 1921), in an article on "Economic Union between Nations and the Location of Industries," Review of Economic Studies, Vol. XVII, (1949-50), argued that the abolition of barriers to inter-European trade and movements of factors would "strengthen the attractiveness of the highly industrialized centre both for labour and capital" and, hence, lead to agglomeration "beyond the social and economic optimum" (pp. 91-93). He opposed Rothschild's argument for intraregional tariffs to offset locational distortions

due to monopolies, but recommended a "specific location tax which offsets the [external portion of] social costs," and also subsidies to firms in locations with potential social advantages (p. 94).

[To be expanded when I obtain a copy of a book of his.]

Paul A. Samuelson (born 1915) published, besides numerous other contributions to the theory of international trade, the following five papers on the equalization of the prices of the same productive factors in different countries: "International Trade and the Equalisation of Factor Prices," Economic Journal, Vol. LVIII (June 1948), pp. 163-184; "International Factor-Price Equalisation Once Again," Economic Journal, Vol. LIX (June 1949), pp. 181-197; "A Comment on Factor-Price Equalisation," Review of Economic Studies, Vol. XIX (1951-52), pp. 121-122; "Prices of Factors and Goods in General Equilibrium," Review of Economic Studies, Vol. XXI (1953-54), pp. 1-20; and "Equalization by Trade of the Interest Rate along with the Real Wage," in Richard E. Caves, Harry G. Johnson, and Peter B. Kenen, eds., Trade, Growth, and the Balance of Payments (Chicago: Rand, McNally, 1965), pp. 35-52. He demonstrated "that free commodity trade will under certain specified conditions inevitably lead to complete factor-price equalisation" (1949, p. 181). The conditions specified that two countries produce two commodities from two factors of production, with production functions yielding constant returns to scale and diminishing marginal productivities of both factors, the factors being qualitatively identical and the production functions the same in both countries, but the two

commodities differing in the ratios in which they use the two factors; with some quantities of both commodities produced in both countries and moving perfectly freely in international trade, without tariffs and transport costs, and with competition effectively equalizing the market price-ratio between them (whereas the factors cannot move between the countries), the result -- equal real prices of each factor in both countries (p. 182) -- was "established unequivocally" (p. 187). In his 1948 and 1949 articles Samuelson had taken labor and land as his only inputs, because both were primary factors. In his 1965 essay he proceeded to introduce capital as a factor required in production. This involved the problems of depreciation, reproduction, gross and net rentals, and interest rates. [Most writers on trade theory, as also on distribution theory, took capital as one of the two factors, but blithely disregarded the problems involved.] Samuelson demonstrated, among other things, that under specified conditions the interest rate would be equalized by (unrestricted and costless) trade of consumer goods, no matter whether we assume the existence of one all-purpose capital good or of heterogeneous capital goods for the production of different commodities (p. 49). He also formulated a "sweeping theorem" for "all kinds of intermediate goods," which allows exclusive attention to be given to the primary factors and the ratios in which they are used in the production of traded consumer goods (1965, p. 52).

Abba P. Lerner (born 1903) published in 1952 a paper he had written for a seminar in 1933, in which he anticipated Samuelson's demonstration of the theorem of the international equalization of

the prices of the same productive factors. The article, "Factor Prices and International Trade," Economica Vol. 19 (February 1952), pp. 1 - 15, used more geometrical than algebraic arguments. The condition that the relative factor-use-ratios must not be "reversed" when the factor-price-ratios change (that is, to say, that the more-labor-using good must not become the less-labor-using good as the price of labor rises) is illustrated by the shapes of the isoquants of the two goods (pp. 77-80). Lerner extends his demonstration to the cases of more than two countries.

1950 - 1970

[Introductory text not yet completed.]

Jacob Viner (1892-1970), who had in 1931 defended the principle of nondiscrimination (see above), presented in 1950 his pioneering distinction between (beneficial) trade creation and (harmful) trade diversion as essential for the analysis of the economic consequences of a discriminatory reduction or removal of tariffs. His book The Customs Union Issue (New York: Carnegie Endowment for International Peace, 1950) has been credited with opening up a new branch of the theory of commercial policy. [Will be expanded.]

