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EXCHANGE CONTROLS AND QUANTITATIVE RESTRICTIONS IN THE I.T.O. CHARTER

Frank M. Tamagna

The final act of the International Conference on Trade and Employment, which convened at Havana on November 21, 1947, and ended on March 24, 1948, was the agreement reached by representatives of 56 countries on a Charter for an International Trade Organization. A draft of the Charter was submitted to the Conference by a Preparatory Committee, which had been established by the Economic and Social Council of the United Nations and had met in London, New York, and Geneva in 1946 and 1947. In general, the approved Charter follows the proposed draft on the relationship between the International Trade Organization and the International Monetary Fund and on exchange matters, but departs from it on the application of quantitative restrictions and the principle of nondiscrimination in trade.1/

1/ For exchange controls and quantitative restrictions in the draft Charter of the I.T.O., see this Review, April 22, 1947, Supplement, and December 2, 1947, pp. 10-12.

Relationship with the International Monetary Fund

The relationship of the proposed International Trade Organization with the International Monetary Fund is a peculiar one, because of the fact that the I.T.O. is coming into existence at a time when the I.M.F. is already an established and operating institution. Since the Havana Conference had no jurisdiction for making provisions obligating the I.M.F., it defined the terms of relationship between the two organizations in the form of unilateral undertakings on the part of the I.T.O. As a consequence, the I.T.O. will be bound from its inception to take certain actions in conformity with I.M.F. decisions; the I.M.F., however, will remain free to determine the extent to which it will cooperate with the I.T.O., at least until its responsibilities have been defined in a bilateral agreement, which the I.T.O. has undertaken to negotiate with the I.M.F.

Article 24 of the Charter lays down the fundamental principle that the I.T.O.

> "shall seek cooperation with the International Monetary Fund to the end that the Organization and the Fund may pursue a coordinated policy with regard to exchange questions within the jurisdiction of the Fund and questions of quantitative restrictions and other trade measures within the jurisdiction of the Organization."

In accordance with this principle, Article 24 requires the I.T.O. to consult with the I.M.F. with regard to all "problems concerning monetary reserves, balance of payments, or foreign exchange arrangements," obligates the I.T.O. to "accept all findings of statistical and other facts presented by the Fund" with regard to monetary and exchange matters, and provides that all members of the I.T.O. shall be members of the I.M.F. or, failing that, shall enter into a special exchange agreement with the I.T.O.--which will not impose obligations more restrictive than those contained in the Articles of Agreement of the I.M.F. (The only exception provided for is in case of an I.T.O. member which "uses solely the currency of another member and so long as neither the member nor the country whose currency is being used maintains exchange restrictions".) Article 24 stipulates further that

(1) the I.T.O. shall not preclude members from using exchange controls or restrictions, which are in accordance with the Articles of Agreement of the I.M.F.;

(2) I.T.O. members shall not, by exchange action, frustrate the intent of the Charter nor, by trade action, the intent of the Articles of Agreement of the I.M.F.;

(3) I.T.O. members, which are not members of the I.M.F., shall furnish the I.T.O. with such information as may be required under the Articles of Agreement of the I.M.F.; and

(4) the I.T.O. shall "accept the determination of the Fund whether action by a member with respect to exchange matters is in accordance with the Articles of Agreement of the International Monetary Fund, or with the terms of the special exchange agreements entered into between that member and the Organization."

Furthermore, Article 23 prescribes in great detail the rules for coordinating the use by I.T.O. members of discriminatory import restrictions permitted under the Charter of the I.T.O., and of exchange restrictions authorized under the Articles of Agreement of the I.M.F. Finally, Article 35 provides that I.T.O. members, for purposes of customs valuation, should use the par values of currencies agreed upon by the I.M.F., and that the I.T.O. should formulate, in agreement with the I.M.F., rules for the conversion rates of currencies in respect of which multiple rates of exchange are maintained consistently with the Articles of Agreement of the I.M.F.

These provisions assign an important role to the I.M.F. in the determination of the circumstances under which it is permissible for a country to impose import restrictions for the purposes of maintaining its external financial position and equilibrium in its balance of payments. The application of these provisions to all member countries will result in imposing upon I.T.O. members which do not wish to become or remain members of the I.M.F. the same obligations as those arising from membership in the I.M.F.

