

# CEPAL

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## Prices and gains in the world coffee trade

*Alberto Orlandi\**

There is now an abundant literature on the need to protect the prices of the developing countries' primary export products, but few studies trace in detail the evolution of these prices through all the stages of production and marketing up to that of final consumption in the central countries. The purpose of the present article is to examine this process with reference to coffee, a product which is of great importance in Latin America's foreign trade, and whose final price, as is common knowledge, has risen significantly in recent years. The data considered lead the author to conclude that much of the increase has occurred in the consumer countries, where, of course, a major proportion of the surplus thus generated has remained.

After giving some account of the world coffee market, the study focuses on the analysis of coffee production and exports in some of the producer countries, in particular Colombia, and on the distribution of coffee income among the various economic agents.

The second half of the article, which analyses the price of coffee in some of the European consumer countries—the Federal Republic of Germany, France and Italy—ends by suggesting measures which would enable the producer countries to capture a larger share of the final price.

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## Introduction

The interest attaching to this study stems from concern with a basic factor in the relations between the Latin American economies and the developed centres; the production, marketing, industrial processing, distribution and final consumption of primary commodities. Its main object is to meet the widely-felt need to identify and elucidate the successive stages in the complex process extending from the production of a primary commodity to the phases nearer to final consumption, which are strongly influenced by the technological innovations proper to our time. An analysis of this type seems indispensable for the purpose of enriching, —while incorporating it into the study— the traditional approach based on the study of the relation between supply and demand on the world market and, in its more perfected form, on examination of the terms of trade as between primary commodities and manufactures.

The natural procedure in this terrain —little explored as yet although not completely virgin ground—<sup>1</sup> seems to be to break down the final retail price, starting from production costs in the producer country, and taking into account all the other various elements entering into the price formation process.

Because of the difficulties of obtaining adequate information, in the present instance the analysis has been confined to a single commodity, coffee. The choice of coffee is due, on the one hand, to its basic importance both in world trade<sup>2</sup> and for many Latin

<sup>1</sup> See in particular UNCTAD, *Marketing and distribution system for bananas* (TD/B/C.1/162), Geneva, December, 1974.

<sup>2</sup> In 1973 coffee represented about 10 per cent of the developing countries' primary commodity exports (excluding fuels).

American countries,<sup>3</sup> and, on the other hand, to the interest of the discussion on it recently stirred up by its wide range of price fluctuations.

The research of which this paper presents the findings was subject to serious limitations. Its object—apart from the above-mentioned aim of clarifying the factors that come into play at the various stages in the formation of the final retail price—is to awaken interest in studies of this type, both inside and outside CEPAL, whether in the direction of analysing the case of

coffee more satisfactorily and in greater depth, or in that of extending the analysis to other products.

A brief account of the world coffee market (world and Latin American exports, price trends, etc.) will be followed by discussion of the distribution of coffee income among the various economic agents participating in the production, export, processing and distribution of coffee, both in the producer and in the consumer countries; and, lastly, the results will be presented in synoptic figures and tables.

## I

### The world coffee market and Latin America

With a total export value of 4,180 million dollars in 1975, coffee was the primary commodity which—with the exception of petroleum—made the biggest contribution to Third World exports. Its aggregate importance in world trade, however, showed a marked decline, from 1.6 per cent in 1965 to 0.5 per cent in 1975.<sup>4</sup>

The importance of coffee for Latin America can be clearly seen from a glance at its percentage share in the total exports of a number of Latin American countries (see table 1).

Latin America's share in world coffee exports, although it has considerably diminished since the Second World War, has settled down at about 62-63 per cent. This trend is essentially due to the

notable relative decline in Brazil's contribution. In the coffee year 1927/1928, for example, Brazil produced 29.6 million bags of coffee—more, that is, than in any year after 1965/1966—and at that time it practically held the monopoly of world exports. In 1950/1951, it still controlled more than 55 per cent of them, whereas by 1972-1974 its average share had dropped to 25.8 per cent. The other Latin American countries, and, to a still greater extent, the countries of Africa, occupied the ground lost by Brazil.

On the demand side, too, there have been substantial changes, albeit in this case of more recent date. Between 1965 and 1975 the share of the United States and Canada dropped from 47.9 per cent to 37.4 per cent; it was Europe that replaced North America as the leading market of destination for Latin America's coffee exports, since the proportion for which it accounted rose from 45.8

<sup>3</sup> See table 1.

<sup>4</sup> The rise in world coffee prices in the last two years has made a substantial difference to these figures, as to all others relating to commercial values of coffee exports.

Table 1  
**SELECTED LATIN AMERICAN COUNTRIES: COFFEE EXPORTS AND THEIR  
 PERCENTAGE SHARE IN TOTAL EXPORTS, 1972-1974**

<i>Country</i>	<i>Exports (millions of dollars)</i>	<i>Percentage share in country's total exports</i>
Colombia	590.0	52.3
El Salvador	158.8	42.4
Haiti	20.3	36.6
Guatemala	141.2	30.9
Costa Rica	96.5	27.5
Brazil	1 032.6	17.1
Honduras	37.9	16.4
Latin America	2 434.4	7.4

per cent in 1965 to 54.4 per cent in 1975.

The problem of coffee price fluctuations and their harassing implications for many Latin American countries has been the object of analysis and of international negotiation during the last two decades.<sup>5</sup>

From figure 1 emerges, together with a picture of coffee price fluctuations over the very long term, a fact to cause still greater concern: the steady reduction of the purchasing power of the coffee-exporting countries, expressed in terms of dollar cents per pound, deflated by the United Nations price increase index for manufactured goods as from the end of the Second World War. In reality, with the exception of the period 1931-1944, which was affected first by the great depression and then by the war, the figure shows that in 1975 the value represented by this indicator was medium-to-low in relation to 1885-1930, and definitely lower than in any year after 1946.

<sup>5</sup> Mention should be made here of the three international agreements which, with a brief interval, have been in force from 1962 to the present day.

While it is true that the situation has strikingly altered since June 1975, by reason, of course, of the severe frosts in Brazil, which raised coffee prices to record levels in both current and constant terms, a responsible analysis of the coffee market can be made only on the basis of the long-term trends, which are unquestionably the most significant.

As has already been noted, in the last two or three years there has been a marked improvement in coffee's position in relation to that of other primary commodities, owing to the joint effect of the rise in the price of coffee and the fall in other primary commodity prices. This inference can be clearly drawn from table 2.

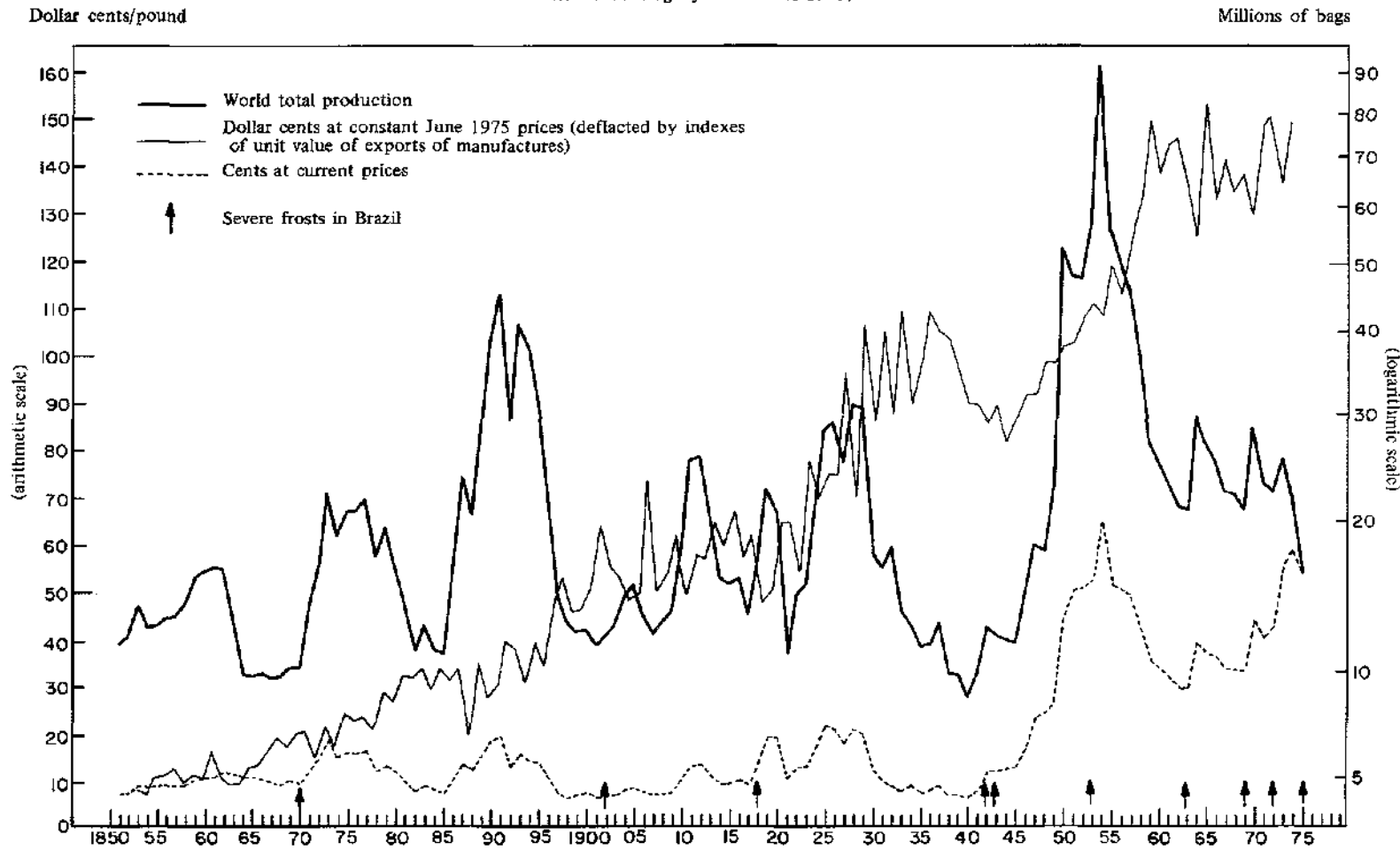
A comparison of the coffee price series (annual averages) for the years 1954<sup>6</sup> to 1976 with the United Nations index of world market prices for exports of manufactures gives the results presented in table 3.

It can be seen that coffee prices, in

<sup>6</sup> It is true that 1954 was a year of exceptionally high coffee prices, although they were only 29 per cent above the average for 1951-1957.

Figure 1  
WORLD TOTAL PRODUCTION OF COFFEE AND IMPORT PRICES OF COFFEE IN THE  
UNITED STATES OF AMERICA IN CURRENT AND IN CONSTANT TERMS

(Annual averages from 1850 to 1975)



Source: Inter-American Coffee Organization (ICO), *Long-Term Historical Data on Production, Stock, Exports and Prices of Coffee*, London, 1975.

current terms, went through a long period of depression, from which they did not emerge until 1976; but even in that year they failed to bridge the gap which sundered them, throughout the period under consideration, from the prices of exports of manufactures. Only the increases which occurred towards the

end of 1976 and were intensified in the early months of 1977 enabled the price of coffee to outstrip the growth of manufactured export prices. Thus, the monthly index for December 1976 made it possible to surpass the annual index of prices of manufactures for the same year.

