

FEDERAL RESERVE BANK OF PHILADELPHIA

Commodity Agreements: The Haves vs. the Have-Nots?

By Janice Moulton Westerfield*

The industrialized nations soon may be transferring more of their wealth when they buy raw materials. Even now, the developing countries are trying to arrange international agreements which would raise the prices of 19 basic commodities and stabilize them at higher-than-market levels.

In the past, commodity agreements have been limited to a single resource, such as tin or coffee. The present push toward a blanket agreement covering many commodities comes from countries that are rich in raw materials but haven't developed the industrial base to turn them into finished goods. These countries are dissatisfied with having their economies depend on the actions of the marketplace. Moreover, they watched the OPEC

cartel pile up huge revenues from oil, and they would like to use commodity agreements to emulate OPEC's earning performance.

Spokesmen for the developing countries claim that commodity agreements would guarantee the industrialized nations access to raw materials and at the same time promote economic development and the redistribution of wealth. Representatives of the developed countries reply that letting market forces operate would produce the largest output for everyone while intervention in commodity markets will lead to economic waste and misallocation of resources. Thus the issues raised by commodity agreements concern both the size and the manner of income transfers from the have countries to the have-nots. The developed countries, because of their interest in maintaining harmonious relations, are likely to go along part way. But they will continue to seek more efficient ways to expand trade and to improve conditions in the developing countries.

*Janice M. Westerfield, who joined the bank in 1973 and received her Ph.D. from the University of Pennsylvania the following year, writes frequently on international finance and trade.

WHAT ARE ICAs?

There's nothing new about attempts to stabilize commodity prices. What is new is the fervor with which the developing nations are urging their case for commodity agreements as the preferred method of transferring income.

International commodity agreements (ICAs) have certain features in common. Their membership includes both producing and consuming countries. (The OPEC cartel, for example, is not an ICA because consumer countries do not participate.) They have certain stated objectives, such as stabilizing prices, assuring adequate supplies to consumers, and promoting the economic development of the producers. A typical statement of objectives can be found in the coffee agreement: "to achieve a reasonable balance between world supply and demand on a basis which will assure adequate supplies of coffee at fair prices to consumers and markets for coffee at remunerative prices to producers [and] to avoid excessive fluctuations in levels of world supplies, stocks and prices which are harmful to both producers and consumers."¹ Finally, an ICA is administered by a central council which represents the members.

ICAs fall into three kinds—quota, buffer stock, and multilateral purchase arrangement. A *quota* arrangement, such as the coffee agreement or sugar agreement, specifies quantities to be exported by each producer. *Buffer stocks* (inventories of commodities) may be used alone or in conjunction with a quota system, as with tin. The buffer stock system attempts to stabilize prices by buying up the commodity when the price nears an agreed-upon floor and selling the commodity when the price approaches the ceiling. The third type of agreement—a *multilateral contract* such as the wheat agreement—sets up ranges of intervention for commodity prices. Consumer countries agree to purchase

certain amounts of the commodity at no less than the minimum price while producer countries agree to sell certain amounts at no more than the maximum price. The market mechanism functions between these limits. The wider the price range, the closer the system approximates a free market; the narrower the range, the more the system approaches a quota system with guaranteed prices. (For a history and analysis of the tin agreement, see Box.)

These three kinds of agreements have a strong attraction for the developing countries, especially because of the way these countries perceive their own position in the international trading arena.

HOW THE DEVELOPING COUNTRIES SEE IT

The developing countries are interested in having international economic relations work more in their favor, and high on their list is the stabilization of their export earnings. Many of the developing countries depend heavily on export earnings from one or two commodities. When prices for these commodities fluctuate, ongoing economic development programs become hard to sustain, and long-range efforts become more difficult to plan.

These countries argue not only that their trade position is disadvantageous but also that it is deteriorating. They claim that because the ratio of export prices to import prices—the terms of trade—has declined over time, their traditional exports now buy fewer imports from the developed countries. In order to prevent further slippage, they've proposed that raw material prices be indexed to prices of manufactured goods. That way, the prices of the raw materials they export would keep pace with the prices of manufactured imports.