The Application of Quantitative Restrictions

A general provision against the application of quantitative restrictions on imports or exports by I.T.O. members[1/] is contained in Article 20. Exceptions to this rule, however, are provided in Articles 20 and 21, some temporary or specific, others general and permanent.

Temporary exceptions contained in Article 20 are restrictions on imports or exports for the purpose of preventing or relieving critical shortages of foodstuffs or other essential products, or of disposing of temporary surpluses of agricultural or fisheries products. Specific exceptions cover the application of standards or regulations for the classification, grading, or marketing of commodities in international trade, or the enforcement of government controls over the domestic production or marketing of agricultural and fisheries products. In order to take advantage of exceptions covering agricultural and fisheries products, members are required --

(a) to give advance notice to and consult with the I.T.O. and other members "having a substantial interest in supplying" the restricted product;

(b) to maintain "the proportion which might reasonably be expected to rule ... in the absence of restrictions" between the total imports (or total exports) and the volume of domestic production of the restricted product; and

(c) to give public notice of the total quantity or value of the restricted product, which is permitted to be imported during a specified period of time.

Of greater interest from the point of view of general monetary policy are the provisions of Article 21, regulating the application of restrictions to safeguard the balance of payments position of I.T.O. members. The Article opens with a policy declaration to the effect that --

1/ Including restrictions made effective through State trading organizations.

"(a) It is primarily the responsibility of each member ... to maintain stable equilibrium in its balance of payments;

"(b) An adverse balance of payments of one member country may have important effects on the trade and balance of payments of other member countries ... ;

"(c) ... it is desirable that the Organization should promote consultations among members and where possible, agreed action consistent with the Charter for the purpose of correcting a maladjustment in the balance of payments;

"(d) Action taken to restore stable equilibrium in the balance of payments should, so far as the member or members concerned find it possible, employ methods which expand rather than contract international trade."

In line with this policy, the Article lays down two conditions under which members may "maintain or intensify import restrictions," namely --

"i. to forestall the imminent threat of, or to stop, a serious decline in its monetary reserves, or

"ii. in the case of a member with very low monetary reserves, to achieve a reasonable rate of increase in its reserves."

The Article provides that any member applying import restrictions under these clauses should have due regard to the availability of special external credits or other resources, should avoid unnecessary damage to the commercial and economic interests of any other member, should not prevent unreasonably the importation of restricted products "in minimum commercial quantities the exclusion of which would impair regular channels of trade", and should progressively relax and ultimately eliminate the restrictions as its external financial position improves.

The application of restrictions under these clauses is subject to a procedure of consultation between the member and the I.T.O., covering "the nature of the /member's/ balance of payments difficulties, alternative corrective measures which may be available, and the possible effect of such measures on the economies of other members". These consultations with the I.T.O. are not binding, however, and "no member shall be required in the course of consultations ... to indicate in advance the choice or timing of any particular measure which it may ultimately determine to adopt." However, unless the member applying the restrictions has obtained prior approval from the I.T.O., any other members whose trade is adversely affected, may challenge the restrictions and bring the matter to the I.T.O. for discussion. The I.T.O. "shall submit its views to the parties with the aim of achieving a settlement." If no settlement is reached and the I.T.O. determines that the restrictions are applied by the member in a manner inconsistent with the provisions of the Charter, it will recommend the withdrawal or modification of the restrictions; failing that, it may release all other members from their obligations toward the member applying the restrictions.

Article 21 provides further that the I.T.O. will not require any member to withdraw or modify restrictions which it is applying in fulfillment of its obligations under Article 3 (to achieve or maintain full and productive employment and large and steadily growing demand) or under Article 9 (to reconstruct or develop industrial and other economic resources and to raise standards of productivity).1/ Article 6 requires the I.T.O. to have regard "to the need of Members to take action within the provisions of this Charter to safeguard their economies against inflationary or deflationary pressure from abroad." On the other hand, Article 21 requires members "in carrying out their domestic policies, to pay due regard to the need for restoring equilibrium in their balance of payments on a sound and lasting basis and to the desirability of assuring an economic employment of productive resources."