Table 2  
PRICE INDEXES  
(Base 1968=100)

<i>Commodity</i>	<i>1974 (annual average)</i>	<i>December 1976</i>
Coffee (Colombia)	183	495
Sugar <sup>a</sup>	1 504	378
Wheat (Argentina)	303	149
Copper	166	104
Tin	262	268

Source: UNCTAD, *Monthly Commodity Price Bulletin*.

<sup>a</sup>In the case of sugar, it must be borne in mind that a major proportion of the volumes traded on the world market was covered by agreements, and that therefore the price fixed on the free market corresponded to relatively marginal volumes.

Table 3

<i>Year</i>	<i>Index of average annual increases in coffee prices (Colombia)</i>	<i>Index of increases in export prices of manufactured goods</i>
1954	100	100
1960	53	108
1965	56	114
1970	65	129
1973	78	171
1974	82	208
1975	82	234
1976	179	235
December 1976	257	

## II

## Colombia: coffee production and exports

1. *Introductory remarks*

Colombia exported 8,175,000 bags of coffee in 1975, when world exports totalled 57,910,000 bags. Accordingly, Colombia's share in world trade was 14.1 per cent, which places the country second in the world, below Brazil and above the Ivory Coast.

The importance of coffee in the Colombian economy has declined considerably in recent years, owing to the development of 'non-traditional' sectors, but it is still substantial, as can be seen from table 4.

Coffee is a key sector because of the roles it plays as provider of employment (for about 2 million workers), leading source of foreign exchange income (accounting on an average for 55.6 per cent of total exports between 1966 and 1975), and supplier of funds for the national budget (about 20 per cent of fiscal revenue in 1972).<sup>7</sup>

All this goes to show that the

specific importance of coffee for the Colombian economy is still very great, and that it seems unlikely to undergo any drastic reduction, at least in the near future.

Colombian coffee belongs to the group known as 'Colombian milds', of which, in the period 1966-1975, the country exported about 80 per cent on an average, the rest being shared between Kenya and, to a lesser extent, Tanzania. Higher prices are generally quoted for 'Colombian milds' than for other grades of coffee.

In June 1976, for example, while the average price of 'Colombian milds' was 183.60 cents per pound, quotations for 'Other milds' (essentially, Central American coffees), unwashed *arabica* (essentially Brazilian coffees) and *robusta* (essentially African coffees) reached only 149.58, 151.08 and 130.06 cents, respectively.<sup>8</sup>

Tables 5, 6 and 7 present the basic annual data for production, exports and prices of Colombian coffee.

Table 4

## COLOMBIA: SHARE OF COFFEE IN THE GROSS DOMESTIC PRODUCT (GDP)

(Millions of pesos at 1958 prices)

Year	(a) GDP	(b) Agricultural GDP	(c) Percentage	Production of coffee	Percentage of (a)	Percentage of (b)
1950	14 689	5 553	37.8	1 430	9.7	25.8
1960	23 123	7 512	32.5	1 951	8.4	26.0
1970	38 492	10 691	27.8	2 092	5.4	19.6
1972	43 605	11 563	26.5	2 117	4.9	18.3

<sup>7</sup> Estimates prepared by the National Federation of Coffee-Growers of Colombia (Federación Nacional de Cafeteros de Colombia).

<sup>8</sup> Monthly averages taken from UNCTAD, *Monthly Commodity Price Bulletin*, Geneva.



Table 5

Year	Production (thousands of bags) a	Production for export (thousands of bags) a	Exports (thousands of bags)	Value of exports (millions of dollars)	Percentage share of coffee in total exports	Percentage share of Colombia in value of world exports
1966	7 600	6 350	5 565	339	67	15
1967	8 000	6 700	6 094	322	63	15
1968	7 900	6 570	6 588	351	63	15
1969	8 450	7 080	6 478	344	57	15
1970	7 800	6 390	6 509	467	63	15
1971	7 200	5 750	6 569	400	58	13
1972	8 800	7 430	6 528	430	50	13
1973	7 800	6 250	6 766	598	55	14
1974	8 500	6 900	6 906	625	(38)	(46)
1975			8 175	(710) <sup>b</sup>	(41) <sup>b</sup>	

<sup>a</sup>These figures refer to coffee years, so that the year 1966 really corresponds to the period between 1 October 1966 and 30 September 1967, and so on.

<sup>b</sup>Owing to the rise in world prices during the first half of 1976, coffee exports amounted to 444 million dollars, i.e., 56.56 per cent of total exports.

Table 6  
AVERAGE QUOTATIONS FOR 'MAMS' COFFEES  
(COLOMBIAN MILDS)  
(Dollar cents per pound)

1948	32.5	1963	39.6
1949	37.4	1964	48.8
1950	53.3	1965	48.5
1951	58.7	1966	47.4
1952	57.0	1967	41.9
1953	59.8	1968	42.6
1954	80.0	1969	45.0
1955	64.6	1970	56.4
1956	74.0	1971	49.3
1957	63.9	1972	56.7
1958	52.3	1973	72.7
1959	45.2	1974	77.8
1960	44.9	1975	81.3
1961	43.6	1976 <sup>a</sup>	131.05
1962	40.8		
1948-1963: Average:	53.0	Standard deviation:	10.9
1964-1975: Average:	55.7	Standard deviation:	11.1

<sup>a</sup>Average for January-June.

Table 7  
**COLOMBIA: STRUCTURE OF LAND TENURE IN THE COFFEE SECTOR, 1970**

<i>Size of enterprise (number of hectares)</i>	<i>Percentage of total number of farms</i>	<i>Number of hectares under production as percentage of total</i>	<i>Number of 60- kilogramme bags as percentage of total production</i>
<b>Distribution by farms</b>			
Under 1	12.6	1.6	1.5
from 1 to 3.99	33.2	11.7	10.8
from 4 to 7.99	18.3	12.6	12.2
from 8 to 11.99	9.5	9.7	9.5
from 12 to 15.99	5.9	7.5	8.0
from 16 to 19.99	3.9	5.9	5.9
from 20 to 99.99	14.5	36.1	36.0
Over 100	2.2	14.8	16.1
<i>Total (in absolute figures)</i>	<i>(302 495)</i>	<i>(1 070 429)</i>	<i>(9 505 342)</i>
<b>Distribution by coffee plantations</b>			
Under 1	33.5	4.7	4.3
from 1 to 3.99	43.8	25.1	22.2
from 4 to 7.99	13.0	20.3	19.1
from 8 to 11.99	4.3	11.8	11.6
from 12 to 15.99	2.0	7.6	8.3
from 16 to 19.99	1.1	5.6	5.8
from 20 to 99.99	2.2	21.2	24.1
Over 100	0.08	3.7	4.6
<i>Total (in absolute figures)</i>	<i>(302 945)</i>	<i>(1 070 429)</i>	<i>(9 505 342)</i>

Source: Estimates based on 1970 Coffee Census (*Censo Cafetero*) data.

## 2. Organization of production

Coffee is grown in Colombia in the temperate zones, between 1,000 and 2,000 metres above sea level.

With respect to the distribution of coffee-growing land, the 1970 census data are available,<sup>9</sup> broken down both by whole farms and by coffee plantations, i.e., by coffee production units irrespective of farm size.

<sup>9</sup> See National Federation of Coffee-Growers, *Censo Cafetero*, Bogotá, 1970.

As can be seen from the foregoing tables, in the land tenure structure it is the farms (*fincas*) and coffee plantations (*cafetales*) of medium size that predominate in Colombia. Farms and plantations of 4 to 99.99 hectares cover respectively 71.9 per cent and 66.6 per cent of the total area and 71.6 per cent and 68.9 per cent of production;<sup>10</sup> and it is assumed

<sup>10</sup> A careful comparative analysis of the two series of data will bring out the fact that the average size of a coffee farm tends to be much larger than that of the coffee plantation

that the land tenure structure in the coffee sector has not altered much since the date of the census. According to these figures, the structure of coffee holdings would be as shown in table 7.

Differences in yield by size of farm (or of plantation) are among the smallest in Latin America (see table 8).

As a general rule there are two coffee harvests in Colombia, one of which,

Table 8  
COLOMBIA: YIELDS PER HECTARE OF DRY PARCHMENT COFFEE,  
BY FARM AND COFFEE PLANTATION SIZE GROUPS  
(*Kilogrammes per hectare*)

<i>Size of enterprise (number of hectares)</i>	<i>Farm yields</i>	<i>Coffee plantation yields</i>	
Under 1	515	485	
from 1 to 3.99	490	471	
from 4 to 7.99	514	502	
from 8 to 11.99	522	523	Average
from 12 to 15.99	567	577	productivity
from 16 to 19.99	531	549	in Colombia;
from 20 to 99.99	531	606	533 kilogrammes
Over 100	579	674	per hectare in
			1974

however, is more important than the other. In the principal coffee-growing Departments, Antioquia and Caldas, the main crop is harvested in October-December and the secondary crop in April-June, while in Quindío, Tolima and Valle the opposite is the case. Total production levels do not vary much from one year to another, since Colombia enjoys relatively stable weather conditions, and at all events, rainfall and drought are distributed differently in different years among the country's various coffee-growing areas.

as such. This means that on coffee farms other crops are grown in addition, and on a fairly large scale. Consequently, in evaluating the income of coffee producers the income accruing from these other crops should be taken into account, a task which obviously exceeds the scope of the present study.

In Colombia coffee is processed on the farm by the growers themselves. The harvested berry (also called the coffee cherry) is depulped and left to ferment, for a period ranging between 12 to 24 hours, in wooden vats with plenty of water, which is continually stirred. Then the berries are washed, to get rid of the syrupy residues, and are dried in the sun. At this stage the product is called 'parchment coffee', and this is the form in which it is sold to the purchasers, as described below. The final phase of processing is 'threshing', which consists in removing the parchment-like outer skin of the berries, and thus leaving the coffee beans ready for consumption or export. This last operation, unlike the first, which, as was pointed out, has markedly artisan characteristics, is carried out in plants of an industrial type.

Approximately 5 pounds of parchment coffee are needed to obtain 4 pounds of green coffee (i.e., coffee ready for export); accordingly, for the purposes of any sort of calculation about volumes and prices in relation to the transformation of parchment coffee into green coffee, it will be necessary to apply a factor of 1.25 to the prices paid for parchment, so as to make it possible to compare, for example, domestic prices with international prices.<sup>11</sup>

Several agro-economic and social factors (such as the predominance of smallholdings, transport difficulties, etc.) determined the adoption of this system of processing coffee in Colombia. And it is of great advantage to the producer, since in this way he captures a proportion of the value added which would otherwise benefit the large industrial units. The equipment required for processing coffee up to the parchment stage is minimal,<sup>12</sup> and the procedure quite simple, which means that in addition, advantage can be taken, at least in part, of the post-harvest periods of which otherwise no use could be made. Further advantages consist in the possibility of using the waste left by the processing operations as compost; the lesser weight of the loads that have to be transported to the buyer markets; and the greater ease with which that same transport operation can be carried out,

<sup>11</sup> For this reason, parchment coffee is usually sold in Colombia in 'loads' of 125 kilogrammes or in 'arrobos' of 12.5 kilogrammes, which correspond, after threshing, to 100 or to 10 kilogrammes of green coffee, respectively.

