382.41373
K91

INTERNATIONAL COMMODITY AGREEMENTS TO PROMOTE AID AND EFFICIENCY: THE CASE OF COFFEE

by

Irving B. Kravis
University of Pennsylvania

PN-ABI-547
72422

July 1967

The author wishes to express his appreciation to the Office of Program and Policy Coordination of the Agency for International Development for the support of the work upon which this paper is based as part of its 1967 Summer Research Project. He wishes to acknowledge the stimulus of the ideas in a memorandum on commodity agreements written by Mrs. Barbara Bergmann and of many discussions with her and Mr. Benjamin Cohen. He also had the benefit of the wisdom and experience of Mr. Morton Abramowitz and Mr. Jack Button. However, all the views advanced in this paper are the sole responsibility of the author and are not to be taken as necessarily being those of the persons mentioned to any degree. The ideas advanced are certainly not to be taken as having been endorsed by the sponsoring agency; the arrangements made between the agency and its summer consultants provide for complete freedom of opinion and judgment for the consultants in drawing up their reports.

(To be published in Canadian Journal of Economics)

International commodity agreements to promote aid and efficiency.
382.41373 Kravis, Irving B.
K91 International commodity agreements to promote aid and efficiency: The case of coffee. July 1967.
25 p.
Bibliography throughout.

1.Coffee trade. 2.Foreign trade regulation. I.Summer Research Project, 1967. II.Title.

Summary

The main rationale for participation in commodity agreements for LDC exports by the U.S. and other developed countries is to further the economic development of the producing countries. To the extent that the extra revenues achieved by an export restriction scheme get into the hands of the producers of the product, strong and almost irresistible incentives to overproduction are given, economic development is not encouraged, and accumulating stocks or exports in excess of quotas threaten the entire arrangement. In addition, the quotas are likely to be based upon past exports and bargaining power at the time of the negotiation of the agreement, and may thus maintain production in high cost areas and prevent the expansion of production in low cost areas, particularly those of recent development.

The International Coffee Agreement (ICA), which went into operation for a five year period in the Fall of 1961, has probably succeeded in maintaining higher export earnings for coffee producing countries than they would have had in a free market, and both the ICA and the International Coffee Organization (ICO) which administers the agreement, have been marked in a number of ways by imagination and innovation. The ICO has been steadily attempting to tighten its control over exports in excess of quotas. It has recently (Spring 1967) introduced the use of stamps for this purpose; each exporting country is given a number of stamps equivalent to its export quota, and the stamps must be affixed to the documents for each shipment of coffee if the coffee is to gain admittance to the importing country. However, since in many countries the price paid to producers makes the cultivation of coffee profitable relative to other crops, the pressure of growers, who are often politically powerful, may continue to force some countries to accumulate stocks or to evade their export quotas in one way or another. The countries of Central America and Africa may find it difficult to arrest the rapid growth in their coffee production and Brazil and Colombia may be unwilling to take further reductions in their market shares. Present plans for a coffee diversification loan fund represent a step in the right direction. The aim is to provide financial resources for the shift out of coffee production that will become necessary as export restrictions are made more effective. However, little impact upon the problem can be expected from this source considering both the size of the proposed fund relative to the level and continuing growth of excess coffee capacity and the failure to attack directly the incentives to continue coffee cultivation. Even if the effort to restrict exports to quotas were successful, there are grounds for thinking that there are substantial inefficiencies in the present geographical distribution of coffee production. The coffee producing countries

as a whole could obtain the present coffee export proceeds with a significantly smaller expenditure of land, labor and capital.

The forthcoming negotiations for the renewal of the ICA provide an opportunity to develop the ICO so as to permit it to cope with these problems. It is proposed that the ICO be empowered to charge a fee for the stamps it issues which would be gradually increased until it represented the difference between a target consumer price and a target producer price. The target consumer price might be determined on the basis of recent price levels, although these are lower than have sometimes prevailed in the last few years; perhaps the developed countries would agree to higher prices if it were clearer that their coffee consumers were being taxed to promote the economic advancement of less developed countries rather than to continue to support wasteful production, including some coffee that would never be used. Once the target consumer price was chosen, the tax would be set so as to establish that producer price which would call forth the quantity of coffee that consumers would be willing to buy at the price set for them. Since the tax would be the same for producers in all countries, coffee would eventually be produced in the lowest cost areas; the market rather than politically negotiated quotas would determine the location of production.

There is, of course, a wide range of possibilities concerning the use of the proceeds from the stamp tax. Except for the requirement that the proceeds not be funneled back to coffee producers, the choices here are independent of the use of the stamp tax to create the separation between consumers' and producers' prices that is necessary to restore balance to the world coffee industry. One obvious use of the proceeds is to ease the burden of transition to a situation in which world producers are confronted with a single price for each grade of coffee. In the longer run, the proceeds of the tax may either be considered as the property of the producing countries in proportion to their old quotas or new levels of production or as available for development purposes to the developing countries as a whole. There is ample room for compromise among these alternatives since the coffee producing countries as a whole would be obtaining the same or higher coffee revenues with a smaller expenditure of real resources; even if every country were guaranteed the continuation of its present net income from coffee, there would still be something left over to make some coffee producers or other LDC's better off than they are now.

This paper takes as its starting assumption that the United States and other developed countries are committed to the continuation of the commodity agreement in coffee and that the possibility of commodity agreements for other primary product exports of the LDC's has become more open than in the past. It is addressed to the question of what provisions would be ideal in such agreements in view of the factors that have caused the developed countries, particularly the United States, to change their position. The discussion is carried on in terms of the coffee problem, a timely question since the present agreement expires in September 1968. The argument may apply to other commodities which like coffee are produced almost entirely in less developed countries, have no close substitutes, and are consumed largely in developed countries. Such products include cocoa, tea, bananas, pepper and other spices, and perhaps tin and manganese ore; though some of these would be excluded on other grounds as appropriate for commodity agreements, they account for more than one-sixth of the developed countries' primary product imports from the less developed countries, and for more than one-fourth if petroleum is exluded.*

---

* Mrs. M.J. 't Hooft Welvaars, "The Organization of International Markets for Primary Products," Table 8, UNCTAD Proceedings, Vol. III.

1. Ideal Commodity Agreements

Until very recently, there was virtually unanimous skepticism in economic literature with respect to commodity agreements. The main reason is that commodity agreements even when the very great difficulties of negotiation are surmounted, lead to the misallocation of resources; either too much or too little of the product is produced, and it is not produced in the lowest cost locations.

Lately, more attention has been given to the role of commodity agreements in transferring resources from the rich to the poor countries.* Commodities which are produced by poor countries and consumed mainly by rich ones lend themselves to such transfers, especially if the demand for them is inelastic with respect to price. While it has been recognized that commodity agreements are inferior means of providing aid--among other reasons because they levy taxes in the rich countries on the basis of the use of the commodity and distribute the aid to the poor ones on the basis of exports of the commodity--the growing gap between per capita incomes in the rich and poor countries and the failure of the developed countries to expend their aid or to give adequate market access have led to a renewed interest in commodity agreements as a second best alternative.