Articles 4 and 21 envisage a procedure of international consultation and joint action to eliminate a "persistent and widespread application of import restrictions indicating the existence of a general disequilibrium which is restricting international trade." Should such a situation arise, the I.T.O. would initiate discussions to consider measures to be taken either by those members whose balances of payments are under pressure, or by those members whose balances of payments are tending to be exceptionally favorable, or by any appropriate inter-governmental organization to remove the underlying causes of the disequilibrium.

The Principle of Nondiscrimination

The Charter seeks to maintain the principle of nondiscrimination among members in the administration of those quantitative restrictions which the members will be permitted to apply. Article 22 defines the basic rules of nondiscrimination as follows:

(a) Similar application of restrictions with regard to all members;

(b) Adoption of quotas representing total amounts of permitted imports;

(c) Allocation of quotas, either by agreement with members having a substantial interest in supplying the product concerned, or on basis of proportion of imports by countries during a previous representative period;

(d) Public notice of quantity, value, and distribution of imports permitted under quotas;

(e) Disclosure to interested members of all relevant information on restrictions administered through import licenses.

1/ A similar provision is contained in Article 14, authorizing the maintenance (subject to notification by the member and review by the I.T.O.) of any nondiscriminatory protective measure affecting imports which has been imposed for the establishment, development, or reconstruction of a particular industry or branch of agriculture and which is not otherwise permitted by this Charter.

Throughout the work of the preparatory committee and the Havana Conference, there was considerable debate as to the extent to which countries with balance of payments difficulties would be required to observe the principle of nondiscrimination. In particular, it was felt that there would be difficulty in reconciling the long-range objectives of the I.T.O. with measures which some countries may find necessary during the transition period. The compromise solution in Article 23 provides certain exceptions to the rule of nondiscrimination and offers alternative procedures to I.T.O. members to meet their transitional problems. The provisions of this Article are closely coordinated with the provisions of Articles VII - 3 (b) (Scarce Currencies) and XIV (Transitional Period) of the Articles of Agreement of the I.M.F.

In general, no time limit is prescribed for the application of discriminatory restrictions which --

(a) "are applied against imports from other countries, but not as among themselves, by a group of territories having a common quota in the International Monetary Fund," provided that such restrictions do not involve differential discrimination as among countries outside the group;

(b) have equivalent effect to exchange restrictions authorized by the I.M.F. with regard to transactions in a currency which has been declared "scarce" by the I.M.F.;

(c) are measures intended "to direct [the Member's] exports in such manner as to increase its earnings of currencies which it can use" without deviation from the rules of nondiscrimination -- i.e., convertible currencies which the recipient country can use freely in payment for imports from any other country;

(d) represent temporary deviations from the rules of nondiscrimination "with the consent of the Organization ... in respect of a small part of [a Member's] external trade where the benefits to the Member or Members concerned substantially outweigh any injury which might result to the trade of other Members"; and

(e) are applied under the preferential arrangements in existence among countries of the British Commonwealth, pending the outcome of negotiations for the substitution of such arrangements with most-favored-nation treatment open to all other I.T.O. members.

The termination date of the transition period, fixed in Article 23, is the same as that stipulated by Article XIV of the Articles of Agreement of the I.M.F., i.e., March 1, 1952, or five years after the date on which the I.M.F. began operations.1/ At the insistent request of the British Delegation, which felt that original drafts of the Charter provided a more flexible approach to the problems of the transition period, the Charter offers prospective I.T.O. members a choice of alternative procedures, known as the

1/ A different deadline, December 31, 1951, is set for "measures not involving substantial departure from the rules of nondiscrimination," having the purpose of assisting "another country whose economy has been disrupted by the war."

"Geneva Option" and the "Havana Option," for regulating the use of discriminatory practices during the transition period (and beyond it, subject to limitations to be prescribed by the I.T.O.).

The Havana Option is written in paragraph 1, Sections (b) and (c) of Article 23. It permits members (a) to apply quantitative restrictions "in a manner having equivalent effect to" exchange restrictions authorized by the I.M.F. during the transition period; and (b) to maintain discriminatory practices in existence on March 1, 1948, and to adapt such practices to changing circumstances.

