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## A Comment on Greenstone's "The Coffee Cartel: Manipulation in the Public Interest"

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reenstone's article, "The Coffee Cartel: Manipulation in the Public Interest," was timely and informative. The purpose of the present article is to provide more information concerning the campaign of price manipulation itself, particularly with regard to the cartel's coordinated buying tactics, its overall approach, and the timing of its moves. Developing countries, which earlier seemed incapable of making the mechanisms and institutions of world trade work to their advantage, succeeded for a time in copying OPEC's example. It is worth noting how they did it.

Central American market participants who were familiar with the details of the manipulation, or who participated in carrying it out, provided an account of the manipulation. Their account is the version that was widely circulated in Central America during 1977-1978.<sup>2</sup> It is interesting that the scheme as executed was profitable from the beginning; it was not a losing operation until as late as 1980. In its early manifestation it was quite different from the usual holding actions in which producer groups engage. This distinction is important, and until today has not been shown clearly to American audiences.

In April 1977 world coffee inventories reached their lowest level of the past 50 years. Statistical services do not agree on what the exact level was that month, primarily because the Instituto Brasileño de Cafe kept secret the data on its own inventory level. Rumors circulated that in the years preceding the 1975 frost, Brazil had condemned and destroyed 10-20 million bags of coffee. That cut into its famous 80-90 million bag peak inventory from 1966. In any event the accepted

<sup>1</sup> Greenstone, Wayne D. (1981): "The Coffee Cartel: Manipulation in the Public Interest," The Journal of Future Markets, 1(1): 3-16.

<sup>2</sup>During 1976-1978 the author was associated with the Central American Institute of Business Administration (INCAE is its Spanish acronym), located in Managua, Nicaragua. The institute's staff and student body were drawn from all the Central American republics. Several people there were coffee experts, and many Institute alumni were coffee growers, traders, or exporters. Three in particular were familiar with the activities of the Compania Salvadorena de Cafe, which is one of the organizations accused of having manipulated the market. A fourth person was the Nicaraguan government's representative to the meetings of Pancafe.

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figure for world coffee inventories was around 6 million bags, or one month's consumption. Central American coffee traders argued that although Brazil's inventory at that time may have been as high as 10 million bags, it did not count because the coffee was of such poor quality that it could only be sold as filler for

cheap blends.

More to the point, the "C" contract which trades on the Coffee, Sugar and Cocoa Exchange calls for the delivery of "other milds": Arabica coffee grown in Mexico, Central America, and Columbia. Brazilian coffee is not deliverable, and neither is African-grown Robusta coffee. For that reason, from the viewpoint of both speculators and would-be manipulators, the size of Brazil's reserve stock did not matter directly. What mattered was that inventories of deliverable grades were extremely low, both in New York and in the countries of origin. In practice, the relevant countries of origin for the "C" contract are Mexico, Guatemala, El Salvador, and Costa Rica. Columbian coffee trades at a premium in the cash market relative to the "other milds," and hence is not often used to make delivery.

The price of "other milds" peaked at \$3.40/lb in April 1977. It then declined until the date of the first alleged manipulation, which involved the July 1977 contract (see Table I). Greenstone states that Brazil and El Salvador reportedly were buying the May, June, and July 1977 contracts. More precisely, the May delivery was not used for the manipulation because that is the month that Central American export houses routinely sell to hedge their cash purchases of

late harvested green coffee.

In Central America coffee is picked beginning in October and continues until February (see Table II). It is then washed and processed into green coffee, moved to ports, and shipped to markets. The processing and marketing cycles take from two to six months. Because of this annual cycle, March and May are the "new crop" deliveries, and December is the "old crop" delivery. In April and early May of 1977, the May delivery was the spot month. It could fluctuate without limit, and carried a higher margin requirement than the more distant months such as July, September, and December 1977. Thus, there are several reasons why July was the month for the cartel to buy. Their buying would not be offset by routine export house selling; the fear of another Brazilian frost in June or July would keep speculators from selling the July delivery short, and the margin requirements would not become onerous until the May contract expired.