Helen Makower (born) and Morton (born) published "A Contribution towards a Theory of Customs Unions," Economic Journal, Vol. LXIII (March 1953), pp. 33-49. They proceeded along the lines of Viner's analysis and showed that the gains from trade creation would be larger the more dissimilar were the cost ratios of the same commodities in the two countries. Terminological decisions have to be made: If the two countries produce

the same commodities, they might be called "competitive" economies; but, if the cost ratios are very different, the economies could be defined as "complementary."

James E. Meade (born 1907) published a succession of important contributions to the theory of integration through customs unions: Problems of Economic Union (Chicago: University of Chicago Press, 1953); The Theory of Customs Unions (Amsterdam: North Holland, Publ. Co., 1955); and "The Balance-of-Payments Problems of a European Free-Trade Area," Economic Journal, Vol. LXVII (September 1957), pp. 379-96. In the book of 1953 he explained why "a partial movement toward a wider economic union" was in general preferable to "a more complete movement toward a narrower union" (p. 9). He divided the economic benefits from integration into three categories as to their sources: "maximization of production" (due to reallocation of resources), "optimization of trade" (due to shifts of consumption) and "increase in competition" (due to forced efficiency and relaxation of monopolistic restraints) (pp. 9-13). He pointed to significant differences in "the degree of integration which has been achieved" in the United States relative to Europe (p. 28). In his book of 1955, Meade asked how the gains from trade creation could be balanced against the losses from trade diversion, and suggested that both the volumes of created and diverted trade and the sizes of the cost reductions and cost increases on each unit of traded goods be considered (p. 35). Even

if there is a net loss through diversion of trade from cheaper to more expensive sources of supply, the reduction of the price to the consumer may expand consumption, permitting a welfare gain, offset by a loss of tax revenue to the government. If this revenue is replaced by means of less price-distorting taxes, welfare may still be increased on balance (p. 43). A "customs union is more likely to raise standards [of the combined welfare of all countries] (i) the higher are the initial duties of the countries forming the union, (ii) the lower are the duties in the outside countries; (iii) the more substitutable for each other are the products of the outside world with the products of the countries forming the union" (p. 52). In the evaluation of gains or losses of welfare account must be taken of any reductions or increases in the divergences between marginal values and costs as may be due to monopoly positions, taxation, and external economies and diseconomies (p. 65). However, one must not confine oneself to the "primary changes," the increases in imports of products from a country which has just been granted a preferential reduction or removal of import duties (p. 67); one must also consider the "secondary changes" in the trade in products which in the countries concerned are substitutes or complements of the products primarily affected (p. 68), and the "tertiary changes," the adjustments in the trade flows that are made necessary to restore balance in international payments (p. 83). Economies of scale may accentuate the extent of all changes in trade as well as the size of their effects upon combined economic welfare (p. 93). If the interest of the policy makers is not in

total world income but rather in income distribution among all countries concerned, or among the member countries of the union, or within a member country, the evaluation of changes could be seriously affected (p. 94). [This has been only a small sample of the rich crop of insights flowing from Meade's analysis.]

Charles P. Kindleberger (born 1910), an early protagonist of European integration, authored and co-authored in various American government positions influential memoranda, three of which, written in 1947, 1948, and 1953, have in later years been widely circulated and quoted. He also contributed an essay on "European Economic Integration" to the Festschrift Money, Trade, and Economic Growth: In Honor of John H. Williams (New York: Macmillan, 1951), pp. 58-75. There he commented on the general sentiment in favor of European integration and the general lack of consensus on what it really meant (p. 59). He found it to be chiefly a problem of resource allocation (p. 61) and concluded that "What is called for is the development of efficient practices and institutions of farming in Europe or a greater degree of integration between the individual countries of Western Europe and the rest of the world." (p. 75). Kindleberger's memorandum of 1953, entitled "Notes on the Integration of the Free World Economy," was written to suggest revisions in an outline which Gunnar Myrdal had prepared for a report of the U.N. Economic Commission for Europe (E.C.E.). Kindleberger proposed that equalization of prices of qualitatively equal factors of production be used as a criterion of economic integration. He emphasized that, chiefly because of the existence of noncompeting