The Geneva Option (Annex K to the Charter) is derived from paragraph 1 of Article 23 of the text of the Charter drafted at Geneva by the Preparatory Committee and is open to any member signing on or before July 1, 1948, the Protocol of Provisional Application agreed upon at Geneva on October 30, 1947. It permits members to "relax" import restrictions in a discriminatory manner to the extent necessary to obtain additional imports over and above the maximum total they could afford by using nondiscriminatory quantitative restrictions. It stipulates that the use of restrictions under this clause should not raise prices of imports to levels "substantially higher" than those prevailing for comparable goods regularly available in other member countries and should not reduce appreciably the amount of exports payable in gold or convertible currencies. Restrictions applied under this clause should not be such as to cause unnecessary damage to the commercial and economic interests of other member countries.

Under both options, members are required to pursue policies "designed to promote the maximum development of multilateral trade possible during [the transition period] and to expedite the attainment of a balance of payments position which will no longer require resort to [restrictions to safeguard the balance of payments] or to transitional exchange arrangements."

Conclusions

Aside from the close coordination between the I.T.O. and the I.M.F. on exchange matters, the Charter offers prospective I.T.O. members considerable freedom in trade matters. It permits the use of quantitative restrictions on a wide scale, and places few limitations on the application of discriminatory practices. The concessions granted to undeveloped countries may well open the way to new systems of trade restrictions, discriminatory practices, and regional preferences. The general principles of reduction of trade barriers and elimination of discriminatory practices remain surrounded by many escape clauses and exceptions.

On the other hand, the Charter lays down rules of fair play and the I.T.O. may provide a forum for consultation and cooperation among nations. With the support of the I.M.F., the I.T.O. may well inaugurate a novel experiment in world trade, a coordination of exchange and quantitative controls achieved through international cooperation and with regard to general interests, which may take the place of controls imposed by individual countries with sole regard to their own national interest. Such a development, representing a middle course between the multilateral trade of pre-World War I and the bilateral arrangements of pre-World War II, may prove to be the most practical road toward a freer and expanding world trade.

DIVISION OF INDIA'S RUPEE BALANCES AND DEBT WITH PAKISTAN

A. B. Hersey and
J. B. Churchill

By the Indian Independence Act of July 18, 1947, the British Government transferred its authority over British India to the independent dominions of India and Pakistan, effective as of August 15, 1947. Among the problems posed by creation of the new dominions was that of dividing in a manner agreeable to both countries the financial assets and liabilities before the partition (1) of the Government and (2) of the Reserve Bank of India, including the sterling balances. This note summarizes the agreement on the first of these two problems.

Agreement on a specific quantitative division has been announced so far only in regard to undivided India's rupee cash balances, by which Pakistan receives Rs. 750 million of the total amounting on August 15, 1947, to a little under Rs. 4,000 million.1/ India's large cash balances, which exceeded the total expenditures originally budgeted for the fiscal year 1947-48, were the result of borrowing in excess of expenditure during the war years as part of an anti-inflationary policy. Release to Pakistan of part of the balances was necessary last August to enable the new Dominion to meet its immediate financial needs. As of February 27, 1948, Pakistan's balances had fallen to 440 million rupees.2/ The 1948-49 Pakistan budget (fiscal year April to March) predicts a deficit of only 100 million rupees, but the expenditure estimates in this budget appear to be on the low side.

Preliminary agreement was first reached in the "Partition Council" consisting before the partition of representatives of the Congress and Muslim League parties under the Governor-General's chairmanship, and subsequently of representatives of the two Dominions. This agreement, which was formalized in an order of the Governor-General,3/ provided among other things (1) that all liabilities of the unpartitioned Government4/ should be assumed on August 15, 1947, by the Government of the Dominion of India, subject to eventual contribution, to be decided later, by the Pakistan Government; (2) that fixed assets should be divided on a territorial basis and that movable physical assets and cash physically held by government departments should be allocated on a similar principle; and (3) that all other assets of the Central Government (including the large cash balances at the Reserve Bank) should for the time being "vest in His Majesty for the joint purposes of the

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1/ One rupee = 30.2 U.S. cents.

2/ In addition, Rs. 50 million withheld by India to cover expenditure said to have been incurred by India on Pakistan account since August 15, 1947, is still the subject of a difference between the two Dominions.