From the standpoint of the LDC's the aid or transfer objective of commodity agreements has usually been formulated in terms of the "stabilization" of the trend of prices or earnings at higher levels than would be produced in a free market. However, the more classical formulations in terms of "stabilization" were usually aimed at benefiting the individual producers while the aid approach is concerned with the export proceeds of the LDC qua nation and may even seek to avoid channeling the benefits to the producers in the exporting country.

Another new or newly stressed objective of commodity agreements is "diversification", that is encouraging the shift of resources away from the agreement commodity into others. Diversification will not work unless ways can be found to prevent individual producers from receiving prices above those required to call forth the quantity that will be consumed at the price established by the commodity agreement.

---

* See, for example, Harry G. Johnson, Economic Policies Toward Less Developed Countries (1967), and John Pincus, Economic Aid and International Cost Sharing (1965). At the official level, the French Government proposed to UNCTAD a plan of market organization for temperate zone food products that would provide for such transfers. The French also proposed that the developed countries impose variable levies on primary product imports from developing countries, the proceeds of which would be turned over to a fund that would be administered by all the countries exporting the given product and therefore having a claim upon the refund. Aide Memoire from the French Government Concerning Certain Questions on the Agenda of the United Nations' Conference on Trade and Development.

The short run or cyclical stabilization of prices or earnings has also been an LDC objective frequently sought through commodity agreements. The initially tardy and subsequently over-compensatory character of supply adjustments (tree crops) and the possibility that sharp price fluctuations induce substitutions (copper) or cause consumer resistance (coffee) may be valid reasons for concern, even though studies by MacBean and others * have tended to minimize the damage to LDC economies arising out of export instability. In any case, the LDC's are less interested in smoothing out fluctuations than in influencing the secular trend of export prices and proceeds.

An ideal commodity agreement in the light of these considerations is one which makes aid transfers possible but which minimizes the misallocation of resources. Cyclical price stabilization may also be a worthwhile objective, particularly if it can be achieved as a by-product.

The key requirement of a commodity agreement that will satisfy the aid and efficiency objectives is a means of separating the price or revenue received by the exporting country from that received by the individual producer. A closely related requirement is that the producer price be uniform for producers in different countries. Where, as is almost always the case, there are different qualities of the commodity, the free market should be allowed to establish the price differentials between them for both producers and (at a different level) for consumers, but producers of a given quality should be paid the same export price regardless of their country.

The integration of the world market--that is, establishment of a uniform producer price--would reduce the aggregate world-wide cost of producing a given size crop. It would eliminate high cost producers and permit low cost producers to expand, in whatever country or area each were to be found. Under present arrangements in commodity markets, the existence of quotas and of taxes and subsidies which vary from country to country often create a situation in which the price realized by producers differs very widely.

Even if a commodity agreement did not raise the price, the producing countries as a whole would be better off under a one-price regime since the same total revenue would be available to them at a lower total cost. It should therefore be possible to bribe the losers--i.e., the high-cost producers whose output declines or terminates--so as to leave them no worse off than before. At the extreme, they could be paid the full amount of their former revenue. In this case the sole incentive

---

*A.I. MacBean, Export Instability and Economic Development, 1966; J.D. Coppock, International Economic Instability, 1962.

to expansion given to the low-cost producers would be the opportunity to gain the new markets provided by the growth in consumption that characterizes most commodities over time as world population and per capita incomes rise. However, the payment of full former revenue for non-output would be more than necessary to compensate high cost producers, since declines in production will also be accompanied by declines in out-of-pocket costs and eventually overhead costs as well. Thus, there would be ample opportunity to bribe the losers and still provide incentives and rewards to the winners. Some compensation system of this sort would indeed be a practical necessity at least for a transition period.

From the standpoint of the United States, the aid given through higher than free market prices paid by its consumers would no longer, under a one-price regime, be supporting high cost, surplus output. The resources used in the LDC's to produce the agreement commodity would be minimized. Each LDC would have the incentive either to cut its costs of production of the agreement commodity or to diversify. Diversi ication would no longer have to be pressed on producing countries as a matter of moral obligation, ethical behavior, or wise provision for the future. Where diversification was possible, internal resources would be used for it and external resources (including the proceeds of the compensatory payments referred to above) might also be mobilized. Areas particularly well suited to the agreement commodity would continue to produce it.

There are many kinds of institutional arrangements that can be imagined for establishing a uniform world producer price and a higher world consumer price. The scheme, of course, should be tailored as closely as possible to the production and distribution structure of the particular commodity. As a practical matter, its chances of adoption will be the greater, the more it can be grafted onto existing institutions and practices.

The possibility of applying these ideas to the world coffee industry is considered below. First, the situation of the industry and the functioning of the International Coffee Agreement are described.

II. The Coffee Situation *

The salient features of the world coffee market since the end of World War II may be summarized as follows:

1. For ten years now coffee has been under a regime of export quotas, at first (1957) agreed upon by the Latin American producers who

---

*The statistical information in this section is taken mainly from Annual Coffee Statistics published by the Pan American Coffee Bureau.

were subsequently (1959) joined by the principal African producers and finally (1962) by the major importers as well. Brazil was a prime mover in all these arrangements including the present agreement which is due to expire in September 1968. Brazil, which has long followed a policy of restricting its exports to maintain prices, has been willing to take a lower share of the market to get other countries to accept quotas. Colombia has followed a similar policy. The quotas of other countries, before the current agreement, tended to be based on estimates of their crops. The result was to make Brazil the residual supplier.

2. As a result of the maintenance of prices, world coffee capacity, already in surplus in the late 1950's, expanded more rapidly than coffee consumption. Exportable production of green coffee rose by 38% between 1957-58 and 1965-66 (from 46.2 to 63.8 million bags) while consumption as measured by imports rose by 29% between 1957 and 1965 (from 36.9 to 47.4 million bags).

3. This expansion of consumption is equivalent to a rate of 3% per annum and approximately the same average rate of growth has marked the period since 1947.

4. Consumption increased only slightly in the U.S., which accounted for over two-thirds of world imports in 1947 and less than half in 1965. However, consumption more than tripled in Canada and western Europe so that these areas together with the U.S. took nearly 90% of imports at the end of the period as compared with 94% at the beginning.

5. There is no substantial production of coffee in any industrialized country although small amounts are grown in Hawaii and Puerto Rico. While there are about 40 coffee exporting countries, 10 of them (5 in Latin America, 4 in Africa and 1 in Asia) have accounted for more than 80 percent of exportable production (domestic production minus domestic consumption) in recent years. Many of these large exporters and some of the smaller ones as well derive between one-third and two-thirds of their export earnings from coffee. The largest producers, Brazil and Colombia, accounted for 31 and 13 percent respectively of world exports in calendar years 1965-66; the corresponding percentages were 41 and 14 in 1957-58, and 52 and 18 in 1947-48. Despite the growth in world consumption, there has been little expansion of exports by these two countries in absolute terms. Almost all the other producing areas have expanded exports substantially; other Western Hemisphere countries doubled their exports between calendar years 1947-48 and 1964-65 and African countries more than tripled theirs; the African share in world exports rose from 14 percent to 31 percent.

