uation: in the first nine months of 1975 they showed a decline of nearly 20 percent from the same period a year earlier. Within that aggregate there were severe dislocations: imports from Jamaica, Surinam, and Guyana declined by 23, 35, and 80 percent, respectively; those from Guinea increased by 50 percent. Not surprisingly under the circumstances, Jamaica retreated somewhat from its insistence that purchasers of bauxite must take minimum quantities—a provision adopted in 1974 to prevent dissatisfied customers from switching to competing suppliers. Amidst such fluidity it is difficult if not impossible to fashion policy and, if it exists, to live by it. Recession periods are not conducive to putting the squeeze on customers. All this could change quickly if and when the pace of demand picks up, and especially if it should do so rapidly and once again bump into capacity ceilings.

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International Trade in Raw Materials: Myths and Realities

Edward R. Fried

Only two years ago the industrial world was gripped by something close to hysteria over developments in international commodity markets. The phenomenon had complex roots which included the gloomy resource forecasts of Meadows *et al.* (*1*), fears that OPEC's success in controlling the oil market would touch off a proliferation of commodity cartels, and a spreading inflationary psychology. Against this background, the explosion of commodity prices then under way tended to be interpreted not in cyclical terms but as heralding a disquieting secular trend.

What made prevailing attitudes even more unusual was their political dimension. Concepts such as "commodity power" and "resource diplomacy" as well as predictions that the industrial countries would become engaged in a struggle over raw materials supplies became newly fashionable and received serious attention. Altogether the atmosphere produced a foreboding, if not a conviction, that power in the world had suddenly shifted from buyers to sellers of primary commodities.

Much of this apprehension lifted as the commodity cycle ran its traditional course. But enough lingers to warrant asking why the reactions to the events of 1972–74 were so overblown, and what the experience suggests about the characteristics of international trade in raw materials and about potentially useful directions for policy.

Postmortem on the Commodities Boom

While the 1972–75 commodity cycle tends to be viewed as a single phenomenon, its separate parts are evident enough and not always causally related. They are worth keeping in mind.

It is of course true that the price rise was about as comprehensive as it was sharp. Each of the major commodity groups showed the effects. With regard to the steepness of the rise, from the beginning of 1972 to the middle of 1974 the U.N. index of export prices of all primary commodities increased by more than 150 percent, fully three times the advance that occurred during the Korean War commodity boom (*2*). With the use of the London *Economist* commodities index, which does not include fuels and is otherwise less comprehensive than the U.N. index, Cooper and Lawrence (*3*) found that "during the past 115 years there has been no year in which commodity prices rose as rapidly as they did in 1972–73 (63 percent) and no 3-year period in which they rose as rapidly as in 1971–74 (159 percent)." Similarly, for a few industrial materials, the sharpness of the decline in prices since mid-1974 has no parallel in the past century.

Nonetheless, the rate, timing, and duration of the advance varied considerably among the major commodity groups. A number of factors, some related to supply and others related to demand, were responsible for the difference in behavior.

In the case of oil, the price explosion did not occur until after the October 1973 embargo. Before that, OPEC (Organization of Petroleum Exporting Countries) demands for higher taxes and a larger share of the total take, which were persistent and successful from 1971 onward, did not cause oil prices to rise much more rapidly than prices of most other primary commodities. Import demand had been expanding rapidly for a number of years—at about 8 to 9 percent a year—principally because of a preference for oil over other energy fuels (due to its low price) and because of the sudden emergence of the United States as a large and growing importer of oil. While world export capacity easily kept up with demand, the oil situation created unusual alarm because of the evidently growing market power of OPEC and because of the contrast with the 1960's, when oil prices declined (*4*).

When OPEC boosted its demands through the almost accidental series of events that began in October 1973, the strong growth in oil consumption and the

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Table 1. Japan's trade in selected industrial materials, 1970–74 and projection for 1975 (*16*).