3/ The Indian Independence (Rights, Property, and Liabilities) Order, 1947, August 14, 1947. Under the Indian Independence Act, the Governor-General was directed to make provision, by order, for division of the rights, property, and liabilities of the undivided Government. This and other broad discretionary powers of the Governor-General were to extend only to March 31, 1948, or such earlier date as might be set, in the case of either Dominion, by the Legislature of that Dominion. Any order of the Governor-General respecting either Dominion could be altered or set aside for that Dominion by its Legislature.

4/ Not including, however, liabilities "which have accrued or may accrue" under contracts made by the Central Government "for purposes which as from that day are exclusively purposes of the Dominion of Pakistan."

two Dominions." Many decisions were thus left to be made after partition by the Partition Council, or, in default of an agreement, by a judicial Arbitral Tribunal. No reference of these problems to the Arbitral Tribunal has been necessary.

On August 14, 1947, the cash balances of the unpartitioned Government were transferred by order of the Provisional Government of India to the account of the new Dominion of India, and the Dominion of India transferred 200 million rupees to Pakistan as an interim payment. Although the initial transfer to the Dominion of India contravened no prior understanding, it has been regarded by the Dominion of Pakistan as lacking legal basis.

On December 12, 1947, the two Dominions announced that a comprehensive agreement had been reached. India, however, refused to pay immediately the remainder of the cash balances due to Pakistan. The political and military situation in Kashmir was particularly tense at this time. Pakistan found it necessary to obtain advances from the Reserve Bank of India and also made arrangements for exchanging with the State of Hyderabad some new Pakistan securities in exchange for Government of India securities owned by Hyderabad. On January 17, 1948, supposedly under pressure from Mahatma Gandhi, India finally completed the payment to Pakistan.

The agreement of December 12, 1947, determined that Pakistan would assume a liability to India in an amount equal to the value of the unpartitioned Government's assets which go to Pakistan, plus $17\frac{1}{2}$ per cent of the excess of total outstanding liabilities over the value of total assets of the unpartitioned Government, minus the value of liabilities assumed directly by the Pakistan Government. The $17\frac{1}{2}$ per cent ratio is somewhat below the population ratio, and is probably above the national income ratio. It is much above the ratio (about 10 per cent) in which bank assets and liabilities are distributed between the two areas. The willingness of Pakistan to assume so large a portion of the uncovered liabilities as $17\frac{1}{2}$ per cent is probably explained by Pakistan's receipt of a generous share of the cash balances (and also of military stores) and liberal terms regarding payment of the debt to India, which allow Pakistan four years of grace, payments of principal and interest to be spread over 50 years thereafter.

Preliminary estimates by the Indian Finance Minister of the total outstanding liabilities and assets of the undivided Government have placed liabilities at Rs. 33,000 million and assets at Rs. 28,000 million, leaving an estimated uncovered debt of Rs. 5,000 million. The Finance Minister also gave a highly tentative figure of Rs. 3,000 million for Pakistan's debt to India. In addition, Pakistan will assume directly a considerable but so far unknown amount of liabilities, including certain pensions and certain internal liabilities, e.g., those to the Government owned railways for deposits of unspent depreciation reserves.

THE CASE FOR DISCRIMINATION IN TRADE Randall Hinshaw

During the war, the U.S. Government took a strong stand in favor of a postwar international economic order built upon the related principles of multilateralism and nondiscrimination. It was believed that such a setting provided the most favorable environment, not only for a thriving world trade, but for an enduring peace. It was realized that the establishment of this environment could not be accomplished immediately after the end of hostilities, but would inevitably be a gradual process, with final arrangements in order only after a transitional period lasting several years. At the same time, it was also recognized that these two principles in themselves were not sufficient to insure international prosperity. The framers of the government program were well aware that under a regime characterized by a high degree of "non-discriminatory multilateralism," the world depression, with all its dire consequences, had originated. Accordingly, the Government played a leading role in creating new international institutions--notably the International Bank and Monetary Fund--which were designed to correct the major weaknesses of the international economic order as it existed before its breakdown in 1929.