groups, such equalization had not occurred even within nations; with national integration sadly incomplete in most countries, international integration was only in its earliest stages. In an article on "The United States and European Regional Integration," Social Science, Vol. 34 (October 1959), pp. 210-217, he held that trade creation was most likely to outweigh trade diversion, but that little, if any, economies of larger scale were to be expected in Europe. He warned of the possibility of "investment diversion" (p. 214). He was most optimistic regarding the effects of the Common Market upon long-term growth (p. 217). In a later survey article on "Trends in International Economics," The Annals of the American Academy of Political and Social Sciences, Vol. 358 (March 1965), pp. 170-179, he gave special attention to the contributions which Viner, Meade, Scitovsky, and Lipsey and Lancaster had made to the theory of tariff protection and customs unions.

Maurice Allais (born 1911) published dozens of articles on economic unification of Europe and its importance as a first stage toward an Atlantic community. Among the articles were "Les conditions de l'unification économique de l'Europe," Production Française, Vol. (December 1949), pp. 7-9; "Les intérêts des groupes sociaux et nationaux et l'union économique de l'Europe," Economia Internazionale, Vol. IV (February 1951), pp. 1-14; and "Fondements théoriques, perspectives et conditions d'un marché commun effectif," Revue d'Économie Politique, Numéro special No. 1 (January-February 1958), pp. 56-99. In his book, L'Europe Unie: Route de la prospérité,

Paris: Calmann-Lévy, 1960, he held that a "total liberalization" of trade and capital movements (with monetary integration) in Europe would lead to an "immense technical progress," allowing the standard of living to double (p. 252). He regarded the eventual extension into an Atlantic community not only as imperative but as a perfectly realistic objective that might be attained within a period of some 20 years (pp. 220-222, and 254).

Jean Weiller (born 1905) published several articles and books relevant to the subject surveyed. Let us mention three articles, all in the Revue Economique: "Politique d'intégration régionale et Libération des échanges," (May 1950); "Aspects particulier d'une libération d'échanges," (December 1950); and "Les degrés de l'intégration et les chances d'une 'zone de coopération' internationale," (March 1958). In the latter he presented various taxonomic distinctions, spoke of an optimal degree of integration (p. 235) perhaps far short of an ideal maximum, reminded us of the difference between national, multinational, and global integration, suggested a coefficient of dependence (on essential imports), contrasted "spontaneous" integration (through free-market forces) with "conscious efforts" at integration (through governmental measures and institutions), and stressed the importance of international coordination of national economic policies (p. 238). [The "degrees" of integration in Weiller's sense seem to have little connection with the "degrees" in Erich Schneider's conception or in my own.]

François Perroux (born 1903) was rather pessimistic in his

book L'Europe sans rivage (Paris: Presses Universitaires de France, 1954), regarding the extent to which trade would actually be freed within a European union and regarding the height of tariff barriers against imports from countries outside the union. He was also apprehensive concerning a possibly dominant position of Germany within the union.

Franz Gehrels (born 1922) and Bruce F. Johnston (born 1919), in their joint article on "The Economic Gains from European Integration," Journal of Political Economy, Vol. LXIII (August 1955), pp. 275-292, applied Viner's criteria and some of their own to the case of a European economic union and concluded that substantial benefits were to be expected for its members. A major consideration was that cost differences within Europe were quite large, so that the abolition of tariffs among union members would create trade as imports from member countries would be substituted for more expensive domestic production. Moreover, there would be beneficial long-run effects on investment, technical progress, producers' competition and efficiency, economies of scale, and economic growth.

Franz Gehrels (born 1922), in an article on "Customs Unions from a Single Country's Viewpoint," Review of Economic Studies, Vol. XXIV, (1956-57), pp. 61-64, present the substitution effects in consumption consequent upon the price changes which result from a reduction or removal of duties. Such consumption effects are independent of any production effects. [Gehrels came upon this thought at the same time as Meade (see above) and Lipsey (see below).]

