

The Possible Uses of Commodity Agreements

For most of the period since the end of World War II, commodity agreements, while often advocated and occasionally put into operation, were regarded rather unfavorably both in economic literature and in the political arena. Only in a few cases where producing countries were able to muster enough political power as in wheat and coffee were agreements actually in effect and even in these cases only sporadically.

In the last few years, however, the idea of commodity agreements has taken a new lease on life. A call for a system of such agreements centered on buffer stocks is a major plank of the program for a New International Economic Order vigorously pressed by Third World countries through UNCTAD in a series of north-south dialogues *cum* confrontations. At the same time, more favorable economic evaluations of their potentials have appeared,¹ although much of the current writing, like the great bulk of the older literature, is rather skeptical.

The rich countries are slowly yielding to the campaign of the poor countries to establish a system of agreements governing a number of the major commodities that enter international trade. An agreement for sugar went into effect January 1, 1978, and agreements are operating also for cocoa, coffee and tin.

The diminution in the hostility of the developed countries towards commodity agreements appears to be based on tactical considerations rather than on any genuine conversion to their economic merits. Faced with even more unappealing Third World demands, including debt cancellation and more extensive technological transfers under more favorable terms, the cautious movement toward commodity agreements seemed the least costly means of meeting the political need to exhibit a positive response on some issues. A general commitment to consider commodity agreements more favorably is hardly a sweeping

¹ See, for example, J. R. BEHRMAN, *International Commodity Agreements: An Evaluation of the UNCTAD Integrated Commodity Program*, Overseas Development Council, October 1977.

concession. Commodity agreements like other international agreements are likely to include broad statements of purpose that encompass a variety of objectives. The ends actually sought in operation are apt to depend upon the resources available and the objectives of those in control. That is why the questions of resource investment in and control over operations are such keenly disputed issues in the negotiations about the "integrated program", the term used by the developing countries for their proposal for a set of commodity agreements built around buffer stocks.

Even if these issues are resolved as the developing countries desire, it seems probable that the hopes of the developing countries for succor from commodity agreements are doomed to disappointment. This conclusion is difficult to avoid if each of the possible purposes that might be served by a commodity agreement — Control, Stabilization, Improved Terms of Trade — is considered in turn. Security of supply, another possible function of commodity agreements, does not loom very large in the aims of the developing countries.

Commodity Agreements as a Means of Permitting Developing Countries to Gain Control of Their Own Resources

A theme that often appears in statements by political leaders of the developing countries is the need for developing countries to re-establish control over their own resources. Indeed, a statement that the developing countries have sovereignty over their own natural resources was one of the three major points of the Declaration on the Establishment of a New International Economic Order adopted by the U.N. General Assembly in 1974.²

To the extent that control or sovereignty is intended to achieve an economic advantage, it may be assumed to include the terms upon which raw materials are marketed rather than to refer merely to domestic ownership of the sources of their production. To this degree the control objective might be regarded as inseparable from the stabilization or improved-terms-of-trade objectives. However it merits separate treatment as a possible assertion of a desire to exercise market power — that is, the power to set either prices or quantities.

The success of OPEC in tripling then quadrupling the price of

² The others referred to the need for improved terms of trade for raw material producers and for transfers of resources from the rich to poor countries.

oil had an electrifying effect upon the countries producing other basic materials, and the impetus to imitation has been widespread. There appear to be some instances in which producers have succeeded in cooperating on the restrictive practices that are necessary to raise prices above free-market levels. It has been reported, for example, that this is the case for platinum, palladium and other platinum group metals.³ For the most part, however, efforts to establish cartels in other products, notably copper, bauxite, and iron ore, have had but limited success. Despite the great political cohesion of the developing countries in their fight to establish the New International Economic Order, the effort to establish cartels seems to founder on one factor or another. In some cases (e.g., bauxite) one or more of the major sources of supply is found in a rich country. In others (e.g., iron ore) production is sufficiently dispersed over a number of countries so that the necessary agreements on restrictions of production and exporting are difficult to establish. For still others there are substitute commodities that make some of the producers fear to push prices up too far (e.g., copper and aluminum, aluminum and steel, and steel and tin). The history of cartels indicates that success in raising prices is not very frequent and when successful does not tend to last long. Eco found that less than half of 51 international commodity cartels for which he could obtain data were successful in raising prices substantially and that the median duration of these was only 4 years.⁴ Nor is the record of international commodity agreements encouraging about their ability to stabilize prices. Price fluctuations were actually greater in agreement years for coffee, sugar and rubber while the opposite was true for tea, wheat and tin. For the last two commodities however government operations (U.S. and Canada for wheat and U.S. for tin) dominated the effects of the agreements in influencing prices.⁵

Thus the lack of sufficient concentration in production and trade works against the successful establishment and maintenance of cartels for most commodities. It is this inability that leads producing countries to seek the aid and consent of the consuming countries to measures designed to influence prices and quantities. Of course the participation of consuming countries is the distinction between cartels and commodity agreements.