The opposition of the American administration to bilateral and discriminatory commercial policies was shared by the great majority of economists in this country. Abroad, however, the sentiment was far from unanimous. While the late Lord Keynes lent vigorous support to the American position, and assisted conspicuously in drafting the blueprints for a world order designed, in his own words, "to implement the wisdom of Adam Smith," there were other prominent economists in Britain and on the Continent who openly opposed the American program and repudiated the philosophy on which it was based. In the latter view, the American opposition to discrimination rested on the knowledge that the United States, with its strong international economic position, had little to gain by practicing discrimination itself and much to lose from its practice by others. Looked at in this way, the American insistence on equality of treatment appeared to some foreign observers to be merely a rather calculating brand of self-righteous idealism which had little relevance to the requirements of war-torn countries facing an acute (and possibly chronic) "shortage of dollars." Foreign sentiment of this kind has not diminished since the end of the war, and in recent months the case for discriminatory commercial policies has been restated with great skill by two European economists, Thomas Balogh and Ragnar Frisch.1/

It has long been recognized that certain forms of discrimination may have economically desirable results. In particular, it has been accepted that where preferential arrangements come into being through the lowering of trade barriers within the preference area (rather than through the raising of barriers against outside areas), international trade is expanded, and resources tend to be allocated on a more economical basis. While such an allocation may still be far from the optimum, most economists would agree that resources would probably tend to be more effectively employed than was previously the case. The only important proviso would have been to the effect that the benefits issuing from this type of preferential treatment might be offset, or outweighed, as a result of retaliation by outsiders.

1/ Thomas Balogh, "A New View of the Economics of International Readjustment," Review of Economic Studies, Vol. XIV (2), No. 36; Ragnar Frisch, "On the Need for Forecasting a Multilateral Balance of Payments," American Economic Review, September 1947.

The recent statements in favor of discrimination have rested on considerations unconnected with the optimum allocation of resources. In an important article, Professor Frisch has shown that, in certain situations, balance-of-payments difficulties are corrected with less injury to the volume of world trade by discriminatory than by nondiscriminatory import restrictions.1/ While the conclusion itself is not new, Frisch's method of demonstration does not appear to have hitherto been used for this purpose, and makes possible a more systematic approach to the economics of discrimination.

The device which Frisch introduces is known as the "trade matrix." This is simply a square made up of rows and columns, the rows designating the exports of a group of countries and the columns designating the respective imports of the same countries. Thus row A shows the exports of country A to countries B, C. etc., while column A shows the imports of country A from countries B, C. etc.; and so on. The terms "exports" and "imports" are here used in the broadest sense to include not only goods and services but also in-payments and out-payments resulting from long-term capital transactions. The only items excluded are the so-called "balancing items," or means of payment--i.e., gold and short-term foreign balances. The latter items are to be regarded as the means of financing external deficits resulting from an excess of imports over exports, as the terms are here used.

An example of a trade matrix showing a situation of international balance is presented in Matrix 1. The data are measured in terms of a common value unit and, for the sake of simplicity, only three countries are included. In this first situation, the total exports of each country are equal to its total imports, and thus the hypothetical "world" is in international equilibrium. The total volume of "world" trade, which can be measured either by world imports or by world exports, is 44. Let us now suppose that country A has a major depression and that, as a result, its imports fall in half. The outcome is shown in Matrix 2.

Matrix 1
Original Situation of Balance
(Total Trade 44)

Importing country / Exporting country	A	B	C	Total Exports	Surplus
A	0	8	10	18	0
B	12	0	2	14	0
C	6	6	0	12	0
Total Imports	18	14	12	44	
Deficit	0	0	0		0

Matrix 2
Unbalanced Situation Resulting from Depression in Country A
(Total Trade 35)

Importing country / Exporting country	A	B	C	Total Exports	Surplus
A	0	8	10	18	9
B	6	0	2	8	-
C	3	6	0	9	-
Total Imports	9	14	12	35	
Deficit	-	6	3		9

1/ Ragnar Frisch, op. cit.

As a result of the depression, country A now has a surplus in its balance of payments, while countries B and C both have deficits. The sum of the deficits, amounting to 9, is equal to the surplus of country A, and world trade is now 35.

