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### INTERNATIONAL COFFEE REPORT

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### CRISIS IN THE COFFEE ECONOMY

by

Mohssen Massarrat \*

#### 1. Introduction

Coffee prices have fallen sharply since the quota regulations at the heart of the International Coffee Agreement were discontinued in July 1989. By December 1989, the ICA Composite Price had dropped by almost half from the January figure of 120 cents per pound (Figure 1).

The average coffee price of 81.7 cents per pound in 1989, against 118.2 cents the previous year, signified an income loss for coffee exporters of 36.5 cents per pound, or a total of US\$ 3.16 billion on exports of 65 million bags. Based on the average 1980 price of 161.02 cents per pound, the lost revenue in 1989 rises to 79.32 US cents per pound and altogether US\$ 6.87 billion. Every producer country suffered a cut, but hardest hit were the small monostructural coffee exporters like Burundi, Rwanda, Uganda, Guatemala, El Salvador, and Nicaragua, which depend on coffee for 40-75 per cent of their export revenues.

The grave consequences for producers of the fall in prices following the lapse for the time being of the Coffee Agreement go to show how beneficial it actually was for the stabilization of the coffee price and of producer incomes while it functioned. At the same time, the events demonstrated the fragility of such an agreement.

The current crisis of the Coffee Agreement was evidently caused by the unwillingness of the producer members of the International Coffee Organization to agree to a new quota arrangement. Brazil, above all, was said to have rejected a reduction of its quota. In view of

the diverging interests of the ICO members, the crisis could be attributed to national egoism and blame distributed accordingly. But such an interpretation would miss the mark and not do justice to the nature of the Coffee Agreement. The agreement cannot operate against the legitimate national interests of member states, but only when the individual interests (quota shares) are in harmony with the global interest of all member states (stable coffee prices). In the absence of such a consensus, the agreement is bound to run into a crisis and cannot regulate the market. Every member state, producer as well as consumer, then tries to exploit the situation for all it is worth. In this cutthroat competition, all producers end up as losers with less income.

Seen in this light, the pursuit of national interests appears not as the cause but rather as the consequence of the current crisis of the Coffee Agreement. The causes of the crisis lie deeper in the fundamental conditions of the world coffee economy and could provoke a new crisis even after the present one is overcome.

### 2. Structural overproduction, below-value price

A long-term view of the international coffee market reveals a persistent overproduction (Table 1) and hence the extraordinarily unfavourable position of the producers. It was evidently impossible in this market over long periods of time to adjust supply to demand. In functioning markets, like those for finished goods in industrialized countries, a temporary overproduction is usually followed by an equilibrium between supply and demand, or a temporary demand backlog. Here, in contrast, the sustained overproduction represents a

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<sup>\*</sup> Professor of Political Science, University of Osnabrueck, Postfach 4469, Federal Republic of Germany

Table 1
Long-term trends of the international coffee market

Coffee Year Oct- Sep	Supply (a) 1000 bags			Demand (a) 1000 bags			Surplus 1000 bags	Composite Price	Total exports of all coffee types (c)
	Produc- tion	Beginning stocks in producer countries	Total 1 + 2	Consumption in producer countries	Exports to consumer countries (b)	Total 4 + 5	Ending stocks  3 -6	.US cents/lb	US\$ 1000
1968	61 792	73 995	135 787	17 676	53 845	71 521	64 266	37.36	2 367 562
1969	62 214	64 980	127 194	17 326	53 146	70 472	56 722	38.71	2 403 989
1970	67 679	56 061	123 740	18 727	53 816	72 543	51 197	50.52	3 018 172
1971	76 041	51 750	127 791	17 731	53 326	71 057	56 734	44.66	2 685 717
972	74 647	51 530	126 177	17 558	58 565	76 123	50 054	50.41	3 220 527
973	70 204	48 402	118 606	17 323	60 257	77 580	41 026	62.16	4 292 832
974	78 094	43 738	121 832	16 897	57 592	74 489	47 343	67.95	4 199 243
1975	64 354	48 214	112 568	17 176	56 970	74 146	38 422	71.73	4 246 855
1976	64 268	37 411	101 679	17 485	58 141	75 626	26 053	141.96	8 392 886
1977	72 254	30 895	103 149	17 896	53 315	71 211	31 938	229.21	12 523 807
1978	80 900	33 308	114 208	17 818 _	_ 51 980	69 798	44 400	155.15	11 235 408
1979	78 126	31 649	109 775	18 786	64 785	83 571	26 204	169.50	12 410 810
1980	90 258	29 768	120 026	18 848	61 244	80 092	39 934	150.67	11 768 460
1981	91 089	41 664	132 753	19 689	59 465	79 154	53 599	115.42	8 087 943
1982	90 526	49 536	140 062	20 062	63 534	83 596	56 466	125.00	9 002 860
1983	85 722	54 272	139 994	18 632	65 731	84 363	55 631	127.98	9 238 828
1984	88 367	51 138	139 505	19 322	70 018	89 340	50 165	141.19	10 665 563
1985	82 674	51 039	133 713	19 236	68 944	88 180	45 533	133.10	10 841 149
1986	95 803	44 729	140 532	19 805	68 879	88 684	51 848	170.93	14 261 587
1987	96 171	47 677	143 848	19 148	73 531	92 679	51 169	107.81	9 432 446
1988	93 295	61 882	155 177	19 730	62 675	82 405	72 772	115,96	

