

THE STRUGGLE FOR CONTROL
OF A COMMODITY CHAIN:
Instant Coffee from Latin America*

John M. Talbot
University of California, Berkeley

Latin America has long provided most of the world's coffee. At the same time, dependence on coffee exports has profoundly affected many Latin American countries. This research note will analyze the relationship between primary-commodity exporting and development by means of a case study of attempts by Latin American countries to industrialize their exports by exporting instant coffee rather than green coffee beans. A commodity-chain approach will be used to explain how the initiatives of Latin American states and private firms have responded to and changed the structure of the global system of producing instant coffee. Three Latin American countries—Brazil, Colombia, and Ecuador—have become significant exporters of instant coffee, but the benefits they have realized from this effort have been limited by the control exercised by transnational corporations over the global production system.

The commodity-chain approach has been developed by world-systems theorists such as Terence Hopkins and Immanuel Wallerstein (1986) and Gary Gereffi and Miguel Korzeniewicz (1990; see also Gereffi, Korzeniewicz, and Korzeniewicz 1994). A commodity chain has been defined as "a network of labor and production processes whose end result is a finished commodity" (Hopkins and Wallerstein 1986, 159). The chain has been conceptualized as a series of nodes linked by various kinds of transactions. According to one explanation, "Each successive node within a commodity chain involves the acquisition and/or organization of inputs (e.g., raw materials or semifinished products), labor power (and its provisioning), transportation, distribution (via markets or transfers), and consumption" (Gereffi, Korzeniewicz, and Korzeniewicz 1994, 2). At each successive node, the commodity is transformed in some way, value is added to it, and profits are generated. A key question about a commodity chain is, how

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does its structure change over time? Structural change can involve reorganizing production within one or more nodes of the chain, changing the ways in which the nodes are linked to one another, or changing the geographic location of the nodes. Changes in structure result from “the complex and diverse strategic choices pursued by households, states, and enterprises” (Gereffi, Korzeniewicz, and Korzeniewicz 1994, 11).

Gereffi has argued, “the development prospects of countries are conditioned, in large part, by how they are incorporated into global industries” (1995, 44). States attempt to change the nature of their countries’ relationships to the world economy by adopting development strategies that are sets of policies designed to move countries into more advantageous global niches. A major goal of these strategies is to maximize the shares of income and surplus remaining inside each country along all the commodity chains linking them to the world economy. This aim brings states into conflict with the transnational corporations controlling the various chains. States and transnationals then struggle over the nature of the nodes and links of the chain and over their control. Both sides attempt to control the nodes to which the largest share of the surplus flows, to create new nodes that will capture larger shares of the surplus, or to redirect politically a larger share of the surplus to the nodes that they already control.

Most studies of development strategies have focused on policies at the aggregate level, characterizing them according to such categories as import substitution or export orientation (Haggard 1990; Gereffi and Wyman 1990). While recognizing that states can adopt different policies for various types of commodities, such studies generally have not assessed the strategies adopted for specific commodities. When they have, such studies have focused mainly on heavy industries like automobile manufacture in the newly industrializing countries. For smaller countries heavily dependent on primary-commodity exports, forward integration into the processing of the commodities that link them to the world economy can also be an important development strategy.¹ But this strategy has not been analyzed in the literature on development strategies or in that on commodity chains. The most important studies of this strategy have been made by analysts of mineral-exporting countries (see Moran 1974; Stephens 1987; Barham, Bunker, and O’Hearn 1994). Evelyne Huber Stephens argued that this strategy is intended “to gain greater state control in order to . . . promote forward and backward integration and market diversification, and to gain greater revenue as a source for investment” (1987, 63).

1. Forward integration refers to a strategy of industrializing exports. Rather than exporting primary commodities in raw form, producer states take initiatives to encourage as much processing of the commodity as possible before it leaves the country. They thus attempt to move as many stages of the commodity chain as possible within their borders. This strategy is undertaken to increase the income and profits from the commodity that are retained in the country and to generate further backward linkages to the economy in order to stimulate development.

Barham, Bunker, and O'Hearn (1994) have noted that the possibilities for pursuing this strategy successfully depend in part on the basic economic and ecological characteristics of the primary commodity in question.

The instant-coffee commodity chain emerged from the coffee commodity chain, and its structure was influenced by the nature of coffee as a product. A tropical product, coffee is grown only in peripheral and semi-peripheral countries but is consumed mainly in the core. Green coffee beans can be stored for long periods, while roasted coffee rapidly goes stale. Thus world trade in coffee has traditionally consisted of exporting green coffee beans from the periphery or semi-periphery to the core, where it is roasted and ground and sold to consumers. This basic characteristic of coffee precluded a strategy of forward integration. Consequently, coffee-producing countries focused on a strategy of limiting output in order to raise world-market prices as a means of increasing profits from their coffee exports (Talbot n.d.).

Instant coffee represented the first processed coffee product, ready for final consumption, that could be stored for long periods and could therefore be produced in coffee-growing countries and exported to core markets. Its invention thus opened the possibility for a strategy of forward integration. The development of instant coffee also created a new product niche in core markets and enabled producers in coffee-growing countries to compete directly with the core-based coffee-processing transnational corporations for a share of this niche.