<sup>12</sup> It consists of a quite rudimentary hand-operated depulping machine, with a few wooden vats for fermenting and a space prepared for the drying process.

because of the non-perishability of the dry berry.

Before being sold, the coffee is sorted by hand, and the lower-grade beans are classed as what is known as *pasilla*, or coffee for domestic consumption.<sup>13</sup>

It is estimated that there is one coffee mill in Colombia for every 4 hectares under coffee, a figure which gives some idea of the artisan level at which this activity is carried on.<sup>14</sup>

Only a few farms go as far as undertaking the threshing operation, for as a general rule it is regarded as requiring too heavy capital inputs to be economically viable on such small scales.

Once threshed, the *excelso* coffee or green coffee for export which meets the quality criteria established by the National Federation of Coffee-Growers passes into the sphere of the international circuits.

### 3. Production costs, taxation and producer's gains

The first of these three elements is very difficult to quantify, especially in a country like Colombia, where coffee production is to a great extent concentrated at the low and medium levels of land tenure and therefore the bulk of the labour inputs are supplied by the owner himself and his family.<sup>15</sup> Other elements, too, such as fertilizers and

<sup>13</sup> As will be noted, *pasilla* also plays a part in export activities, since one of the export taxes consists precisely in 6 per cent of the volume exported payable in *pasilla*.

<sup>14</sup> In El Salvador, for example, the corresponding figure is about one processing plant per 700 hectares.

<sup>15</sup> This state of affairs, however, has its limits, since on an average-sized farm (3-5 hectares) weeding and above all picking necessitate up to five hands for every one who normally works on the coffee plantation

transport costs, are often impossible to estimate in monetary terms. This is no doubt why sources of information on the subject are so few and far between.

A fairly typical example, although of relatively little interest today because the information is out-of-date, is afforded by a CEPAL/FAO study.<sup>16</sup> Other sources,<sup>17</sup> although less exact than the foregoing study, are more recent, and can be used as a basis for the present analysis, notwithstanding all the difficulties posed by reference to an 'average' farm which in reality corresponds to only about 10 per cent of total production.

An estimate prepared by the Economic Research Section of the Coffee Research Centre (Centro de Investigaciones sobre Café - CENICAFE)<sup>18</sup> for the year 1972 gave a total cost of 4,332

throughout the year, and accordingly additional labour is very often engaged for these operations.

<sup>16</sup> See CEPAL/FAO, *Coffee in Latin America. Productivity problems and future prospects*, United Nations publication, Sales No 58.II.G.4, 1958, vol. I, chapter X. In this study labour inputs are reckoned in man/hours, fertilizers in kilogrammes per hectare and other costs in terms of pesos at current prices. After going into a detailed analysis of several methodological problems (such as that of distinguishing between hired labour and family labour), the study presents a monetary estimate of total costs for 1955/1956.

<sup>17</sup> See *Economic Growth of Colombia: Problems and Prospects. Report of a mission sent to Colombia by the World Bank in 1970*, Baltimore-London, The Johns Hopkins Press, 1972; International Coffee Organization, *Tendencia de los precios percibidos por los productores de café en nueve países*, 1298/75 (c), 1975; and Roberto López Alzate, "El cafetero medio colombiano", in *Revista Cafetera de Colombia*, Bogotá, vol. XXII, January-April 1973, pp. 63-77.

<sup>18</sup> R. López Alzate, *op. cit.*, p. 71.

pesos per hectare for a farm of 3.5 hectares with yields of 541 kilogrammes per hectare (which represents an ideal medium-sized Colombian farm); of this cost about 85 per cent corresponds to labour and the rest to fertilizers, tools, financing and fixed costs. The data prepared by the World Bank<sup>19</sup> and the International Coffee Organization<sup>20</sup> show similar results. The World Bank presents a series of estimates of current costs (excluding taxes and miscellaneous contributions, depreciation and interest, which amount to 7-10 per cent of total costs) for the years 1960-1969. The International Coffee Organization gives indexes of increases in costs (production inputs),<sup>21</sup> up to 1975. If these indexes are applied to the World Bank estimates, the figure obtained for the year 1975 is 81.63 pesos per *arroba*, i.e., 3,533 pesos per hectare with a medium yield (541 kg); the addition of 10 per cent for fixed costs not taken into consideration by the World Bank brings this sum up to 3,886 pesos. For the sake of simplicity, we will take total costs to be the average of these two estimates, namely, 4,109 pesos per hectare (541 kg);<sup>22</sup> that is, 7.6 pesos per

<sup>19</sup> *Economic Growth of Colombia: Problems and Prospects, op. cit.*, p. 270.

<sup>20</sup> *Tendencia de los precios percibidos por los productores de café en nueve países, op. cit.*, annex table 6.

<sup>21</sup> *Ibid.*, annex 2.

<sup>22</sup> In a study by Roberto Junguito, *Objetivos de la política cafetera*, Bogotá, Fundación para la Educación Superior y el Desarrollo, May 1974, the figure given is 24.3 dollars per 60-kg bag, i.e., 3,834 Colombian pesos per hectare (541 kg) for the year 1970. If this figure is extrapolated to 1972 by means of the ICO indexes, a total of 4,645 pesos is obtained, i.e., 7 per cent more than the CENICAFE figure and 13 per cent more than our estimates based on World Bank and ICO data.

kilogramme, or 950 pesos per carga (125 kg), of parchment coffee. Projection of this figure to 1974 gives the results which in table 9 below are compared with average producer prices.

Although these figures are merely indicative, they may be regarded as close enough to reality to be acceptable.

The domestic prices considered represent an average of the prices establi-

Table 9

<i>Year</i>	<i>Production costs (per 125-kg 'carga')</i>	<i>Average prices paid to producer (per 125-kg 'carga')</i>
1972	950	1 498.94
1973	1 067	1 937.09
1974	1 500	2 262.50

shed by the National Federation of Coffee-Growers. In accordance with the world market coffee situation, private exporters can intervene by purchasing at prices above the floors established by the Federation. This happens whenever – as in present circumstances – international prices are high enough to allow exporters a margin of profit even if they have to pay the producer prices exceeding the Federation's minimum. It is on account of this factor that the percentage of total coffee purchases effected by the Federation varies greatly from one year to another, and may rise from figures near zero, as in the first half of 1976, to 80 per cent, as was the case in 1972.<sup>23</sup>

<sup>23</sup> The National Federation of Coffee-Growers (FEDECAFE), in theory a private association of coffee producers, in practice enjoys a semi-public status. Its faculties, which will be described in greater detail later, include the following: fixing of support prices and standards of quality; purchases of coffee from producers; formation and management of inventories; sales to private exporters or direct exportation of coffee; utilization of the National Coffee Fund, which is fed by coffee taxation at several levels and by the profits on

On the basis of negotiations with the government, the Federation fixes the support price of parchment coffee, so that the producer may be assured of a remunerative income and, at the same time, incentives to production may be kept under control (to which end tax measures are also used).

The purchases made by the Federation under the internal support-price régime are financed by the National Coffee Fund (a special account in the Banco de la República, managed by the Federation), which in its turn generally obtains loans for that purpose from the Banco de la República, and pays them off as the coffee is delivered to private exporters or directly abroad.

the Federation's sales; control of the domestic consumer market; and, in general, primary responsibility for the country's coffee policy at both the domestic and the international level. The Federation is the arena in which the interests of small-scale producers, major producers, exporters, the State and other economic agents connected with coffee production or trade confront one another, and coffee policy decisions are as a general rule the result of these confrontations.

In table 10 the evolution of domestic prices, measured in terms of the floors established by the Federation (annual averages), is compared with that of average f.o.b. export values over the period 1962-1975.<sup>24</sup>

Table 10

	1962	1963	1964	1965	1966	1967	1968
(a)	478	556	718	717	757	759	889
(b)	760	741	905	1 373	1 372	1 395	1 507
	1969	1970	1971	1972	1973	1974	1975 <sup>a</sup>
(a)	889	1 304	1 246	1 499	1 937	2 262	2 675
(b)	1 587	2 292	2 130	2 514	3 666	3 884	3 646

Source: National Federation of Coffee-Growers and International Coffee Organization (ICO).

Note: For (a) prices are expressed in terms of Colombian pesos per 125-kg load, and for (b) in pesos per 100 kg, to compensate for the transformation from parchment coffee into *excelsa* coffee.

<sup>a</sup>Provisional.

As can be seen, the relation between domestic and international prices has fluctuated considerably, although always within certain limits. In percentage terms, these limits have ranged from 52 per cent to 79 per cent (the percentage represents the proportion of the international price received by the producer), the average for the period being 61 per cent.

With the aim of more precisely specifying how the relative position of the coffee producer has developed, the evolution of domestic prices in the

various countries is next compared with a series of indicators other than mere export prices, i.e., the index of consumer prices, the index of cost of production inputs and the index of domestic prices received by producers of other export lines, although for reasons of climate these crops cannot be regarded as possible substitutes for coffee. The results of this comparative analysis are presented here without further comment, for want of space, but they speak clearly enough for themselves (see table 11).

Tax incidence is very heavy in Colombia. There is a decidedly complex set of tax or paratax instruments which bear on coffee export activities.<sup>25</sup>

<sup>24</sup> In June 1976, this price stood at 5,650 pesos per load, plus a special bonus of 1,000 pesos per load, because of coffee's particularly favourable world market situation. This total (6,650 pesos per load) compares with an export value of 13,693 pesos (c.i.f.) which corresponds to about 13,000 pesos f.o.b. The special bonus was introduced on 7 June 1976 to enable the Federation to make purchases of coffee which otherwise would have been monopolized by private exporters.

<sup>25</sup> On the other hand, tax incidence on production (income tax, land tax and additional taxes) is minimal, and does not amount to 5 per cent of production costs. At least, this was the case until a short time ago, when, in order to moderate the inflationary effects

Table 11

**COLOMBIA: COMPARISON OF DOMESTIC COFFEE PRICES WITH OTHER RELEVANT VALUES TO DETERMINE THE EVOLUTION OF THE COFFEE-GROWER'S POSITION**

Year	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1962	479	100	100	100	100	100	100	100	100	100	100
1963	556	116	132	116	98	118	128	91	117	118	111
1964	618	150	155	150	119	126	155	97	159	127	150
1965	717	150	160	100	120	83	185	81	179	129	180
1966	757	158	192	105	120	88	194	81	187	142	187
1967	759	159	208	98	105	93	193	82	206	148	203
1968	889	186	220	99	105	94	199	93	194	170	214
1969	982	206	242	103	105	98	241	85	208	232	212
1970	1 304	273	259	128	142	90	256	107	249	262	218
1971	1 246	261	282	112	120	93	277	94	265	250	269
1972	1 499	314	323	124	130	95	292	108	275	258	307
1973	1 337	405	396	146	175	83	328	123	s.d.	s.d.	s.d.
1974	2 262	473	493	165	179	92	378	125	s.d.	s.d.	s.d.
1975	2 675*	560	652	168	144	117					

Source: Estimates prepared on the basis of ICO data.

(a) Domestic prices received by producers for parchment coffee (Federation), expressed in pesos per 125-kg load (annual averages).

(b) Indexes of increases in (a).

(c) Indexes of consumer prices.

(d) Indexes of domestic prices received by producers, expressed in dollars at constant 1962 prices.