³ JOINT ECONOMIC COMMITTEE, *The United States Response to the New International Economic Order: the Economic Implications for Latin America and the United States*, February 23, 1977.

⁴ Cited by BEHRMAN, *op. cit.*, p. 21.

⁵ As summarized from various studies by BEHRMAN, *op. cit.*, p. 21.

Stabilization as an Objective of Commodity Agreements

The case for international cooperation toward stabilization objective rests on the propositions that:

- a) stabilization is worthwhile and
- b) that it should be sought by international rather than national means.

The literature on the analysis of the gains entailed in stabilization supports the general conclusion that price stabilization tends to produce welfare gains to society as a whole if storage costs are not too high.⁶ However, the literature also shows that the distribution of the gains between producer and consumers depends upon the underlying supply and demand conditions. Under simplified assumptions (linear supply and demand curves and disturbances that cause parallel shifts in the curves), consumers gain and producers lose from price stabilization when the disturbances arise on the demand side while the opposite is true when they stem from the supply side. In addition to these possible gains, measured in terms of changes in producer and consumer surplus, stabilization itself may be a source of gain if risk-averting producers or consumers prefer a lower stable income to a higher unstable one. Another benefit that is sometimes claimed for commodity price stabilization is the avoidance of an alleged ratchet effect of commodity price increases upon the general price level; in this view commodity agreements are helpful to consuming countries such as the U.S. in the fight against inflation.

The locus of the benefits that might accrue from price stabilization is further clouded by the fact that the producers of commodities are not invariably poor countries nor are the consumers invariably rich countries. For some commodities, such as wheat and cotton, the United States and the Soviet Union and other resource-rich developed countries are important producers and poor countries are among

⁶ B. F. MASSELL, "Price Stabilization and Welfare," *Quarterly Journal of Economics* May 1969, and "Some Welfare Implications of International Price Stabilization," *Journal of Political Economy* March/April 1970. Also S. J. TURNOVSKY, "The Distribution of Welfare Gains from Price Stabilization: A Survey of Some Theoretical Issues," in F. G. Adams and S. A. Klein (editors), *Stabilizing World Commodity Markets*, Lexington Books, Lexington, Mass. (1978).

the main importers. (In the negotiations for a new wheat agreement the poor countries are arguing for guaranteed supplies at stipulated maximum prices but the exporters are refusing.)⁷ Indeed coffee, tea, cocoa, and bananas are the sole exports of developing countries which do not have close substitutes produced in the rich countries. It is also true that some developing countries have relatively small stakes in commodity production and exporting (e.g., Mexico). The most dynamic export sector for developing countries as a whole, indeed, is manufactures which accounted for 41 percent of total LDC non-fuel merchandise exports in 1975.⁸

Of course, the Third World campaign for commodity agreements concentrates on a core of 10 commodities which are important to developing countries and which are thought to lend themselves to price stabilization: cocoa, coffee, copper, cotton, jute, rubber, sisal, sugar, tea and tin. Even for this list, however, the prospect of gains to the poor countries of the world from the successful stabilization of prices, owing to reasons set out above, have to be regarded as quite restricted. In a recent study in this *Review*, covering all these commodities and 7 others, Messrs. Brook, Grilli and Waelbroeck concluded that price stabilization was likely to benefit the developing countries only for coffee, cocoa, and jute in the above list, and for wheat and wool in addition.⁹ (For the other 12 commodities included in the study, the effects on the developing countries are uncertain.)

The case for stabilization has been cast thus far in terms of prices although arguments have often been advanced in terms of revenue stabilization. It is usually claimed in this context that instability in export proceeds for developing countries impede the planning and execution of their development programs. However, efforts to establish the link between stability of export earnings and rates of growth empirically have produced mixed results.¹⁰ Even if there were such a link, a producing country wishing to offset the instability of its export proceeds could do so by allowing its international financial reserves to expand and contract as need be. International action

⁷ *Economist*, June 24, 1978, p. 97.

⁸ GATT, *International Trade, 1976/77* (Geneva: General Agreement on Tariffs and Trade, 1977), Table 7.

