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9

Resource Politics: The Future of International Markets for Raw Materials

Alan R. Winberg

I

We have reached a major turning point in international relations. In the natural resource field there is a continuing shift of control over investment and production from generally economic forces to a mixture of both economic and generally political forces. Recent international meetings indicate that eventually trade in all materials will come under some form of intergovernmental regulation.*

At the Fourth United Nations Conference on Trade and Development, UNCTAD IV, held in Nairobi, Kenya, in 1976 and at the Conference on International Economic Cooperation, held in Paris in 1976 and 1977, states discussed several proposals and approaches for improving trade in primary commodities.[1] Among the issues discussed were instability of prices; instability of earnings for exporters; inadequacy of returns; inadequacy of investment; lack of processing of primary resources in exporting countries; availability of energy; security of supply; the need for more transparency on intercorporate and intracorporate sales. At these meetings, much was said but few issues were resolved. A deadlock was quickly reached between exporters and importers of raw materials. Predictably, those states favored by the existing system are very hesitant to see things change. It is equally clear that those states that desire change will eventually use every tool they have to make the system work more in their favor.

*The material presented in this chapter is the sole responsibility of the author and cannot be taken as representing the views or positions of the government of Canada.

As seen in Nairobi, a new source of conflict is developing between primary commodity exporters and primary commodity importers. As this conflict becomes more defined, present relationships and patterns of state behavior will change drastically. The less developed nations of the world are starting to band together to form much more cohesive political blocs than the Group of 77. Evidence of this development may be found in the recent efforts to organize producer associations or common fronts of exporting countries. The purpose of these associations is to set prices and production levels for mineral and agricultural products and to give producers a stronger position from which to deal with consumers. The major consumers of raw materials are industrialized nations, and the markets for raw materials are often dominated by large transnational corporations whose operations tend to confer the most benefit on these same industrialized, raw material–importing nations. Initially, these blocs of developing nations may be regional in nature, but as producers of raw materials realize the vast political and economic advantages of uniting their forces and cooperating to control price and production levels, the blocs will likely become interregional.

The health of the world economy plays a key role in the success of producer associations, of course. In periods of recession, world markets for raw materials tend to become very weak, and concerted action to raise prices does not meet with much success. However, if these associations exert pressure when the world economy is on an upswing, it is likely that they can make important gains.

The dramatic success of the Organization of Petroleum-Exporting Countries (OPEC) has certainly demonstrated the advantages of such producer cooperation and has made the world realize the power that may be derived from the possession of resources and resource reserves. Significantly, OPEC has shown the developing world just how vulnerable the rich, industrialized nations may be. In consequence, accelerated efforts have recently been made for the formation of new associations or the expansion of existing associations by producers of iron ore, copper, bauxite, coffee, bananas, mercury, phosphates, tea, jute, hard fibers, pepper, coconuts, and rubber. Is action based on OPEC's example possible for some or all of these groups?

For a producer association effectively to stabilize or raise prices of a given commodity for a period of, say, eighteen months, the association must meet certain conditions. In the first place, the members of the association must supply a large share of the world market. The smaller their share of that market, the less their ability to control prices is likely to be. The amount of leverage they can wield will depend upon the shape of the supply and demand curves[2] of the commodity in question. Some leverage may be exercised by associations supplying even as little as 20 percent of the world market.

Second, the world demand for the product must be relatively inelastic; that is, the quantities in demand would not be much diminished by a small rise in price. This would be so if the commodity were an essential good, especially if it were one that accounted for only a small part of the expenditure of a single consumer or that represented only a small fraction of the cost of the final product, as is true of certain raw materials.

A third requirement is that it be difficult for producers of the commodity who are not members of the association quickly to increase their existing production of the commodity or to bring new sources into production. As well, it should be equally difficult to substitute some other commodity for the one produced by the association.

Fourth, it is necessary that the structure of the world market for the commodity allow an OPEC-like producer action. It will be shown below that markets that are vertically integrated facilitate such action in the short run. In vertically integrated markets, the same firms undertake every stage of the production and marketing process. For example, the world oil industry is vertically integrated to a very high degree. Major transnational firms, and sometimes consortia of transnationals, undertake exploration, drilling, extraction, storing, transport to refineries, refining into various gas and oil products, transport of refined fuels to retail outlets, and quite often outright or partial ownership of these outlets. In the processing and transforming of most raw materials, technical advantages may be gained from vertical integration. Vertical integration and centralized control of all stages of production provide increased security of supply, improved coordination between successive stages, greater overall efficiency, and elimination of middlemen who may interfere with certain stages of production or marketing. Firms running vertically integrated operations may enjoy the advantages of near-monopolistic conditions with resulting increases in profits.