6. One reason for the great expansion of African production has been the growth in the demand for robusta coffees, which form the bulk of African output. Although robustas are used for the brewing of

Coffee Production, Exports, Imports and Prices, 1953-66

	(1) World Exportable Production (mil bags)	(2) World Exports (mil bags)	(3) World Exports ($ mil)	(4) World Imports (mil bags) Total	(5) World Imports (mil bags) Arabica	(6) World Imports (mil bags) Robusta	(7) Average Annual Spot Prices, NY Brazil Santos 4 (cents per lb.)	(8) Average Annual Spot Prices, NY Uganda W & C No. 10 (cents per lb.)
1953	na	34.5	2,363	34.0	28.6	5.4	57.9	47.6
4	na	28.8	2,453	30.1	24.6	5.5	78.7	57.9
5	na	33.6	2,193	34.0	27.7	6.1	57.1	38.4
6	na	38.7	2,326	37.2	29.9	7.3	58.1	33.6
7	na	35.1	2,154	36.9	28.7	8.0	56.9	34.6
8	46.2	36.2	2,003	37.0	29.3	7.8	48.4	38.1
9	52.0	42.2	1,913	41.9	33.9	8.0	37.0	29.3
1960	66.4	42.4	1,899	42.6	33.2	9.4	36.6	20.6
1	52.8	43.8	1,839	43.9	33.8	10.2	36.0	18.9
2	58.2	46.3	1,881	46.9	36.1	10.8	34.0	21.1
3	53.4	48.9	1,964	48.0	36.7	11.3	34.1	28.4
4	56.9	46.7	2,377	48.6	35.3	13.4	46.7	35.8
5	36.7	44.2	2,166	47.4	33.3	14.1	44.7	31.3
6	63.8							

Source: Pan-American Coffee Bureau, Annual Coffee Statistics, 1965, except where otherwise noted.

NOTES:

Col. (1) Exportable production (production minus domestic consumption) is for crop year beginning in previous October.

Cols. (1), (2), (4), and (5) Bags of green coffee (or green coffee equivalent) weighing 60 kg.

Col. (3) 1953-59 from Pincus, op. cit. Pincus' figures for 1960 and 1961 are $1,872 and $1,804, respectively.

regular coffee in some European countries, notably France, their distinctive flavor makes them less suitable than arabica coffees * for blending in the U.S. and other major markets. Their lower price and favorable technical characteristics cause them to be used for soluble coffee. However, the rise in the African share in world markets cannot be explained solely in terms of their use for soluble coffees or expansion of coffee consumption in markets where they are favored by public taste or restrictive import policies. In the U.S., for example, the African share in imports of green coffee rose from less than 5% at the beginning of the postwar period to nearly 30% currently, while the proportion of imports used for soluble coffee has stabilized at 17 or 18% in the last half dozen years. **

7. Production in individual countries is subject to wide variations owing to climatic conditions. This is particularly true of Brazil. Beginning in 1963-64, for example, exportable production for three successive years was 21.1, 3.0 and 27.8 million bags. The sharp decline in 1964-65, which was caused by frost in one producing area and drought in another, was notfully reflected in exports since there were large stocks that could be drawn down. Only Colombia, among other producers, maintains any substantial stocks; for countries other than Brazil and Colombia,therefore, the fluctuations in production, fortunately less spectacular than those of Brazil, have been more apt to show up directly in changes in exports.

8. The average annual price of coffee (Santos No. 4, New York) has varied between 19 and 79 cents a pound since the end of World War II; the current (July 1967) price is around 39 cents. Coffee prices surged upwards on three occasions when supplies appeared to be short. The first time occurred in the late 1940's when demand expanded more rapidly than supply; when Brazil ran out of stocks in 1949, the price, which had been around 26 cents, jumped to around 54 cents. A few years later, in 1954, frost damage in Brazil sent prices soaring to a 79 cent average for the year. Since that time the trend of prices has been mostly downwards owing to persistent overproduction relative to what the market could absorb at prevailing prices, and to the resultant accumulation of stocks. After the 1954 peak, prices dropped to the 57 or 58 cent level and remained in that region for most of the period 1955-57. By the

---

*Of the three major categories of coffee, two--Brazils and milds--come from the arabica-type coffee tree. Arabica trees are cultivated in subtropical areas mainly in the western hemisphere and to a more limited degree in Africa. The milds, which are grown in Latin American countries other than Brazil, are more expensive than the Brazils. Robusta trees, which can be grown in tropical areas, produce a coarser fruit.

**Annual Coffee Statistics, 1965, pp. 51 and 59.

latter half of 1957, the knowledge that Brazil had reacquired stocks of about 7 million bags and prospects for large crops in Brazil and elsewhere caused prices to slide first to a level of 36 to 37 cents in 1959-61 and then to 34 cents in 1962-63. The third upward price movement, to an average of 47 cents in 1964, was caused by the Brazilian frost and drought referred to earlier. Since then prices have again been drifting downwards. World stocks amounted to 50 million bags in 1964, and another 15 million bags were added in the next three years. *

9. Although it is not misleading to describe the major trends in coffee prices in terms of a Brazil-type (i.e., Santos No. 4), price relationships among the various types of coffee are sensitive to changes in relative excess demand or supply. For example, the price differential between a Colombian mild (MAMS) and Santos No. 4 was less than 4 cents a pound in 1958 and more than 8 cents the next year. Again, the differential between the same Brazil and a Ugandan robusta (W&C No. 10) was less than 6 cents in 1963 and more than 13 cents in 1955. However, the price differentials between robustas and arabicas have tended to be larger since 1953, approximately the date at which the large relative expansion of African production began. ** It is possible that this reflects the policy of encouraging coffee output pursued by most African governments on the one hand and the policy of restricting exports followed by Brazil and Colombia on the other hand.

10. According to one study, based on U.S. data for the period 1953-63, the elasticity of substitution between robustas and Brazils was close to 1; that is a 1% decrease in the price of robustas relative to that of Brazils would result in almost a 1% increase in the quantity of robustas bought relative to the quantity of Brazils. *** The practical implications of this relationship may be illustrated by calculating what would happen if the 1965 price differential between robustas and Brazils (average annual prices of 31 and 45 cents per pound, respectively ****) were eliminated. The answer is that U.S. imports in 1964 of 5.7 million bags from Brazil and 5.3 million bags of robustas would have been altered by a shift of about a million bags from robustas to Brazils. This may be an underestimate; it is possible that the true elasticity of substitution is larger. The equation in which the elasticity was computed had a strong time trend in favor of robustas which the authors attributed

---

*1966 Annual Report of the President to the Congress on the International Coffee Agreement (1967), p. 5.
**Cf. Annual Coffee Statistics, 1965, p. 26.
***G. Lovasy and L. Boissonneault, "The International Coffee Market", IMF Staff Papers, Nov. 1964. The actual figure for the elasticity of substitution between robustas and Brazils was -0.98; for Colombian milds and Brazils, it was -1.59; and for other Latin American coffees and Brazils, it was -2.76.
****Prices for Uganda W & C No. 10 and Santos No. 4.

to the growth in the demand for soluble coffee. However, as already noted, the soluble factor does not appear fully to account for the relative expansion of robustas in the U.S. market. An alternative explanation for the high trend might be that robustas have been consistently below their long run equilibrium price relative to Brazils and that the shifts in relative quantities measured by the time trend are also the result in part at least of price substitution.