Commodity (unit)	1970	1971	1972	1973	1974	1975 (projected)
Aluminum (10^3 metric tons)						
Imports	233	204	271	373	385	271
Exports	3	22	7	2	24	37
Copper (10^3 metric tons)						
Imports	302	268	294	395	293	210
Exports	47	11	26	27	280	31
Nickel (10^3 metric tons)						
Imports	10.1	8.3	12.0	14.3	16.3	7.8
Exports	.4	.2		.2	.5	1.3
Magnesium (10^3 metric tons)						
Imports	2.1	.7	2.9	6.0	12.7	1.9
Exports	.1			.1	1.4	2.6
Tungsten (10^3 kg)						
Imports	106.4	40.3	45.4	204.0	285.5	19.6
Exports	50.6	91.6	81.1	64.2	113.9	232.7
Molybdenum (10^3 kg)						
Imports	114.8	10.3	52.3	196.3	80.5	16.6
Exports	17.5	23.4	21.6	34.7	20.7	19.2
Tantalum (10^3 kg)						
Imports	20.8	11.0	13.7	24.1	34.5	16.0
Exports	2.3	.9	2.3	.5	25.3	15.0
Raw cotton (10^3 metric tons)						
Imports	835	821	867	944	879	718

short run inelasticity of demand for imports put the oil market in a highly vulnerable position. Subsequently, when the market began to shrink, the OPEC countries managed to reduce production so as to prevent sharp competition for markets and a substantial erosion of prices.

Cereals prices also made their quantum jump after a decade of comparative stability, but the causal forces were of an entirely different character. For a number of years, acreage in the exporting countries had been restricted and stocks gradually decreased. Beginning in 1972, crop failures in the Soviet Union, South Asia, North America, and then once again in the Soviet Union levied unusually heavy demands on the world market so that stocks were swiftly depleted and could not be rebuilt (*5*). Cereals entering world trade amount to only 10 percent of world consumption. In a world with very small stocks, crop disasters in a major consuming country or region can quickly result in uncertainties, tight supplies, and waves of panic buying on international markets. Thus, in response to the various major crop shortfalls of the past few years, cereals prices were the first to peak in the commodities boom and have since fluctuated within a comparatively high range.

For other food commodities the story is mixed. The rapid rise in world income accelerated the growth in demand for sugar and cocoa, with production failing to keep up for several years in succession. By 1974 stocks had fallen to 10-year lows, which led to extremely sharp price increases and then to surprisingly large reductions in consumption and a subsequent fall in prices. (In the case of sugar, a markedly improved crop yield in 1975 also helped to turn the market around.) Coffee prices have been closely related to the depressing effect of a series of frosts in Brazil on world production, and are beginning even now to head toward new highs. In all three commodities a steady decline in stocks made the market vulnerable to unusual changes on the supply side.

On the other hand, for industrial raw materials the price cycle has been dominated by demand. Supply factors exerted a significant influence here and there, as for example the poor U.S. cotton crop of 1974, transportation bottlenecks in Africa and strikes in Chile that reduced exports of copper, and tightened environmental regulations that delayed bringing new metal capacity into production. The huge increase in government taxes on bauxite, imposed first by Jamaica and then by other bauxite producers, was also a factor. Nonetheless, the most general and most important causes of the rise and fall of industrial raw materials prices were cyclical: the upward pressures on demand resulting from the unusually rapid growth of the world economy in 1972–73 at rates averaging 6.5 percent a year (1.5 percentage points above trend), and the subsequent collapse of demand following the onset of the worst recession since the end of World War II (*6, 7*).

Inflationary expectations, exchange rate fluctuations, and sometimes an exaggerated concern about the adequacy of raw material supplies made matters much worse. They were reflected at times in a preference for holding commodities over currencies, in speculative purchases, and in a general buildup of inventories—all of which exacerbated shortages, put sellers of commodities in an unusually strong market position, and fueled the price boom. The subsequent liquidation of stocks when the recession started intensified the collapse of prices.

Reliable data on world stocks of most raw materials are not available, but the importance of speculation and inventory changes is indicated by the remarkable shifts in Japan's commodity trade during the 1972–75 period. Because of the paucity of its resource base, Japan is the largest importer of a number of industrial materials and probably accounts for 20 percent of world imports of this group of commodities as a whole. As is evident from the data in Table 1, Japan's unusually large imports of these materials in 1973 and 1974 show the effects of speculation and panic buying when the boom was in progress, while its exports of the same commodities in 1974 and 1975 show the severity of the subsequent liquidation of stocks. Copper is the most dramatic example, with Japan shifting from being the world's largest net importer in 1973 to a position of virtual balance in 1974. Reactions in Japan to the commodity scare, while probably extreme, were not dissimilar from those in other industrial countries.