Fifth, the members of a producer association, or at least some of them, have to be in a healthy financial position (or, failing this, in a relatively strong, stable political position). An association needs some initial financing to take measures that could stabilize prices. Any stabilizing action carried out by producers, such as creation of buffer stocks or imposition of quotas, requires that supplies be either bought up or cut back. This means that producers will have to accept lower revenues for a certain time. Initially, this burden could be borne by those producers with the most favorable economic situation. The least costly method of cutting back supplies is domestic production quotas, but this requires a strong, stable political position in the country concerned, because it means persuading or forcing domestic producers to accept an initial reduction in revenue in hopes that restrictive action will lead in time to a higher export price and increased revenues. The financial capacities and political strengths of producers will determine the credibility of their actions and the likelihood of consumers taking retaliatory actions. If consumers believe producers are capable of taking and sustaining strong action, perhaps they will make concessions without such action being taken.

And finally, the members of the association must act in a cohesive and united manner so that the association can adopt and carry out an integrated policy, backed by all its members. Recent attempts at coordinating supply and price have demonstrated that the association is most likely to be successful when only a few countries control a large portion of the supply. When this is the case, there is less danger of one producer, tempted by a strong market, abandoning the association and increasing supply, thus taking advantage of the higher price.

Clearly, the majority of producer associations now being formed cannot meet these criteria for success to the same extent that OPEC has, and so one would not expect them to achieve a success of OPEC's proportions through similar means. However, it may be possible for producers to raise revenues on a more moderate scale by concerted action in several cases, notably copper, bauxite, and possibly iron ore, and in the agricultural sector, pepper, broad-leaved timber, coffee, cocoa, and perhaps tea. Even where OPEC-type action seems less possible, cooperation among producing countries could still be expected to bring significant benefits, such as stabilization of prices, improved marketing efficiency, a stronger posture with regard to synthetic substitutes, more leverage when dealing with transnational firms, and better utilization of resources. This is especially applicable in the cases of zinc, lead, manganese, tin, jute, sisal, rubber, oil seeds, and oils.

One method by which potential associations could make up for weaknesses they might possess when operating alone would be to form a common front with one or more other cartels. For example, the present members of the copper producer association, CIPEC (Conseil Intergouvernemental des Pays Exportateurs de Cuivre [Intergovernmental Council of Copper Exporting Countries]), are not in a financial position to cut back production substantially or to accumulate stockpiles. This financial weakness prevents CIPEC from becoming a strong producer association in the near term. If CIPEC were to be supported by the bauxite producer association, however, both would be much strengthened. Indeed, cooperation between the International Bauxite Association and CIPEC would be virtually essential for both associations because of the high cross-elasticity of substitution between copper and aluminum. Because one may be substituted for the other with relative ease, the price of copper affects the amount of aluminum used in production and vice versa. However, an alliance between copper and aluminum producers is highly unlikely at this time.

One interesting example of intercartel cooperation was the formation, in December 1974, of a state-owned multinational corporation for the marketing of coffee, set up on the initiative of the Venezuelan president, Carlos Andres Perez. Agreement was reached between five Latin American countries. Venezuela, a member of OPEC and possessor of large amounts of unabsorbable revenues, offered to use these OPEC revenues to buy surplus coffee production and thereby guarantee a minimum price to the other members. Although most OPEC member-states are not heavily involved in mineral trade, Iran has indicated that it may be interested in funding a copper buffer stock. This trend toward cooperation between cartels, especially where there is an overlap between memberships, illustrates how dynamic and far-reaching the changes created by the establishment of producer associations may eventually become.

But why this new interest in producer agreements? Highly cohesive producer associations controlling a very large part of total production have existed before. Without exception, these cartels eventually collapsed. There is no reason to expect new formations to become permanent institutions, even though, among international raw material exporters, it is true that certain leaders are now adopting longer-term plans and have realized the advantages of cooperating.