11. In most producing countries, the coffee industry is a direct focus of public policy. Prices and incomes of producers are controlled or influenced through marketing boards, subsidies, or taxes. Sales or export quotas are assigned to individual producers. Coffee acreage is controlled. High quality seed is distributed and other measures of technical assistance are provided by public or quasi-public agencies which try to improve yields and quality. No one producing country engages in all of these activities, of course, but there are few, if any, significant producing countries in which coffee output is not influenced by public policy.

12. One consequence of the differing extent and character of government intervention in the coffee market in the several producing countries is that producers are confronted not with a single world price (with differentials for quality) but with national prices that differ from country to country. In 1965, for example, producer prices, according to one set of estimates, varied from 31 to 93 percent of the average export price. (The average export price may be regarded as the free market evaluation of relative qualities, given the quantities being offered.). The figures for some leading producing countries are as follows:

Country	Average Export Price Per Pound (U.S. Cents)	Estimated Average Producer Price Per Pound * (U.S. Cents)	Producer Price as % of Export Price
Brazil	41.0	12.7	31
Colombia	46.2	33.2	72
El Salvador	45.9	36.7	80
Guatemala	41.3	30.6	67
Mexico	42.1	27.3	65
Angola	28.7	26.7	93
Ethiopia	40.0	32.0	80
Ivory Coast	29.6	10.2	34
Uganda	23.6	13.0	55

*The difference between the two prices is accounted for by government taxes, exporter margins, stabilization funds and "services."

Source: Peter T. Knight, "The Critical Coffee Sector in Brazil: Potential Earnings from Diversification," a paper prepared for the Summer Research Project, Policy Planning Division, Office of Program Coordination, Agency for International Development (1966).

The significance of the differences in the right-most column is that high cost coffee production is being encouraged in some producing countries and low cost production discouraged in others. If farmers' profit margins were the same in all countries, Brazil and the Ivory Coast would be the low cost producers.

13. Taking the viewpoint of the coffee producing countries as a whole, the net result of all these factors was that foreign exchange earnings of the producing countries from the export of coffee reached a peak of $2.4 billion in 1954 and subsequently fell to a low of $1.8 billion in 1961 when more than half again as many bags were exported. The figure was $2.2 billion in 1965.

III. International Coffee Agreement

The International Coffee Agreement (ICA), which entered into force for a five-year period in September 1962, is the only one of the four commodity control agreements successfully negotiated in the post-war period in which the participating developed countries were solely in the position of importers and consumers; in the other cases--wheat, sugar and tin--they also had important producing or financial interests.* The export restrictions which are at the heart of the agreement had their origins in an export quota scheme agreed upon by 7 Latin American countries in 1957 and broadened in producer coverage in successive years until it included about 90% of world exportable production in 1960 and 1961. **

Like the other commodity agreements negotiated in the postwar period, the ICA shows the influence of the provisions of the Havana Charter for an International Trade Organization (1948), which, though never ratified, has been an important source of guidance in the conduct of commercial policy. Specifically, consuming as well as producing countries are included and given equal weight in the voting arrangements, and both consumer and producer interests are to be considered in arranging for the stabilization of prices and the achievement of long run equilibrium between supply and demand.

---

*"Stabilization of International Commodity Markets," UNCTAD Proceedings, Vol. III.

**Rowe, op. cit., p. 16.

Membership in the International Coffee Organization (ICO), established to administer the coffee agreement, included (as of mid-1967) 36 exporting countries and 23 importing countries accounting for close to 98% of world trade in coffee. The Council, which is composed of representatives of all the member governments, takes decisions by a two-thirds vote of the importing and exporting members voting separately. Votes within each group are distributed in proportion to imports or exports, but no country may have more than 40% of the voting power in its category. Brazil has 36.7% of the exporting countries' votes and the U.S. 40.0% of the importing countries' votes. Although neither may exercise a formal veto power because a proposal may eventually be adopted unless at least 2 exporting or 2 importing members persist in voting against it, in practice actions have depended upon a consensus including these two countries.

The objectives of the ICA may be summarized as follows:

1. To achieve a balance between supply and demand. A concomitant objective is to cope with coffee surpluses.

2. To keep coffee prices at "equitable" levels and to avoid "excessive" price fluctuation. Agreement could not be reached how high prices might go and still be "equitable", but there is a provision that prices should not be permitted to decline below the levels prevailing in 1962. These levels were at or near lows for the period since 1949, but they were higher than they would have been in a free market without any export restriction scheme.

3. To encourage the consumption of coffee. This together with the maintenance of equitable prices would increase the purchasing power of coffee exporting countries.

4. To contribute to the development of member countries, increase in their employment and income, and fair wages, higher living standards and better working conditions.

The last objective is, of course, a very broad one which, it was probably intended, would be promoted by the achievement of the others. In any case, the first three objectives are the ones to which the operative clauses of the ICA are addressed, and of these, it is the price objectives that have been the main focus of effort in the actual workings of ICO.

Export Quotas

The main mechanism for controlling prices is a system of export quotas for the producing countries. Each producing country's "basic quota" was fixed in terms of number of bags of coffee in an annex to the ICA. The total of the basic export quotas assigned to the original

36 exporting countries was 45.6 million bags. Provision was made for year to year overall adjustments by the establishment of an "annual quota", expressed in terms of a percentage of this total. In the first coffee year under the agreement, for example, the annual quota was set at 99 percent of the 45.6 million bag total. The actual permitted exports for each country in that year was then 99 percent of its "basic" quota. Some leeway is allowed in the percentage of the actual quota for the year that a country may export in any one quarter. As long as it remains within its quota, each exporting country is free to sell its coffee in any market.

The importing countries are relied upon to make the export quota system effective. Exports under the quotas are to be accompanied by certificates of origin issued by the exporting country with a copy to the ICO. Importing countries are not to permit the entry of coffee from any other member country without a certificate of origin or a certificate of re-export. In addition, the importing countries have placed quotas on imports from non-members.