In sum, generalizations about international trade in primary commodities can be misleading, as the disparate factors behind the 1972–74 boom attest, and they can also be costly. Eventually it became evident that, contrary to earlier fears, the world did not face an era of permanent shortages, or of a proliferation of effective producer cartels, or of disquieting shifts in political power. In the meanwhile, however, such fears contributed to inflationary behavior, to uncertainty in financial markets and, eventually, to overly restrictive monetary policies and unnecessarily large reductions in output and employment. There were unfortunate political consequences as well. Commodity issues suddenly were on the center stage of relations between industrial and developing countries, pushed there in part because of the unfounded belief that OPEC could be the model for a general restructuring of trade in commodities and the "oil weapon" could be used to bring this restructuring about. Posed in these terms, the issue was almost sure to result in a stalemated confrontation serving principally to draw energies away from more urgent and constructive business between the industrial North and the underdeveloped South.

With respect to the future, what are the

factors to consider in developing a more useful approach to problems arising out of international trade in raw materials? Before answering this question, it is helpful to review the main characteristics of the commodity trade as a whole and the comparative significance of trade in raw materials.

Structure of the Trade

An examination of the composition and origin of world exports is a good place to begin. A breakdown of the major commodity groups and the distribution between all primary commodities and manufactured goods is shown in Table 2 for the year 1973. These data underlie much of the discussion below on the characteristics of the trade.

Table 2. Origin and composition of world exports, 1973 (*17*).

Commodity	Billions of U.S. dollars			
	Developing countries	Non-Communist industrial countries	Communist countries	Total world exports
Agricultural raw materials	9.2	17.4	3.8	30.4
Ores and minerals*	5.1	7.1	1.7	13.9
Food	22.8	51.2	6.9	80.9
Fuels	43.0	13.7	5.8	62.5
Manufactured and processed products	27.9	296.0	36.6	360.5
Residue	1.5	6.9	3.1	11.5
Total†	109.4	392.3	57.9	559.7

*Nonferrous metals—as distinct from ores—are included in manufactured and processed products. †Figures may not add to totals due to rounding.

Oil is unique. By its size alone, trade in oil is in a class by itself. It has been the largest single commodity in world trade for a number of years, accounting for about 5 percent of world exports. After the extraordinary price increases of 1973–1974, the proportion jumped to more than 12 percent. Thus in 1974, oil exports, valued at about $115 billion, were somewhat larger than exports of cereals, oil seeds, and all other foodstuffs put together. As a further comparison, net exports of copper, largest among the raw materials, probably were no more than $5 billion even with the high 1974 prices.

Consequently, the jump in oil prices had an enormous effect on the world economy. The quadrupling of its price represented an income transfer of about 2 percent of world gross national product (GNP) from oil importing to oil exporting countries. Furthermore, the economic shocks resulting from this price boost, coupled with the institutional difficulty of coping with them, probably were the major cause of the world recession in 1974, accounting for about half the decline from trend in world output during that year (*8*).

Other factors, now well known, put oil exporters in a uniquely strong position to manipulate the market. Among the most notable are the slow response of the demand for energy and the supply of energy fuels to higher prices, the concentration of exports among a fairly small number of countries, the strong financial position of those countries, and the comparative ease with which oil production can be cut back in the short term.

Against this background, it is evident that OPEC's market power and the potentially large economic impact of the exercise of that power cannot be used as a model for other commodities. Even for oil, the returns are by no means in. OPEC's cohesion as a producer cartel is only now beginning to be put to a test with the emergence of a substantial surplus between the potential export capacity of the oil producers and world import demand. In effect, the quadrupling of oil prices has set in motion a chain of reactions in the world energy situation; while this response has been slow to develop, its effect on the world oil market will be continuing and cumulative. By its actions from October 1973 onward, OPEC may have traded the advantages gained from maximum use of its market power in the short run for a steady attrition of that power in the medium and longer term.

Raw materials exports are comparatively small. Table 2 shows how fuels (mostly oil) and foodstuffs dominate world commodity trade. By comparison, trade in nonfuel minerals and other raw materials is small. Raw material exports in 1973 were $45 billion, less than one-fourth of trade in primary commodities and 8 percent of total world trade. Of this amount, exports of nonrenewable materials such as ores and metals were only $13 billion.