(e) Indexes of FOB values of coffee exports, expressed in terms of dollars at constant 1962 prices.

(f) Relation between (d) and (e)  $\frac{(d) \times 100}{(e)}$

(g) Index of costs of production inputs.

(h) Relation between (b) and (g)  $\frac{(b) \times 100}{(g)}$

(i) (j) and (k) Indexes of domestic prices received by producers of bananas, cocoa, and cotton, respectively.

\* Provisional.

The 'reintegro mínimo cafetero' (minimum exchange surrender requirement) determined by the Monetary Board represents the amount of foreign exchange per 70-kilogramme bag exported which private exporters are obliged to change at the official rate in the Banco de la República. A special exchange rate for

purposes of coffee was in force, from 1957 to 1967, but thenceforward was abolished. This exchange differential really constituted an additional tax, which varied according to Colombia's exchange policies.<sup>26</sup>

As they operate at present, these payments do not constitute a tax proper,

deriving from the coffee boom a system of compulsory bonds was imposed on coffee producers.

<sup>26</sup> The difference between the exchange rate known as the 'coffee dollar' and the rate used for other types of exports averaged 29 per cent between 1957 and 1967.



except when the Monetary Board fixes the refund levels above the external price level, as happened, for example, in mid-1976. In such cases, private exporters find themselves compelled to purchase additional foreign exchange in order to comply with the provisions of the law. In normal periods, that is, when minimum coffee refund levels do not exceed international f.o.b. price levels, the disadvantages<sup>27</sup> suffered by the exporter who has to change his dollars into pesos are not quantifiable.

The *ad valorem* export tax was introduced in 1951 and was established at 15 per cent of total dollar export earnings. When world market coffee quotations fell the tax was reduced to 9 per cent and in 1962 it was abolished altogether. It was reintroduced, however, in 1967 simultaneously with the abolition of the differential exchange rate, and was set at 26 per cent, a percentage which was progressively reduced until by December 1968 it had dropped to 20 per cent. Out of this 20 per cent, 4 per cent went to the National Coffee Fund, and the remainder to the Banco de la República.

Subsequent provisions further reduced the *ad valorem* tax, and in June 1976 it stood at 18 per cent, of which 14 per cent was allocated to the national budget through the Banco de la República, 3.2 per cent to the National Coffee Fund and 0.8 per cent to the Departmental Committees of Coffee-Growers.<sup>28</sup>

<sup>27</sup>These disadvantages would consist in the loss of possibilities of exporting capital or importing goods, of safeguard against currency devaluation, etc.

<sup>28</sup>The Departmental Committees of Coffee-Growers finance infrastructure projects relating to coffee activities.

The '*retention quota*' is the quantity of export coffee which all private exporters have to surrender to the Federation and which is allocated to the National Coffee Fund. This tax is measured in percentages of the volumes of green coffee exported, and is payable in parchment coffee equivalent. It should be recalled that the rate of conversion of parchment coffee into green coffee is 1:08 (1 kilogramme of parchment coffee corresponds to 0.8 kilogrammes of green coffee), which means that for every 70-kg bag of green coffee exported, the exporter has to hand over the legally-established percentage of those 70 kg, multiplied by a fixed coefficient of 1.25. For example, if the retention quota is 25 per cent, the amount of coffee that the exporter will have to surrender per 70-kg bag exported will be equal to  $70 \times 0.25 \times 1.25$ , i.e., 21.875 kg. The exporter has the option of handing over, instead of the coffee itself, its equivalent in money.

This tax serves the purpose of bringing in capital for the National Coffee Fund, establishing centralized inventories and regulating the exportable supply, to which particular importance attaches when quota commitments are in force.

Coffee retention was introduced in 1958, and between 1958 and 1972 its level did not exceed 25 per cent of the amount of green coffee exported. Thenceforward, the authorities gradually increased the proportion until by June 1976 it had climbed to 85 per cent. Accordingly, at that date, the exporters were surrendering to the Federation for every 70-kg bag of green coffee exported, 74.373 kg of parchment coffee,<sup>29</sup> or its equivalent in money.

<sup>29</sup> Result of multiplying  $70 \times 0.85 \times 1.25$ .

The tax known as '*Pasilla y Ripio*' corresponds to a fixed quantity of two lower-grade coffee (5.5 per cent of *pasilla* and 0.5 per cent of *ripio*) which every exporter has to hand over to the Federation. This tax serves the twofold purpose of obtaining coffee for domestic consumption and reserving the higher-grade coffee for export. The volume is calculated on the basis of green coffee exports, i.e., for every bag of green coffee exported the exporter has to surrender 3.85 kg of *pasilla* and 0.35 kg of *ripio*.

This set of instruments, with the exception of the *pasilla y ripio* tax, which has undergone no substantial change since its establishment in 1941, and of an additional 'export tax', which has always represented a minimal sum,<sup>30</sup> and was abolished altogether at the end of 1972, has constituted a standing object of negotiations between the Federation, producers, exporters and the State. Measures relating to modifications of the retention quota, the *ad valorem* tax, the minimum exchange surrender requirements and the domestic support price have a powerful impact on the Colombian economy as a whole, especially as regards the available supply of financial resources, inflationary trends, and both public and private investment rates.

Noteworthy examples of the results of these negotiations are the 1969 agreements between producers and the government, in which the mode of dealing with any rise in world coffee prices is settled in advance, a scheme being drawn up for the distribution of such increases between the producer, the

<sup>30</sup> Revenue from this tax for the whole of the year 1972 totalled 1,399,000 pesos, i.e., barely 0.25 pesos per 60-kg bag exported. It must not be confused with the *ad valorem* export tax.

National Coffee Fund and the Departmental Committees of Coffee-Growers. All this does not affect inflows received by these two agencies under other heads, such as the *ad valorem* tax and the coffee retention quotas.<sup>31</sup>

In evaluating the impact of taxation on Colombia's coffee production, emphasis must be placed on the role played by the National Coffee Fund and the Departmental Committees of Coffee-Growers, which retransfer to the producers, through the execution of infrastructure projects, extension of credits and technical assistance, a considerable proportion of the resources disbursed in the form of tax payments.

The National Coffee Fund (Fondo Nacional del Café - FNC) constitutes a special account on the National Treasury's books, in which the receipts, apart from the tax revenues mentioned above, derive from sales of coffee to private exporters or directly abroad. The Fund is administered by the general Manager of the Federation of Coffee-Growers. Foreign exchange export earnings are handed over to the Banco de la República, which in its turn remits to the FNC, subject to approval by the

<sup>31</sup> The 1969 agreement laid it down that once the international price exceeded 57 dollar cents per pound, 35 per cent of the increase would go to the producers (through a rise in support prices), while the National Coffee Fund and the Departmental Committees of Coffee-Growers would receive 30 per cent respectively. In 1972 the agreement was amended on the following lines: as from 54 and up to 61 cents per pound a margin of 5 cents was established, to be distributed in the same way as under the 1969 agreement. Above 61 cents this margin was widened to 6 cents. The agreements in question have never been fully implemented, and in practice recourse has always been had to the tax measures described.

Monetary Board, the foreign exchange resources which the Federation of Coffee-Growers needs to meet its external commitments. In recent years, the Federation has found itself obliged to negotiate internal and external credits to eke out the FNC's resources. Currently, however, the FNC has debts outstanding only with the Banco de la República. It also collects funds by the issue of 'coffee bonds' on the national financial market.

Through the FNC purchases of coffee from producers are financed, and through these in turn inventories are built up. The FNC likewise participates in the current expenditure of the Federation of Coffee-Growers, as well as in its 'technical campaigns' and other activities on behalf of producers, and in the capitalization of institutions concerned with aid and credits, such as a rotating fund for coffee loans (*Fondo Rotatorio de Crédito Cafetero*), the Banco Cafetero and the Departmental Committees of Coffee-Growers.<sup>32</sup>

Lastly, the FNC finances the payment of bounties to foreign purchasers.<sup>33</sup>

The work of the Departmental Committees includes improvement of infrastructure (highways, educational services, etc.), and technical assistance. To that end they can obtain advisory assistance from the Technical Services of the Federation of Coffee-Growers and financial contributions from the FNC, apart from their own receipts, which are constituted mainly by their portion of the revenue from the *ad valorem* tax

<sup>32</sup> A detailed analysis of the activities carried out with the support of the FNC appears in the *Annual Reports* of the General Manager of the National Federation of Coffee-Growers.

<sup>33</sup> See p. 179.

and their participation in the 1972 sharing agreement.

Taking it into account that producers and population in coffee-growing areas in general recover a considerable proportion of coffee tax revenue through the public services rendered by the National Federation of Coffee-Growers and the Departmental Committees—although exactly how much it is difficult to assess—, a synoptic chart may now be constructed to present a breakdown of coffee prices from the phase of production to the export stage. For this exercise the year studied is 1973 (see figure 2).

#### 4. Exports

Almost the whole of Colombia's coffee exports take the form of green coffee.

There are three plants for processing soluble coffee (one belonging to the Federation at Chinchiná; one of Nestlé's, SICOLAC; and one national private enterprise, COLCAFE), but their export levels are very low. The plants receive coffee at prices subsidized by the Federation, but even so it would seem that Colombian coffee, because of its high prices, is not in a position to compete with the *robustas*, which are the type of coffee most used for transformation into soluble coffee.<sup>34</sup>

Better prospects seem to be offered by the processing of coffee abroad, whether in respect of roasted and ground or of soluble coffee, on the possible basis

<sup>34</sup> In this process the rate of extraction (whether the freeze-dry or the spray-dry method is used) is still low, and, furthermore, solubilization involves a loss of the coffee's natural aroma, which is an incentive to use lower grades for this purpose, such as the African coffees.

Figure 2  
**COLOMBIA: BREAKDOWN OF PRICE PER KILOGRAMME  
 OF COFFEE EXPORTED, 1973**  
 (Dollars)

1.603 c.i.f. price of 'green' coffee	
0.076	Freight and insurance
0.127	Exporter's gross income
0.029	'Pasilla' tax
0.305	<i>Ad valorem</i> tax
0.258	'Retention quota'
0.362	Producer's profit <sup>1</sup>
0.445	Production costs
0.807	Domestic price

<sup>1</sup> By 'producer's profit' is meant here the difference between the average domestic price during the year and the production costs calculated earlier in this paper for an 'average coffee farm'. This is, of course, an approximate estimate.

of blending the Colombian product with other African or American coffees. In this case, the difficulties will be mainly institutional, since the country lacks experience alike at the financial and at the industrial and commercial levels in making investments of this type. The success of a pilot project executed in Argentina for the production of roasted

and ground coffee, however, has awakened the Federation of Coffee-Growers' interest in attempting the experiment on a larger scale.

Apart from these exceptions, Colombia exports green coffee, and once the product has reached the ports of destination has nothing to do with the subsequent phases of processing and

marketing.<sup>35</sup> But through its merchant marine (the Flota Mercante Grancolombiana), the country controls a good deal<sup>36</sup> of the transport of its coffee exports.<sup>37</sup>

The high level of taxation on coffee is an incentive—especially in periods when international prices are also high—to smuggling it, particularly into Venezuela, a country which also exports coffee, although in limited quantities (978,000 bags, on average, between 1964 and 1974). Nevertheless, the distance of the coffee-growing areas from the frontier, and the difficulties of transport, reduce this contraband to presumably small volumes.<sup>38</sup>

Colombian coffee is exported by the National Federation of Coffee-Growers or by private exporters listed in a special register kept by the Federation itself.