The operation of the export quota system nevertheless encountered difficulties attributable largely to the fact that the prevailing prices paid to producers made coffee production profitable relative to other crops in most of the exporting countries. No international mechanism was in operation which would reduce the incentives that the maintenance of prices provides coffee farmers to continue or even expand coffee production. The result was to encourage persistent excess production (relative to requirements for allotted exports and domestic consumption), in amounts and locations which have varied from one coffee year to another. Since few Central American or African producing countries find it easy to finance the holding of stocks or even possess the physical facilities for storage, excess production created almost irresistable pressures to export coffee in excess of the quota. Under these circumstances, considerable quantities of above-quota coffee were exported, some through loopholes in the ICA certificate system, some through formal waivers obtained from the Council, and some in simple violation of the agreement.*

One of the loopholes turned out to be the novel provision in the ICA which permitted sales outside of quotas to "new markets", consisting of more than 30 Afro-Asian and Soviet Bloc countries with low per capita coffee consumption and consequently having considerable potential for expansion. Together with provisions for the establishment of a coffee promotion program to be financed by the exporting members and clauses dealing with the removal of obstacles to coffee consumption,

---

*1966 Report of the President.

the "new markets" clause constituted the means by which it was proposed to promote the increased consumption objective of the agreement. The difficulty was that coffee ostensibly destined for new markets began to be diverted en route to the higher priced markets of the importing member countries. Another loophole, unrelated to the new market provision, was the smuggling of coffee to non-member countries for shipment to member importing countries with the claim that the coffee was produced in the non-member country.*

With respect to open over-shipments, an effort was first made to charge these against quotas for succeeding periods, but in most, if not all, cases they were finally covered by waivers. Aside from a number of ad hoc waivers, the pressure of overproduction in some countries and the inability of the members to agree on a revision of the basic export quotas in 1965, the time stipulated in the ICA for the review of these quotas, led to a set of waivers for 15 producing areas. A total of 1.4 million bags was thus added to the annual quota of 43.7 million bags for 1965-66. The increases were to be suspended if they depressed prices beyond specified levels, and they were not to be regarded as prejudging the issue of future quotas. Some of the waivers were indeed suspended in the latter half of the year. Further tightening of the waiver procedures came in 1966-67 when recipients were required to set aside 20% of the waiver proceeds for coffee diversification (or, an alternative which none selected, to freeze stocks equivalent to the amount of the waiver).

Despite the reservation to the contrary, waiver recipients appear to have established a favorable bargaining position with respect to future quotas. Larger crops thus promise to lead to larger quotas, though less automatically than in the past. In any case, the countries that did not stay within their original quotas have already benefited at the expense of those who did. On the other hand, it can be argued that the original quotas based largely on past production were unfair to new low cost producers and that the waivers only rectified the inequities and injustices. One thing that seems certain is that total revenues to the coffee producing countries as a whole were smaller than they would have been had total marketings remained within the original annual quota. If the price elasticity of demand for coffee is -0.4,

---

*The Executive Director of the ICO estimated that almost 3 million bags of "tourist" coffee - coffee transhipped through other countries so as to escape being charged to a quota - circulated in one year. Statement to the U.N. Conference on Trade and Development, Geneva, May 25, 1967.

the decrease in revenue associated with the 3% quantity increase is near 5%; if it is -0.6 the decrease is around 2%. *

As the loopholes and evasions became evident, the ICO took measures to improve its system of surveillance over export quotas. Certificates of origin were required for all coffee originating in member countries whether shipped directly to member importers or indirectly through non-members, and the importing countries were asked to impose quotas on imports from non-members. Effective in April 1967 a stamp system was introduced in an effort to curb overshipments. Under the new system, certificates of origin are valid only if they have affixed to them a quantity of ICO-issued stamps equal to the amount of the coffee covered by the certificate.

Quota Adjustment Through Indicator Prices

An important step in the evolution of the agreement was taken in 1965 with the adoption of a scheme for increasing or decreasing the annual quota whenever an indicator price (an average of the prices of the 3 major types of coffee) rose above or fell below a specified price range. Not only was this a more explicit effort to stabilize prices but it also in effect necessitated some agreement on "equitable" prices which could not be reached when the ICA was negotiated. The most significant aspect of the measure, however, was that each producing country was now virtually guaranteed coffee earnings equal to the product of its quota and the price for the type of coffee it produced, provided that there was no crop disaster and that the quota system really worked.

The arrangement was subsequently modified so as to adjust quotas for each of four different categories of coffee in accordance with its own indicator price. As it stood in mid-1967, the provisions called for the upward or downward adjustment of total export authorizations for a given type of coffee by 2.5% whenever its indicator

---

*An FAO study cited by 't Hooft Welvaars (op. cit.) sets the elasticity between -0.2 and -0.6. An estimate of -0.4 is used by Pincus (op. cit., p. 185) for the U.S. with reference to the price level prevailing in 1961. At higher prices, elasticity may be greater, and it may also be greater abroad where incomes are lower. As the elasticity approaches -1, there will of course be less and less change in revenue. Even at this point, however, the producing countries would still be worse off, since they could have obtained the same export proceeds with smaller quantities of coffee.

price exceeded or fell below specified limits for 15 days. The categories and the price ranges were:

	Cents per pound
Colombian milds	43.5 - 47.5
Other milds	40.5 - 44.5
Unwashed arabicas	37.5 - 41.5
Robustas	30.5 - 34.5

The lower limits of these ranges are higher than the prices that prevailed in 1962 (roughly 41, 36, 34 and 21 cents respectively, for the above types), the reference year for minimum prices in the ICA. On the other hand, the upper limits are lower than the average prices of 1964 (approximately 49, 47, 47, and 36 cents), the year prices were driven up by the Brazilian frost and drought.

The multiple indicator price system seems on the whole more conducive to price stability and more sensitive to consumer preferences than a single price indicator scheme. When quotas for all kinds of coffee are adjusted on the basis of changes in a single average price, the advent of excess demand for a particular type of coffee does not call the adjustment mechanism into play until its price rises sufficiently to pull the indicator price above the limit. This event may be hastened by the price effects on other coffees as they are substituted for the scarce type as its price rises. In the final analysis, however, the one price indicator system imposes upon consumers the combination of coffees embodied in the original basic quotas (except to the very limited extent that price changes may induce production shifts from one type of coffee to another in the few countries that can produce more than one of the major types). Adjustment to changing tastes is made by allowing the market to alter the relative prices of the different types of coffee. The multiple price indicator system, on the other hand, freezes the price differentials and meets shifts in consumer preferences by altering the quantities of the various kinds of coffee placed on the market. It may also affect the future development of the world coffee industry in a different way from a one price indicator system since it tends to turn attention more specifically to each major type of coffee individually and to the fortunes and policies of the producing regions associated with each.

Production Controls and Diversification

For the longer run solution of the coffee problem, the producing countries committed themselves in the ICA to adjust coffee production to the amount needed for domestic consumption, exports and stocks. One year after the ICA entered into force, the Council was supposed to determine production goals for each producing member country. While each producing country was to be responsible for the

means by which it achieved the established goal, it was required to submit reports on its program and a confrontation process involving discussion of the reports was contemplated. The Council was given the authority to establish procedures to verify compliance with the achievement of the production goals, and to deny any increases in the annual quota that might be made to a non-complying country. "Unfortunately," it was stated in an official report, "it has not been possible to implement this section of the Agreement. Most countries hesitated to agree to the Council's setting production goals so long as there was a chance that they might negotiate for themselves such an increase in their basic quota that they would not have to curb production."