No item in this group is overwhelmingly large. In 1973, combined exports of the seven largest—copper, cotton, iron ore, wool, rubber, tin, and phosphate rock—probably accounted for about half the total for the group; the other half was spread over 25 to 30 additional commodities, for most of which world exports were under $500 million.

Obviously, shortages induced by marked changes in trade in some of these commodities can create troublesome temporary industrial bottlenecks and sudden jumps in their prices can contribute to inflationary pressures. However, the range of substitutability is considerable and there is also room to shift between primary and secondary materials, depending on price. Generally—again in sharp contrast to oil—even substantial shifts or disruptions in trade in individual raw materials are likely to have isolated, limited, and temporary, rather than pervasive effects on the world economy.

More commodities move from West to West than from South to North. Ever since OPEC's success in oil renewed the world's interest in primary commodities, the issues have been viewed principally as a confrontation between producers in developing countries and consumers in industrial countries. This attitude is reflected in the various actions of the U.N. General Assembly calling for the establishment of a New International Economic Order (*9*) and in the discussions between industrial and developing countries at the first session of the Conference on International Economic Cooperation held in Paris during December 1975. The developing countries, having the OPEC model in mind, see the trade in commodities as a potential mechanism to generate a substantial resource transfer. Industrial countries, apart from taking defensive action, seek assurances of regular and adequate supplies. Both the demands of the former and the concerns of the latter have diminished with the disappearance of shortages and the reappearance of surpluses, but the discussion generally continues as a dialogue between North and South.

Nonetheless, leaving oil aside, Table 2 shows that the major share of trade in primary commodities takes place between industrial countries (including the Soviet Union and Eastern Europe). These countries import more primary commodities (by value) from each other than they do from developing countries. This is true for each of the nonoil commodity categories—foodstuffs (where the dominance of industrial country exporters is exceptionally large), ores and metals, and other raw materials. In the aggregate only 30 percent of the exports of nonfuel primary commodities originates in the developing countries compared to 70 percent in the industrial countries.

This does not make the conditions for trade in primary commodities any less im-

portant for developing countries, since these commodities are the major source of their export earnings. Moreover, a number of developing countries are heavily dependent on exports of a single commodity. Yet developing country exporters predominate in only a comparatively small number of instances—tropical agricultural food products and a few raw materials. For the rest, new trade arrangements would depend as much or more on the support of industrial country exporters as it would on that of developing countries.

Furthermore, the fact that developing countries have widely different interests in primary commodities also complicates the consideration of commodity issues exclusively in North-South terms, or as an across-the-board confrontation between rich and poor nations. Some countries, such as India or Korea, have relatively small interests as primary product producers and exporters. Among some commodities there is a natural competition for markets as, for example, between copper and bauxite or between the beverage crops. Most of all, import costs are a general concern. The quadrupling of oil prices increased the oil import bill of the developing countries not having oil resources by $10 billion in 1974, or by somewhat more than the total amount of concessional aid they received in that year, and it added substantially to the cost of fertilizers and other manufactured products these countries must buy abroad. Thus even when the predominant movement of exports is from South to North, as in oil or sugar, the large majority of individual developing countries have substantial interests as importers and consumers.

Cartel paranoia. Much of the apprehension about the 1972–74 commodity boom centered on cartels: for how many other commodities would producers be able to form effective OPEC-like organizations? Mostly, the concern was about price, but more amorphous fears also existed. Following the OPEC model, would primary producers in a supposed era of chronic shortages withhold supplies for political purposes or, as a variation, might one envisage a grand alliance of primary producers (possibly financed by OPEC) aiming at a substantial transfer of political power?

These latter concerns may be dismissed out of hand, despite the tendency of developing countries to present a united front in generalized discussions of commodity issues in international forums. Apart from oil, there are no primary commodities for which the industrial countries conceivably could be held for political ransom, and in view of the distribution of commodity exports, there is no combination of primary producers that could control the world market and at the same time be motivated to act together to achieve a specific political objective (*10*). As for OPEC financing, most of the oil-producing countries are finding that they have more than enough domestic uses for their oil revenues and none has shown much inclination to supply concessional financing to prop up commodity markets in a big way (*11*).