Along with stabilization of export earnings and improvement in the terms of trade, the developing countries are looking for easier access to the markets and technology of their industrialized trading partners. Access to these potentially large markets currently is

¹International Coffee Agreement 1976, p. 2.

BOX

INTERNATIONAL TIN AGREEMENT

Some form of international control of tin production has been in effect for over 50 years. Initially, only the producing nations were parties to the agreement. Several attempts were made by the members to include the consuming nations, but none was successful until the early 1950s, when the U. S. stopped buying tin for its strategic stockpiles.* This withdrawal from the market and the resulting price decline helped spur negotiations for a new agreement. The First International Tin Agreement became effective in July 1956 for five years. Subsequent agreements, also of five years' duration, were negotiated, and the U. S. became a member of the Fifth Agreement.

The main objective of the agreement has been to adjust world production and consumption of tin so as to "prevent excessive fluctuations in the price and export earnings of tin." The central provisions to attain these goals—buffer stocks and export controls—have remained unchanged.

The International Tin Council administers the buffer stock operations to maintain prices within a target zone. When prices reach the floor of the target zone, the Council buys tin until the market price rises above this level or the funds are exhausted. When prices approach the ceiling, tin stocks are sold as long as the stocks last. Buffer stocks are considered the first line of defense; export quotas are held in reserve for situations that the buffer stock can't control. Export quotas can be tightened to shore up the floor price, and penalties can be imposed on countries that exceed their export quotas. These controls have been operative about one-quarter of the time.

The tin agreements have been quite successful in maintaining the floor price. Only once, in September 1958, has the price fallen below the floor level. And that price decline was caused mainly by sales of tin by the U.S.S.R., a nonmember. Maintaining the ceiling price has been more difficult. Ceiling prices were exceeded in 1961, 1963-66, and in the 1970s, and they would have been broken more often if they had not been raised. In recent years, the buffer stocks were exhausted, export quotas were suspended, and prices still remained above the ceiling of the target zone. The buffer stock was doubled in the Fifth Agreement, which became effective provisionally in July 1976. Though the agreements may have contributed somewhat to a more stable tin price, average prices probably have been higher than they would have been without the agreements.

*Through the years, critics have objected that the price was set so high that even mines with high production costs were able to operate at a profit. High prices also stimulated the search for substitutes. Shortly after World War II, new methods of tin plating, food storage (freezing), and competition from aluminum and synthetic products all acted to dampen demand.

restricted by quotas, tariffs, and other barriers. Actually, many developing countries are guaranteed access on a basis of equality—for example, at the same tariff level—with other nations.² But they want more than just equal

²The most-favored-nation clause extends tariff reductions granted to one country to all other countries with which the first exchanges most-favored-nation treatment. This approach has been used for commodities covered

access; they want free entry for the products of their fledgling industries. Preferential treat-

by the rules of the General Agreement on Tariffs and Trade. One important exception is the customs union, which may reduce or eliminate all trade barriers for members. A second is the Generalized System of Preferences which the U.S. implemented in January 1976. This program grants duty-free entry to selected imports from eligible developing countries, subject to quantity restrictions.

ment is required, they claim, if they are to compete with developed countries that already have well-established customs unions and other arrangements for trading their goods.

The developing countries look to international commodity agreements as the answer. ICAs, they believe, would raise the relative prices of their exports, stabilize those prices, and enable them to develop their productive resources. In short, ICAs would start wealth flowing their way, as, they believe, other forms of economic assistance have failed to do.

But outside the developing countries, many people have doubts about the value of ICAs. They take a different view of what has been happening to commodity price stability and they emphasize the drawbacks of commodity agreements. They believe that a clearer perspective on these matters ought to precede a decision for or against ICAs.

HOW SOUND ARE THE ARGUMENTS FOR ICAs?

The arguments about price instability and terms of trade demand special attention, for they lie at the heart of the developing countries' case for commodity agreements. It's important to know also which are the producing and which the consuming nations, as well as how likely it is that commodity agreements would accomplish what they're designed for.