Partly as a result of this impasse, attention has recently been turned to a proposal to establish a Coffee Diversification Fund (CDF). The underlying idea is to provide financial resources for the shift out of coffee that will become necessary as ICO quotas are more firmly enforced. The CDF would be financed by a contribution from each exporting member country, perhaps at the rate of $1 per bag (which is roughly 2% of the value) for a six year period. The contributions, which may be regarded as loans, would total $250 to $270 million. The U.S. has offered to lend $15 million outright and another $15 million contingent upon matching loans from other consuming countries. Since some of the major producing countries presumably would not borrow from the CDF, the whole sum (perhaps as much as $300 million) would be available for lending to other surplus countries--particularly those that required waivers--who would not have contributed as much as half the total. Loans from the CDF would be administered by an international financial institution under general policies established by the ICO. The nature of CDF policies, particularly the question of how directly the projects to be financed must be related to the coffee control program, were still in negotiation at the time of writing.

Although the adoption of the CDF would be a step in the right direction, too much cannot be expected from it. The financial resources at the disposal of the CDF would be small, many of the governments and producers insufficiently convinced that their interests really lie in the reduction of coffee production, and the road to coffee diversification long and hard. Above all, it does nothing directly to meet the basic problem of reducing the incentives to produce coffee. The experience of Brazil, which has undertaken by far the most ambitious programs of this character, is relevant.

The first effort at coffee diversification in recent years was begun in June 1962.** By the end of 1965, over 700,000 hectares,

*1966 Annual Report of the President of the U.S. A joint study with the FAO and the IBRD looking to the future establishment of production goals is under way.

**Much of the information about the Brazilian program is taken from Knight, op. cit.

more than 15% of all the land in coffee, had been released from coffee production. Most of the tree eradication occurred in 1962 and 1963, and may have been encouraged as much by frosts as by the subsidy for tree eradication. In any event, the subsidy, at first equivalent to 50% of the gross income per tree, was quickly eroded by inflation to 9% in 1964. When in addition, the wholesale price of coffee almost doubled in 1964 relative to other wholesale agricultural prices after a decade of declines, the eradication program lost whatever effectiveness it had had. Exportable output in 1965-66, despite the eradication program and extensive frost damage of the preceding period, was virtually as high as it had been in 1961-62. In the second half of 1966 a new start was made, this time based on larger subsidies for eradication and measures to decrease the price of coffee relative to other crops through a lower real price for coffee and minimum support prices for crops that could be grown on former coffee land. Although trees capable of producing something like 5 million bags of coffee out of total maximum capacity of 37 or 38 million bags were eradicated in the first year of the program, new trees and better care of the remaining ones meant that the net decrease in capacity was only half as great. It is too early to say whether the increase in the producer price recently announced and the continued rise in prices in Brazil will again be permitted to erode the program.

The Brazilian experience shows the great difficulty that may be encountered in revising the expectations of farmers after long periods in which coffee support programs have made coffee production profitable. The establishment of revised expectations will take time,. especially since there are likely to be ways by which the farmers can hedge against a weakening or change in the intentions of the government with respect to coffee. They may use eradication subsidies to uproot relatively unproductive trees and retain the high yield trees. They may take advantage of high support prices for other crops to interplant them between their coffee trees; while this may adversely affect coffee yields it avoids the risk of a complete commitment to alternatives that are unfamiliar and uncertain or that have been shown over the years to be less profitable than coffee. In these attitudes they are encouraged by arrangements more favorable to coffee than to other crops in such matters as technical assistance, credit, storage, and transport.

A government may find it difficult to maintain the diversification program over the time required. It may be hard even to start it. Until now the de facto rules of the ICA game, though not the rules in the agreement, have been that larger crops mean larger quotas. Unless the governments and producers concerned become convinced that the rules have changed, there will be no incentive to diversification. Furthermore, the present organization of the world coffee market, makes it difficult to know which countries are really the low cost producers. Some of those with above-quota production

may consider that they are in a highly competitive position vis-a-vis most other producing countries and will therefore be loath to undertake programs to curtail production. More generally, the possibility that small coffee farmers may be forced back to subsistence farming or driven to cities where they will add to overcrowding and unemployment, and the fact that coffee production is more labor intensive than some of the likely alternatives such as corn and rice may be further deterrents. The political power of the coffee growers, even if overcome at the beginning, is likely to press continually for more favorable coffee prices relative to other crops. All in all, it would take a very secure and determined government to sustain a coffee diversification plan at a level and duration that would involve substantial diminutions in production without compelling external economic pressures.

IV. The Future of the Coffee Agreement

It is possible that the difficulties have been exaggerated and that the present policies of the ICA will eventually resolve the problem of excess coffee production. The stamp plan may succeed in enforcing quotas, and once producing countries accept the limitation on their exports as really binding, they may seek to obtain the use of the CDF and other financing to aid in shifting resources out of coffee. If this turns out to be the case, the present arrangements may provide the most expedient solution for the world coffee problem in view of the great political difficulties of negotiating new provisions.

It would not, of course, be the best solution from the standpoint of the economic interests of the coffee producing countries as a whole. The quota system provides no mechanism for enabling the coffee producers to earn the $2.2 billion now being paid for the 45 million bags of coffee they export by employing the smallest possible amount of resources. The quotas discriminate against low-cost late comers to the coffee industry, and they do not provide the pressures for cost reduction that would prevail under competitive conditions. Judging from the differences in producer prices in different countries and from various reports about what could be achieved in individual countries by improved methods of coffee cultivation, a conservative guess would place the proportion of resources that could be released from coffee without reducing world output at no less than one-quarter. If these resources were employed in alternative uses, the real incomes of the coffee producing countries would be increased by more than a half billion dollars a year.

---

*FAO, Coffee in Latin America; II Brazil, State of Sao Paulo (2) (1960), p. 46.

A more pressing reason for considering the development of different arangements under the ICA is the possibility that the producing countries will not bring coffee production under control. * Some of the obstacles to the implementation and maintenance of diversification programs have already been set forth. It is difficult to believe that the Central American and African countries whose absolute and relative shares in the coffee market have been growing rapidly will accept a more static situation. The present arrangements of the ICA attempt to put a lid on coffee exports while permitting prices that create large pressures for sales. There is no operative provision for reducing the pressure, and the lid may continue to blow off as it has in certain Central American and African countries. Another possible outcome is that coffee will back up into larger and larger stocks as it has in Brazil and Colombia. Either endangers the continuation of the ICA.

Therefore, consideration ought to be given to changes in the present organization of the world coffee industry which will permit a more decisive separation of the relatively high consumers' price, which may continue to be used to assure high aggregate receipts to the coffee-producing countries and the producer price which has to be depressed to a point at which surpluses will disappear.

