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MARKETING, COMMUNICATIONS AND TRANSPORT

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THE attempt since World War II to increase output in the deficit areas of the world has stressed policies that would lead to the expansion of food production. While this emphasis has been desirable, it should be recognized that the development of marketing is as important as the expansion of physical production. A marketing system which is wasteful of resources or fails to provide the means by which consumer wants are readily transmitted to producers can be as serious a drag on the level of real income as low *per caput* physical productivity.

If there were any satisfactory way of measuring objectively the degree of complexity of a marketing system, that measurement would provide a fairly good index of the level of real income of a region. This follows from the fact that many of the marketing services, such as fancy packaging, have a high income elasticity of demand. On the other hand, the more basic distributing services are as essential as the physical product itself and indeed a community cannot advance beyond the stage of narrow economic self-sufficiency without, for example, an adequate transport system.

It was in recognition of the fact that expansion of food supply includes development of marketing that the 9th F.A.O. Conference passed the following resolution: 'Considering that accelerating economic development calls for more farm, fish and forest products to meet consumer demands and nutritional standards, with an increasing proportion of perishable goods . . .' and 'considering further that advance in this direction is obstructed because many closely inter-related aspects of agricultural production and marketing must be improved and modernized in balance with one another . . .' the Conference 'urges member governments to make adequate provision for marketing work in their development programmes and to give due attention to balancing increases in production for sale with corresponding improvements in marketing, processing and transport organization and facilities . . .'. The area of economic activity which is known as marketing produces mainly form, place, and time utilities. In addition, it provides the institutions through which demand and supply establish prices. It is in establishing prices that some of the more difficult problems of marketing arise. These include price instability, inequalities of bargaining power, and attitudes on the part of farmers and consumers toward the activities of traders.

The Key Services

A good marketing system has two objectives: (1) to provide efficiently the form, place, and time utilities, and (2) to provide effective price-making machinery which will reflect accurately supply conditions and will protect consumer sovereignty. The second objective is a critical one in a free enterprise economy which emphasizes individual consumer and producer decisions, for the market institutions assume the responsibility of transmitting the price signals which inform producers where resources should be used to satisfy consumer wants.

I would consider the first objective and point out the key services that a marketing institution must include in order to reach it.

With respect to *form*, the critical service is identification of the product. This is necessary because units of a product which appear to be similar may be, in fact, quite different in quality. For example, wheat varies greatly in its milling quality and it takes some skill to detect these variations. Similarly other products must be clearly identified so that buyers and sellers may know exactly what is being traded. Therefore, the form of the product should be so well defined that individual grades are, in effect, different products; then quality differences can be reflected in prices. One way to inform buyers and sellers on quality is to subject products to professional grading. That is to say, the rating is done by a neutral party, whose decisions are acceptable to both buyers and sellers. In Canada the Federal and Provincial governments have inspection services for grading a number of farm products which enter the market, but the intensity of this service varies considerably between products, being excellent in some cases and only a general guide to quality in others.

One of the shortcomings encountered in physical grading is the difficulty of carrying the grades through to the final consumer. Where this is possible it is a valuable aid in communicating consumer preferences to producers. Grading is a particularly important but difficult problem in international trade where the tastes of consumers in an importing country may not be readily understood by the exporter. The fact is that the variations in this service within countries, between countries, and between products is great and an effort to expand and to tidy up these services, with an eye to both national and international markets, would be highly desirable. An international authority which defined grades of products would be a valuable aid to trade in agricultural products. Such an agency, by defining quality, would expedite trade much as a system of weights and measures does by defining quantity.

Another method of identification of the product may be carried out by private dealers. This occurs when a processor, wholesaler, or retailer packages and labels his product and follows up with an advertising campaign. Consumers seem to respond very readily to such a programme which puts the onus on the individual seller to meet the standards which he claims for the product. The danger to the public interest of identification by this means is that the advice is proferred by an interested party who admittedly puts forth a biased judgement on the product. The method, however, works surprisingly well provided (1) that there is a high degree of business integrity, (2) that there is a reasonable amount of competition, and (3) that the consumer acts intelligently. The policy question of what, in the interests of good marketing, is the proper balance to strike between the extremes of cold, unimaginative but objective grading, and colourful, imaginative, biased identification based on promotion by private sellers, is not an easy one to answer. Experience would seem to indicate that the two methods are not mutually exclusive and that they both play a part in a mature, efficient marketing system.