This research note will analyze the struggle for control over the instant-coffee commodity chain. Because instant coffee emerged as a product for the mass market only after World War II, analysts can observe the ways in which the structure of the chain was conditioned by the larger structure of the world economy at the time it emerged as well as the ways in which this structure was altered over time by competition among transnational corporations and peripheral producers. The outcome of this competition illustrates both the possibilities and the limits of a development strategy based on industrializing primary-commodity exports. To understand how this struggle developed, it is first necessary to understand how the instant-coffee strand of the coffee commodity chain evolved.

A BRIEF HISTORY OF INSTANT COFFEE

In its early years, instant coffee was associated with war.² Military commanders sought a way to give their troops in the field a caffeine boost

2. Instant coffee is usually referred to as "soluble coffee" by those in the coffee trade. This section is based on numerous articles in *Tea and Coffee Trade Journal*: William Kappenberg, "Latest Developments in Soluble Coffee," Aug. 1952, pp. 22–24; Michael Sivetz, "History of the Soluble Coffee Industry," Feb. 1985, pp. 5–10, and "From Humble Beginnings," June 1985, pp. 3–4; Dan Bloch, "Coffee Technology—How It Spreads," Feb. 1985, pp. 10–12; Ralph Colton, "More Off-Shore Soluble Coffee," July 1982, pp. 16, 38–39; Samuel Lee, "The History

without having to transport cumbersome equipment for brewing coffee. The earliest experiments and patents for instant coffee date back to the U.S. Civil War; further experiments were conducted during the Spanish-American War. Instant coffee was first produced commercially in the United States beginning in 1906, by a European immigrant named George Washington. The G. Washington Coffee Company continued to sell instant coffee in the U.S. market into the 1940s.³ Instant coffee received a further boost during World War I, when the U.S. Army purchased it for some troops stationed in Europe. But this early instant coffee was never more than a novelty item. By most accounts, it was of poor quality and had a somewhat foul taste. The first major advance in instant-coffee production occurred in the 1930s, when Nestlé technicians, in consultation with Brazilian coffee officials trying to find ways to dispose of their huge coffee stockpiles, realized that the spray-drying technology being used to produce powdered milk could be adapted to make powdered instant coffee.

Commercial development of instant coffee for the consumer market was interrupted by World War II. At the same time, the U.S. government greatly stimulated the industry's development by making instant coffee a standard component of the rations given to U.S. troops and then buying massive quantities. Because Nestlé, G. Washington, and a few other small producers existing at the time could not begin to meet this demand, about ten new manufacturers went into business during the war. U.S. military purchases not only created an instant demand but also exposed millions of young men to instant coffee as a convenient consumer product.

During the postwar period, U.S. consumption of instant coffee increased rapidly, reaching by 1960 some 20 to 25 percent of total U.S. coffee consumption, which was itself increasing. The companies that had manufactured it for the military competed for shares of this expanding market. Three major players rapidly emerged: Nestlé, Borden (another producer of spray-dried milk), and General Foods, whose Maxwell House division was already leading in the U.S. market for roasted and ground coffee. Also in the early 1950s, ten medium-sized roasters serving re-

of Soluble Coffee," Oct. 1988, pp. 3-4; James Quinn, "India Leaps, Then Looks: How Do Your Solubles Grow?" Oct. 1952, p. 22; James Wood, "Place of Soluble Coffee in the U.S. Market," Aug. 1956, p. 26; and Richard Blun, "Soluble Coffee Marketing IS a Local Problem," Aug. 1957, p. 30. I have also drawn on the following unsigned articles in *Tea and Coffee Trade Journal*: "Soluble Coffee Has Long Served Country," Aug. 1954, p. 20; "The Origin and Development of Nescafé," Aug. 1958, p. 22; "Soluble Coffee Process Examined," Feb. 1986, pp. 6-10; and "How Instant Coffee Was Invented," Feb. 1988, p. 18. See also "Offshore Solubles," *World Coffee and Tea*, Sept. 1963, p. 40.

3. In the 1940s, the G. Washington Coffee Company was acquired by American Home Products Corporation, which continued to sell G. Washington instant coffee in the U.S. Northeast in the 1950s. In 1961 Tenco purchased the original G. Washington plant in New Jersey, and the brand disappeared. See "G. Washington Reports Improved Coffee Sales," *Tea and Coffee Trade Journal*, Apr. 1954, p. 66; and "American Instants Plant Bought by Tenco Division," *World Coffee and Tea*, Mar. 1961, pp. 27-28.

gional markets mostly in the eastern U.S. pooled their resources to form Tenco, a firm established to manufacture instant coffee to be packaged under the labels of each of the investing companies. Tenco rapidly became the third-largest instant-coffee manufacturing company, after Nestlé and General Foods. Tenco also produced "private-label" instant coffees for dozens of small roasters and grocery chains.⁴

Instant coffee was on the cutting edge of the "durable foods" introduced into the U.S. market during the 1950s (Friedmann 1991), along with other new convenience foods like frozen orange-juice concentrate, Birdseye frozen vegetables, and "TV dinners." The United States represented the largest consuming market for instant coffee in the 1950s, but world consumption was also expanding rapidly. Nestlé, based in Switzerland, was manufacturing it for Swiss and French markets. Instant coffee had also been introduced into the United Kingdom in the 1940s, and it became somewhat popular during the war when tea was rationed. From there, it spread to Australia, New Zealand, and Canada. The U.S. military played a role in introducing instant coffee to the Japanese market during the postwar occupation. Thus the United Kingdom, Canada, and Japan joined the United States as major consumers of instant coffee in the late 1950s and early 1960s.