Nevertheless, all of these associations or cartels possess certain inherent instabilities. None is permanent. For one or more of the reasons outlined below, eventually the association will lose its leverage in the marketplace, and cohesion among its members will disintegrate.

For example, once the price of a commodity rises above its fair economic price,[3] new sources will be brought into production. Because price can be held at a certain level only by controlling supply, the life of a cartel may depend to a great extent on the length of the period required for bringing in new sources of the commodity in question or for developing a substitute. Moreover, as the price rises consumers can be expected to reduce their demand for the commodity as much as possible, and tastes will tend to change. The association, therefore, must plan well to minimize the danger of such a result. If the producer association or cartel does not manage the supply and price of the commodity efficiently, it is even possible that its actions could do more damage than good in the long run. An excessive price held for a long period may encourage the establishment of new sources, the development and use of substitutes, and a change in tastes to the extent the price of the commodity might fall to a point much below the original level. Even while the price is high, this does not guarantee that total revenues to exporters will be higher. Total revenues are determined by both price and quantity sold. If demand is very elastic (greater than unity), total revenues will drop because of the decrease in quantities demanded.

The cohesion of the cartel will also be subject to increasing strains as time passes because of different characteristics and needs of its members. There always exists the danger that a state will base its strategy on a cartel or producer association only to find the cartel subverted by one or two other members. In the present international system, based on the sovereignty of nation-states, it is very difficult to ensure that members will act in good faith with regard to production quotas, for example. Some members may need to earn foreign exchange more than others, making the temptation to disregard production quotas strong. The problem becomes even more complex when some members are more economic producers than others. For example, in an iron ore association with Brazil as a member, Brazil could sell its ore at a much lower price than the other members and still make a profit because of the high quality of the ore. Although

Brazil's long-term interests would best be served through cooperation with the cartel, under certain conditions the possibility of conflict with the other members would be great.

Further, if the commodity is nonrenewable, the difference in the amount of reserves held by different members can reduce the cohesion of the association. For example, studies have shown that Algeria's oil will last only fifteen years at present exploitation rates, but Saudi Arabia's will last for centuries. Thus, a conflict of aims exists between these two OPEC members. Algeria would like to take advantage of the present inelasticity of the demand for oil[4] by setting a much higher price than is now being charged. In this way, it would obtain maximum revenues for its oil over the next ten or fifteen years to use in developing other industries and energy substitutes. Saudi Arabia, on the other hand, does not want to speed up the development of substitutes and in any case could experience difficulties in absorbing greater revenues in the near term.

Yet another problem endangering the producer group's cohesion is the social pressure to increase or decrease supply that may exist within the societies of different association members. State enterprises may not be preoccupied solely with maximizing profits. They may be concerned with providing employment or protecting the environment. Goals will be different among association members. In general, the only way that prices can be raised or stabilized by a producer association is by controlling supply. This fact has important short-run implications for employment in producer countries.[5] In the case of OPEC, this aspect of controlling production was relatively unimportant for most members because relatively few persons are employed in oil extraction. It becomes more difficult, however, in mineral extraction where more people are employed. And the group of agricultural commodities present a very difficult employment problem for a government wishing to cut back production. This is the situation facing the group of Latin American coffee-producing states where production comes from thousands of small peasant producers.

Political problems within producing countries can also reduce the association's cohesiveness. In the long run, the positive effects of the association's actions within its member countries will depend on government policy. The vast majority of Third World producers, especially those whose exports are based on mineral extraction, have a most unequal income distribution. Past experience has shown that benefits from united producer action in mineral extraction have been distributed largely between mine workers and the government. How much accrues to peasants or to nonunionized labor depends solely on the political will of the government concerned. The same could be said for some agricultural commodities.