There were only two problems with buying the July 1977 contract, from the cartel's standpoint. The first was that coffee prices in general were falling. The southern hemisphere coffee harvest begins in April and continues until July. Inventories of Brazilian and Robusta coffees were therefore rising, and projections were that inventories would increase from then onward. That was serious, since the cartel contemplated buying in a falling market; but it was not as serious as the second problem: Shiploads of deliverable green coffee from Central American ports of origin would be arriving in New York from May onward. When the price peaked in April 1977, there was no green coffee in Central America. Most of the crop had been picked, washed, sold, and shipped. The little that remained was in strong hands. The problem was that the green coffee had been shipped and would be arriving at the delivery point. The "C" contract calls for delivery in New York. It appeared possible that when the July 1977 contract expired, green "other milds" would be abundant at the delivery point and nowhere else—a cruel irony.

Table I

	Ex-Dock Prices Other Mild Arabicas		N.Y. Coffee Exchange	N.Y. Coffee Exchange Number of Open Positions
	New York	Hamburg	July 1977	July 1977 Contract
June 1, 1977	<b>\$</b> 268.00	\$291.72	\$266.50	1304
June 2, 1977	263.50	287.15	263.50	1299
June 3, 1977	263.00	284.38	263.00	1309
June 6, 1977	272.00	284.51	277.83	1291
June 7, 1977	270.00	284.70	276.66	N.A.
June 8, 1977	275.00	283.76	276.00	1272
June 9, 1977	265.00	279.62	270.33	1170
June 10, 1977	258.00	275.42	262.64	1162
June 13, 1977	253.00	269.75	254.00	1125
June 14, 1977	250.00	265.59	250.30	1110
June 15, 1977	237.50	257.81	237.28	1078
June 16, 1977	223.00	251.19	224.43	1108
June 17, 1977	255.00	257.64	255.00	1126
June 20, 1977	269.00	258.93	268.29	1097
June 21, 1977	268.50	260.12	268.96	1062
June 22, 1977	290.00	261.62	291.00	1048
June 23, 1977	280.00	262.48	281.13	1005
June 24, 1977	268.00	259.27	273.00	945
June 27, 1977	265.00	254.21	273.50	842
June 28, 1977	263.00	251.16	273.85	801
June 29, 1977	254.50	246.44	272.00	789
June 30, 1977	255.00	244.55	287.00	758

Table I illustrates several points. First, for the last two weeks of June 1977, the cash price of deliverable coffee in New York rose above the cash price of the same grade in Europe. This is unusual, because shipping costs from points of origin to Europe are higher than to the U.S. Second, the expiring July 1977 contract, which tracked the New York cash price closely at the beginning of the month, rose above the cash price as the month went on, and finished 32c/lb above cash. Third, the open interest in the July 1977 contract did not fall steadily during the month; it fluctuated, and remained high as the notice date approached. As Table III will show, the open interest remained alarmingly high in comparison with the number of bags certified for delivery against the expiring contract. These numbers portray a classic short squeeze.

Data for Table I are from the International Coffee Organization and the New York Coffee and Sugar Exchange, quoted in Coffee 1977-78, Institute Brasileiro de Cafe, New York, 1978, various pages.

On the other side of the Atlantic, London inventories of Robusta coffee were rising from their low point of April 1977. Robusta coffee normally sells for less than Arabica coffee because it is inferior in taste and aroma. Nevertheless, it competes with Arabica because it serves as a filler in blends and because it gives a high yield and acceptable flavor in the manufacture of soluble coffee.

The London coffee contract called for delivery of Robusta coffee in London. (Note: Later, after the period of the alleged manipulation, a London Arabica contract was launched. It was to be traded in dollars and was to be similar in other respects to the "C" contract which trades in New York. It has never attained much trading volume.)