The capital-intensiveness of instant-coffee production led to a high concentration of market shares in these major markets. Only the largest coffee-processing firms possessed enough capital to compete in developing new technologies and building more modern production facilities. In addition, only the largest firms could afford the advertising and promotional expenditures necessary to compete in the national market. Private-label processors like Tenco continued to produce a number of small brands, disguising somewhat the high degree of concentration in the market. But in the 1960s, markets became increasingly national while smaller brands began to disappear or be acquired by large manufacturers. By the 1970s, three or four transnational corporations controlled more than 80 percent of most major consuming markets (UNCTAD 1984).

By the 1970s, consumption of instant coffee had leveled off or begun to decline in many of these countries. But its consumption worldwide is still increasing.⁵ Because of its ease and method of preparation,

4. Tenco was acquired in 1959 by Minute Maid, leader of the frozen orange juice industry. Minute Maid was in turn acquired by Coca Cola in 1960, which thereby became the world's third-largest manufacturer of instant coffee. See "Minute Maid Acquires Tenco, Hints New National Soluble Brand," *Tea and Coffee Trade Journal*, Sept. 1959, p. 85; and "Fox Leaves Minute Maid, Goes to United Fruit; Cloud Named," *World Coffee and Tea*, Jan. 1961, p. 20. Borden did not keep up with the rapid pace of innovation set by General Foods and Nestlé through the 1950s and by 1960 was no longer a major manufacturer.

5. It is difficult to get accurate estimates of instant-coffee consumption in most countries. Total consumption is estimated from the "disappearance" of reported stocks of green coffee beans, but how this estimate is apportioned between roasted and ground coffee versus instant is hard to ascertain.

instant coffee seems to be the most acceptable coffee product in traditional tea-drinking countries. The United Kingdom, Canada, and Japan are the best early examples. More recently, this pattern of instant coffee as the most readily adopted form has been witnessed in East Asian newly industrializing countries like South Korea and Taiwan and in the former Soviet Union. Consumption of instant coffee has also increased in many third world countries, including some coffee-producing countries where coffee drinking was not previously part of the culture.

THE EVOLUTION OF THE INSTANT COFFEE CHAIN

The development of technology to mass-produce instant coffee and its rapid spread during the 1950s and 1960s led to creation of a new commodity chain. Because of the nature of instant coffee, various possibilities existed for the structure of this new chain. Instant-coffee factories did not have to be located near the point of consumption, as did factories for roasted and ground coffee, and they could be located near the source of the raw material. Transnational corporations and coffee-producing states alike had interests in how the emerging chain would be structured, and they pursued a variety of strategies to shape and control it. The following sections will trace the evolution of the chain through three distinct phases: an initial phase controlled by the transnational corporations; a second phase dominated by initiatives by producer states; and the current phase of internationalization and competition for new markets.

Initiatives by Transnational Corporations, 1950–1965

As the new chain emerged in the early 1950s, the technology for extracting and drying the soluble coffee solids that made up instant coffee was still evolving. It was controlled by the transnational corporations, the only ones with the capital to invest in research and development and new plants. Three transnational corporations undertook international initiatives during this period, with each one following a somewhat different strategy shaped by their corporate identities.

General Foods, long a major producer of roasted and ground coffee, set up its instant-coffee production according to the same model of production. Factories were located in the major core markets, near the point of consumption. The first factories were built in the United States and Canada, and later ones were located in the United Kingdom and Germany to serve the European market. General Foods was also the first transnational corporation to build a plant in Japan. The company acquired a Mexican producer of instant coffee in 1962 but did not actively seek to construct its factories in coffee-growing regions.

Nestlé, always a transnational corporation, grew by locating pro-

duction facilities in each new national market that it entered, and the company followed the same strategy with instant coffee. By the mid-1960s, Nestlé was operating plants in Australia, New Zealand, Canada, Austria, Denmark, France, Germany, Italy, Netherlands, Spain, Switzerland, and the United Kingdom. Nestlé was also active in third world national markets and built factories wherever demand existed. By 1964 Nestlé had created subsidiaries in Brazil, Colombia, Mexico, and the Ivory Coast as well as a joint venture in India. All these plants produced for local markets, except for the Ivory Coast plant.

The Ivory Coast was an obvious location for an instant-coffee factory because at the time, it was the world's largest producer of robusta coffee.⁶ In 1959, as the country's administration looked toward imminent independence, the Ivory Coast was eager to attract foreign capital, particularly for processing its primary commodities. Nestlé obtained a number of generous concessions by agreeing to build a plant there, including an exemption from export taxes for some of the green coffee beans to be exported by the subsidiary to its French parent (a subsidiary of the Swiss transnational corporation). In addition, Nestlé gained access to lower-quality coffees not suitable for export, which were available at cheap prices inside the country (Masini et al. 1979). Nestlé's Ivory Coast plant thus incurred considerably lower costs for raw materials than did factories in core countries. It was established mainly to serve a "regional market" consisting of Western and Northern Africa, the Middle East, and Greece.