With regard to *place* there are two main problems. One is the question of how a market institution can provide accurate price differentials based upon location of the products. The other concerns the provision of efficient transportation services that will promote the greatest advantage from the division of labour and trade. An example of the first is that a bushel of wheat at a point in the producing area is worth less than an identical bushel at the terminal elevator by an amount equal to the cost of handling and shipping. In Canada the market for grain is the most successful among commodity markets in achieving perfect pricing between points separated by long distances. This achievement is a result of good transport, storage, and price reporting facilities. Livestock prices, though not as perfectly related between marketing points as are grain prices, nevertheless keep in fairly close relationship from one part of the country to another because the trading information from the public markets is made available through government publications, radio, and the press.

The prices which tend to get seriously out of line between points are those for products which are not shipped regularly. An example of this kind of imperfection has been cited in a study of a local vegetable market where it was found that simply for lack of information dealers often imported vegetables when local supplies were available at lower prices.[1] The market institution in these instances has not been adequate to bring into play the equalizing forces. This phenomenon occurs quite frequently in local markets where prices and quantities are not reported as regularly or accurately as they are for products which move in large quantities in the national and international markets.

The way to eliminate this type of price imperfection and to rationalize prices over a wide area is to improve communications by a market reporting service. Such a service, however, must be associated with an adequate transport system. Canada is a good example of a region whose agricultural development has been vitally dependent upon transport to provide access to markets. The economic area of Canada is a strip of land from 100 to 500 miles wide, 3,500 miles long, with a population of 17 million persons. In these circumstances, railway and highway mileages *per caput* are high. Transport costs account for from 12 to 15 per cent. of the marketing bill for agricultural products, which is probably a reasonable price for the nation to pay for the advantages of regional production, wide product distribution, and price rationalization between regions as widely separated as those of Canada. This fact has been recognized, and Canada's basic policies for economic development have centred around transport and communication. Early in her history it was her policy to encourage the building of a transcontinental railway and to tie to it certain aspects of a railway rate structure designed to encourage trade and build up markets, both inside and outside the country. More recently a national radio system has contributed to the integration of the nation into larger market areas.

With respect to pricing over *time*, the problem is to cope with the uncertainty of future events. Accurate and objective market information will aid in achieving perfect prices over time as it does in the case of form and location; the difference is that estimates of the future are involved, so that no amount of information or analysis can entirely remove the imperfections.

The time aspect of agricultural prices is particularly important because many products are produced seasonally and are marketed over an extended period. In the case of these products, dealers must judge what the demand is going to be between now and the next crop and, on the basis of this estimate, decide when to buy or sell.

[1] R. S. Elliot, B. A. Campbell, and P. J. Phair, *The Marketing of Fruits and Vegetables in Greater Winnipeg*, Economics Division, Canada Department of Agriculture.

These activities affect the supply available now relative to the future and serve as a means of relating present to future prices. Even when good storage facilities exist, it is possible to find examples where the price differences between two periods of time bear little relationship to the costs of holding the product. Such examples, however, do not detract from the importance of storage as a means of attaining price rationalization over time, for the effect will be to push prices in the right direction, which is to say that when storage is linked with reasonably good forecasts of future demand and supplies, present prices will tend to equal realized future prices less the cost of storage and compensation for the risk involved. It is obvious, however, that price forecasting is difficult and that the price uncertainty associated with marketing a product over a period of time is inimical to the expansion of trade and to spreading sales over the period of time that will maximize utility. The question is what sort of provision in the form of marketing institutions should be made to meet this problem.