Table II
PD. 2—PERIODS OF HARVESTING AND EXPORTING OF COFFEE

Country	Beginning of Crop-Year	Main Harvesting Period	Main Exporting Period
Colombia	October	All year <sup>b</sup>	All year
Kenya	October	October-March	November-April
Costa Ricaf	October	September-February	November-March
El Salvador <sup>f</sup>	October	November-March	December-March
Guatemala <sup>f</sup>	Ocotber	August-March	October-April
Honduras	October	October-March	November-April
Mexicof	October	October-March	December-May
Nicaraguaf	October	November-February	December-March
Panamaf	October	October-December	November-January
Venezuela <sup>f</sup>	October	October-January	November-February
Indiaf	October	October-February	December-March
Ethiopiag	October	October-December	December-March
Benin <sup>h</sup>	October	November-February	January-April
Cameroonh	October	November-January	December-March
Central African Emp.h	October	November-March	January-April
Ivory Coasth	October	November-April	December-March
Togoh .	October	November-February	January-April
Ghana <sup>h</sup>	October	October-March	November-April
Nigeria <sup>h</sup>	October	November-March	January-April
Sierra Leoneh	October	December-February	February-April
Uganda <sup>h</sup>	October	All year <sup>c</sup>	All year
Zaire <sup>h</sup>	October	All year <sup>d</sup>	All year
Trinidadc	October	November-February	December-March
Ecuador <sup>f</sup>	April	June-October	September-December
Peru <sup>f</sup>	April	April-October	May-October
Burundi <sup>f</sup>	April	April-September	June-September
Rwanda <sup>f</sup>	April	March-August	May-October
Brazile	April	July-October	
Malagasy Rep.	лріп	July-October	All year
(Madagascar)h	Anril	May October	July November
Angola <sup>h</sup>	April April	May–October May–September	July–November July–November
Indonesiah	-		•
Tanzania <sup>l</sup>	April	May-December	July-February
	July Tuly	October-February	December-April
Dominican Rep. <sup>f</sup> Haiti <sup>f</sup>	July Inde	September-February	November-March
	July	August-March	October-April
Congo (Brazzaville) <sup>h</sup> Gabon <sup>h</sup>	July	September-October	November-December
Gabon"	July	May-September	June-October

<sup>&</sup>lt;sup>a</sup>Plus the following countries, without indication of the respective periods of harvesting and exporting: Jamaica, Guinea, and Liberia (beginning of the crop-year: October) and Bolivia, Paraguay, and Papua and New Guinea (beginning of the crop year: April).

<sup>&</sup>lt;sup>b</sup>Maximum period: October-March.

<sup>&#</sup>x27;Maximum period: November-February.

<sup>&</sup>lt;sup>d</sup>Maximum period: December-February.

<sup>\*</sup>Colombian Mild Arabicas.

Other Mild Arabicas.

<sup>&</sup>lt;sup>g</sup>Unwashed Arabicas.

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Source: Instituto Brasileiro do Café (Brazil)—International Coffee Organization and Pan-American Coffee Bureau (other countries).

As the May 1977 contract expired in New York, inventories of Robusta were building in London and inventories of Arabica were arriving in New York. To carry out a successful short squeeze, the cartel had to prevent the buildup of deliverable physical inventory at the delivery points.

The maneuver was done in this way. The Instituto Brasileño de Cafe (IBC) bought London Robusta futures and also bought physical Robusta coffee in London. In addition, the IBC bought shipments of Robusta which were still on the high seas. The IBC shipped to Brazil both the Robusta coffee it bought in London and the shipments afloat. It announced that it needed the Robusta coffee for blending into the input mix in its soluble-coffee-manufacturing activities. Meanwhile, the Compania Salvadorena de Cafe (at the time headed by Ricardo Failla) bought green Arabica coffee both in New York and in shipments afloat, and sent the latter directly to Europe to keep them from reaching New York. At the same time the Compania Salvadorena de Cafe continued buying the expiring July 1977 futures contract.

Because of this maneuver, inventories of coffee certified for delivery against the July 1977 "C" contract did not rise until the shorts had already been squeezed. On June 30, 1977, the July 1977 "C" contract settled at \$2.87/lb. ICO indicator physicals (other mild Arabicas exdock) were quoted at \$2.55 in New York and \$2.4455 in Bremen, West Germany. Because of the higher shipping cost between Central America and Europe, other mild Arabicas are usually cheaper in New York than they are in Bremen. Table III shows the figures for certification of coffee deliverable against the "C" contract. During the month of June 1977, only 8750 bags of coffee were certified for delivery. This is enough for only 35 futures contracts. Of course, coffee certified earlier could have been delivered if it had still been available. On June 30, 1977, there were no fewer than 758 open July 1977 contracts. Ironically, during the month of July 1977, after the shorts had already been squeezed, 128,486 bags were certified for delivery.