In 1973 the total volume exported by the Federation was 2,823,425 60-kg bags, as against 3,942,843 bags exported by private traders; in proportional terms, the Federation and private individuals exported in that year 42 per cent and 58 per cent of total sales abroad, respectively.

With regard to the distribution of markets, the Federation accounts for the lion's share of exports to Europe, while

<sup>35</sup> It should be noted here, however, that Colombia does play a very large part in the advertising of its product in the consumer markets.

<sup>36</sup> On this point no data were available.

<sup>37</sup> Between 70 and 75 per cent of coffee exports are shipped from the Pacific Ocean port of Buenaventura, while almost all the rest leaves from a port on the Atlantic (Barranquilla).

<sup>38</sup> The case is different with cattle, for example, which, as the stock-farming areas are so close to the Venezuelan frontier, are smuggled *en masse* into Venezuela.

private individuals control the sales to the United States, as can be seen from table 12.

The Federation as a monopoly on exports to the countries with which bilateral agreements exist (Spain, the Democratic Republic of Germany, Yugoslavia, Hungary, Poland and the Soviet Union), and in general its exports to Europe are larger than those of private individuals. The latter, nevertheless, retain an appreciable proportion of the European market (33.5 per cent in 1973), while in the United States market the Federation has a much smaller share (12.71 per cent in 1973).

Between 1961 and 1973, the Federation covered between 25 and 44 per cent of exports, according to the year concerned, the average being 34 per cent. In recent years, this proportion seems to have become stabilized at about 40 per cent, at least up to 1976.

A highly original element in the external marketing of Colombian coffee lies in the granting of 'bonuses', or, in other words, discounts, to importers;<sup>39</sup> these are normally paid by the FNC, and in practice reduce the existing price differentials between Colombian coffee and the other milks. When the bonuses are taken into account, these differentials do in fact decrease considerably, although it seems true that they do not disappear altogether.

This system of bonuses, whose existence is recognized by the National

<sup>39</sup> A figure which was estimated in the course of discussions with those responsible for another country's coffee policy, and which should be taken with extreme caution, is about 21 dollar cents on the international price quoted in June 1976, i.e., 183 cents.

Table 12  
**EXPORTS BY COUNTRIES OF DESTINATION**  
*(60-kilogramme bags)*

Country	1972		1973	
	Federation	Private individuals	Federation	Private individuals
United States	285 082	2 240 255	382 226	2 623 346
Other American countries	167 167	66 410	102 261	72 270
Federal Republic of Germany	476 957	1 072 431	713 685	602 032
Sweden	69 825	251 551	138 285	201 119
Spain	400 505	—	301 262	—
The Netherlands	243 016	73 219	385 788	25 433
Other European countries	619 138	451 275	671 802	384 441
Total for Europe	1 809 441	1 848 476	2 210 828	1 219 025
Other countries	81 012	30 595	128 109	28 203
Total	2 342 702	4 185 736	2 823 424	3 942 844

Source: National Federation of Coffee-Growers, *Boletín de información estadística sobre café*, Bogotá, nos. 46, 47.

Federation of Coffee-Growers itself, represents the continued application of a formula that was devised while the International Agreement of 1962 was in force (under which export quotas were increased in relation to price levels), and has been kept up, apparently, by mere trade custom.

Although fluctuations in production levels from one year to another are limited in comparison, for example, with what happens in Brazil, Colombia has maintained a considerable reserve of inventories, as can be seen from table 13.

Colombia has taken a very active part in the attempts to organize coffee production and marketing at the world level. Its intervention in the 'Bogotá

Group' and in the 'Geneva Group' on behalf of world control of supply, as well as the position it adopted jointly with Brazil in connexion with the negotiation of a new International Agreement, are important cases in point. Generally speaking, it may be said that Colombia has been able (because of the degree of official control exercised over coffee activities through an agency such as the Federation), and has given evidence of its political will, to harmonize its domestic policies with organizational requirements at the international level relating to the control and 'equalization' of demand and supply and, above all, to the maintenance and increase of the purchasing power of the producer countries.

Table 13  
COLOMBIA: COFFEE INVENTORIES, 1962/1963-1974/1975

<i>Coffee year</i>	<i>World inventories</i>	<i>Inventories in Colombia</i>	<i>Percentages of exportable production</i>
1962/1963	71 707	2 024	31
1963/1964	71 340	2 139	30
1964/1965	69 678	3 589	55
1965/1966	88 796	4 746	68
1966/1967	82 804	5 369	25
1967/1968	78 826	5 499	82
1968/1969	69 182	5 050	77
1969/1970	65 336	5 583	79
1970/1971	54 637	5 635	88
1971/1972	54 267	4 216	70
1972/1973	55 295	5 434	83
1973/1974	40 896	3 839	48
1974/1975	49 277	3 000 <sup>a</sup>	38

Source: ICO, Documents EB 1290/74 and E 1402/75.

<sup>a</sup>Estimates.

### III

## Brief notes on coffee production and exports in El Salvador and Brazil

In these two cases the analysis will be reduced to the barest essentials, stress being laid on the elements of differentiation from the situation in Colombia.

#### 1. *El Salvador*

In the first place, attention must be drawn to two points of capital importance:

(1) El Salvador produces 'arabica mild' coffee, which is quoted among 'other milds' on world markets;

(2) The extreme density of the population, plus the skill and tenacity of the Salvadorian farmers, and adequate use of fertilizers and pesticides, have raised the country's coffee production to the highest yields in Central America and virtually in the world (1,149 kilogrammes per hectare in 1975).

The figures for production and exports in recent years are given in table 14.

Table 14  
EL SALVADOR: COFFEE PRODUCTION AND EXPORTS

Year	Production (thousands of bags)	Exports (thousands of bags)	Value of exports (millions of dollars)	Share of coffee in total exports
1966	(1 960)			
1967	(2 430)			
1968	(1 990)	1 982	93.56	44 <sup>o</sup> / <sub>o</sub>
1969	2 190	1 899	89.36	44 <sup>o</sup> / <sub>o</sub>
1970	2 310	1 865	120.76	51 <sup>o</sup> / <sub>o</sub>
1971	2 410	1 689	107.56	44 <sup>o</sup> / <sub>o</sub>
1972	2 490	2 083	131.44	44 <sup>o</sup> / <sub>o</sub>
1973	2 140	2 489	159.52	45 <sup>o</sup> / <sub>o</sub>
1974	2 660	2 554	194.72	42 <sup>o</sup> / <sub>o</sub>
1975		3 062		

Source: Pan American Coffee Bureau, International Coffee Organization, Banco Central de Reserva of El Salvador.

As regards land tenure, fairly complete data—shown in table 15(a)—are available for 1961, and others less complete for 1971. For the sake of comparability with the 1971 figures, those for 1961, have been regrouped in table 15(b) in accordance with the same criteria used for 1971.

Table 15(a)  
EL SALVADOR: STRUCTURE OF LAND TENURE IN THE COFFEE SECTOR, 1961

Size of enterprise	Number of farms	Percentage of total number of farms	Area under production (hectares)	Percentage of total area under production	Percentage of production
From 0 to 4.9 hectares	26 000	71.1	11 525	9.1	6.2
From 5 to 99.9 hectares	9 789	26.8	59 200	46.4	42.8
100 hectares and over	749	2.1	56 600	44.5	51.0
Total	36 538	100.0	127 325	100.0	100.0

Source: Second Agricultural Census, p. 238.



Table 15(b)  
**EL SALVADOR: STRUCTURE OF LAND TENURE IN THE COFFEE  
 SECTOR, 1961 AND 1971**

Size of enterprise	Area		Production	
	Percentage 1961	Percentage 1971	Percentage 1961	Percentage 1971
From 0 to 9.9 hectares	15	17	10.3	12.1
From 10 to 49.9 hectares	24	27	22.8	26.2
Over 50 hectares	60	55	66.8	61.7

As can be noted, land tenure is much more concentrated than in Colombia,<sup>40</sup> which holds true, for other crops as well. The figures for the differences in yields between small, medium-sized and large farms also relate to 1961, and are as follows:

	<i>Kilogrammes per hectare</i>
Small farms (0-15 hectares)	491
Medium-sized farms (15-100 hectares)	704
Large farms (over 100 hectares)	796

Another fundamental difference from Colombia lies in the existence of 'mills' (processing plants), which cen-

<sup>40</sup> An ICAP study on coffee taxation in Central America, referring to the year 1968, drew attention to the fact that in El Salvador and Guatemala ownership of land is more concentrated than in the other Central American countries: about 5 per cent of the farms cover approximately 60 per cent of the coffee-growing area. See ICAP, *Estudio sobre la tributación del café en Centroamérica* (CIAP/321), Washington, D.C. (mimeographed text), December 1968, p. 2.

tralize the transformation of the coffee crop into parchment coffee, whereas in Colombia, as has been shown, this process is in the hands of the producer himself.<sup>41</sup> This problem does not affect the large-scale producers, since as a general rule most of them are at the same time 'processors' and centralize the processing of their own coffee output together with that of neighbouring farms.

The Salvadorian Coffee Company (Compañía Salvadoreña del Café - CSC) possesses only a limited number of processing plants, but their strategic location and their size<sup>42</sup> should ensure the small producer protection against possible abuses on the part of private processors.

The CSC also establishes—and this is its basic activity—a floor for the

<sup>41</sup> Despite the difficulties due to lack of space and water resources which are invoked in order to justify the existence of the processing plants, it may well be asked whether the presence of groups of vested interests such as the 'processors' (who are sometimes the exporters themselves) does not constitute an even stronger determining factor in the persistence of this marketing system.

<sup>42</sup> The CSC's largest processing plant dealt with 400,000 bags of coffee in the year 1975.

producers' price which serves to guarantee farmers a minimum income, when there is no possibility of selling coffee at higher prices. In this respect, the situation is much the same as in Colombia.

A table similar to that constructed for Colombia (see again table 11) was prepared for El Salvador, and presents the results deriving from table 14. On the basis of information supplied by ICO, ICAP and local institutions produc-

tion costs were estimated for the year 1973 at an average of 63 colones per quintal,<sup>43</sup> the methodology used being similar to that outlined for Colombia (see table 16).

As regards taxation, El Salvador's is the highest in Central America. The tax on the coffee plantation itself is of relatively minor importance; in 1968 its incidence was calculated at 84 cents per hectare, or 0.05 cents per bag of coffee produced.<sup>44</sup> Moreover, coffee-growers are

Table 16

**EL SALVADOR: COMPARISON OF DOMESTIC COFFEE PRICES WITH OTHER RELEVANT VALUES TO DETERMINE THE EVOLUTION OF THE COFFEE-GROWER'S RELATIVE POSITION**

Year	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1962	55.20	100	100	100	100	100	100	100
1963	53.20	96	102	102	101	94	95	99
1964	64.40	117	103	119	103	114	114	97
1965	71.20	129	104	134	103	125	125	97
1966	66.46	120	103	129	115	104	104	94
1967	57.20	104	104	112	114	91	91	103
1968	58.46	106	107	108	118	90	90	105
1969	61.60	112	107	108	117	96	96	91
1970	58.60	106	110	140	123	86	86	98
1971	57.39	104	110	130	133	78	78	112
1972	65.20	118	112	145	137	86	86	121
1973	75.80	137	119	164	146	94	94	132
1974	81.00	146	139	186	192	76	76	234
1975			117	135				

Source: Calculations based on ICO data.