(a) Data include all types of coffee

(b) Green coffee exports to consumer countries are identical with the total demand for green coffee in these countries

(c) Calendar year

Sources: International Coffee Organization and own calculations

structurally determined anomaly accompanied by considerable latent competitive pressure on the producers.

Under the burden of structural overproduction, sharp conflicts over qutoas are inevitable at every new quota distribution, the coffee price tends to sink to a level below its value, and the Coffee Agreement faces the potential danger of breakdown. Member states producing mild coffees may point to the rising demand for these types on the world market to argue for higher quotas. But robusta producers can advance just as good arguments for the maintenance of their present quotas. The pressure forcing all producer countries to seek higher quotas emanates from the bulging coffee warehouses. Worsening terms of trade for coffee and below-value coffee prices are the unavoidable result of overproduction. As figure 2 illustrates, the coffee price rises and falls inversely with the level of overproduction.

The relative stability of the coffee price despite long-term overproduction resulted from the price-stabilizing function of the Coffee Agreement before it itself became the victim of overproduction. The ruinous competition took place in the market outside the agreement (developing countries and centrally planned economies) where coffee was sold at prices up to 50 per cent under the ICO world market level (World Bank 1986: 5) Now this ruinous competition has become global. The world coffee market will not return to normal and the price will not reach its real level (equilibrium price) unless the producers can reduce the structural overproduction and create the conditions for a balance between supply and demand.

Before this can be attempted, it is necessary, first of all, to make an analysis of the causes for structural overproduction.

Figure 1

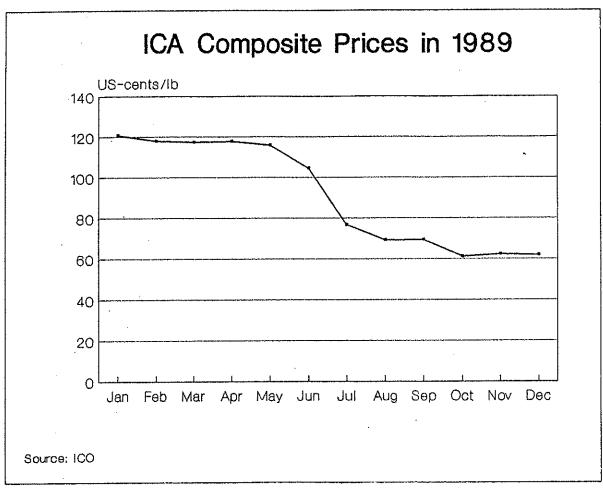
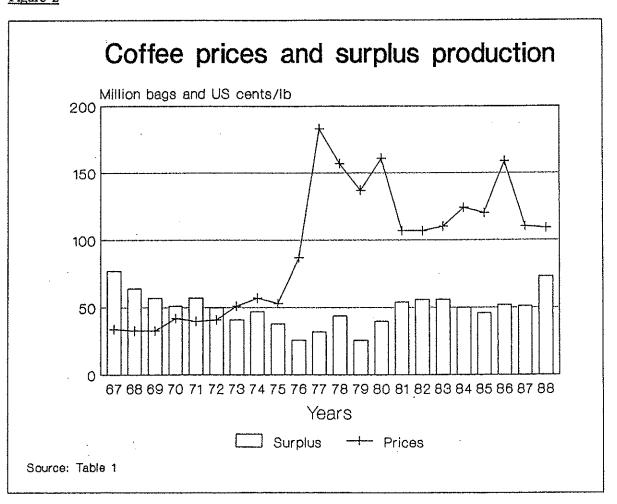


Figure 2



### 3. Causes of structural overproduction

The causes for structural overproduction of coffee are manifold and have to be examined on a nation by nation basis. In the following, the most important of these are outlined.