Movements in Commodity Prices. The evidence for the terms of trade argument depends upon the time period chosen. It appears that over the first half of this century, commodity prices were trending upward. During the decade after the Korean War, prices of most primary products fell while those of manufactured goods were rising slightly, but the next decade saw the terms of trade improve for the developing countries. Overall from 1950 to 1975, the United Nations export price index of primary commodities (excluding oil) rose from 105 to 225 while the

export price index for manufactured goods rose from 78 to 213. Since these indexes take 1963 as the base year (= 100), they indicate that from the base year on, prices of primary products have outrun prices of industrial goods. Thus while some countries may face worsening terms of trade, a close look at the evidence does not support a case for overall deterioration.³

Further, the evidence for price instability for primary products is far from conclusive. Most of the primary commodities except cocoa have seen a lessening of price fluctuations since midcentury. Large groups of commodities show less price fluctuation in the third quarter than in the first half of this century, and the same goes for an important commodity subgroup.⁴ But since 1950, primary commodity prices have fluctuated on average about 1.5 percent per year more than prices for manufactured goods.

While overall price instability for primary products probably has been overstated by those who favor ICAs, it remains true that some primary commodities may suffer severe price fluctuations. And since some nations may depend on one or two export commodi-

³From 1972 to mid-1974 the U.N. index of export prices of all primary commodities increased by over 100 percent. The other side of the picture is the sharp decline in commodity prices observed the following two years (followed by another price rise in 1976). Nevertheless, commodity prices in general outstripped manufactured goods prices from 1972 to 1976. Indexing commodity prices to manufactured goods prices would have resulted in smaller revenues for commodity producers.

⁴The U.N. price index for 22 primary commodities had an average annual fluctuation of 14.5 percent over the first half of this century. The average fluctuation dropped to 4.5 percent for the period 1950-62 and then rose slightly to about 7.5 percent for the period 1963-75. The average annual price change for the ten core commodities (excluding hard fibers) fell from +14.7 percent in the first half-century to +11.3 percent for the period 1950-75. Dae Yong Choi assisted in calculating these figures from *Instability in Export Markets of Underdeveloped Countries* (New York: United Nations Department of Economic Affairs, 1952) and from various issues of the *U. N. Monthly Bulletin of Statistics*.

ties for a large part of their income, a drop in the price of either or both may be extremely troublesome, even if the average price for a group of primary products holds much more stable. This lack of diversification in a developing nation's economic base may be at the heart of the drive toward ICAs. It's likely that individual commodity price fluctuations could be reduced much more efficiently in other ways—for example, by developing markets that deal in future purchases and sales of primary commodities. But the developing countries continue to argue in favor of ICAs, believing that the terms of trade have deteriorated and that primary product prices have been destabilized overall.

Who Are the Commodity Producers? Furthermore, the division into producers and consumers of primary commodities is not as simple as appears at first sight. Consumers cannot be identified with developed countries nor producers with developing countries. OPEC is a revealing example: here the interests of the developing countries that don't produce oil are aligned with those of the consumer nations. In primary commodities, the principle producers are the *developed* countries. In fact, the developed nations produce about 70 percent of the commodities under discussion at UNCTAD (United Nations Conference on Trade and Development) and account for nearly 50 percent of the exports.⁵ The U.S., for instance, leads the world in cotton exports. Wheat and rice are other commodities heavily imported by the developing countries.

Because different countries produce different primary products, perhaps the list of commodities should be examined case by

⁵The primary products under discussion at the North-South talks were cocoa, coffee, tea, sugar, jute, cotton, natural rubber, copper, bananas, iron ore, bauxite, beef, sisal, vegetable oils, oil seeds, tropical woods, manganese, phosphate, and zinc. The UNCTAD discussions cover ten core commodities (the first eight listed above plus hard fibers and tin) as well as bananas, iron ore, bauxite, meat, wool, wheat, and rice.

case to see which countries would benefit from the higher prices ICAs would bring. It's likely that commodity agreements would make the U.S., the U.S.S.R., and other resource-rich developed countries the major beneficiaries and would bring small benefits to the developing countries.⁶ In short, agreements on large groups of commodities could give the developing nations the promise of economic improvement without the return they expect and end up benefiting mainly the developed countries.