⁹ E. BROOK, E. GRILLI, and J. WAELBROECK, "Commodity Price Stabilization and the Developing Countries," in this *Review*, March 1978.

¹⁰ See the summary of studies in L. STEIN, "Export Instability and Development: A Review of Some Recent Findings," in this *Review*, September 1977.

might, however, be justified on the ground that the need to accumulate and maintain reserves places a burden on a low income country which should be borne by the international community. The IMF's compensating financing facility is a recognition of such a responsibility. The scheme, which was recently liberalized, provides credits to offset shortfalls in export proceeds, but they must be repaid in 3 to 5 years. Some 50 countries, have borrowed a total of about \$5 billion under these arrangements.¹¹

Although revenue stabilization would be preferred, price stabilization has been taken as the practical objective by the Third World countries. The reason is that the price information required to operate a price stabilization plan is available on a day to day basis whereas the information on quantities necessary for revenue stabilization is available only after delay. Price stabilization is claimed in any case to be superior to compensatory financing since the latter benefits only producers while the former benefits consumers as well. Compensatory financing, it is suggested, will not prevent reduced output, whereas price stabilization will.

Even if it is accepted that the developed countries have a responsibility to mitigate the effects of instability on the developing countries and if the uncertainties about the benefits of price stabilization are set aside, the question of the feasibility of price stabilization has to be faced. Whatever the mechanism chosen — multilateral contract, (e.g., wheat agreement), export restriction (e.g., coffee agreement), or buffer stock (e.g., tin agreement, and favored by UNCTAD) — the chief problem for any scheme aimed at price stabilization is to forecast the long run equilibrium price which should be the target if price stabilization is the sole purpose. If such forecasts can be made with reasonable accuracy, private speculation should serve to make the market price approximate the target. The case for public intervention must rest on the proposition that an international organization can arrange for better forecasting than is likely to be produced in the private sector.

Even if this assumption is made, it must be recognized that any forecasters whether engaged by a public authority or by private interests face enormous difficulties.¹² If the aim is to establish a buffer

¹¹ *IMF Survey*, January 23, 1978.

¹² For a realistic but nevertheless optimistic review of the problems, see L. R. KLEIN, "Potentials of Econometrics for Commodity Stabilization Policy Analysis," di Adams and Klein, *op. cit.*

stock, it is necessary to be able to predict the size of the stock needed to keep the price within the target range. The advent of econometric models provides the opportunity for a much more systematic assessment of the effects of the many interacting variables that determine prices and quantities in a commodity market. It is unlikely that any buffer stock management of the future will be content simply to lean against the wind in its price stabilization efforts. Yet the modelling of commodity markets encounter some especially difficult problems. The markets for most commodities are strongly impacted by institutional influences some of which are hard to capture in econometric models. The behavior of oligopolistic firms (copper, bananas) and of government marketing boards or other public institutions controlling exports in producing countries (cocoa) may be amenable to incorporation in models since the entities involved may be assumed to be governed by decision rules of an economic character. However, government stockpiles maintained for strategic purposes in consuming countries (tin) cannot be satisfactorily dealt with since the policies of governments change over time. Commodity modelling also faces serious problems owing to the need for world wide data for production, consumption, price and stocks. Some data, particularly for stocks, are impossible to obtain from some socialist countries, and the latter are important participants in a number of commodity markets.

The upshot of these difficulties is that large errors must be expected in the prediction of the long run equilibrium price and of the required stocks. Furthermore, while it is conceivable that it may be feasible to manage stocks so as to stabilize prices over some undefinable short run, no econometric model will forecast the kind of cataclysmic events that have dominated the price history of the last quarter of a century — Korea, Vietnam, and the concomitant shocks of OPEC and the crop failures of 1973-1974. What can be expected at best is price stabilization between such large exogenous shocks to the system, and the re-targeting of prices after each such event.

The danger during the periods of relative stability is that the selection of the wrong target price will be more destabilizing than the free market would be. The managed price will have to be kept within a range that is credible to potential speculators in the market. The temptation that will be present particularly in managements influenced by producing countries, will be to set a higher price than is justified by long run market conditions.