This situation of disequilibrium is of course unstable, and balance will tend to be restored in one way or another, if only for the reason that external deficits must be financed out of reserves which are generally not large. The most desirable way to restore balance would be for country A to rid itself of the depression and thereby increase its imports to the original level. If this, however, is ruled out, and if events are permitted to take their natural course, a downward spiral may be set in motion which may drag world trade down to a very low level. Let us assume an intermediate situation in which country A is able to keep its depression from getting any worse (i.e., is able to maintain its imports at the reduced level) and in which countries B and C attempt to restore balance by imposing import restrictions. In these circumstances, it can easily be shown that import restrictions which discriminate against the "surplus country" (A) result in a smaller contraction of world trade than import restrictions which are applied against the surplus country on a nondiscriminatory basis. The first situation is shown in Matrix 3.

In this example, it is assumed that country A's imports remain at the same level as in Matrix 2 and that countries B and C reduce their imports from country A by the amount of their respective deficits. Under these conditions, balance is restored, and total trade is 26.

In the foregoing case, balance is attained by discriminatory import restrictions--restrictions which discriminate against the exports of the surplus country. If, instead of this procedure, countries B and C attempt to eliminate their deficits by reducing imports on a proportionate basis from all sources, balance can still be achieved, but only at a lower level of total trade than in Matrix 3. The situation in the latter circumstances is as shown in Matrix 4.

Matrix 3

Balance Restored by Discrimination Against Country A

(Total Trade 26)

Exporting country \ Importing country	A	B	C	Total Exports	Surplus
A	0	2	7	9	0
B	6	0	2	8	0
C	3	6	0	9	0
Total Imports	9	8	9	26	
Deficit	0	0	0		0

Matrix 4

Balance Restored by Nondiscriminatory Import Restrictions

(Total Trade 22)

Exporting country \ Importing country	A	B	C	Total Exports	Surplus
A	0	4	5	9	0
B	6	0	1	7	0
C	3	3	0	6	0
Total Imports	9	7	6	22	
Deficit	0	0	0		0

Under these conditions, world trade is 22, or exactly half the volume in Matrix 1. The reason is obvious: since the imports of country A were assumed to fall in half (and to fall in the same proportion from each source), the only way in which countries B and C can restore balance, if they must apply restrictions on a proportionate basis, is also to cut imports in half from each source. If the original reduction in country A's imports had been by one-third, the cuts by countries B and C would have had to be by one-third; and so forth.

It should be noted that the surplus country under these assumptions suffers no more when balance is restored by foreign restrictions which discriminate against its exports than when balance is achieved by nondiscriminatory restrictions. In either case, the surplus country's exports fall to the level of its imports, which are assumed to remain unchanged. But while the effect on the surplus country is the same in both cases, it is clear that world trade suffers less in the first case than in the second.

While some of the generalizations which have thus far been made are valid regardless of the number of countries involved, others must be modified if more than three countries are taken into account. Consider, for example, the trade matrix in Matrix 5. Here we have a situation of disequilibrium in which there is one surplus country (A) and three deficit countries (B, C, and D). Let us suppose that the deficit countries attempt to restore balance by discriminating against the exports of the surplus country. In the situations involving only three countries, it was possible for each deficit country to follow the simple rule of cutting its imports from the surplus country by the amount of its deficit, in which case balance would automatically be restored. In the situation illustrated in Matrix 5, however, it is not possible for country B to follow this rule, since its imports from country A, amounting to 2, are less than its deficit, which amounts to 4. Let us suppose that country B cuts out all its imports from country A and that countries C and D reduce their imports from A by the amount of their respective deficits. The result is as shown in Matrix 6.

Matrix 5
Unbalanced Matrix with Four Countries
(Total Trade 55)

Exporting country \ Importing country	A	B	C	D	Total Exports	Surplus
A	0	2	6	10	18	9
B	4	0	4	2	10	-
C	2	8	0	4	14	-
D	3	4	6	0	13	-
Total Imports	9	14	16	16	55	
Deficit	-	4	2	3		9

Matrix 6
Effect of Attempt to Achieve Balance
by Discrimination: Stage 1
(Total Trade 48)

Exporting country \ Importing country	A	B	C	D	Total Exports	Surplus
A	0	0	4	7	11	2
B	4	0	4	2	10	-
C	2	8	0	4	14	0
D	3	4	6	0	13	0
Total Imports	9	12	14	13	48	
Deficit	-	2	0	0		2

It will be seen that while countries C and D restore equilibrium in their own balances by this action, country B does not. It still has a deficit of 2, which is matched by country A's surplus of 2. Country B must cut imports still further to achieve balance, and since it cannot reduce them from A, where they are already zero, it must reduce them from either C or D or both. Let us suppose that it reduces its imports by an equal amount from C and D, cutting imports in each case by 1. As shown in Matrix 7, this achieves balance for B, but disturbs the balance in C and D.