Tenco, the third company, was not a transnational at first, having been established by ten smaller coffee companies to compete with the likes of General Foods in instant-coffee production. Tenco undertook the most innovative and ambitious strategy. It collaborated with the International Basic Economy Corporation (IBEC), a Rockefeller company investing in food-processing industries in a number of third world countries. Tenco thus attempted to create an international network to produce and distribute instant coffee.⁷ Other manufacturers imported green coffee beans from various countries and blended them to produce instant coffee. The Tenco-IBEC plan was to manufacture instant coffee in a number of coffee-growing countries and export it in bulk to the major consuming markets, where it would be blended and packaged for private-label customers. These local brands could then be sold at lower prices than the national brands of the transnational corporations. Between 1955 and 1958, Tenco-IBEC built factories in El Salvador, Mexico, and Guatemala by forming joint ventures with local capitalists—large coffee growers or cof-

6. Robusta coffee, grown mainly in Africa and Asia, has a harsher taste than the arabica grown in Latin America, but robusta produces a higher yield of solids when processed into instant.

7. "Tenco, IBEC Form New Firm for Soluble Distribution," *Tea and Coffee Trade Journal*, Dec. 1956, p. 102.

fee-roasting firms or both. Instant coffee from these factories became the first instant coffee imported into the United States. But after Tenco was acquired by Coca Cola in 1960, this strategy was no longer pursued actively. Coca Cola reverted to a strategy like that of General Foods in building in the core markets, in this case establishing factories in Germany and the United Kingdom.

The production capacity established in the coffee-growing countries during this period was relatively small and usually locally oriented. Most often, it was intended to capture local markets. Further, this capacity was controlled by the transnational corporations and integrated into their global strategies. In the case of Nestlé's Ivory Coast plant and Tenco's Central American plants, the strategy was to gain a competitive edge by lowering the cost of raw materials. This comparative advantage of lower production costs formed the basis for initiatives made by producer states beginning in the mid-1960s.

Producer State Initiatives, 1965–1975

Brazil / By the mid-1960s, instant coffee was far enough advanced in the product life cycle that production technology was not changing rapidly and no longer required a huge effort in research and development. The technology could be acquired from core engineering firms by any investors with the necessary capital. Under these conditions, Brazil took the lead in developing an instant-coffee export industry and was soon followed by Colombia and Ecuador. The explosive growth of Brazil's exports led to conflict with the transnational corporations that had controlled the chain up to this point.⁸

By the early 1960s, Brazil was into "the secondary import-substitution phase" of its development strategy, and the state was beginning to look for ways to diversify its exports (Haggard 1990). Brazil was by far

8. My account of the growth of the Brazilian instant-coffee industry draws on Fisher (1972, chap. 9); Cordell (1969); Krasner (1973); Lucier (1988, 139–47); and Sivetz, "From Humble Beginnings," *Tea and Coffee Trade Journal*, June 1985, pp. 3–4. I have also drawn on the following articles in *Tea and Coffee Trade Journal*: William Kappenberg, "Latest Developments in Soluble Coffee," Aug. 1952, p. 22; L. M. Peppercorn, "Nestlé's Introduces Solubles for Home Consumption to Brazilians," Oct. 1953, p. 26; and L. M. Peppercorn, "Brazil Reviews Soluble Position: Standard Brands, Tenco Alter Plans," Dec. 1959 p. 52. See also *World Coffee and Tea*: "Is a World Boom Brewing for Instants?" Dec. 1960, pp. 15–17; "Guide to Latin American Coffee: Brazil," Apr. 1966, 23–24; "The Brazil Powder Phenomenon," Nov. 1966, pp. 25–30; "Instants: After the Crisis—What?" Nov. 1967, pp. 23–39; "Brazil Powder: Beyond the Crisis," Nov. 1968, pp. 24–26; "The Brazil Powder Keg: It's Quiet Now but Could Get Explosive Again," Nov. 1969, pp. 38–39; "Instants: Far More Capacity, Far Different Product," Apr. 1970, pp. 25–29; George Boecklin, "Main Currents in the USA Coffee Industry," Aug. 1970, pp. 79–81; "Brazil Powder: Solubles Issue Splits Industry, Delays Final Action in ICA . . . White House, State Department Called In," Nov. 1970, pp. 47–49; "Brazil Solubles Issue: Did Settlement Clear the Way for U.S. Participation in the ICA?" May 1971, pp. 35–40; and J. Mazzone, "Brazil Report," Oct. 1984, p. 32.

the world's largest producer of coffee, and coffee still accounted for over 40 percent of its total export earnings. Developing the capacity to produce instant coffee for export seemed like a logical step in evolving its development strategy. Brazil was also the world's second-largest consumer of coffee (after the United States) and thus had always had a large internal market for coffee, as well as large local roasting companies. One of Nestlé's first third world subsidiaries to produce instant coffee was built in Brazil in 1952. Although this subsidiary produced mainly for the local market, instant coffee never achieved a large share of the total Brazilian market. Several other major manufacturers, including Tenco, developed plans to build factories in Brazil in the late 1950s but abandoned them after encountering difficulties in getting licenses and permission to import equipment.