(a) Average domestic prices received by the producer for green coffee, expressed in colones per quintal (100 pounds).

(b) Indexes of increase in (a).

(c) Indexes of consumer prices.

(d) Indexes of f.o.b. value of coffee exports in dollars at constant 1962 prices.

(e) Indexes of costs of production inputs.

(f) Relation between (b) and (d)  $\frac{(b \times 100)}{(d)}$

(g) Relation between (b) and (e)  $\frac{(b \times 100)}{(e)}$

(h) Indexes of domestic prices received by cotton producers.

<sup>43</sup> The world market price for that year was 53.98 cents per pound, i.e., 134.85 colones per quintal (100 lbs.).

<sup>44</sup> A. Rochac, "La tributación del café" (mimeographed text), San Salvador.

exempt from income tax, which is, however, levied on processors and exporters.

The major source of revenue for the State is undoubtedly the *ad valorem* tax on exports, which is applied at a basic rate of 6.75 dollars, plus 30 per cent on anything over 45 dollars obtained as the f.o.b. price per quintal of coffee on the world market. In June 1976, this tax amounted to 38.25 dollars per quintal.

The 'retention quotas' which were in force for some time were abolished in the coffee year 1972/1973.

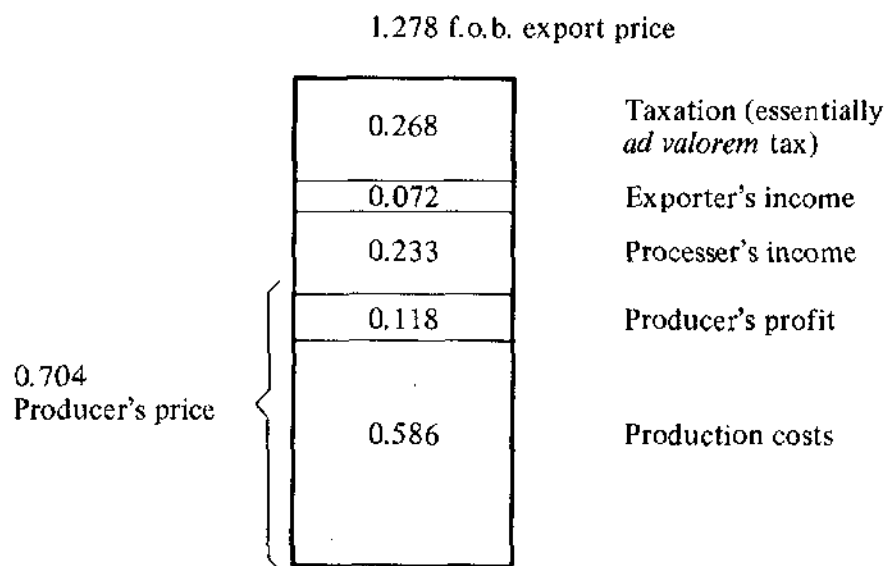
As stated above, tax rates are a good deal higher in El Salvador than in the other Central American countries, and this has given rise to many smuggling

problems, which have sometimes profoundly affected the Salvadorian economy.

To summarize the distribution of coffee income, figure 3 may now be constructed, similar to that already prepared for Colombia (see again figure 2).

Most of El Salvador's exports of green coffee (about 60 per cent in 1975) go to the European Economic Community, by way of private national exporters, listed in a special register kept by the Salvadorian Coffee Company (CSC); this institution also signs coffee contracts on international stock markets, although on a lesser scale than the National Federation of Coffee-Growers in Colombia.

Figure 3  
**EL SALVADOR: BREAKDOWN OF PRICE PER  
 KILOGRAMME OF COFFEE EXPORTED**  
 (Dollars)



## 2. Brazil

Although Brazil is the world's leading coffee producer, its case will be discussed in very brief outline, because it was impossible to obtain estimates of production costs or statistics on the structure of land tenure in the coffee sector. Moreover, the analysis of these indicators would be more difficult in Brazil's case, owing to several factors, among which special importance attaches to the wide diversity of the country's various coffee-growing areas, in contrast to the relative uniformity existing in Colombia and El Salvador.

Brazil produces 'unwashed *arabica*' coffee on farms that are generally of larger size than those of Colombia; and it is sold on the domestic market at minimum guarantee prices fixed by the Brazilian Coffee Institute (Instituto Brasileiro de Café- IBC).

Production is subject to sudden slumps caused by recurring frosts in the southern States (Paraná and São Paulo), and these contractions have a marked influence on world prices.<sup>45</sup>

It is also of interest to point out that Brazil, with an annual consumption of about 6 million bags, constitutes the second world coffee *consumer* market, after the United States.

Table 17 shows production and exports of Brazilian coffee as from the coffee year 1950/1951.

As can be seen, there is no secular trend towards an increase in production for ever since the 1920s it has remained at relatively stable levels, if circumstantial fluctuations are discounted. On the contrary, it might be truer to say that exportable production has decreased, owing to the sharp upswing in domestic consumption.

Table 17  
BRAZIL: PRODUCTION AND EXPORTS OF COFFEE, 1950/1951-1974/1975  
(Millions of bags)

Coffee year	Production	Exports	Coffee year	Production	Exports
1950/51	20.6	16.6	1963/64	24.1	19.8
1951/52	18.9	16.3	1964/65	15.1	12.9
1952/53	20.2	15.0	1965/66	38.8	15.3
1953/54	19.3	14.3	1966/67	19.8	16.3
1954/55	18.8	10.8	1967/68	24.8	18.2
1955/56	26.5	17.0	1968/69	18.1	19.3
1956/57	17.1	14.9	1969/70	18.7	19.0
1957/58	26.3	13.6	1970/71	10.4	15.6
1958/59	31.7	14.8	1971/72	29.1	20.3
1959/60	44.1	17.9	1972/73	27.1	19.2
1960/61	29.8	16.1	1973/74	16.2	19.7
1961/62	35.9	17.4	1974/75	26.9	12.3
1962/63	36.1	16.6			

<sup>45</sup> See table 17.

Coffee taxation in Brazil is based on two items: the tax on circulation of merchandise (Impuesto de Circulación de Mercadería – ICM) and the contribution quota (Cuota de Contribución – CC).

The ICM is paid to the States, and its amount is normally included in the domestic price received by the producer; the CC is fixed in dollars per 60-kg bag exported, and the national authorities periodically determine how much it is to be. Figure 4 shows an annual average weighted for 1973.

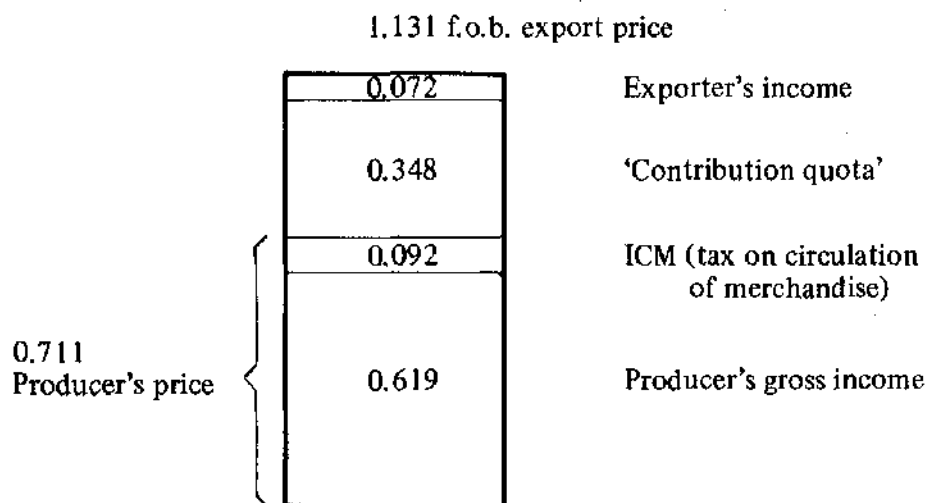
Coffee exports, as in Colombia, are subject to a 'minimum export price' ruling, established in relation to the price

conditions prevailing on the world market.

Figure 4 gives a breakdown of the price per kilogramme of coffee exported by Brazil, with the reservation, already made above, that as estimates of production costs are lacking, all that can be identified is the producer's gross income.

Lastly, it is worth while to point out that Brazil is the only Third World country which has come to export a substantial proportion of its production in the form of 'soluble' coffee. This process has not been without its difficulties,<sup>46</sup> but today the share of soluble coffee in Brazil's coffee exports is stabilized at about 15 per cent.

Figure 4  
**BRAZIL: BREAKDOWN OF PRICE PER KILOGRAMME  
 OF COFFEE EXPORTED, 1973**  
*(Dollars)*



<sup>46</sup> In this connexion the controversy between Brazil and the United States in 1971 may be recalled.

## IV

### Coffee prices in consumer countries

The differences between green coffee import prices and the retail prices of roasted and ground coffee vary considerably from one country to another, essentially owing to the different incidence of taxation in each case.

The comparability of import prices with retail prices is a technical problem which is easy enough to solve. In reality, coffee loses 19 per cent of its weight during the roasting process. Accordingly, the retail prices given below are expressed in terms of green coffee equivalent, i.e., they represent the real prices paid by consumers divided by a factor of 1.19.

This point having been explained, a comparison between import prices and retail prices in thirteen consumer countries may be observed in table 18, prior to analysis in greater depth of the component elements of price formation in some of these cases.

As table 18 shows, the range of difference extends from a minimum (in 1973) of 31.4 cents in Canada to a maximum (in the same year) of 170.6 cents in the Federal Republic of Germany.

A more detailed analysis will be made of three cases on which it was possible to obtain more precise information: the Federal Republic of Germany, France and Italy.<sup>47</sup>

<sup>47</sup> The data relating to the three cases are not uniform, and this explains the different ways in which they are dealt with, although an attempt was made to achieve a maximum of comparability, at least in the final tables.

#### 1. *The case of the Federal Republic of Germany*

The Federal Republic of Germany displays a manifest preference for mild coffees, for which higher prices are quoted on world markets; this tendency can be clearly noted when annual average import prices in Germany are compared with those in the other main importer countries.<sup>48</sup> For the period under review (1962-1974), with the exception of a single year, 1971, the values for the Federal Republic of Germany are the highest in the world. During the year 1972, for example, German industry paid an average of 51.8 dollar cents per pound of green coffee imported, whereas the equivalent sums for the United States, France, Italy and the Netherlands, were respectively 43.0, 43.7, 41.1 and 48.0 cents. 1972 was also an exceptional year in the sense that imports of *arabica* coffee<sup>49</sup> to the Federal Republic of Germany came to represent 77 per cent of total imports of green coffee. This figure tended to settle down from that year onwards at about 72 per cent, which still constitutes an unusually high proportion.

In 1975 a marked upswing occurred in imports of 'milds', which amounted to 2,224,390 bags of 'Colombian milds' (39.0 per cent of the total) and 2,230,768 bags of 'other milds' (39.1 per cent of the total). The Federal Republic of Germany is also among the countries which import proportionally most coffee

<sup>48</sup> See again table 18.