Richard G. Lipsey (born 1928) and Kelvin J. Lancaster (born 1924) published a formulation of "The General Theory of Second Best," Review of Economic Studies, Vol. XXIV, (1956-57), pp. 11-32, based on the traditional convention of optimality in the patterns of production and consumption under a structure of prices that equate the marginal social costs of all goods produced with the marginal valuations of all goods consumed. The existence of taxes, monopoly prices, externalities of all sorts, and customs duties makes the attainment of the best patterns practically impossible. Since some of the price distortions may offset one another, the removal of certain duties may make matters worse rather than better, that is, increase the distance from a "second-best" position. A small variation of any tax or duty is more likely to raise welfare than a large variation would.

Gunnar Myrdal (born 1898), in his book An International Economy: Problems and Prospects (New York: Harper, 1956), declares that "Economic integration is the realization of the old Western ideal of equality of opportunity" (p. 1). "Migration, capital movements, international aid and trade are not the primary means of achieving this closer integration. In a real sense they are the products of integration, not the cause. They can help, but they cannot be relied upon to do the job. The major task is first to force economic development in the underdeveloped countries..." (p. 3-4). [The relationships among economic integration, equality of opportunity, equality of incomes, and economic development are not sufficiently clarified.]

Erich Schneider (1900-1970), renowned German economist, showed in an Italian article, "Lineamenti di una teoria economica del mercato commune," Rivista Internazionale de Scienze Economiche e Commerciali, Vol. II (February 1957), pp. 107-118, that an understanding of economic integration requires definitions of the two extremes -- complete isolation and perfect integration -- and differentiation of degrees of integration between the extremes.

Richard G. Lipsey (born 1928), in an article on "The Theory of Customs Unions: Trade Diversion and Welfare," Economica, Vol. XXIV (February 1957), pp. 40-46, presented the thesis of the beneficial consumption effects of the changes in relative prices due to reductions or removals of tariffs. He had shown these effects previously in his doctoral dissertation (University of London,), which was later published as a book, The Theory of Customs Unions: A General Equilibrium Analysis (London: Weidenfeld & Nicolson, 1970). In his brief note "Mr. Gehrels on Customs Unions," Review of Economic Studies, Vol. XXIV, (1956-57), pp. 211-214, Lipsey pointed to an error of reasoning on the basis of a model with only two commodities, and corrected it by introducing a third commodity. He showed that the asserted general presumption of a welfare gain derived from a customs union was not valid. In his most instructive survey article, "The Theory of Customs Unions: A General Survey," Economic Journal, Vol. LXX (September 1960), pp. 496-513, Lipsey defined this theory as "that branch of tariff theory which deals with the [welfare] effects of geographically discriminatory changes in trade barriers" (p. 496). He contrasted the old arguments, Viner's new reasoning, and the post-Viner developments, and provided a most lucid exposition of the

present state of the theory. Some of this is repeated in Lipsey's article on "International Integration: Economic Unions" in the International Encyclopedia of the Social Sciences (New York: Macmillan, 1968), Vol. 7. Lipsey distinguished the following types (or "degrees") of economic integration among two or more countries. Preferential tariff system (lower internal than external tariffs); free-trade area (zero internal tariffs), customs union (common external tariff), common market (free movements of factors), economic union (common monetary, fiscal, and other policies), and complete economic integration (single economic policy). Of the economic effects of integration, he regards resource reallocation, adjustments of consumption patterns, and changes in the terms of trade as "static," and economies of scale, changes in market structures (competition), and changes in growth rates as "dynamic." [These adjectives, I submit, had better be reserved to describe the type of analysis rather than the effects or processes analyzed.]