The maneuver worked. In late June and early July 1977, the "C" contract rose precipitously, gaining more than 40c/lb in 30 days (see Table I). Meanwhile, the reference cash price of Brazilian coffee in New York fell steadily, dropping more than 25c/lb in the same period. A similar drama was going on in London.

The December 1977 contract was easier to manipulate. In December 1977, the scarcity of Arabica coffee continued because the Central American harvest had just begun. No new-crop coffee could reach New York before the December contract would expire. Throughout the late summer and fall the roasters had been buying Arabica for their blends according to their normal schedule. Inventories of Robusta and Brazilian coffee were by then reaching adequate levels, and the supermarket shelf price of popular blends was falling, but deliverable Arabica coffee was therefore scarce in New York, and much of that belonged to the Compania Salvadorena de Cafe. To squeeze unwary speculators required no more than to buy the December 1977 contract and demand delivery.

The 1978-1979 manipulation was successful primarily because coffee zones in Brazil were hit by a light frost on May 31, 1979. The Bogota Group began August 1978 with a fund of \$140 million. At first the Group bought each expiring contract month and took delivery of green coffee. This was not as costly as it sounds, because the member countries were able to keep shipments of green coffee from

<sup>&</sup>lt;sup>3</sup>Data from the International Coffee Agreement, quoted in *Coffee 1977-78*, Instituto Brazileiro de Cafe, New York, 1978, various pages.

## Table III CERTIFICATION OF COFFEE DELIVERABLE AGAINST THE "C" CONTRACT

January 1977	1,740 bags
February 1977	58,899 bags
March 1977	13,000 bags
April 1977	9,907 bags
May 1977	13,008 bags
June 1977	8,750 bags
July 1977	128,486 bags

Source: Instituto Brasileiro do Cafe (Brazil)— International Coffee Organization and Pan-American Coffee Bureau (other countries).

arriving in New York and depressing the New York cash price. Instead they sent green Arabica coffee to Long Beach and New Orleans, in effect prolonging the scarcity of green Arabica coffee in New York.

When the frost hit they had long positions in the July 1979 contract. Member countries coordinated their buying with Brazil's announcements of frost damage. The July contract was particularly appropriate for their purpose because by then it was the spot month and hence fluctuated without limit. The cartel could buy additional July contracts using the profits from the July contracts it held before the frost. This coup raised the cartel's bankroll by a reported \$300 million.

From that time on, Pancafe operated in a comparatively mundane fashion. It bought futures contracts and physical coffee in a falling market, intending to use its resources to hold up the price as long as possible. Rising production in the face of stagnant consumption finally prevailed, and Pancafe exhausted its resources in the spring of 1981.

## NOTE ON SOURCES

The account provided in this article is the version which circulated among large growers and exporters in Central America in 1977. The principals who told me what was going on are as follows:

- (1) Mr. Pedro U., Salvadorean coffee grower. I had many conversations with him during the period October 1976-June 1977.
- (2) Mr. Fabio Gallo, Nicaraguan coffee grower, processor, and exporter. I talked with him on three occasions during the period March 1977-July 1977.
- (3) Mr. Hector Ramos, Nicaraguan coffee grower. I had many conversations with him during the period March 1977-June 1978.
- (4) Mr. Duilio Baltdorano, Director of Cafe Presto, Nicaragua's soluble-coffee manufacturer, and a leading coffee exporter. He was Nicaragua's representative to the meetings of the Bogota Group and Pancafe during the relevant period.
- (5) Dr. Manuel Olave, Professor of Economics and Director of the Consulting Division at INCAE. He was a consultant to Ricardo Fialla and the the Compania Salvadorena de Cafe from late 1976 until early 1978.