The case of coffee again provides a good example. In many producing countries, it appears that the gains from higher world prices have gone to the larger-scale farmers and plantation owners. Before frosts in Brazil sent coffee prices soaring in 1976, governments of many exporting countries had been trying to cut back coffee production by imposing quotas on all existing producers. They paid the (higher) world price to these producers for their (reduced) production. This system of control prevented small-scale peasants from increasing existing production and also restricted new peasants from moving into coffee production. Thus, the most profitable production and highest profits were left to larger-scale producers. However, this is not the only method that has been used to cut back supply. In Tanzania, the domestic price was lowered, and supply fell accordingly. A large tax was applied to all coffee exported. Although producers get lower prices, the government spends the new export tax receipts on measures directed toward improving the lot of the peasants. If the governments were not sincere, however, this arrangement could be even more detrimental to the peasants than the first one outlined: with the export tax, small producers have to accept reduced production and lower prices; if the revenues from the export tax are not spent for their benefit, they would be much worse off. If major political instability or loss of domestic control results from a government's domestic implementation of a producer association policy, it is possible that this country may not be able to continue to take common action with other producers, reducing the cohesiveness of the association.

The length of a cartel's life depends on its ability to take successful action, and the degree of success possible depends in turn on the commodity in question. But the built-in instabilities of a cartel are such that in the long run even the strongest will weaken.

Clearly, faced with the threat of actions that may be taken by a producer association, consumers can be expected to become increasingly organized as time passes. This has been true of oil consumers reacting to OPEC.

In general, if producers limit their goal to obtaining stable prices, the association will be much more stable than if a higher price were pursued. Clearly, as prices increase above normal levels, the payoff to producers who drop out and operate outside the cartel becomes greater.

II

Several industrial countries, such as Australia, Canada, New Zealand, Sweden, South Africa, and the USSR, are substantial exporters of a wide variety of raw materials. Some of these exporters, Australia and Sweden in particular, have supported the formation of producer associations for the commodities they export. Others have refused to support these associations, hoping to improve trade in raw materials by international commodity agreements negotiated by both producers (net exporters) and consumers (net importers). Certainly, negotiated agreement between consumers and producers seems to be the most peaceful and satisfactory way to solve the problems of international trade in commodities. But producers and consumers may not have common ideas as to the magnitude of specific problems or future predictions of trends in supply and demand.

Consumers often are hesitant to enter into these agreements. History has shown that consumers often profit from fluctuations in raw material markets because these fluctuations tend to keep less industrialized producers in a very weak bargaining position with regard to terms of trade. Although they may have to pay higher prices in boom periods, the most important net importers of raw materials are industrialized nations, and the performance of their economies does not depend exclusively on stable raw material markets as does that of many net exporters. Thus, although it cannot be denied that both producers and consumers have a common long-run interest in stable markets, achieving this goal is not really of immediate concern to consumers.

In commodity agreements, initially, it is usually the consumers who can afford to finance the agreement but the producers who benefit. Critics in importing countries are quick to point out that agreements are usually undermined by producers who dump supplies during periods of low prices and create artificial shortages when the market becomes stronger. This activity provides a strong argument against consumer participation in commodity agreements.

In a world based on equal, sovereign states, every state watches out for its own self-interest. Often, short-term consequences have a much greater effect on government decisions than possible long-term results. From this perspective, producers will be less interested in negotiating with consumers when markets are strong, and consumers will not be interested when markets are weak. In transitional periods between strong and weak markets, consumers have no immediate interest in raw material markets and are not likely to agree to finance stabilization measures. This dichotomy cannot be resolved without fundamental changes in the international system that would change, in turn, the nature of relations between states. For the present, satisfactory commodity agreements can be successfully negotiated only after producers have demonstrated that they are capable of taking common action. Consumers, too, can be expected to show their power. Once both have demonstrated relative strength, then and only then can a satisfactory agreement be negotiated to each side's mutual benefit.

Since 1945, agreements including both producers and consumers have been negotiated on only six commodities: wheat, sugar, tin, cocoa, coffee, and olive oil. None has a very good record for stabilizing prices, except for the tin agreement, and now it too is suffering strains. Within the International Tin Council, fruitful negotiations have taken place because the producers act in a cohesive fashion, as do the consumers. Consumers tend to negotiate in good faith because there is a serious threat that producers could take OPEC-like action. Of course, the price of tin could not be increased as much as that of oil because there would be a very high rate of substitution. Even though the United States is not a member of the Tin Council at this time, over the last fifteen years it has helped increase demand for tin by building up large strategic stockpiles (over 400,000 tons).

The important point about the tin agreement is that it has worked in the past because both the producer group and the consumer group have been relatively strong and cohesive. Only when both groups have gathered their forces can satisfactory negotiations take place and a workable agreement be reached.