<sup>49</sup> 'Colombian milds' and 'Other milds'.

Table 18  
**COMPARISON BETWEEN IMPORT PRICES AND RETAIL PRICES OF COFFEE  
 IN THE MAIN CONSUMER COUNTRIES**  
*(Annual averages)*

Country	1962		1965		1968		1971		1972*		1973*		1974*	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Belgium	32.2	84.8	41.8	95.2	39.5	98.0	51.2	126.9	49.2	122.5	60.7	140.0	76.3	182.5
Canada	31.7	58.9	40.3	72.2	36.4	68.7	44.1	82.9	46.5	81.7	57.8	89.2	63.2	98.0
Denmark	31.9	109.0	41.4	124.7	36.5	118.0	46.9	148.4	49.5	149.7	60.7	173.5	74.9	211.2
Spain	33.0	—	39.9	78.8	38.6	67.7	48.5	81.0	49.3	84.1	61.6	101.9	70.4	108.7
													(est)	(est)
United States	30.4	70.8	37.6	83.3	34.0	76.4	40.7	93.4	43.0	92.7	54.3	104.0	59.1	122.9
France	31.4	73.1	33.7	74.7	34.8	79.4	42.9	106.4	43.7	108.9	50.8	123.6	—	—
The Netherlands	31.4	—	40.7	77.6	38.0	80.1	49.5	106.9	48.0	104.8	61.3	126.8	73.9	—
													(est)	(est)
Italy	27.3	135.6	36.9	142.2	33.0	142.3	39.4	156.3	41.1	151.5	47.9	160.3	58.0	—
													(est)	(est)
Japan	29.7	—	34.0	128.0	27.9	129.2	30.6	160.1	29.9	166.9	40.4	180.0	63.9	181.4
													(est)	(est)
United Kingdom	27.2	84.4	32.8	85.5	33.6	71.8	41.9	89.3	38.5	80.1	48.8	86.0	—	—
Federal Republic of Germany	41.3	163.8	46.9	157.5	42.0	151.0	48.7	193.7	51.8	192.1	65.1	235.7	—	—
Sweden	35.7	64.6	45.9	73.4	39.6	68.4	50.6	94.5	50.6	96.8	62.1	114.0	80.4	141.4
													(est)	(est)
Switzerland	34.7	—	40.5	103.8	39.1	101.1	48.8	117.2	49.0	121.9	61.3	154.7	82.3	197.6
													(est)	(est)

Source: Calculations based on ICO statistics.

A: Average green coffee import prices (expressed in dollar cents per pound).

B: Average of retail prices for roasted coffee, expressed in terms of green coffee equivalent (retail prices: 1.19).

\* For the countries indicated, and for all countries in the years indicated, the margins of approximation are fairly wide, owing to exchange fluctuations.

from Latin America, with 71.8 per cent in 1975, as against, for example, 65.5 per cent in the case of the United States, 29.1 per cent in that of France and 58.7 per cent in that of Italy.

The high cost represented by the unit price of imports, together with the heavy burden of domestic taxation, combined to make retail prices of coffee in the Federal Republic of Germany the highest to be found among the leading consumer countries.

Nevertheless, owing to the stability of internal taxation, and above all to the vigorous revaluation of the mark against the dollar, these prices have not increased in current terms since 1962, and in fact in that year they were higher than in 1973, as can be seen from table 19.

Table 19

**FEDERAL REPUBLIC OF GERMANY:  
RETAIL PRICES OF ROASTED COFFEE**

*(Deutschmarks (DM))*

1962	17.2
1963	16.7
1964	16.6
1965	16.6
1966	17.1
1967	16.8
1968	15.8
1969	15.6
1970	16.8
1971	16.6
1972	16.1
1973	16.7

This price stability allowed consumption to increase steadily, and, consequently, imports also expanded; in 1975 they reached a record level of 5,701,837 bags, reaffirming the position of the Federal Republic of Germany as the

second importer country in the world after the United States.

In the Federal Republic 80 per cent of the coffee consumed is taken in the form of roasted and ground coffee; the remaining 20 per cent constitutes the part of the market reserved for soluble coffee, of which 35 per cent—a proportion that seems likely to increase—is produced by the 'freeze-dry' method. This country also imports small quantities of soluble coffee (the equivalent of 120,474 bags of green coffee in 1975), which are more than offset by exports of the same product (155,893 bags in 1975).

The figures for the year 1971 may be used to exemplify how the retail price of coffee is formed in the Federal Republic of Germany.

To the cost of the raw material, i.e., 3.72 DM per kg, 25 per cent has to be added at the outset on account of the loss of weight undergone by coffee during the roasting process. This brings the price of the raw material up to 4.65 DM per kg. Supplementary expenditures on customs duties<sup>50</sup> (0.33 DM), freight and insurance (0.22 DM) and importers' margins (0.05 DM) combine with this figure to make the cost to the roaster 4.93 DM per kg of green coffee.

The processing (roasting) costs proper, plus costs of packing, come to approximately 1.00 DM per kilogramme.

The special tax on coffee,<sup>51</sup> which is

<sup>50</sup> As in the other EEC countries, in the Federal Republic of Germany the common tariff rate is in force, which, for green coffee, is 7 per cent.

<sup>51</sup> Pressure is being exerted with a view to the abolition of this tax, in the framework of tax harmonization within the EEC, but up to now it has been ineffectual.



paid to the *Länder*, is 4.50 DM for non-decaffeinated roasted coffee.<sup>52</sup>

The roasters' profit margins, which have to cover internal freight and advertising costs, amount to 2.86 DM per kg.

All this goes to make up the cost for the retailer, which is 15.39 DM per kg; if to this figure are added the retailer's profit margins (2.50 DM per kg) and the VAT (0.66 DM), the final consumer price is reached, which, as already stated, was 16.5 DM per kg in 1971.

The distribution of income and profits is as follows:

	<i>DM per kg</i>	<i>Percentage</i>
Gross income of exporter countries	4.65	28
Tax revenue	5.49	33
Industrial profit margin	2.86	17
Industrial costs	1.00	6
Commercial profit margin	2.50	15
Others	0.05	0
<i>Total</i>	<i>16.55</i>	<i>100</i>

Both industrial and commercial margins are of course subject to income tax and the tax on net wealth, which in some degree increases the amount taken over by the State, at the expense of these two factors.

For information purposes, a synoptic table of the structure of the price of soluble coffee, according to whether the 'spray-dry' or the 'freeze-dry' method is used, is presented below, again with reference to 1971 (see table 20).

<sup>52</sup> On decaffeinated roasted coffee, this tax is 4.75 marks per kilogramme, and on non-decaffeinated soluble coffee, 10.80 marks per kilogramme.

## 2. The case of France

In consequence of the special relations it maintains with its ex-colonies, France imports most of its green coffee (about 70 per cent) from Africa. This grade of coffee, apart from being the lowest-priced on the world market, enjoys complete exemption from tariff duties in the European Economic Community, under the Yaoundé and Lomé Agreements (the former in the first place and the latter at the present time). Other types of coffee are subject to the EEC common external tariff (7 per cent), and to this is added, in the case of France, an additional stamp tax (2 per cent of the tariff duty) and a plant sanitation tax of 0.7 per cent. France imported 4,646,000 bags of coffee in 1974 and 4,295,000 in 1975. Almost all its imports consist of green coffee, and nearly the whole of the remainder (soluble coffee equivalent to 140,000 bags of green coffee<sup>53</sup> in 1974 and 1975) comes from EEC countries, the exception being Brazil, which exported soluble coffee to France equivalent to 20,900 and 13,200 bags in 1974 and 1975 respectively. In addition, France exports soluble coffee in quantities which represent approximately double its imports. In 1974 and 1975 it exported the soluble coffee equivalent of 318,300 and 249,600 bags of green coffee, respectively, mainly to the United States and EEC.

The average unit value of 1 kilogramme of green coffee imported in 1972 was 12.00 francs. To break down the formation of the retail price a distinction

<sup>53</sup> To obtain the green coffee equivalent of a volume X of soluble coffee, this volume must be multiplied by a coefficient of 2.8/3.

Table 20  
**FEDERAL REPUBLIC OF GERMANY: STRUCTURE OF INDUSTRIAL COSTS  
 OF SOLUBLE COFFEE**  
 (DM per kg)

	'Spray-dry' method	'Freeze-dry' method
Raw material	9.30	12.40
Tariff duties	0.65	0.87
Freight and insurance	0.40	0.52
Importer's margin	0.10	0.13
Cost to roaster	10.45	13.92
Industrial costs and margins	14.10	15.98
Cost to retailer (including coffee tax)	37.95	42.90
Retailer's margin	10.00	14.00
Retail price before VAT	47.95	56.90
VAT	2.05	3.10
Final retail price	50.00	70.00

must be made between (1) real costs and (2) profit margins.<sup>54</sup>

Under the first head may be included unloading costs (0.12 francs), the loss of 20 per cent in the roasting operation (1.10 francs) and the roasting (industrial) costs proper (0.36 francs), plus the costs of packing (0.42 francs) and distribution and 'other' costs (0.54 francs).

Under the second item may be noted the gains of the industrial companies' agents and middlemen at the import level (0.13 francs), customs duties and supplementary charges (0.33), VAT (0.9) and roasters', wholesalers' and retailers' profit margins (0.42, 0.96 and 1.2 francs, respectively).

<sup>54</sup> The source of this information is, essentially, a study by the London Graduate School of Business Studies, "The European Coffee Market", London, n.d.

With these components it is now possible to construct table 21, in which the formation of the consumer price of one kilogramme of roasted coffee is recapitulated.

Table 21  
**FRANCE: BREAKDOWN OF RETAIL PRICE  
 OF 1 KILOGRAMME OF COFFEE, 1973**

	Francs
Green coffee	5.50
20-per-cent loss	1.10
Margins of middlemen	0.13
Unloading costs	0.12
Tariff duties	0.33
Roasting costs	0.36
Packing	0.42
Distribution, etc.	0.54
Roasters' margins	0.42
Wholesalers' margins	0.96
Retailers' margins	1.20
VAT	0.90
<i>Total</i>	<i>12.06</i>

Consequently, the distribution of income and profits is as follows:

Gross income of exporter	
country	46 per cent
Tax revenue	10 per cent
Costs	20 per cent
Industrial margins (roasters' plus wholesalers')	11 per cent
Commercial margins	10 per cent
Other items	2 per cent

### 3. *The case of Italy*

Like most of the consumer countries, Italy imports coffees from various sources, which the domestic industries blend in order to obtain the standard product that generally reaches the consumer in the form of roasted and ground coffee. Consumption of soluble coffee is very limited in Italy.

The relative percentages of imports of various types of coffee fluctuate little from one year to the next, and remain at about the following levels:

Unwashed <i>Arabica</i> :	20 per cent
Other <i>Arabicas</i> :	20 per cent
IBC (Brazil):	30 per cent
<i>Robusta</i> (Africa):	30 per cent

For the year 1972 the c.i.f. import prices for these various types of coffees were fixed respectively at 550, 550, 500 and 530 liras per kg of green coffee, of which the unit value in that year was 529 liras.