Harry G. Johnson (born 1923) made a series of contributions to the theory of economic integration: "The Criteria of Economic Advantage," Bulletin of the Oxford University Institute of Statistics, Vol. XIX (February 1957), pp. 33-38; "The European Common Market: Risks or Opportunity," Weltwirtschaftliches Archiv, Vol. 79, (No. 2, 1957), pp. 267-280; "The Gains from Free Trade with Europe: An Estimate," Manchester School, Vol. XXVI (September 1958), pp. 247-255; "The Cost of Protection and the Scientific Tariff;" Journal of Political Economy, Vol. LXVIII (August 1960), pp. 327-345;

"The Economic Theory of Customs Unions," Pakistan Economic Journal, Vol. X (1960), pp. 14-32, reprinted in Johnson, Money, Trade, and Economic Growth (London: Allen & Unwin, 1962), pp. 46-73; "Optimal Trade Intervention in the Presence of Domestic Distortions," in Richard E. Caves, Harry G. Johnson, and Peter B. Kenen, eds., Trade, Growth, and the Balance of Payments (Chicago: Rand, McNally Co., 1965), pp. 3-34; "An Economic Theory of Protectionism, Tariff Bargaining, and the Formation of Customs Unions," Journal of Political Economy, Vol. LXXIII (June 1965), pp. 256-283; and "Problems of European Monetary Union," Journal of World Trade Law, Vol. V (July-August 1971), pp. 377-387. Since Johnson touched on nearly every aspect of the relevant theories, I select only a few for inclusion in this review. In his 1958 article, he presented reasons why closer integration between the British and West European economies could not be expected to produce more than very modest material benefits: neither reallocation of productive resources nor economies of larger-scale production could bring more than minute improvements in productivity. In his 1965 article he introduced a novel approach to the understanding of so-called non-economic objectives of society, particularly, the gratifications (pride) of the citizens from knowing that their country was producing certain goods at home, rather than importing them more cheaply from abroad: "Industrial production [within the nation or region]...appears as a collective consumption good yielding a flow of satisfaction to the electorate independent of the satisfaction

they derive directly from the consumption of industrial products" (p.). Thus if I may paraphrase him, Johnson holds that the real income of a nation or region includes the psychic income which its citizens derive from the pride of having "their own" industrial production just like the biggest nations; they have a good feeling or happiness comparable to that derived from having a winning football team, native or resident composer of world fame, or a generally admired natural world wonder. [I cannot help raising the question whether the citizens know the cost of protection in terms of real product foregone, that is, whether they know how much consumption of material goods they have to give up for the pleasure of having certain things home-made rather than imported.]

Tibor Scitovsky (born 1910), in his book on Economic Theory and Western European Integration (Stanford: Stanford University Press, 1958) held that in the case of Western Europe no substantial benefits could be expected from a reallocation of productive resources through better division of labour; the main results would come from "the increase in competition which the common market is almost certain to bring about" (p. 10). Competition would bring increased pressures "upon the economic behaviour of Governments, entrepreneurs, workers, and others." In a paper on "International Trade and Economic Integration as a Means of Overcoming the Disadvantages of a Small Nation," in E.A.G. Robinson, ed., Economic Consequences of the Size of Nations, (London: Macmillan, 1960), pp. 282-290, Scitovsky distinguished two disadvantages of smallness: A country

may be too small to provide a market for the full-capacity output of the most efficient plant in a given industry -- this is a "technological disadvantage -- or it may be too small to provide the competitive conditions necessary as a spur to utmost economy and efficiency."

Bela Balassa (born 1928) has been one of the most productive contributors to the literature on our subject, beginning with his article "Towards a Theory of Economic Integration," Kyklos, Vol. XIV (1961), pp. 1-17, and his book The Theory of Economic Integration, (Homewood, Ill.: Irwin, 1961). Differences between integration of developed and developing countries are treated in Economic Development and Integration, (Mexico: Cemla, 1965). Having introduced the distinction between intraindustry and interindustry specialization in "European Integration: Problems and Issues," American Economic Review, Vol. LIII (Proceedings, May 1963), pp. 175-184, he applied it in "Tariff Reductions and Trade in Manufactures among the Industrial Countries," American Economic Review, Vol. LVI (June 1966), pp. 466-473, chiefly to explain the ease of adjustment to the elimination of tariffs within the common market. He used data on trade/income ratios to evaluate "Trade Creation and Trade Diversion in the European Common Market," Economic Journal, Vol. LXXVII (March 1967), pp. 1-21, and again in Manchester School, Vol. XLII (June 1974), pp. 93-135.