It is to be expected that producers of commodities that are not traded under an international agreement will eventually form into associations or cartels. In general, as pointed out above, inherent instability, possibly accelerated by consumer reaction, will eventually weaken these cartels to the point where the producers will want to negotiate with consumers to guarantee a stable market. The difference between a commodity agreement negotiated at that juncture and those that are attempted at present is that producers would likely have developed a common position of strength from which to carry on negotiations with the consumers, who are already organized to a certain extent, in part because of the transnational companies that dominate the production and transformation industries.

Thus, the organization of international commodity markets may be seen as cyclic in nature, starting with a relatively "free" market in which transnational firms dominate the scene. These markets are characterized by very volatile price fluctuations, which are further accelerated by speculators and transnational firms. Their near monopoly of information in relatively opaque markets often allows them to make substantial economic rents. Rents are also generated from the oligopolistic nature of these industries having large barriers to the entry of competition and often a wide spread between market price and marginal cost. These rents may or may not be passed on to producers, and the extent to which they are shared is determined in negotiations between transnationals and individual producers. The next stage of the cycle is the creation of producer associations that control price and production levels in an attempt to stabilize prices around long-term trends, at the same time increasing their share of rents presently flowing to transnationals. In some cases, producers may attempt to raise prices at levels that increase factor rents. In the third phase, consumers will associate to react to the producer association. Depending on the practices of the producer and consumer associations, the market may become quite disrupted during this phase. In any case, inherent weaknesses in both groups will eventually lead to a negotiated commodity agreement between producers and consumers. Also, attempts may be made to regulate long-term demand. Depending on the commodity, such agreements could include the creation of buffer stocks, production, export or import quotas, countercyclic financing, compensatory financing, and other methods of dealing with short-term fluctuations from long-term trends, none of which are without problems. The life of the commodity agreement will depend on how well future trends in demand and supply were predicted and on how long all parties act in good faith. Inevitably, at some point serious problems must be expected. There is no way to always predict accurately in human society. Nor can one hope that no cheating will go on when there is a payoff to cheaters and when the actors are sovereign nation-states and transnational companies.

The cycle is completed when the commodity agreement breaks down and we find ourselves with a situation similar to the one that existed before the formation of the producer association. At present, we are at the initial stage of the cycle for most commodities, though the market for oil is already at the start of the third stage. It is expected that, after going through the entire cycle initially, the duration of subsequent phases will change. The first three stages would occur much more quickly, and hopefully, the last phase, involving cooperation, will last much longer.

A further factor that will enter into the picture over the next few decades is the possibility of developing important new sources in the deep seabed for several raw materials, especially oil, nickel, manganese, and cobalt. If these sources are controlled by present importers, markets could be radically transformed, and of course present exporters would not pull very much weight in such markets. Creation of an effective international seabed authority, or some other means of regulating the exploitation of the seabed, does not seem very possible in present circumstances. This means that once the necessary technology for ocean mining is developed, the market cycle for the sea's raw materials may not conform to the general pattern. On the other hand, although it is unlikely that these producers will associate in the very near future, if they were to join together they could play a major role in the future exploitation of the seabed and thus possibly protect their position as land producers.

III

Transnational companies play a major role in raw material markets during phase 1 of the above cycle. In the following phases, their importance is reduced. As the market moves into phase 2, the actions taken by producers to stabilize the price of their exports will ultimately enable them to deal with the powerful transnationals that often control these resources. As the cohesion and resulting effectiveness of the cartel develop, much of the transnationals' power will be transferred to the host governments.

A goal shared by all exporters of raw materials, both industrialized and less developed, is to increase the amount of local processing and to have greater control of the transnationals' general operations within its borders. During phase 2 of the market cycle, producers will realize that this can best be achieved by forming a common front with all other producers to decide upon and coordinate appropriate measures—export controls, export taxes, and the like—to force the transnationals that control much of the world's production and processing of raw materials into taking the action most beneficial to the source countries.