A somewhat more serious question is whether primary producers can manipulate markets so that over a sustained period of time they can realize prices substantially above competitive levels. The burden of the discussion so far is that what happened in oil tells us little about other commodities, that the structure of the trade indicates that the possibilities for establishing successful sustainable, producer cartels for other commodities are few and unpromising, and that in any event the economic consequences for importing countries would be much smaller than with oil (*12, 13*).

Sustained control over international commodity markets depends on a number of conditions, principally the following: (i) the concentration of exports among a few countries; (ii) inelastic demand for the commodity; (iii) inelastic supply of the commodity or of close substitutes from sources outside the cartel; and (iv) policy cohesion and export discipline among members of the cartel to keep markets tight and prices high. Generally, to fulfill the fourth condition, exporters must be strong enough financially to accumulate stocks and forego current export earnings when surpluses develop.

With the exception of oil, these conditions do not apply to most primary commodities. Among the raw materials, for example, developing countries have a commanding export position only in copper, rubber, tin, bauxite, and hard fibers. Even though exports are concentrated among a few countries, obstacles to the sustained exercise of market control exist, including the weak financial position of most of the exporting countries, sharp competition from substitutes, and potentially large increases in supply from new sources. Apart from bauxite, markets for these commodities suffer from the slow growth in demand. For commodities where collusion between industrial and developing country exporters would be required, differences in policy objectives could be a further complicating factor. Industrial countries, in considering possible gains from collusive action on their exports of primary commodities, must also consider possible retaliatory action against their exports of manufactured goods, which represent by far the largest part of their trade. The general point is that primary producers in a very few instances and for a limited period of time might be able to manage supply so as to raise prices, but their ability to withstand cyclical downswings would be weak and their prospects for sustaining effective price-fixing arrangements over the medium term, let alone the long term, would be dim.

Most of these limitations on the exercise of cartel power were demonstrated during the 1972–75 commodity cycle. During the economic upswing the demand and supply factors cited earlier, rather than collusive actions by producers, were principally responsible for the boom in prices. Once the recession began, producer groups—for example, in copper, tin, rubber, and mercury—could do little to prevent the fall in prices. High phosphate prices have lasted longer because the demand for fertilizer remained strong, but weakness has now begun to set in. Jamaica's imposition of heavy taxes on bauxite, with other producers following suit in varying degrees, comes closest to the OPEC model. However, special factors apply to bauxite since trade takes place mostly within integrated companies rather than on international markets. Usually a company's refining equipment is geared to the use of particular ores and large investments in smelting and refining are hostage to producing country governments. Even so, strains have emerged over how the reductions in bauxite imports induced by recession are being allocated among the producing countries.

A final comment on commodity markets may serve to add a further perspective on the cartel problem. In the past two decades, demand for most primary commodities has grown comparatively slowly and exports have lagged substantially behind the growth in world trade. That is why most of the attention devoted to commodity issues was concentrated on proposals to reduce burdensome surplus and to support prices. The medium-term future at least may not be very different; World Bank studies project a tendency toward softness in commodity markets through 1980 (*12*). These are hardly the market circumstances in which new OPEC's are likely to flourish or which could lead to a substantial shift of power, political or economic, to countries producing primary goods.

Policy Directions

Now that most of the hysteria over commodities has died down, it is possible to take stock and to review options for U.S. policy in a calm atmosphere. Perhaps the

most important lesson to be drawn from the experience of 1972–75 is that there is no single policy to cover the full range of commodity trade problems. To say that the issues must be approached on a commodity by commodity basis is simply the beginning of wisdom.

Two commodities—oil and cereals—bring to the fore the vulnerabilities of the industrial nations to external shocks, either from supply interruptions or from sudden jumps in prices that lead to inflationary pressures and a contraction of overall output. Tropical agricultural products and a few minerals are of special importance to the developing countries. The remaining commodities fall into no special category and for the most part are comparatively small elements in trade or economic life in general.