Hans H. Liesner (born 1929) contributed to the collective work by James E. Meade, S. J. Wells, and H. H. Liesner, Case Studies in

European Economic Union (London: Oxford University Press, 1962) and to the conference proceedings, Roy Harrod and Douglas Hague, eds., International Trade Theory in a Developing World (London: Macmillan, 1963). The essay included in the latter volume was on "Regional Free Trade: Trade-Creating and Trade-Diverting Effects of Political, Commercial and Monetary Areas" (pp. 194-204). Liesner expected that the most important benefits from European integration would come through increases in "internal economic efficiency" -- the reduction of slackness and inertia -- under the pressure of more vigorous competition (p. 197). He found that the shockingly low estimates of gains through cost reductions -- between 0.05 per cent of national income (Verdoorn) and a maximum of 1.00 per cent (Harry Johnson) were not so implausible for Britain. If some 27 per cent of her national product were to become subject to foreign competition; if the largest cost reduction at the margin equaled the height of the tariff removed, say, 20 per cent, with the average only about one-half, that is, 10 per cent; then these 10 per cent of 27 per cent would account for a cost reduction by 2.7 per cent. To this, however, one would have to add the "consumption effects" and any external economies of scale (p. 199).

Raymond F. Mikesell (born 1913) contributed a paper to the conference proceedings published by Roy Harrod and Douglas Hague, eds., International Trade Theory in a Developing World (London: Macmillan, 1963). In the paper on "The Theory of Common Markets as Applied to Regional Arrangements among Developing Countries," pp. , he gave chief emphasis to the so-called "dynamic effects" of inte-

gration. Mikesell includes under this heading "increasing opportunities for profitable foreign and domestic investment," "broadening the export base," "achieving balance-of-payments equilibrium," "mobilizing unemployed resources," and "avoiding economic dualism" (p. 205). [Some of these effects seem to be rather dubious; and the practice of using the adjective "dynamic" for indirect, delayed, or long-run effects, rather than for a technique of analyzing them, seem quite inopportune.]

Michael Michaely (born 1928) presented in his article "On Customs Unions and the Gains from Trade," Economic Journal, Vol. LXXV (September 1965), pp. 577-583, a comparison of the arguments of earlier writers, especially Gehrels and Lipsey, and showed that their results can be reached without some of their highly restrictive assumptions. Thus, the proposition that the discriminatory abolition of duties on imports from union partners may result in a welfare gain even with a preponderance of trade diversion acquires more generality.

Charles A. Cooper (born 1933) and Benton F. Massell (born 1930) produced two joint articles, one "Toward a General Theory of Customs Unions for Developing Countries," Journal of Political Economy, Vol. LXXIII (October 1965), pp. 461-476, and the other on "A New Look at Customs Union Theory," Economic Journal, Vol. LXXV (December 1965), pp. 742-747. In contrast with earlier writers from Viner to Meade and to Lipsey, who had analyzed the economic effects of a customs union as a discriminatory reduction of duties

in the United States, where purchases of out-of-state products are almost one-half of the purchases from producers within the state.

Imre Vajda (19 - 1971), Hungarian socialist, published in English an essay "Integration, Economic Union and the National State," in Imre Vajda and Mihaly Simai, editors, Foreign Trade in a Planned Economy (Cambridge: Cambridge University Press, 1971), pp. 29-44. He compared the economic integration of capitalist and socialist countries. The former concentrates "on the integration of the market," the latter "on the coordination of plans" (p. 31). Although Vajda did not deny the contribution which "market integration" has made to economic welfare, he stresses the importance of selective "production and development integration" (p. 35), with its important function of redistributing income within and among the integrated countries. Nevertheless, market integration should be applied also to "socialist international division of labour" (p. 42). While this division of labour "need not necessarily be directed towards total integration," "a more planned and institutionalized co-operation should be achieved" in the "sectors which determine technical progress." However, the Socialist countries' CMEA should abandon "the trend towards 'closedness'" and replace it "by a wider, continental and eventually global attitude." (p. 42).