Beginning in 1960, the Instituto Brasileiro do Café (IBC, the state coffee agency) announced a series of measures to encourage local capitalists to build instant-coffee factories, including sales of green coffee beans from the IBC's massive stocks and guarantees to purchase 80 percent of the output the first year and decreasing percentages thereafter. The most important measure was an exemption from the export tax that was applied to all green coffee exports. The first two Brazilian manufacturers, Dominium and Cacique, opened in 1965. After that, production expanded rapidly, with Vigor and Frusol opening in 1966 and five additional plants by 1969. A small amount of instant coffee was exported to the United States in 1965, but exports mushroomed as the new plants started to operate. By 1969 the Brazilian firms had captured 14 percent of the total U.S. market for instant coffee.

"Brazil powder," as it was called by the U.S. industry, had several significant advantages over the instant coffee manufactured in the United States. The most important was cost. Brazilian manufacturers could buy coffee beans below export quality, known as "grinders," from the IBC for significantly less than export-quality coffee. When these savings were combined with the export tax exemption, Brazilian manufacturers could deliver instant coffee to the U.S. market at a cost of about 50 or 60 cents per pound less than U.S. producers. This difference was huge at a time when instant coffee was retailing in the U.S. market at about \$2.50 per pound. Further, the Brazil powder was of higher quality than most instant coffee being sold on the U.S. market because it was made from Brazilian arabicas, whereas the coffee blends used to manufacture instant coffee by the transnational corporations contained a lot of harsher-tasting robustas.

The rapid growth of Brazilian exports created a division within the U.S. coffee industry. Most importers of green coffee beans strongly opposed this development because Brazil powder could be sold directly to instant-coffee manufacturers, thus bypassing the traders in green coffee.

But some importers soon decided that they could deal in instant coffee as well as green and began buying from producers in Brazil for resale to U.S. manufacturers or to smaller firms wanting to package their own private labels. General Foods was a leader of the opposition to Brazilian imports, but Nestlé, with a plant in Brazil, took no strong position. Coca Cola/Tenco, the pioneer in importing instant coffee produced in the growing countries, strongly supported the Brazilian policy. Two other large U.S. producers, Hills Brothers and Chock Full O' Nuts, closed down their instant-coffee factories and began to import Brazil powder and package it under their own labels.

The height of this controversy coincided with renegotiation of the International Coffee Agreement in 1968. The U.S. State Department took a hard line in these negotiations, insisting on including a mechanism in the agreement to deal with the problem of "unfair competition." This stance resulted in Article 44 in the new agreement, which prohibited "discriminatory treatment in favor of processed coffee as opposed to green coffee" by the exporting countries. Ironically, most of the importing countries that signed the International Coffee Agreement (although not the United States) imposed much higher import tariffs on processed coffee than they did on green coffee. Once the agreement went into force, the United States used Article 44 to compel Brazil to impose an export tax of 13 cents per pound on instant coffee destined for the U.S. market. But members of the U.S. coffee industry who had originally opposed the Brazilian policy were still not satisfied, arguing that this tax did not begin to offset the cost advantage enjoyed by the Brazilian manufacturers.

Meanwhile, the U.S. Congress, sympathetic to industry complaints, held up the legislation enabling full U.S. participation in the 1968 International Coffee Agreement. This reaction forced the State Department, which had agreed to the 13 cent tax, to seek further concessions from Brazil. In March 1971, an agreement was finally reached that satisfied most of the remaining opposition. The United States agreed to implement the 1968 International Coffee Agreement, and Brazil agreed to sell 560,000 bags of green coffee beans per year to U.S. instant-coffee manufacturers exempt from the regular export taxes on this product. The green coffee traders were satisfied because this coffee was to be sold through normal trade channels. General Foods was placated because under the allocation formula agreed on, it stood to receive almost half of this coffee. Nestlé, not a major purchaser of Brazilian coffee, got nonetheless almost a quarter of it. But not everyone was happy. Hills Brothers and Chock Full O' Nuts, which were no longer manufacturing instant coffee in the United States, received none. This agreement ended the Brazil powder controversy but was soon rendered moot when the 1968 International Coffee Agreement was not renewed in 1972.

By this time, the economics of instant-coffee production in Brazil

had changed. The high demand for grinders on the Brazilian market in the late 1960s had driven their price up to the level of export-quality coffee. Two frosts in Brazil in 1969 and 1972 reduced the supply of Brazilian coffee and increased the price advantage of robustas. And the rapid expansion of production capacity in Brazil had outstripped the growth of markets for Brazilian instant coffee. Just as the market was recovering from the 1972 frost, the devastating frost of 1975 hit. Brazilian coffee became so scarce that the Brazilian manufacturers had to begin importing African robustas to use in their factories. Soon after, Brazil began planting its own robusta coffee and is now one of the world's largest producers of robusta, much of it used by instant-coffee manufacturers. Nonetheless, as a result of state initiatives and investments by local capitalists, Brazil had eleven instant-coffee producers with significant installed capacity by the late 1970s. They were producing mainly for export and had gained a foothold in the United States and other core markets.