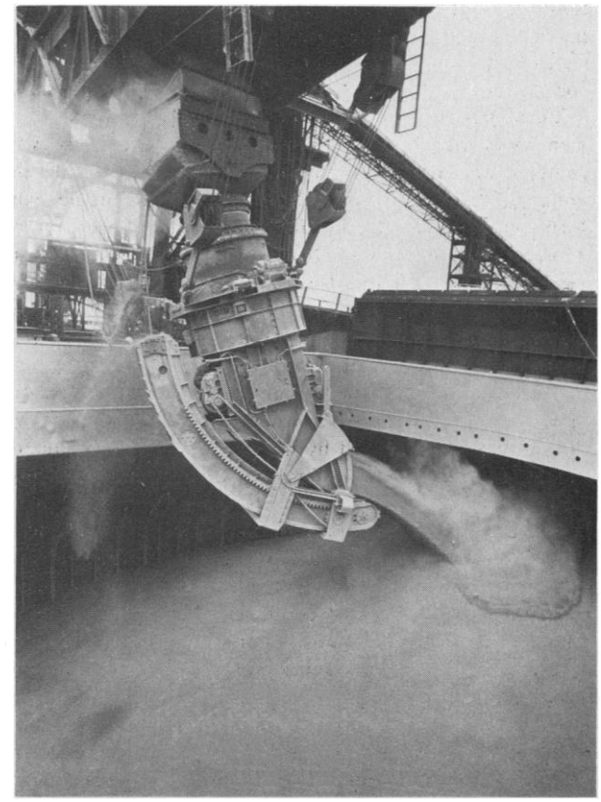
To begin with oil, the largest of the commodity issues, there is a wide measure of agreement that the vulnerability of industrial nations to OPEC actions must be reduced. This can be done by permitting market forces to encourage domestic production of energy fuels and to restrain demand for energy, and in some respects to supplement those forces by tax incentives or penalties or by regulatory measures. The conflict here is with the requirements for economic recovery, since allowing energy prices to rise too rapidly could introduce major problems of demand management and ultimately losses in economic output. Hence the policy debate over the next few years, as during the past two years, should center on how to arrive at a pace of adjustment that will represent a sensible compromise between the two conflicting objectives. This in turn will require constant modification as more experience is gained about a world of high priced energy and as present uncertainties about the response of energy demand and supply to higher prices are resolved.

If the major industrial nations pursue these adjustment policies on a coordinated basis, with the aim of making gradual but steady progress in containing dependency on imported oil, their bargaining position on the world oil market will improve and the market power of OPEC will diminish. Furthermore, if they continue to enlarge stockpiles and strengthen plans for sharing energy in emergencies (all of which is part of the program of the International Energy Agency) their short-run vulnerability to OPEC pressures will also be lessened. Eventually it may be possible for importers and exporters to reach periodic international agreements on oil, which might permit importers to invest somewhat less heavily in high-cost domestic production capacity and give exporters a somewhat larger market. But this possibility lies in the future, since the present positions of the two sides are far apart and further substantial changes in their underlying bargaining leverage would be required to bring them closer together.

In cereals the immediate requirement is to provide for the rebuilding of world stocks from their present dangerously low levels. Obviously this must await the reappearance of surpluses in world production of cereals. Even then the rebuilding of stocks is not likely to occur on an orderly, systematic, or adequate basis unless the financial burden is shared equitably among the industrial countries, including the Soviet Union, and policy objectives are negotiated and coordinated. Consequently progress in this area will require a major advance in international organization and decision-making. Until it occurs, the industrial countries will face the danger of economic shocks from sudden sharp jumps in food prices and arrangements to cope with food emergencies in the poorest countries will be precarious. Furthermore, there will be less chance of moving toward greater rationalization of world agricultural policies and realizing the efficiencies this can bring. A growing amount of world agricultural trade, on which such efficiencies rest, depends in turn on assured supplies and the sharing of grain reserves in time of reverses in agricultural production.

For those commodities that are exported principally by the developing countries, price stabilization arrangements between producers and consumers could reduce fluctuations in export earnings of developing countries and avoid costly disruptions to their economic programs. Greater price stability also could be helpful to consuming countries and might possibly improve the prospects for a more even flow of investment in the production of primary commodities. However, such arrangements are promising only for a limited number of commodities, and they are difficult to negotiate and sustain. The candidates here include coffee, cocoa, and tin where agreements have already been negotiated, and copper, rubber, tea, sugar, and hard fibers where substantial complications stand in the way of commodity agreements but where the prospects are at least worth serious exploration.