# 3.1 Displacement of competition by increasing productivity and reduction of cost.

Investigations show that coffee yields have risen considerably in a number of countries, thanks to the use of fertilizer and plant protection chemicals, greater plant density, and new varieties. As a rule, the increases in productivity have led to lower production costs. In free markets, cost advantages are exploited to expand production and sales in order to boost profits. If the demand does not change correspondingly, this behaviour initially results in overproduction, but eventually forces less competitive players to reduce or cease production, so that under normal conditions the overproduction crisis is temporary and ends up in a balance between supply and demand. The structural crisis in the world coffee market has followed a different pattern and must therefore have other causes.

### 3.2 Surviving by overproduction

Some observers have blamed overproduction on the "coffee cycle", the interval between planting and harvesting, pointing out that it takes five to eight years for supply to adjust to demand when coffee prices change. (Trandinh 1982: 9f) The interaction between price change and the coffee cyclé in fact helps to explain short and medium-term fluctuations and shifts in the coffee supply, but not the chronic and structural overproduction. If producers were able to adapt to changed market conditions, overproduction and low prices would be succeeded by a supply shortage and higher prices at the end of each coffee cycle.

It is apparent, however, that this precondition is not being fulfilled (Streeting/Elson 1971: 16f); indeed, coffee producers have been guilty of "price-inverse behaviour" (Bohrich 1965: 98f). Moreover the producers, and particularly those in the developing countries, don't lower their production because of their low wage structures; thus there is supply inelasticity (Trandinh 1982: 18). Faced with the problem of structural overproduction, the significance of this behaviour, which appears not to reflect the market forces, is generally disregarded in expert literature.

Reflected in this contrary behaviour and the consequent supply inelasticity is the fact that, labouring under

monostructural constraints, these growers are guided not by profitability criteria but simply by the need to survive in a traditional mode of production. In part subsistence farmers in part producers for the world market, their reaction to lower world market prices is to increase, not reduce, production in order to maintain their incomes and essential purchasing power. They increase production by putting in more labour from family members, greater tree density and more intensive cultivation, more careful harvesting, and where possible expanding the area planted. (Massarrat 1988)

Broadly speaking, two conflicting modes of production clash in the world coffee market: on the one hand, medium-sized and large growers, producing for profit and capable of diversification and the other, subsistence farmers, producing by traditional methods and fighting for survival in highly monostructural systems. The former seek to dispose of their higher yields and surpluses by increasing their market share at the cost of the latter, but these respond likewise with greater production, although this can only lead to a further drop in prices.

The dichotomy of production systems plays an important role in the structural divergence of supply and demand in the world coffee market and the price disequilibrium associated with chronic overproduction. The weight of subsistence farmers in coffee production has not so far been sufficiently investigated. But small growers working in the traditional way clearly account for a substantial share, particularly in Africa. According to de Graaff, the average coffee area was 10.7 hectares in Brazil, 3.4 in Colombia, 2.7 in Costa Rica, 0.4 in Kenya, 0.1 in Rwanda, 1.1 in Cameroon, 3.0 in the Ivory Coast, and 1 hectare in Indonesia. (de Graaff 1986: 76)

### 3.3 Overproduction and Third World indebtedness

Like subsistence farmers, whole countries dependent on coffee exports are forced into overproduction by their foreign indebtedness. Despite falling or stagnating prices, countries encourage expansion of coffee production and exports at the expense of growing food in order to service the debt and maintain their import capacity. All coffee exporters are heavily indebted, and in most cases, notably Brazil, the revenue from coffee exports is insufficient to service the debt. The pressure to increase exports is particularly strong on countries like Colombia, the Ivory Coast, El Salvador, Guatemala, Costa Rica, Kenya, Uganda, and Cameroon, whose budgets are mainly financed by the earnings from and taxes on coffee exports (Table 2). The connection between foreign indebtedness and overproduction reinforces the market disequilibrium arising from the dichotomy of production systems.

Caught in the imperatives of the struggle to survive, foreign indebtedness and other structural constraints, producers may hope to increase their earnings in the face of falling prices by expanding production. But this can only turn out to be an illusion, because the greater output leads to increased surpluses on the world market and adds to the pressure on prices, so that in the end larger volumes of production and exports do not result in higher earnings. While incomes stagnate, the inputs of labour and other resources increase. The structural overproduction does not free labour for the development process, but rather binds it increasingly without additional growth and thus hampers development. The sale of coffee below its true value causes a permanent transfer of real income to the coffee consumer countries which in essence are the beneficiaries of the structural overproduction crisis. On the other hand, the producers are caught in a vicious circle of overproduction, price erosion, and stagnating incomes. The possible increase in the world market demand for coffee as a result of the opening of the Eastern bloc economies and satisfaction of their pent-up requirements may temporarily ameliorate the overproduction but will not remove its structural causes which will soon reassert themselves.