Colombia / The second-largest coffee grower after Brazil is Colombia. By the mid-1960s, the country was still depending on coffee for more than 60 percent of its export earnings but had begun a drive to diversify its exports. Colombia is also the second-largest coffee-consuming country among coffee producers, but its internal market is much smaller than Brazil's. Nestlé had built an instant-coffee subsidiary in Colombia in the early 1950s to produce for the domestic market. Its success induced Colcafé, a large domestic roaster, to open a factory in 1960. Colcafé produced primarily for the local market but began to export small quantities. The Colombian quasi-state agency that controlled coffee policy, the Federación Nacional de Cafeteros (FNC), had originally opposed the export of instant coffee in the belief that it lowered taste standards for coffee and that high quality was the major selling point of Colombian coffee (exemplified by the Juan Valdéz ad campaign). But by the late 1960s, it was clear that instant coffee had become an important product in core markets and that Brazil's move into exporting instant coffee was highly successful, and thus the FNC decided to begin producing Colombian instant coffee for export. The FNC elected to produce high-quality instant coffee and therefore built a freeze-dry plant, which opened in 1973.

The destinations of Colombia's instant-coffee exports reflect the effects of more direct state involvement. Although the two largest importers of Colombian green coffee beans are the United States and Germany, the largest importer of instant coffee is Japan. FNC strategy has been to leave established markets, particularly the United States, to the private exporters, while focusing on finding and expanding new markets for its coffee. Thus Colcafé sends most of its exports to the United States and Canada, and also to the United Kingdom and Germany. The FNC had

already become one of the largest exporters of green coffee to Japan, a relatively new and booming market, and the move into instant was a natural step. More recently, the FNC has rapidly expanded the export of coffee extract (a liquid concentrate that is dried to produce instant), most of which has also gone to Japan.

Ecuador / Ecuador has been much less dependent on coffee than Brazil or Colombia, obtaining almost half of its export earnings from bananas. As in Colombia, Ecuador's instant-coffee industry also began with production for the local market. In 1957 the state enacted an industrial development law to encourage import substitution. Ecuador was already importing some instant coffee for local consumption, although the raw material needed to produce it was available locally. The new law established protective tariffs against importing instant coffee and made credit available for importing the machinery needed to manufacture it. A group of local capitalists involved in food processing for the local market formed Solubles Instantáneos (SiCafé) in 1960 and began to produce instant coffee in 1962. Production was intended for local consumption, but during the instant-coffee export boom in the late 1960s, SiCafé found export markets for its product. This success induced other capitalists to invest. In the late 1970s, El Grupo Noboa, the largest financial-industrial group in Ecuador and the leading agro-exporters, built another factory to produce instant coffee for export (Hidrobo 1992; Fierro Carrión 1991).⁹ In this case, SiCafé performed as a textbook "infant industry." Not only did SiCafé supply the local market, but it soon began to find export markets and quickly became a major exporter. Its success later drew another producer into the industry.

These initiatives by producer states greatly expanded the capacity for producing instant coffee in coffee-growing countries. Through the late 1960s and early 1970s, exports of instant coffee from these plants to the core markets multiplied. And unlike the exports from Central America and the Ivory Coast in the earlier phase, these exports were controlled by local capitalists and producer states. Although some transnational corporations and the U.S. government initially opposed the Brazilian initiative, an accommodation had occurred by the late 1970s. Producer states and local capitalists could not afford the advertising expenditures needed to introduce their own brands into the core markets. Consequently, they sold their instant coffee in bulk to the transnational corporations or to smaller firms that packaged and sold it under their own brand names. Simultaneously, the transnational corporations found that they could integrate this product into their global production and marketing strategies while maintaining control of the major core markets.

9. "Soluble Coffee Plant for Ecuador," *Tea and Coffee Trade Journal*, Apr. 1959, p. 62.

Internationalization in the 1980s

In the 1980s, production of all forms of coffee became increasingly internationalized. General Foods was taken over by Philip Morris, which also bought several major European producers to become the world's largest coffee company. Nestlé meanwhile acquired several large U.S. and European producers. International trade in processed coffee products grew rapidly, as these conglomerates streamlined their operations (Talbot 1995–1996). This internationalization also affected some established producers in Brazil and Colombia. Iguaçú, the second-largest Brazilian producer, is now 40 percent owned by Marubeni, one of the largest Japanese *sogo shosha* (general trading companies); the remaining 60 percent belongs to a group of Brazilian coffee growers. Vigor, another Brazilian producer, was purchased by Marcellino Martins, one of the country's largest exporters of green coffee, which was later acquired by ED & F Man, one of the world's top five importers of green coffee. Dominion ran into financial difficulties soon after it was formed, was taken over by the Central Bank of Brazil, and was later sold to Mitsubishi. Tenco–Coca Cola owns one small plant and is a partner in another with Iguaçú. Thus while Brazilian capital still controls most of the instant-coffee industry, the coffee transnational corporations have increased their share of ownership. The Colombian FNC also formed a partnership with Marubeni in the early 1980s. The FNC modernized its freeze-dry plant and greatly expanded capacity, a project in which Marubeni provided capital and technology in return for a minority share of the firm. Production capacity was further expanded in the late 1980s.