The only way that this difference between the two sets of prices can be established is through a tax on coffee. ** Some exporting countries already levy substantial taxes on coffee, directly as taxes on production or exports, through the monopoly profit of a marketing board, or in some other form. However, governments have been unable or unwilling to make the taxes large enough to achieve the needed restriction in production. Furthermore, the taxes that are levied vary widely from one country to another, with adverse consequences for the efficient location of production that have already been discussed. Conceivably, taxes on coffee levied by producing countries might be subject to international agreement and control, but taxes levied unwillingly might find their way back to coffee producers in one way or another, and the idea of many

---

*The Executive Director of the ICO recently estimated that present acreage and productivity imply production in excess of consumption of 10 million bags a year. Some countries he noted have undertaken diversification measures, ". . . but the magnitude of the cutback is still not sufficient to have a world-wide impact on the surplus problem." Statement, op. cit.

**Taxes to increase prices of exports in inelastic demand have been considered by a number of writers. See 't Hooft Welvaars, op. cit.; Johnson, op. cit., p. 157; and Pincus, op. cit., p. 149.

national legislative bodies levying taxes in accordance with an international agreement does not seem very plausible.

Pressure for conformance would be increased if the importing countries were to levy duties which they would waive whenever the exporting country itself imposed the tax, but this also would require the coordination of action by many legislative bodies and would impose a cumbersome administrative burden on the importing countries. If the importing countries levied the tax and actually collected it for refunding to the exporting countries, * the funds might come to be considered as part of the aid appropriation and thus not turn out to be a net addition to the flow of resources to the developing countries.

A Stamp Fee for Coffee

An approach which is superior to any of these alternatives and which may be readily grafted on to the present organization of the world coffee industry would be to have the tax levied by an international organization -- viz., the ICO. The basic idea is to have the International Coffee Organization (ICO) levy a uniform tax on coffee moving from the LDC's to the DC's. The levy would take the form of a fee for the stamps now issued by the ICO as a means of helping the DC's insure that they are importing only coffee exported under the quotas of the International Coffee Agreement. The path for such a tax may be paved by the $1-a-bag export levy for the CDF which seems near acceptance. The levy could begin at a low rate and increase gradually--say over a five-year period--until it represented the difference between the consumers' price and the producers' price, the latter being the price necessary to call forth the quantity of coffee that consumers will buy at the price established for them.

Merchants importing coffee in the DC's would be free to buy coffee anywhere in the world at any price they could negotiate, but exporters would have to purchase the stamps from the ICO or its local agent to make it eligible for entry into the importing country. The governments of the importing countries would have no further obligation beyond restricting imports to stamp--bearing shipments as they already do; it would be politically easier for these governments to continue their present regulations governing the sources of coffee imports than to levy taxes and transfer the receipts.

---

*This was proposed by the French Government. See footnote 1.

From the standpoint of the governments of the exporting countries, the onus of bringing about changes in producer prices would be shifted to the international community operating through the ICO. *

Ideally, each exporting country would treat its own coffee industry neither more or less favorably than other industries with respect to taxation. Taxing the coffee industry more heavily would place it at a disadvantage relative to coffee from other countries, and few, if any, producing countries would be tempted to do this. A greater problem may arise from the temptation to try to maintain the coffee sector by favorable taxation or outright subsidization, thus undoing the effects of the ICO tax. It should be possible, however, to find ways to avoid the grosser forms of subsidization and to minimize the aggregate effects of the subtler forms. For one thing, the

---

*Professor Kaldor has advanced an ingenious scheme that would also separate the consumer and producer prices and allow market forces to determine the location of coffee production. He would require the producing countries to levy export taxes which would be raised whenever their coffee stocks increased (owing to excess production relative to domestic consumption plus export quotas), and decreased when their stocks declined. Since the size of the export tax would provide an indication of the relative efficiency of each country's coffee industry, quotas would be periodically reallocated to the countries with higher export taxes. (However, no country would get an increased quota unless it had fulfilled its old quota. This would prevent a country from levying an excessive export tax in order to get a higher quota.) Kaldor's proposal has the advantage of combining the problem of determining stock policy with the shift to an efficiency-determined location of production. However, a similar degree of automaticity for the regulation of coffee inventories could be devised for operation with the stamp fee plan. The Kaldor proposal leaves the proceeds of the tax entirely in the hands of the exporting countries, which has both advantages and disadvantages as compared to collection and some control of the proceeds of the tax by an international body. (Among other things, this would require transfers from successful exporting countries to unsuccessful ones if any compensation were to be given to the losers.) The variable export tax scheme like the international tax would require continuing international agreement upon the spread between consumer and producer prices that should be maintained. The choice between the two approaches thus depends on political rather than economic criteria, and the key question is which has the best chance of gaining acceptance and being put into operation. N. Kaldor ("Stabilizing the Terms of Trade of Under-Developed Countries", Economic Bulletin for Latin America, Vol. VIII, No. 1, (March 1963).

ICO should be given the power to impose higher stamp fees or to withhold tax proceeds where necessary to offset subsidization. It would also be necessary to prevent the use of multiple exchange rates to tax or subsidize coffee, but other special rules regarding exchange rate practices or devaluations would probably not be required.

As long as importing countries admitted only stamp coffee and exporting countries did not subsidize their coffee industries, the tax alone would eventually suffice to bring production and consumption in balance. Furthermore, the tax would represent the only interference with the market. Price differentials between various types of coffee could, for example, be left to the market place. The only problem here would be to determine the kind of tax that would be most neutral with respect to the different grades of coffee. An ad valorem tax would probably present unnecessary administrative complications, while a single-rate specific duty applicable to all coffees might be considered unduly burdensome for the lower price grades when prices can vary as between 21 cents for a robusta and 45 cents for a Colombian mild. Perhaps the resolution would be to use four different specific rates, one for each of the major types of coffee now distinguished in the multiple indicator price system, each of the duties bearing roughly the same relation to the recently prevailing price of the coffee to which it applies.*

Although the ICO would never intervene directly in producers' and consumers' markets, it would nevertheless have to have some target prices in mind in establishing the tax rate. The most likely outcome as far as the consumer price is concerned is that the target would be set within a negotiated range regarded on the basis of historical experience as equitable by the producing and consuming countries. Such ranges have already been established for four main types of coffee and the maintenance of this price level is an obvious possibility. On the other hand, even the higher limits of the present prices are lower than those that have sometimes prevailed in the past few years and probably well below the prices that would maximize coffee revenue. If the producing countries were willing to accept the rationalization of the coffee industry so that the importing countries no longer could feel that their coffee dollars were being used to produce coffee wastefully, including some that would never be used, the importing countries might be willing to consider somewhat higher prices.

It is possible also that the present distinction in the ICA between traditional and new markets could be refined under the stamp tax plan, and coffee revenues increased by more systematic discrimination among various markets. Taxes on coffee destined for different places could be varied according to their elasticity of demand.