Are ICAs Workable? Even if the terms of trade were unfavorable to the developing countries, and even if the developing countries were the main commodity producers and thus the main prospective beneficiaries of ICAs, these agreements still might not work out very well. Economic conditions favorable to commodity agreements are difficult to maintain over the long haul. Indeed, a recent MIT study found that commodity cartels which put through large price hikes lasted an average of only four to six years.⁷ The difficulties are less severe when fewer

⁶The developing countries want to improve their economic position in relative as well as absolute terms. But because the developing countries consume a large portion of the world's raw materials and export significant quantities of manufactured goods, higher commodity prices may not improve their net foreign earnings as much as they hope. The gains anticipated by the developing countries will be reduced to the extent that they import costlier raw materials and export relatively inexpensive manufactured goods. Moreover, because commodity agreements constrain the total supply of goods, such agreements may reduce the size of the economic pie available to be divided.

Nevertheless, because some developing countries have not been able to diversify their exports, they tend to be concerned with the prices of only a very few commodities. A few primary products may generate a sizable portion of their export earnings while money spent on imports is spread over a whole basket of goods. Thus they see it as their interest to concentrate on the few export prices that have a strong effect on their own economies.

⁷P. L. Eckbo, "OPEC and the Experience of Previous International Commodity Cartels," Working Paper No. 75-008WP, MIT Energy Laboratory, August 1975.

producers are parties to the agreement because detecting attempts to cheat and policing the agreement are simpler then. Reaching a consensus on barriers to keep competitors out of the market may be easier, too. But entry barriers and policing still have to be taken care of.

One cause of the fragility of commodity agreements is technological innovation which leads to the substitution of synthetics for natural products. Commodity agreements are effective in keeping prices up only so long as no cheaper substitutes can be found for the protected item. When the supply of natural rubber was restricted in the 1920s, for example, synthetic rubber was brought onto the market. And when natural fibers, such as silk, cotton, and wool, became scarce or very costly because of war or production cutbacks, chemical companies produced man-made fibers to fill the demand. Metals also have given way to substitution, by cheaper metals and plastics.

Further, each kind of ICA has its own characteristic weaknesses. Quota systems specify amounts to be exported by each producer. But producers may try to circumvent their quotas if they see gains to be made from increased production and sales. And reallocation of quotas among producers has proven difficult. Nor do quotas keep producers outside the agreement from expanding their production.

The buffer stock system also has drawbacks. The main drawback with a buffer stock is that it may require extensive financing by member countries to acquire the commodity and support its price. If the fund isn't large enough, buffer stock operations won't have much effect on prices. Price ceilings, especially, have proven hard to maintain. Further, the market in which the manager buys and sells the commodity must be well organized. The establishment of intervention points—floor and ceiling prices—requires forecasting a market-clearing price that anticipates future developments. If producers are to receive a net benefit, members

then must negotiate an average price which is higher than the market-clearing price if they are to bring about a transfer of income from consumers to producers.

Other difficulties confront the manager of a buffer stock. If the floor price is set too high, producers step up production, especially if convinced the buffer stock manager will support the price. In this case, too many resources will be used in production of the commodity, and surpluses will result.⁸ Further, a manager must be able to distinguish short-term fluctuations from long-term trends in prices. A secular price increase that is offset continually by sales from the stockpile, for example, will deplete the buffer stock and leave the manager unable to defend the ceiling price. Even a buffer stock which exhibits no systematic imbalance in purchases or sales can be costly to operate. Storage costs, brokerage fees, and general operating expenses may be sizable.⁹

Thus, in short, the history and practical

⁸Critics argue that commodity agreements are inefficient mechanisms for allocating resources. If a commodity price is supported above the equilibrium price, high-cost producers will be subsidized. They will respond by expanding production, and their extra production will be purchased for the buffer stock. The result will be a surplus of the commodity—to be stored or destroyed. Meanwhile, consumers will respond to the artificially high prices by buying less and shifting their demand to substitutes.