Matrix 7
Stage 2 of Same Attempt
(Total Trade 46)

Exporting country \ Importing country	A	B	C	D	Total Exports	Surplus
A	0	0	4	7	11	2
B	4	0	4	2	10	0
C	2	7	0	4	13	-
D	3	3	6	0	12	-
Total Imports	9	10	14	13	46	
Deficit	-	0	1	1		2

The latter countries, which were previously in equilibrium, might now be tempted to restore balance by retaliating against what would probably seem to them the unjustified action of country B, but this clearly would not restore equilibrium and, in fact, would be likely to precipitate a downward spiral. The "correct" solution to the problem requires that countries C and D reduce their imports from country A by the amount of their deficits (respectively 1 and 1). In this event, overall balance is at last attained, as shown in Matrix 8.

Matrix 8
Final Attainment of Balance by Discrimination
(Total Trade 44)

Importing country / Exporting country	A	B	C	D	Total Exports	Surplus
A	0	0	3	6	9	0
B	4	0	4	2	10	0
C	2	7	0	4	13	0
D	3	3	6	0	12	0
Total Imports	9	10	13	12	44	
Deficit	0	0	0	0		0

It will be noted that, contrary to the situation in three-country cases, the attainment of balance by discrimination in the foregoing situation involves a contraction of total trade by an amount greater than the original aggregate deficit (surplus). Nevertheless, it remains true that the necessary contraction would be still greater if the deficit countries were required to achieve equilibrium by nondiscriminatory import restrictions.

It would be a serious mistake to regard the foregoing analysis as presenting a strong case in favor of discrimination. In particular, as Frisch recognizes, the analysis offers no case at all for uncoordinated discrimination by deficit countries against surplus countries. In the first place, it must be remembered that discriminatory import restrictions are particularly likely to invite retaliation. Thus, on this ground alone, it is doubtful whether uncoordinated discriminatory action against surplus countries would be likely to achieve balance at a higher level of world trade than nondiscriminatory action. A more fundamental point is that any superiority which discriminatory import restrictions may have as a means of minimizing a contraction in total trade depends entirely upon whether the correct (and continually changing) formula of discrimination, as derived from the trade matrix, is complied with.

As we have seen, even in simple situations involving as few as four countries, the appropriate formula is not likely to be stumbled upon by accident, particularly since it may require that countries which are already in balance must reduce their imports and exports. Under realistic conditions embracing many countries, only the highest degree of international cooperation would insure the superiority of discriminatory treatment. The trade matrix would have to be continuously scrutinized; detailed balance-of-payments data for all countries would have to be obtained at frequent intervals without appreciable lag; and all countries would have to be willing promptly to adjust their commercial policies to the changing requirements of the matrix formula. Co-operation would be required not only on the part of the deficit countries but also on the part of the surplus countries (who would have to agree not to retaliate) and on the part of the countries already in balance (to whom a directive to contract imports and exports might seem unfair).

But surely if this almost utopian degree of international cooperation were to be attained, it would be just as simple and easy to follow a more rational criterion of trade policy than the essentially restrictionist goal of "minimum contraction." Under conditions of such close cooperation, it should be possible to have as a realistic objective the optimum level and composition of world trade, and this would entail very different rules of procedure from those envisaged by Professor Frisch. In particular, such a criterion would open the possibility of increases in exports to surplus countries, a possibility which Frisch does not consider. For this broader purpose, it is possible that Frisch's method may be just as illuminating as in the problems with which he is concerned and, if such be the case, the results should be far more rewarding. Once, however, the assumption that exports cannot be increased is dropped, Frisch's case for discrimination becomes very tenuous indeed.