---

*Actually there are many more than four types of coffee and it might be desirable to recognize this in the tax scheme.

The aim in setting the target price for producers would be to keep long run supplies coming on to the market in quantities that would keep the consumer price within the target range. If it was anticipated that technical progress was likely to increase the output of resources currently employed in coffee production faster than the expansion of demand, the producer target price would be lowered by increasing the tax. If, on the other hand, demand seemed to be growing faster than supply, the opposite measures would be taken. *

Any solution of the world coffee problem will, of course, have to cope with the issue of Brazil's stocks, but that issue does not present any difficulty that is unique to the scheme outlined above. All authorities appear to agree that the great bulk of the stocks will never be used except in the event of a breakdown in the ICA and a resulting price war, and that the stocks are being held mainly for bargaining purposes. If this is the case, a scheme that really promises to resolve the world's coffee problem may conceivably lead also to a greater willingness on the part of the owners of the stocks to dispose of them.

Since the full tax representing the difference between the consumer and producer target prices will not be imposed at once, the export quota system should be relaxed only gradually. As the tax is

---

*Further consideration might be given to the problem of avoiding the sharp fluctuations in producers prices that have in the past played such an important role in leading to the overexpansion of coffee production. The demand for coffee is rather stable, and substantial annual variations in the coffee crop, usually on a two-year cycle and dominated by fluctuations in Brazilian output, have been the source of instability. A buffer stock scheme might be desirable to insulate prices from these fluctuations. Except for the transition period, when the ICO might find it convenient to maintain buffer stocks as it acquired experience with suppliers' responses to different prices, it seems preferable to leave buffer stocks to the individual countries. The countries might wish in any case to smooth out the earnings of their coffee farmers and they would better be able to do so with their own schemes. Also, since the degree of instability is not the same for all producing countries, the costs and benefits of an international scheme would not be the same for producers in all countries. The ICA already contains provisions for the establishment and implementation of a policy with respect to stocks although little has been actually along these lines. If the large overhang of Brazilian stocks could be resolved, a relatively simple set of rules with respect to the national buffer stocks would probably suffice. For example, an upper limit might be placed on the size of the stock maintained by any country in terms of its average annual output over a preceding period of years, and its right to dispose of stocks might be limited by some formula related to shortfalls of production from such an average.

increased, quotas should be expanded on a proportionate basis for all countries; the tax will inhibit expansion and curb production in high cost countries without preventing producers in low cost countries from expanding to take advantage of the quota increased. Eventually, the quotas can be eliminated altogether.

TLe Use of the Proceeds

There is, of course, a wide range of possibilities concerning the use of the proceeds from the stamp tax. Except for the requirement that the proceeds not be funneled back to coffee producers, the choices here are independent of the use of the stamp tax to create the separation between consumers and producers prices that is necessary to restore balance to the world coffee industry. The suggestions made below are not inherent in the basic scheme but merely intended to be suggestive of the problems and alternatives.

There are two basic issues concerning the use of the proceeds. The first is how to use them to ease the burden of the transition to a situation in which world producers are confronted with a single price for each grade of coffee. From this standpoint a ten-year renewal of the agreement rather than a five-year renewal would be essential. The second issue is what use will be made of the proceeds after the transition period.

The key principle in the transition period should be to permit gradual adjustment by high cost coffee farmers who lose income, and by governments who lose export proceeds and in some cases revenues from coffee taxation as well. Indeed, in the initial period the fees might simply be turned over to the governments of the coffee producing countries in proportion to their quotas in the coffee agreement. The governments would in turn be allowed to use some or all of the funds to compensate high cost producers who were squeezed out. Such producer compensation would, however, have to be at a degressive rate--for example, starting at 95% of the base year income in the first year and in each succeeding year a steadily diminishing percentage of the previous year's income. The governments might be required to use part or all of the balance of the payments from the stamp fee to encourage diversification as long as there were resources still idle as a result of the integration of the world coffee market.

In the longer run, the proceeds of the stamp tax should from one point of view be available for general development purposes, perhaps being added to the resources of the World Bank Group. Each producing country will, of course, regard its share of the total proceeds as rightfully its own, but this is inconsistent with the general aid rationale that motivates the importing countries to permit their consumers to be taxed through the higher prices imposed by the scheme. Whatever the merits of either point of view, the coffee

producing countries may be expected to be the less attracted to the scheme the more that they are asked to share the benefits with others. Perhaps a compromise could be worked out which would assign at least a share of the tax proceeds for general development financing for use in developing countries in accordance with the kind of criteria used by the World Bank Group.

Of course individual coffee producing countries will also be concerned with their own fortunes within the group of producers. The loss of revenue from coffee to another producing country will not appear much, if any, more attractive than the loss of coffee revenue to a non-producing country. It may be worth noting in this connection that the dispersion of farm costs of production in most coffee producing countries is so large, that most, if not all, major producing countries are likely to be left with some low-cost production. There is no denying, however, that the competition will produce some losers as well as winners. But the point remains that the all around gains will be more than enough to compensate the losers.

At one extreme, indeed, a commitment might be made to distribute the tax proceeds continuously to the present group of coffee producing countries. Each would continue to receive not less than its present coffee export proceeds during the ten-year life of the agreement even though it exported little or no coffee. The low-cost countries that were able to expand their sales beyond their original quotas would share in the incremental tax revenues obtained as a result of the growth in world coffee consumption. If past growth rates can be extrapolated, this would mount to 25 or 30% over present levels by the 10th year. Even under this scheme, the economic development of the producing countries would be significantly stimulated since the efficiency objective of the stamp tax plan would be achieved.

It seems more reasonable to think, however, that national revenues from coffee would eventually have to be linked more closely with successful competition in the world market, and that the plan that is adopted should provide for a gradual diminution or elimination of unearned revenues accruing to countries on the basis of past coffee production.

Perhaps these stakes will seem too high for some producing countries; they may be unwilling to open their coffee industries to a degree of competition in which everything may eventually be lost, however gradually. There is a half-way house--indeed a continuum of part-way houses--that can be suggested. The ICO might, for example, halt the downward movement of the producer price in any country when exportable production declined to say 50% of the present export quota. This could be done by altering the stamp tax on coffee from that particular country.

However, the need for adjustment cannot be escaped altogether. In most instances, alternative employments will eventually be found although they will not usually pay as well as coffee has been paying. Where there really are no alternative employments and coffee output per unit of input is low relative to other places, the removal of the present protection for high cost producers would not drive them from coffee production but would reduce their incomes. It is possible therefore that the more efficient resources with alternative opportunities would be the ones that would be pushed out of coffee production, but this kind of outcome would be in the best interest of total output and income.

The difficulties of moving resources out of coffee production, some of which have been mentioned, are large and real in political and human terms. But they are not different in character from the costs of economic development in general. It is unreasonable to expect men to run to meet them, but to keep running away from them is to avoid economic development altogether or greatly to restrict its scope.