During the 1980s, consumption of instant coffee increased in “non-traditional markets,” particularly in the East Asian newly industrializing countries and the Middle East. Established producers in Brazil, Colombia, and Ecuador were better positioned to compete directly with the transnational corporations for these new markets than they had been to enter the “traditional” home markets of the transnational corporations. But they have achieved only limited success in selling to these new markets. One reason was the global presence of the transnational corporations, which had already established retail networks for selling coffee (as well as their other consumer products) in these new markets. For example, the Korean coffee market, with a high share of instant-coffee consumption, is dominated by a joint venture between General Foods and Japan's Ajinomoto. Nestlé and Coca Cola, the leaders in the Japanese canned coffee market, have formed a joint venture to distribute canned coffee throughout East Asia.

The opening of the Eastern European and Soviet markets in the late 1980s provided further opportunity for Latin American exporters to capture new markets. In the more stable Eastern European countries (Poland, Hungary, the Czech Republic), European-based transnational corporations had the advantage of proximity and moved in quickly. Bra-

zilian manufacturers have managed to gain shares of the markets in some other Eastern European countries, such as Romania. They also enjoyed considerable success in the USSR before its collapse and more recently in Russia and the former Soviet republics. Brazilian manufacturers began selling to the USSR in the late 1960s, when Brazilian capacity was expanding and exports to the United States were threatened by the dispute over "discriminatory treatment." Cacique became the major supplier of the USSR at this time. In 1974 an instant-coffee factory was opened in the USSR, and Brazilian sales stopped. But when the USSR again began to import large amounts of instant coffee in the mid-1980s, Brazil—Cacique in particular—was a natural source. In the 1980s, Cacique and Iguazu became the major suppliers, with Cacique at times shipping half of its total exports to the USSR. These firms were hurt badly when exports were disrupted in 1991, but Russian buyers again began importing large amounts of instant coffee in 1993, much of it from Brazil. Unlike the bulk instant shipped to core markets to be repackaged under other brand names, most of the instant sold by Cacique to Russia is packed for final consumption under Cacique's own brand names.¹⁰

China is another huge potential market. Some coffee is grown in Yunnan, and a small local market exists for coffee, virtually all of it in instant form. Colombia's FNC recently set up a joint venture with Japan's Mitsui to manufacture instant coffee and extract in China. Some of this product will be exported to Japan, at least initially.

It remains to be seen how big these new markets will become and whether the early entry of Latin American producers will help them compete against the transnational corporations in these spheres. Although the successes of Latin American manufacturers of instant coffee have been limited thus far, they have gained market shares and early brand-name recognition in some large markets with potential for rapid growth.

BENEFITS FROM INSTANT-COFFEE EXPORTS

If forward integration into the production of instant coffee was a viable development strategy for Latin American coffee-growing countries, then they should have received two related types of benefits from it. First, manufacturing instant coffee should have generated backward linkages to the local economy in the form of increased demand for labor and other inputs used in the manufacturing process. Second, by adding more value to their exports, coffee-growing countries should have received larger shares of the total income and profits generated along the entire

10. See Jan Thomas, "The Russians Are Buying! The Russians Are Buying!" *World Coffee and Tea*, Mar. 1993, pp. 6–11; "Cacique Back to Work after 1 Month Vacation," *Tea and Coffee Trade Journal*, Oct. 1991, pp. 86–87; and "Russia Leads Brazilian Soluble Exports," *Tea and Coffee Trade Journal*, July 1995, p. 7.

commodity chain. The evidence available suggests that these countries are receiving some of both types of benefits but that they are limited in important respects.

The early instant-coffee plants—the Nestlé subsidiaries and Tenco's Central American plants—generated few backward linkages. The technology and machinery for manufacturing instant coffee were all imported by the transnational corporations. Some demand was created for packaging materials that could be produced locally, as well as a temporary demand for local materials and labor in constructing the plants. Some local laborers were employed in the plants, but they did not require large labor forces.

By the beginning of the phase of initiatives by producer states, the production technology had become routinized. Key elements of the necessary machinery, such as the spray dryers, still had to be imported from the core. But many components like roasters, tanks, and valves could be and were produced locally, particularly in Brazil, with its large industrial base and a domestic industry making coffee-processing equipment. Production technology was also more automated, resulting in less demand for local labor, some of which called for highly skilled labor to operate the automated equipment. In the current phase of internationalization, Brazil, Colombia, and a few other producer countries have developed the capacity to construct complete instant-coffee plants without imported components.

Unfortunately, few data exist that would allow comparing a country's earnings from instant-coffee exports with those from green coffee exports in order to estimate the payoff from developing the capacity to export instant coffee. Some data are available on the export prices of instant coffee from these countries, but they are sketchy and not comparable over time. No reliable studies have been made of the costs of producing instant coffee that would allow estimating profits from its production. The data available suggest that the coffee-growing countries earn more from exporting instant coffee than from exporting green coffee beans but that the transnational corporations are able to use these exports to maintain or increase their already sizable profit margins.¹¹

The potential increase in earnings available through a strategy of forward integration was substantial. One widely cited estimate made by UNCTAD (1984) for the mid-1970s claimed that the U.S. import price for green coffee was 57 percent of the final retail price of an equivalent amount of instant.¹² Data from the Pan American Coffee Bureau (PACB)

11. The following discussion is extracted from a more detailed analysis presented in my dissertation in progress.

12. This estimate is probably somewhat high because the period for which it was calculated included the three years following the disastrous 1975 Brazilian frost, when prices for green coffee beans hit all-time highs. A lower limit for this figure is probably that provided

for exports from the Tenco plants in the late 1950s showed that their export prices were roughly 75 percent of the U.S. retail price of instant, which averaged \$3.24 per pound between 1956 and 1960.¹³ Tenco-IBEC owned controlling interests in these firms, however, and thus exercised control over the increased income and profits from these exports.