Generally, in such agreements, buffer stocks are likely to be more useful than export quotas as the principal stabilizing mechanism. Agreements based on buffer stocks should be easier to negotiate and, if substantial changes in such stocks are used as a decisive signal for changing the price range, they could permit fairly wide latitude for the use of market forces. Funds to finance buffer stocks should be supplied principally by the industrial countries. It may be more feasible and otherwise could be satisfactory to build such financing into each individual commodity agreement through the imposition of a small tax on



Cereals, one of the two commodities that bring to the fore the vulnerabilities of the industrial nations to external shocks, either from supply interruptions or from sudden jumps in prices that lead to inflationary pressures and a contraction of overall output. [U.S. Department of Agriculture]

the trade. This latter method is in use in the cocoa agreement.

For some commodities—notably among the minerals—where arrangements between producers and consumers prove to be neither negotiable nor appropriate, it would make sense for the industrial countries, on a coordinated basis, to acquire stocks when markets are soft and to dispose of them when markets are tight. This would help to avoid wide swings in prices and investment and would provide some security against price gouging and panic buying in times of shortages. Thorny practical problems exist but so long as the major industrial countries share the responsibility and act according to agreed guidelines, costs are likely to be small and the benefits considerable.

Among the minerals there is also a need to improve the climate for investment in the developing countries so as to assure an adequate and efficient buildup of productive capacity. Investment in the natural resource area is now surrounded by growing political tension, which is partly based on wide differences between host countries and private investors over the size of the prospective economic rents and how they should be shared. As a result, investment capital is being diverted to the exploitation of lower-grade mineral deposits in politically safer countries, with evident sacrifice to the efficient use of resources on a world scale and to the interests of the developing countries themselves (*14*). Here the World Bank and its affiliate, the International Finance Corporation (IFC) could help to ease tensions by becoming a substantial public participant, along with private investors, in politically sensitive investments. In effect the IFC would be acting as trustee for the developing countries—providing disinterested expert advice on what terms of investment are feasible and equitable and assuring these countries, through its policy of reselling its equity position to investors in host countries, of eventual control of the enterprise.

For the large remaining number of commodities, the best policy would be to do nothing, that is, nothing beyond the continuing and rather more urgent effort to reduce tariff and other barriers to trade generally. Primary producers justly argue that the present tariff structure discriminates heavily against the location of processing industries in their countries (*15*). A broad success in the Tokyo Round of trade negotiations, now under way, would reduce or eliminate tariffs on processed products, which in turn would encourage investment in the processing of these products in the primary producing countries themselves.

In sum, a variety of commodity policies, carefully drawn, could strengthen the structure of the world economy and help to reduce political tensions. They deserve sympathetic and urgent consideration, the more so because of the confusion now surrounding commodity issues. This confusion and the atmosphere of confrontation it generates is dangerous precisely because it can destroy the assurance of mutually responsible behavior that is the foundation for a multinational trading system and the steady growth of international specialization.

There should be no illusions, however, that changes in commodity markets can be a source of substantial resource transfers or otherwise contribute decisively to solving the problems of developing countries. Moderating the economic instabilities arising from the commodity trade will depend more on financial measures, such as a major expansion of compensatory financing measures and of development assistance programs, than on individual commodity agreements.

More generally, the most promising trade opportunities for the developing countries are in manufactured goods rather than in primary commodities. During the past 15 years exports of manufactured goods from developing countries have been growing by 12 percent a year; they now account for approximately 40 percent of the total exports of the developing countries not having oil resources, compared with 20 percent at the beginning of the period. Success in the Tokyo Round could assure that this trend will continue because it would give the developing countries improved access to markets for the growing number of manufactured products in which they are and will become competitive. Furthermore, a reduction in trade barriers would be a powerful means of reducing distortions in international investment and of helping to insure that the benefits of such investments will be equitably shared. All this would provide for real progress toward a more productive international economic order. A preoccupation with commodity problems, or worse, with commodity power and the collection of bizarre ideas that goes under the heading of resource diplomacy carries the danger of diverting the attention of the international community from this essential task.