Because the developing countries do not appear to dispute the inefficiencies of commodity agreements, it's hard to see why they are so adamant about them. It would be more efficient economically to develop futures markets in commodities to smooth price fluctuations and then to transfer wealth to the developing countries as a separate operation via direct aid or loans.

⁹A recent study estimated that the maximum initial capital outlays to establish buffer stocks for eight agricultural commodities would be \$8.3 billion. This estimate assumes buffer stocks large enough to keep price fluctuations within 10 percent of the target level. Pooling the capital outlays for the buffer stocks would reduce the amount of capital required if the commodity prices tend to move independently of one another. For further discussion see P. A. MacAvoy and D. L. McNicol, "Commodity Agreements and the New International Economic Order," Council of Economic Advisers, June 1976.

economics of commodity agreements justify only modest hopes for their success. Moreover, there is no conclusive evidence available for the alleged deterioration in commodity price stability and in the terms of trade.

CURRENT STATUS OF ICAs

In light of these facts, it is not surprising that negotiators for the developed countries have shown some reluctance toward the ICA proposals. At the recent North-South talks in Paris, for example, the 27 participant countries could agree on only 20 of 41 subjects under discussion, according to their joint communique. The developed countries clearly haven't bought the argument that commodity agreements will provide consumers with ready access to supplies at reasonable prices.

Most developed countries, and especially the U. S., are reluctant to endorse the ideology behind the ICAs. The U.S. position has shifted from vaguely favorable to cool and back again over the years. In 1961, President Kennedy pledged that the U. S. was ready to examine commodity market difficulties on a case-by-case basis. But not much was agreed upon until President Carter started the ball rolling again by stating in New York that the U. S. was "willing to consider with a positive and open attitude, the negotiation of agreements to stabilize commodity prices, including the establishment of a common fund" Since then, at the Conference on International Economic Cooperation (CIEC) in Paris, the U.S. has agreed to the principle of a common fund to support commodity prices. Further negotiations are scheduled for the current UNCTAD meeting (November 1977).

The common fund, indeed, has been the main stumbling block in these negotiations. The developing countries have argued for a \$6-billion fund to stabilize the prices of the 19 primary commodities. Basically, this common fund would be used to establish a buffer stock for each commodity. Under this system, when the price of a commodity threatened to fall below the floor, the commodity would be purchased; when the price reached the ceiling,

the commodity would be sold. But the integration of the individual commodity agreements has not been agreed upon. One approach would have the common fund lend money to individual commodity councils which would own and trade the stocks. Then the common fund, through the commodity councils, could channel money received from sales of one commodity into purchases of other commodities for the buffer stocks.

Both economic and political considerations, as well as humanitarian ones, appear to dictate some sort of an affirmative response to the developing countries' pleas for aid. The developed nations already have sunk huge investments into the developing countries, and they want those investments to be productive. Maintaining harmonious relations is likely to discourage nationalization and to forestall boycotts and other obstacles to mutually beneficial trade. Further, the Third World countries vastly outnumber the developed countries, and their growing political power makes them a force to be reckoned with. The question is what sort of response is most appropriate.

OTHER WAYS TO TRANSFER WEALTH

Perhaps all the rhetoric about commodities has obscured the real issue—income redistribution towards the poorer developing countries. Many people believe that it should be possible to transfer wealth to these countries in a way which avoids the pitfalls of price supports—unwanted surpluses, artificially high prices, and misallocation of resources that may accompany interference with the pricing mechanism.

One alternative favored by the U.S. is to expand the IMF Compensatory Financing Facility. This IMF facility already is available to member countries suffering from balance-of-payments deficits. Its role could be extended to provide larger drawing rights for member countries that have shortfalls in export earnings from primary products.