In contrast to this situation, the PACB data show that between 1965 and 1969, the period when "Brazil powder" stormed the U.S. market, its average export price was about 40 percent of the average retail price of instant coffee on the U.S. market, which had fallen to \$2.44 per pound because prices for green coffee beans were lower at this time. The export price of Brazilian instant coffee to the U.S. market during this period was actually slightly less than the export price of an equivalent amount of green Brazilian coffee (generally lower in price than other Latin American arabicas). The Brazilian manufacturers still managed to make a profit at this price because of their access to grinders on the local market and their exemption from export taxes. But Brazil as a whole earned no additional income. Profits of the manufacturers represented primarily a transfer of surplus from the state to the private sector. Nonetheless, state planners probably viewed this outcome as a necessary incentive for drawing local capital into the industry. It would become a worthwhile investment in the long run if the Brazilian manufacturers could eventually sell their instant coffee at higher prices.

More recent data on the value of instant-coffee imports into Japan between 1984 and 1990 suggest that this situation had not improved much, at least in the core markets.¹⁴ Although the retail price of instant coffee in the Japanese market is not reported, the data suggest that Brazilian manufacturers received slightly less for their exported instant coffee than Japanese importers paid for an equivalent amount of green coffee from Brazil. Colombia's higher-quality freeze-dried instant coffee was earning slightly higher prices in Japan than equivalent amounts of Colombian green coffee beans.

Some recent data suggest that the Brazilian manufacturers earn more for their exports to newer nontraditional markets. Trade-journal reports on sales by Brazilian manufacturers to the United States and the USSR and on total sales between 1985 and 1990 indicate that they received prices 20 to 25 percent higher for their Soviet sales than for their U.S. sales. Soviet prices were also about 25 percent higher than those for the

by the UK Monopolies and Mergers Commission (1991) for 1989, the year of a severe price crash, which showed costs of green coffee beans to be one-fourth to one-third of the sales revenue for instant coffee.

13. See *Annual Coffee Statistics* for 1966–1975 (published by the Pan American Coffee Bureau in New York).

14. See the *Commodity Bulletin: Coffee* for 1986–1993 (published in London by Landell Mills Commodity Studies).

Brazilian sales to Japan. Some of this difference is accounted for by the fact that the sales to the United States and Japan are primarily in bulk, while the Soviet sales are for instant coffee packed for retail sale. Thus the instant coffee shipped to the USSR was costlier to produce but probably also earned higher profits.

CONCLUSION: OUTCOMES OF THE STRUGGLE

The structure of the instant-coffee commodity chain that has evolved out of the struggle for control can be summarized as follows. In many respects, the structure resembles the commodity chain for roasted and ground coffee: green coffee is shipped from the coffee-producing countries to factories owned by the transnational corporations, which process them into instant coffee for sale in the core markets. The major difference is that instant-coffee factories in the coffee-growing countries are now exporting to the core markets. These factories account for over half of the total world trade in instant coffee. Although some are owned by transnational corporations, in three of the top four exporting countries (Brazil, Colombia, and Ecuador), these factories are owned mainly by local capitalists and the state. Yet imports of instant coffee into the core markets account for a relatively small share of total consumption, probably less than one-fifth in most countries. The main obstacle faced by these exporters was ultimately not technological. Rather, it arose from the advertising expenditures, brand names, and distribution channels controlled by the transnational corporations.

The forward-integration strategies of the coffee-producing states were countered by backward-integration strategies employed by the transnational corporations. As the coffee producers attempted to gain control of the processing stages of the chain with higher value added, the transnational corporations attempted to lower their production costs by locating plants closer to the sources of their raw materials. This backward integration has resulted primarily in transnational corporations' control of the local markets in coffee-growing countries rather than in exports to the core. Most of the remaining world trade in instant coffee is intra-industry trade among the core markets. In the current phase of internationalization of production, the interplay of forward and backward integration strategies has led to mergers and joint ventures between local capital and the transnational corporations. Latin American manufacturers have managed nevertheless to carve out a niche in the global production system.

The benefits of the forward integration strategy have been limited. But without the initiatives made by producer states, the instant-coffee chain would probably be almost identical to that of roasted and ground coffee, and producers would have received no benefits at all. Clearly, for any country heavily dependent on the export of a single primary commod-

ity, as Brazil and Colombia were in the 1960s, forward integration is not a panacea. Export diversification must be a major focus of an overall development strategy. Yet forward integration can be a viable component of such a strategy. The possibilities and the potential benefits of a strategy of forward integration will depend on the economy and ecology of the commodity in question. That is the reason why it is important to analyze the structures of individual commodity chains.

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