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1. D. H. Meadows, D. L. Meadows, J. Rander, W. W. Behrens III, *The Limits to Growth* (University Books, New York, ed. 2, 1974).
2. During the Korean War, the boom ran its course between the first quarter of 1950 and the first quarter of 1951, when prices increased 45 percent. After that prices drifted downward for the better part of a decade until they reached a point about 5 percent below where they were when the Korean War boom started. *International Trade 1972*, General Agreement on Tariffs & Trade, Geneva, 1973.
3. R. N. Cooper and R. Z. Lawrence, *The 1972–7. Commodity Boom*, paper prepared for the meeting of the Brookings Panel on Economic Activity, and 5 December 1975. [The London *Economis* data are shown in the issues of 2 March 1974 and September 1975.]
4. For a careful examination of the factors setting the stage for the oil developments of 1973–74, see J. Darmstadter and H. H. Landsberg, *Daedalus* **104** (4), 15 (1975).
5. In addition, the United States was slow to react to the new situation and delayed increasing acreage, see F. H. Sanderson [*Science* **188**, 503 (1975)].
6. Cooper and Lawrence (*3*), in analyzing the evidence on industrial materials, emphasize the worldwide economic boom and particularly the economic surge in the United States as the major explanation of the price boom of 1972–73.
7. See also *Trade in Primary Commodities: Conflict or Cooperation?* a tripartite report of 15 economists from Japan, the European Community, and North America (Brookings Institution, Washington, D.C., 1974).
8. E. R. Fried and C. L. Schultze, *Higher Oil Prices and the World Economy: The Adjustment Problem* (Brookings Institution, Washington, D.C., 1975).
9. U.N. General Assembly, *Declaration and Program of Action on the Establishment of the New International Economic Order*, May 1974; *Charter of Economic Rights and Duties of States*, December 1974; 7th Special Session, U.N. General Assembly, resolutions adopted in September 1975.
10. Curiously enough, the U.S. export position in cereals is probably the closest case in point, hence the occasional proposals in the Congress and elsewhere to withhold grain exports from the Soviet Union or from OPEC countries to achieve political objectives. Even in cereals, however, potential political linkages are weak to nonexistent, and in any event short lived. Imports are a marginal factor in Soviet grain consumption (10 to 15 percent in a really bad year). For the Soviet Union, a rich country and a superpower, the option of reducing grain needs by reducing meat consumption for a year or so would almost certainly seem preferable to granting significant political concessions in order to buy U.S. grain. Increased Soviet efforts to achieve self-sufficiency would be the main consequence of U.S. attempts to use grain sales politically. As to the member countries of OPEC, grain needs are fairly small and could readily be satisfied from a number of alternative sources.
11. Venezuela made the only known venture in this area when it offered Central American producers short-term loans on quasi-commercial terms so that they would not have to dump their coffee on the market as soon as it was harvested. The United States, the major coffee importer, was prepared to do the same thing, on concessional terms, in 1962. Neither offer was taken up.
12. For essentially similar conclusions and the underlying argumentation see (*7*); B. Varon and K. Takeuchi, *Foreign Affairs* **52** (3), 497 (1974); R. F. Mikesell, *International Collusive Action in World Markets for Non-Fuel Minerals* (U.S. Department of State, Washington, D.C., July 1974). A more alarmist view of commodity cartels has become associated with the writings of C. Fred Bergsten. See, for example, C. F. Bergsten, *Foreign Policy* **14**, 84 (1974); *Challenge* **17** (4), 34 (1974); "The U.S. Must Now Deal with the Other Cartels," *New York Times*, 1 June 1975.
13. E. Stern and W. Tims, *Am. J. Agric. Econ.* **57** (2) 225 (19 → K. Takeuchi and B. Varon, *Ann. Am. Acad. Political Social Sci.* **420**, 46 (1975).
14. See, for example, the discussion of U.S. investment in mining in R. F. Mikesell, *Nonfuel Minerals: U.S. Investment Policies Abroad* (The Center for Strategic & International Studies, Georgetown University, Washington, D.C., 1975), chap. 1.
15. Among the OECD countries generally, duties are either zero or small on most ores and concentrates and substantial on semifinished and finished products manufactured from these primary materials. Japan is the worst offender, but the tariff structure of other industrial countries also discriminates in favor of their processing industries. This practice penalizes the primary producers in efforts to sell processed products in OECD markets. For a clear presentation of this tariff discrimination, see Economic Council of Canada, "Looking Outward: A New Trade Strategy for Canada," (Information Canada, Ottawa, 1975), table 10–3.
16. *Imports and Exports of Japan* (Ministry of Finance, Tokyo, Japan). Japan's imports of metal ores followed much the same trend as its imports of metals.
17. *International Trade 1974–75*, General Agreement on Tariffs & Trade, Geneva, 1975.