On this basis, it is possible to reconstruct the price formation up to the level of 2,300 liras, which, as will be seen, was the average retail price in the year under consideration.<sup>55</sup>

<sup>55</sup> Most of the data are taken from "The European Coffee Market", *op. cit.*

The first item to be added is the unloading costs, established for 1972 at 15 liras per kilogramme of green coffee.

The second thing that must be taken into account is tax incidence, which in Italy's case is particularly heavy. The taxes are of four types: customs duties, tax on consumption, value added tax (VAT) and compensatory duty.

Table 22 shows the incidence of domestic taxation on coffee imports.

From the four final figures in this table can be deduced the cost of green coffee for the blend of varieties used in Italy. The weighted average of the four results thus obtained places this cost at 1,236 liras.

However, the real cost of the coffee blend to the roaster, which comprises the 20-per-cent loss of weight in roasting, is 1,545 liras.

To this figure must be added processing costs (roasting operation), which are very low, and for 1972 were estimated at 20 liras per kg, and those of advertising, packing and distribution (140 liras per kg). The margin left between this cost level (1,705 liras) and the wholesale price (1,965 liras) constitutes the roaster's net profit, which in 1972 was estimated at about 260 liras. Between the wholesale price and the retail price (2,300 liras in 1972) comes, of course, the retailer's profit margin, estimated at 335 liras. Thus a table can be constructed similar to those prepared for the Federal Republic of Germany and France:

Gross income of exporter	
country	23 per cent
Tax revenue	29 per cent
Costs	20 per cent
Industrial margins	12 per cent
Commercial margins	15 per cent

Table 22

<i>1 kg of green coffee</i>	<i>Unwashed Arabica (20 per cent)</i>	<i>Other milds (20 per cent)</i>	<i>Robusta (30 per cent)</i>	<i>Brazil (30 per cent)</i>
c.i.f. price	550	550	500	530
Port costs	15	15	15	15
Tariff duties	38.5	38.5	exempt	37.1
Tax on consumption	500	500	500	500
VAT	161	161	146	128
Compensatory duty	19.8	19.8	18	19.1
<b>Cost of green coffee</b>	<b>1 284</b>	<b>1 284</b>	<b>1 179</b>	<b>1 229</b>

#### 4. Synthesis

As a general observation, it should be noted that the sample selected is not the most indicative of the real world situation, since at least two of the countries chosen (the Federal Republic of Germany and Italy) are among those that have the highest internal taxation on coffee. For lack of time and want of data no account has been taken of so important a case as that of the United States, which would be found at the opposite extreme as regards the level of retail prices.<sup>56</sup>

Attention must be drawn, however, to the predominance of components not directly related to unavoidable industrial costs (the various profit margins and taxation) in the formation of the final retail price. It is interesting in this connexion to recall the position with respect to bananas, a product for which the level of 'real' industrial costs is even lower, since it undergoes no transformation process. Notwithstanding this, UNCTAD<sup>57</sup> points out that the producer captures a mere 11.5 per cent of the

final retail price, while the f.o.b. price represents only 26 per cent of that final price.

To return to coffee, a schematic representation of the situation in the Federal Republic of Germany, France and Italy can now be constructed (see figure 5). If this figure is compared with those presented earlier (figures 2, 3 and 4), which traced the formation of the f.o.b. export price, it will be noted that between the Federal Republic of Germany, France and Italy there are certain differences with respect to the green coffee import price, and that in turn this price is not easily comparable with the export prices indicated.

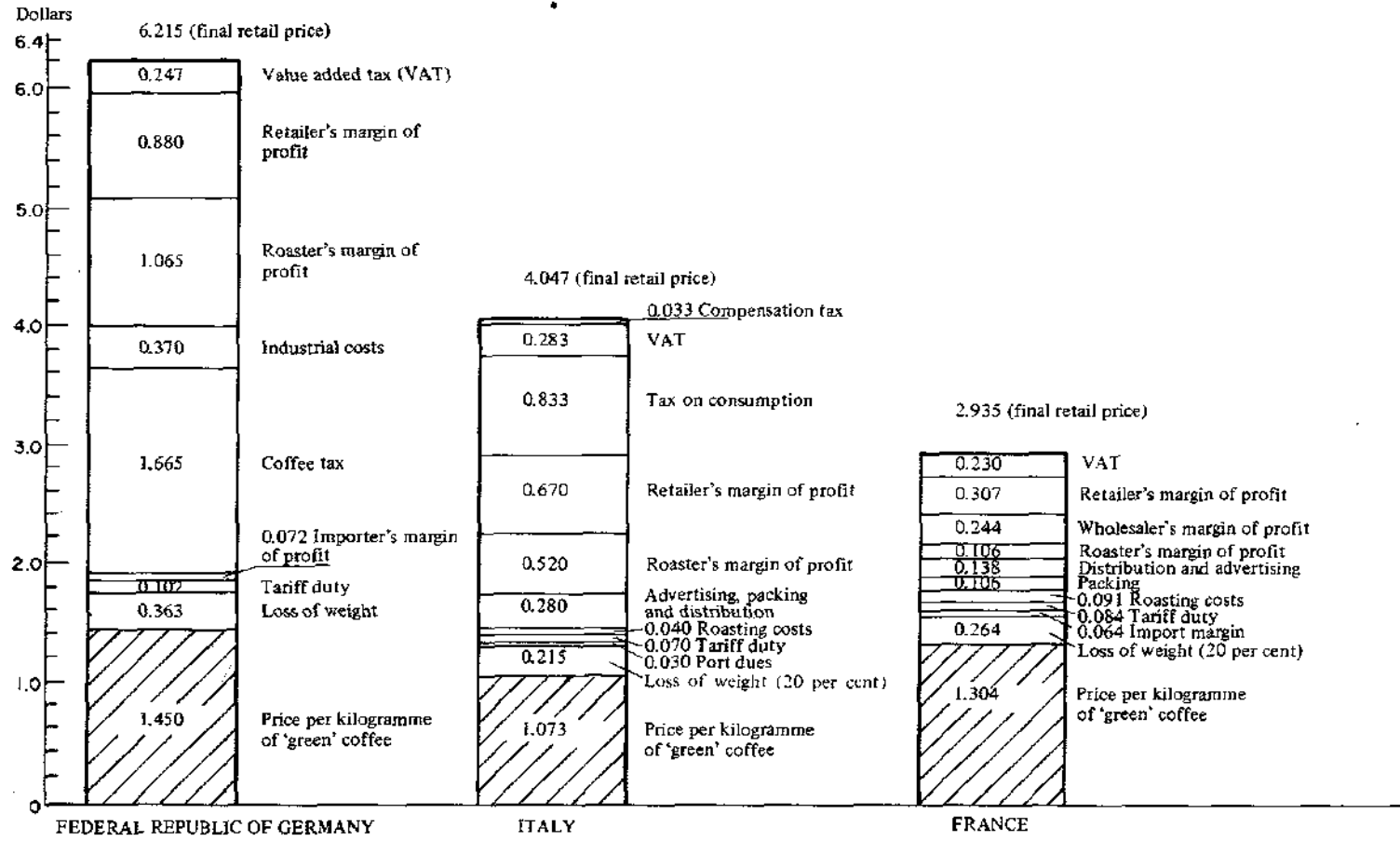
The price differentials are due, on the one hand, to the larger or smaller proportion of African coffee (of which the price is much lower) imported by each country, and, on the other hand, to exchange fluctuations, which were particularly sharp during the year 1973.<sup>58</sup>

<sup>58</sup> The exchange rates used are annual averages; this involves a certain margin of error, especially if it is taken into account that the currencies of the Federal Republic of Germany and of Italy, for example, fluctuated in opposite directions.

<sup>56</sup> See table 18.

<sup>57</sup> UNCTAD, *op cit.*, table 8.

Figure 5  
**BREAKDOWN OF RETAIL PRICE KILOGRAMME OF ROASTED COFFEE,**  
**IN THE FEDERAL REPUBLIC OF GERMANY, FRANCE AND ITALY**  
*(Dollars)*



With these reservations, which only marginally affect the estimates, it is now possible to measure the share in the final retail price obtained by the producer in Colombia, El Salvador and Brazil, as well as that of the exporter country as such and thus to attain the main objective of the present study (see table 23).

Table 23

**COMPARISON OF PRODUCER'S PRICES AND FOB EXPORT PRICES IN COLOMBIA,  
EL SALVADOR AND BRAZIL, WITH FINAL RETAIL PRICES IN THE FEDERAL  
REPUBLIC OF GERMANY, ITALY AND FRANCE**  
(Percentages of final retail price)

	Colombia		El Salvador		Brazil	
	Pro- ducer's price	f.o.b. export price	Pro- ducer's price	f.o.b. export price	Pro- ducer's price	f.o.b. export price
Federal Republic of Germany	13.0	25.8	11.3	20.6	11.4	18.2
Italy	19.9	39.6	17.4	31.6	17.6	28.0
France	27.5	54.6	24.0	43.5	24.2	38.5

## V

### Conclusions

It is clear from the situation described that the producer countries need to obtain a larger share of the value added in relation to the retail price paid in the consumer country. There are several alternative ways of attaining this end, which will be examined here very briefly, and which include both action aimed merely at the maintenance of international prices and measures bearing on the actual mechanism of distribution of gains at the world level.

(1) Supporting export prices by means of international agreements (fixing of quotas, creation of inventories, regulation of supply, diversification, etc.) may be regarded as the traditional method, since longstanding experience exists in this respect. Without embarking

upon discussion of the efficacy of the international agreements signed in the past or currently in force (1962, 1968 and 1976), it may be pointed out that the last of these has been severely criticized on more than one occasion, and that in any event its objective is only to mitigate world price fluctuations and not to make any substantial change in the distribution of the value added.

(2) Unilateral action on the part of the producer countries as a whole (voluntary and concerted restriction of supply) would have better possibilities of bringing about a stable and substantial improvement in international quotations. But there are forty-six coffee-producing countries in the world, and hitherto it has been very difficult to

secure agreement among them even for less ambitious purposes. Moreover, a producers' association of such a type would need financial support in order, for example, to build up inventories. Lastly, there is some doubt as to whether the price-elasticity of world demand for coffee is as low as has always been thought, and the consumer response to the increases in 1976/1977 is highly suggestive in this respect.

(3) Exporting of processed coffee (roasted and/or soluble) has proved feasible in only a limited number of cases up to now. The difficulties of exporting roasted coffee stem, on the one hand, from the consumer's customary preference for blends of coffee from different sources, and, on the other hand, from the consumer markets' greater protection against the more highly processed forms of coffee and other primary commodities in general. Lastly, the control of consumer markets by relatively few enterprises, which are

sometimes big transnational corporations such as Nestlé, General Foods, Procter and Gamble, etc., seriously hinders access to marketing mechanisms (distribution chains, supermarkets, etc.). Much of what has just been said applies to soluble coffee too, and the conflict between Brazil and the United States in 1971 clearly shows what limits are set to the possibilities of marketing Latin American coffee in this form.

(4) Direct intervention in the consumer countries' markets, through the purchase of local enterprises or the establishment of new ones, is an interesting mechanism which so far has been tried out in only one instance: the purchase of the United States firm of Hills Brothers by a private group in Brazil. This might conceivably be one of the objectives of the proposed multinational Latin American coffee company. If a project of this type were to materialize, more than one country would have to take part, and an essential requisite would be an unequivocal political will on the part of governments.