As much as it may hurt a peoples' national pride, it is clear that, in the short term, transnational enterprises can be a great help in the development of a country's natural resources. Transnationals bring capital, technology, and marketing skills to the host country. A symbiotic relationship exists, with both the transnational and the source country profiting from the arrangement. Because of imperfect markets and the price differentiation in raw material markets, there are definite advantages for a source country if a transnational (with its technological expertise) is in charge of production and marketing of a given commodity. Indeed, for those products in which markets are vertically integrated, nationalization of an industry has several short-term disadvantages, especially with regard to marketing. Such nationalized enterprises have to compete with the transnationals and with other nationalized enterprises, and such competition would be based solely on price. This inevitably favors the transnational because it can offer more than just a competitive price. Consumers may be more interested in being sure that contracts will be filled on time and with the proper grade or quality. Here, the transnational, because of the contacts it has already built up, can offer established relations with foreign buyers, several sources of supply that would guarantee greater certainty that contracts would be met on time, and a product and quality control well known and understood by the consumer. This explains the transnationals' dominance during phase 1 of the market cycle.

In the following phases, the presence of the transnationals may well be instrumental in transforming the market. The presence of such firms in the petroleum industry was a most important factor (along with past policies of the major oil consumers) in allowing the members of OPEC to increase the price of oil quickly and dramatically. Because the oil industry is vertically integrated, the transnationals simply passed on all price increases (increase in taxes imposed by producers) to the consumers. OPEC's actions received little negative reaction from the transnationals; the annual reports of these companies illustrate how their profits rose just as fast as the price of oil and in equally impressive dimensions.

Thus, in the short term, there are good arguments for individual states to allow the transnationals to retain charge of production and marketing. In the long term, however, the opposite is true, for these advantages can and do become disadvantages. The transnational's ability to transfer technology and capital to the host country does not always compensate for the loss of control of the industry. The transnational's easier access to credit often leads to the take-over of national companies. The transnational uses its established contacts, expertise, and ability to transfer technology and attract capital to extract favors, such as special tax concessions, subsidies, and grants from the source country. All the trump cards are brought into the bargaining process. In the long run, the resource producer wants to escape the industry's vertical integration. The resource producer would prefer to export a finished good rather than a raw material.

The presence of the transnational causes certain other problems. First, these companies have the ability to transfer price, to use the channels of international trade to rake off surpluses, often through sales to affiliates. Copper and bauxite are examples of commodities where this has taken place.[6] In the second place, transnationals also operate with security perspectives; they tend to diversify their sources. The more diversified the sources, the more difficult it will be for an individual producer to resist granting concessions demanded by a transnational, because the transnational can play off one producer against another. Once again, the producers' strength lies in maintaining a common front in negotiations. Even where a strong producer association exists, the transnational can be expected to make attractive offers to single members in an attempt to persuade them to break the common front. Third, because most transnational corporations are vertically integrated, there will be constraints on these companies developing local processing, local uses of the commodity, or local production in the host countries. This tendency is well illustrated by the relations between aluminum companies and bauxite producers. A strong producer association has much more leverage than individual producers when negotiating, first, with transnationals to gain local transformation and, ultimately, with industrialized nations to gain greater access to their markets.

Thus, the problems of producer countries when they confront the transnational companies may also be alleviated if not solved by organizing a common front to coordinate dealings with transnationals. Any action, from imposing stricter controls to nationalization, that is carried out by only one producer is practically doomed to failure. Actions carried out in common are different. If every producer imposed the same tax or restriction, the transnationals would be obliged to acquiesce. United action would allow the producing countries to retain their access both to export markets and to international capital markets (consumers would still require an adequate supply of the commodity in question). An action such as partial or outright nationalization would also solve the transfer-pricing problem, because national agencies or an agency within the association could set up auctioning systems to ensure that consumers paid the full market price. Once formed, strong producer associations are likely to take actions similar to those just described, thus transforming the role of these companies in the second, third, and fourth stages of the market cycle.

IV

The Sixth Special Session of the United Nations General Assembly in April 1974, the Seventh Special Session in September 1975, and a number of specialized conferences in 1976, 1977, and 1978 were devoted to discussions between the industrialized countries and the developing nations to explore the possibilities of starting a transformation process that would lead to the establishment of a new international economic order. The industrialized world is turning its attention to consideration of demands from the developing countries for a new global order that would provide a more equitable sharing of the world's wealth and power, a new system of international relations "based on equity, sovereign equality, interdependence, common interest and co-operation among all States."[7]

Although the industrialized states have endorsed the concept of eventually creating this new order, it is obvious that no major changes can be expected overnight. However, whether or not the industrialized nations wish to redistribute a part of their wealth, the above analysis indicates that, in the field of primary commodities, a gradual redistribution is to be expected in favor of raw material exporters. As we move into phase 2 of the market cycle, producer associations can be expected to become more and more important as tools to advance the diffusion of economic and political power in the world. Over the next decade, one can expect to witness a continuing transfer of power away from the industrially advanced centers toward previously peripheral regions. Those developing nations that are major exporters of vital raw materials will become more and more important in world affairs.