Commodity Agreements as a Means of Improving the Terms of Trade

But why shouldn't the market power of the organized producing and consuming countries be used to raise the market price above what it otherwise would be? Even if one does not accept the claims of Prebisch, Myrdal, Singer and others to the effect that international markets work unfavorably for primary product producers, it is still possible to favor higher prices as a means of transferring resources from the rich countries to the poor ones. The record of the rich countries, particularly of the U.S., in providing aid to the poor countries can only be described as lamentable. Modest internationally established targets for aid have not been met. Furthermore the commercial policies of the U.S. and other rich countries have not been as favorable to the manufactured exports of the developing countries as could be desired; even though they have been adequate to permit a rapid expansion from a very low base, the current protectionist tendencies in the rich countries threaten the further development of this trade.

The answer to the "why not" question is that there are several necessary conditions required to permit the transfer of resources through higher commodity prices. One is that production be concentrated in the poor countries and consumption in the rich countries. Even for the few products which satisfy this condition, higher prices transfer resources to countries in proportion to their exports of these particular products, rather than in accordance with their need or just claims.

Another and more likely to be satisfied condition is that of "additionality". This means simply that the increased prices should not produce a political response in rich countries that leads to a reduction in other forms of aid. In most rich countries, it would appear that the link between commodity prices and aid appropriations is a very weak one. Of course, it is conceivable that a systematic sustained policy of using government power in rich countries to raise the prices of primary products imported from poor countries might bring a reaction that would reduce aid, but this seems remote at least for the present.

The other and much more difficult requirement for a successful policy of raising price above the free market equilibrium price is to

restrict supply. Without effective supply restriction a price above the long run equilibrium level calls forth cumulating surpluses that are expensive for the state to acquire and store. Further the overhang of stocks tends to depress the market price and thus to increase the cost of price maintenance. This is a lesson that mountains (or lakes) of products such as wheat, meat, milk, and cheese that have accumulated at various times in the U.S., the European Economic Community, and elsewhere appear not to have driven home.

National governments have sometimes tried, usually with modest success at best, to restrict output in order to protect their price support programs. The possibility of successful output restriction on an international level seems quite limited. It is difficult to imagine a successful international effort to restrict output of agricultural products, for example, through direct controls such as those limiting acreage planted in particular crops.

An alternative to mandated production restraints would be to pay producers a lower price than the price received from consumers. The price to producers would be set so as to call forth the quantity that consumers would buy at the above-equilibrium target price. This is neither a new idea nor a remote theoretical possibility. It is rather a measure that has been put into use in a number of individual countries through the imposition of export taxes or by means of official marketing monopolies (e.g., the marketing boards in African countries) which have paid farmers lower prices than the world prices which their produce fetched.

However, the implementation of either of these mechanisms by an international authority presents formidable political difficulties. It is hard to imagine a successful international agreement to levy a common export tax. Even if all producing countries agreed on the tax rate, there would be great problems in ensuring that the revenue did not directly or indirectly find its way back into the pockets of the producers and thus call forth excess supply. Alternatively, the effect of an export tax might be achieved by having importing countries collect the tax or by having an international authority levy a stamp tax, the latter being enforced by the refusal of importing countries to accept any imports without stamps. In these arrangements also, the problem of the disposal of the revenue would present great difficulties. The producing countries could be expected to demand its distribution to them and this would again open the possibility that the funds

would go back to the producers thus endangering the supply restriction effort.

Because the campaign for a system of commodity agreements is a political one, economic arguments are unlikely to dissuade the developing countries from their fundamental purpose. For example, the accumulating evidence that the alleged tendency towards a long run decline in the terms of trade for primary products cannot be substantiated, has not led to any abatement of the campaign to establish commodity agreements.

This and other parts of the plans for a New International Economic Order have two dangers: One is that the developing countries will really begin to believe that their development problems are primarily external, or at least have their attention diverted away from the internal problems that are at the heart of economic development. A higher price of tea will help Sri Lanka, but there is no feasible tea price that will make it rich. Sri Lanka's economic development depends mainly on the skills of its people, the human and physical capital they are able to accumulate and their success in designing and operating a viable society and an efficient economy.

The second danger is that the developing countries are demanding arrangements that will not produce the results they anticipate or which imply drastic changes that the developed countries will not implement or perhaps not even accept. The developed countries may enter into commodity agreements to defuse current political pressures but subsequently find themselves unable to meet the financial requirements owing to both the economic and domestic political costs involved.

Perhaps, taking all the economic and political factors into account, a settlement on an effort to stabilize prices around their long term trend is the best that can emerge from the present situation, but even this is difficult to achieve and the distribution of its benefits uncertain.

A writer who has lived through the unraveling of the successive disillusionments with aid as an instrument to further economic development may perhaps be forgiven for concluding on a wistful note: Direct aid with all its faults again seems attractive relative to aid through commodity prices raised by international efforts.

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