To the extent that the economic malaise of the developing countries stems from price

instabilities caused by lack of diversification rather than from an overall, long-term deterioration in the terms of trade, a balance-of-payments financing facility may provide the remedy. Another alternative, advocated by the Europeans, would be to expand the Stabex program of the European Community. At present, Stabex is a half-billion-dollar fund which provides support for export earnings from several basic commodities and is available to some 50 countries associated with the EC. Other options include expanding loans from the World Bank and other international institutions.

Direct aid to the developing countries may be extended through either foreign aid or special action funds. Back in 1968 at the Delhi session of UNCTAD, the industrial countries accepted the goal that 1 percent of their GNP be devoted to aid through public and private transfers. This goal was reiterated as part of the Paris agreement when the industrial countries agreed to work toward a target rate of 0.7 percent of a country's GNP as direct aid. Countries like Canada and Sweden agreed to write off the debt of certain distressed countries to the tune of \$254 million. The participating countries also agreed upon a special action fund to help the poorest countries.¹⁰

¹⁰The U. S. pledged \$345 million to the special action fund, a sum which needs Congressional approval to be effective by fiscal year 1978. The European Community

A PEEK AT THE FUTURE

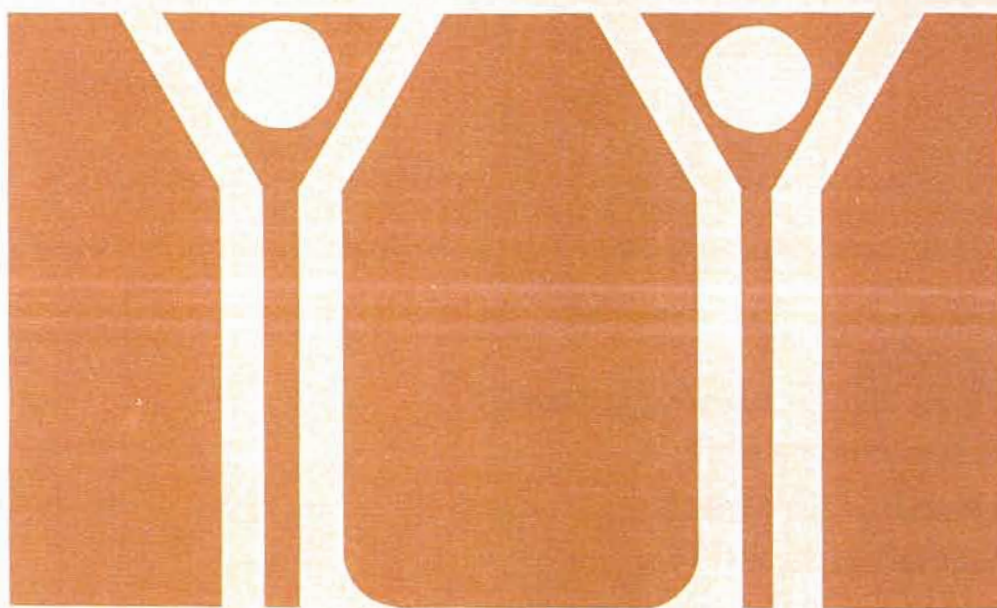
Policymakers in the developed countries have accepted the premise that they must share more of their countries' wealth with the developing nations. But both the extent and the method of redistribution are far from settled. They definitely do not want raw material prices indexed to prices of manufactured goods. They may, however, go part way toward preserving and increasing the purchasing power of other countries. So, for example, they are willing to allow entry of some goods imported from the developing countries on a preferential basis. Similarly, they are ready to commit funds to development projects, as long as those projects are well laid out. It's likely, then, that the developed countries will pledge some further aid, even if it's less than the 1 percent of GNP demanded by the developing countries.

As new pressures for commodity agreements are brought to bear, most of the developed countries will accept limited interference with the pricing mechanism because they think they have no choice. But over the long haul, they can be expected to push for alternative forms of aid—forms that preserve the efficiencies and economic growth that market forces can foster.

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