It would be improper to assume that improvements accruing to net exporters of raw materials automatically would make the present international division of wealth and power more equitable. Certainly, real resources would flow from net importers to net exporters. But the workings of a market have nothing to do with justice or equity. The advanced, industrial nations are the greatest net importers, but many developing countries would also be affected, as they were by the quadrupling of oil prices. Developing countries that are net importers of commodities in which markets can be transformed would find themselves in an even less favorable position. Also, some industrial countries, such as Australia, Canada, South Africa, Sweden, and the USSR, are net exporters. Thus, without touching on the question of equity, one could generalize that there would be a diffusion of power away from advanced, industrialized net importers toward raw material exporters.

Some of these exporters may indeed share some portion of their wealth with developing states, and in this regard the establishment of common fronts of producers may be seen as a step toward establishing a new economic order in which there would be a greater probability that the world's wealth and power would be divided more equitably between all nation-states. This probability would be further increased if mechanisms were established to assure the resource-poor complete compensation for the losses they face stemming from higher import prices.

Purely economic market forces do not determine world investment, production, and consumption of raw materials. It has now become crystal clear that eventually trade in all commodities will come under some form of intergovernmental regulation. Economic forces remain important, but they are overshadowed by political forces. In the system, these political forces are centered around individual nation-states, each *competing* to pursue its own particular interests. This leads to a relatively shortsighted perspective, with each state more interested in its immediate needs and goals than in the problems of the global community.

I would argue that the establishment of a new international order will not occur as long as states remain the basic actors in the international system. But, unfortunately, the creation of a world federalist system does not seem very likely in the foreseeable future. Until such a system is established, there will continue to be overproduction; noneconomic transformation of commodities that should be processed in the source countries before exportation; inefficient, wasteful consumption; and violent price fluctuations, creating hardship for individual producers and making planning impossible in many developing areas. In the meantime, the market cycle outlined above will be operative for primary commodities. Notice that as the market progresses through stages 1 to 4, the amount of waste of resources may diminish. Eventually consumers' and producers' shortsightedness will have to give way to eventual commodity agreements that will take into account the nonrenewability of some natural resources and the inputs required to obtain these resources. But even then, the agreements obtained will be related more to the relative political strengths of producers and consumers than to concerns for our ecology or a more equitable distribution of the world's wealth.

Notes Chapter 9: Resource Politics

1. This paper is not concerned with temperate zone fibers and foodstuffs, or raw materials in which high-income countries are dominant from the standpoint of reserves, production, and export. The relevant commodities are thus tropical zone foodstuffs, petroleum, and some minerals such as bauxite, tin, nickel, copper.

2. A supply curve is a curve relating the quantity of a commodity that will be supplied to the price. Generally, the curve is depicted as rising from left to right, indicating that producers will supply more at a higher price. A demand curve relates the quantity demanded to price. Generally, the curve falls from left to right, indicating that consumers will purchase less at a higher price. Steep curves are "inelastic," and flat curves are "elastic." In a market where supply and demand curves are very inelastic near their intersection, a group of relatively small producers could exercise a great deal of leverage.

3. "Fair economic price" is defined as the absence of factor rents where price equals marginal cost or, more simply, as the price at which existing producers will continue to produce but no new producers will be attracted into the market.

4. All commodities face very elastic demand and/or supply curves in the long run. If the price were high enough, eventually substitutes would be developed or new sources brought into production.

5. In the long run, however, I would contend that the increased revenues gained by the producer association can be managed to improve employment levels and development.

6. See John Tilton, "The Choice of Trading Partners," pp. 419–7[illegible]. Tilton demonstrates that international exchange depends to a great extent upon where transnational firms have affiliates.

7. United Nations, Office of Public Information, *Charter of Economic Rights and Duties of States*, p. 2.