Changes in the world market shares of the various producer countries reflect the sharp competition among suppliers. Brazil accounted for only 22.7 per cent of world exports in 1987, against 33.5 per cent in 1965, whereas Colombia and a number of smaller producers, like India, Indonesia, Mexico, Kenya, Costa Rica, and Honduras, increased their shares (ICO 1989: Agreement No. 13/88, Table 3).

This alteration in market shares results from the massive expansion both in supply and competition. Which of the other elements stated above have led to which individual responses must be examined on a case by case basis.

### 4. Conflicting views of the coffee price

There is no uniform definition of the coffee price. The International Coffee Agreement, according to Article 1, pursues the aim of assuring equitable prices to consumers and adequate prices to producers. These are imprecise concepts, open to the subjective interpretations of conflicting interest groups. Can the world market price, freely formed without regulations and quotas, be taken as the real price?

This, at any rate, is the view held by the German Institute for World Economy at the University of Kiel. They are opposed in principle to commodity controls through international agreements, and hold to the view that the coffee agreement resulted in a transfer of re-

sources in which the exporting members and importing non-members gained while the importing members lost. (Hermann 1988)

The cardinal error in such ideas is that they assume a functioning market in line with classical economic theory, i.e. a market in which prices are freely formed and supply can adjust to demand to establish an equilibrium. The real price in such a market is then the equilibrium price. If supply chronically exceeds demand (structural overproduction), the price falls below the equilibrium and to less than its value. Conversely, persistent shortage (monopoly conditions) raises the price above the equilibrium and real value. Proponents of free trade in coffee advocate free price formation and oppose regulation but disregard the basic equilibrium requirements indispensable for a functioning market. The coffee market has been characterized by structural overproduction and below-value prices over a long time, except at the time of the frost damage in Brazil in 1975 and the drought in 1985. Consequently, the quota regulations of the Coffee Agreement at most reduced the losses suffered by producers but did not assure them gains at the expense of the consumers. These losses have become even greater following the failure of the agreement.

The foregoing arguments clearly illustrate that when considering the price for coffee and other primary goods it is not sufficient to start from a basis of the speculative price which might be received. Rather consideration should be given to the equilibrium price and ranges on either side which might be acceptable.

## 5. Coffee equilibrium price by means of a new ICO-policy

The equilibrium or real market price for coffee would assert itself if the forces making for overproduction were reduced. To this end, several issues would have to be addressed.

a) Efforts to raise yields through increased use of fertilizer, pesticides, and more productive varieties would undoubtedly have economic advantages in the short run.

Whether these measures are profitable in the longer term is uncertain and considering their long-range consequences they are open to question.

Agreement to restrict steps in this direction would save expenditure, achieve higher prices by reducing overproduction and protect the environment.

b) Those producer groups and states which for structural reasons have been forced to produce for the world

market, but which neither now nor in the future have the conditions to be competitive at the global level, should be assisted to implement structural adjustment strategies in order to diversify or concentrate on their domestic markets (Strategies of differentiated structural adaption.)

c) Countries highly dependent on coffee exports and with large balance-of-payments deficits and foreign debts need to be given generous bridging loans to overcome their financial problems, because without aid they will continue to promote the expansion of coffee production and exports in the hope of boosting their foreign exchange earnings.

Steps to reduce overproduction and establish a functioning world coffee market would have to be backed by a reorientation of the International Coffee Organization from a policy of regulating marketing through quotas to one of regulating production and supply. If the producing countries were able to adjust their output to world demand and equilibrium prices prevailed for the different types of coffee in the interest

of both producers and consumers, the market itself would regulate the share of each exporter and type of coffee. The Coffee Agreement would not become redundant. But its regulatory function would be limited to preventing speculation and excessive price fluctuations due to natural catastrophes. It would also have the new task of organizing the financing of the measures necessary to establish and maintain a functioning world market. Such an agreement would probably be less expensive and more effective in avoiding a one-sided resource transfer through a below-value coffee price than the present one which is permanently threatened by failure.

An important prerequisite for the reorientation of the International Coffee Organization and supporting measures is the availability of comprehensive, systematic and uniformly comparable information on the current competitive position of the various producer groups, regions and countries. Useful experience in this respect can be obtained from countries like Costa Rica where the compilation of such information is furthest developed.

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