The private trade has invented the futures market, an institution which operates in conjunction with storage facilities to link up present prices with those of the future. The hedging facilities which such a market provides, serve to separate the marketing service of risk bearing from that of storing and processing the product. Secondly, a futures market encourages the participation of large numbers of speculators whose purchases and sales help to smooth out the price fluctuations which would occur if the demand and supply changes were not anticipated. The futures market, by affording facilities for hedging, does furnish the means of avoiding much of the risk of price changes for those who store and process the product. These facilities, however, have been regarded by primary producers as of little value in reducing price risk chiefly because of yield uncertainty. It may be that its value to producers as a means of reducing price uncertainty has been underrated and this might account for an attitude of indifference on the part of farmers concerning futures trading. It does not account for the hostility which some producer groups show toward futures markets. It arises out of their suspicion that future trading actually increases price fluctuations and uncertainty because of the predominance of uninformed speculators. The critics claim that such speculators do not make judicious purchases and sales of futures contracts based on informed opinion of future conditions of demand and supply, but act *en masse* on the strength of rumour and inadequate appraisal.

An alternative to a futures market is for the State to accept responsibility for price uncertainty by means of a forward price or a support price programme. This form of protection against price changes is useful to the farmer but does not afford as much protection to the firms engaged in processing and distributing as do the hedging facilities of a futures market.

Although there is the particular problem of price uncertainty associated with holding a product over time, the storage facilities which expand the market beyond the seasonal pattern of agricultural production usually involve costs which are modest relative to the value added. Thus, adequate storage must be included among the key marketing services.

Canada has deemed it in the national interest to supplement the facilities of the private trade and to supply storage space for grain at terminal points. This space, together with that owned by private enterprise including farmers, affords sufficient capacity to store about two normal Canadian grain crops. Canada has also used a subsidy programme since 1907 to encourage the building of cold storage warehouses. Freezing has proved to be an economical and nutritionally satisfactory method for preserving meats, vegetables, and fruits, and seasonality in consumption is being virtually eliminated through the improvement of merchandising methods for frozen goods.

A further consideration in marketing over time is that as the marketing period is extended the cost of financing increases. Furthermore, the banking institutions must be in a position to supply the kind and quantity of loans needed for storage or extensive processing of products. Marshall referred to the costermongers who paid seemingly exorbitant rates of interest for daily loans. This represents a primitive form of financing under which it would be impossible to conduct economical product distribution. Thus, the improvements in marketing technology which permit better distribution of products over time require financial institutions which provide loans of the right kind and amount.

Price Instability

The phenomenon of *instability* resulting from variations in output together with an inelastic demand, characterizes the prices of many agricultural products. The resulting price and production cycles are not conducive to the optimum development of trade or to the most efficient use of resources. This is one of the more serious problems under the second objective—that of providing a satisfactory price making institution which gives considerable freedom to individual buying and selling.

There are two ways of meeting this problem. One is a government programme of support or forward prices at or just below the equilibrium level. This will serve to lessen instability by dampening down the cycles of production as well as those of price. The other method is to integrate vertically the firms engaged in the production and marketing of the products. Vertical integration brings together, through contracts or by a combination of firms, two or more of the processes involved in producing and marketing a product. Such integration has the effect of reducing the relative price fluctuations with which a firm has to cope because the higher price elasticity of demand for the marketing services dilutes the lower price elasticity of demand for the primary product.

Vertical integration also serves to reduce price fluctuations by strengthening the tenuous link between producers' decisions and consumers' wants. Agriculture is probably the only industry in which decisions to produce are made almost entirely without reference to the effect of these decisions upon price. Thus, agriculture in the free enterprise economies functions nearly in the classical tradition of independent decisions by numerous producers, no one of whom can affect the price by the amount which he produces. It may be that agriculture should abandon its traditional separation of the production firms from the marketing firms in favour of vertical integration. This would remove some of the weight of price uncertainty and the burden of capricious shifts in the terms of trade from the shoulders of the farming sector.

Imperfect Competition

An unequal distribution of bargaining power between economic sectors in the long run will divert resources from their optimum use; in the short run it allows one group to exploit another. The possibility of the latter engenders in the minds of farmers and consumers the suspicion that competition may be deliberately suppressed by those who provide the marketing services. Apart from the suspicion of collusion, there is a general realization by farmers and consumers that they buy and sell from a position which approximates to that of classical free enterprise while the middlemen compete in terms of appeals and service rather than of price. No doubt there is a problem when persons in a trading position of small competitors deal with a group of buyers or sellers so few in number that each can, as an individual, affect price. In these circumstances, since the firms are in business to make a profit, their logical policy is to set limits to the extent of price competition in which they engage. That kind of competition does not necessarily imply collusion on the part of the dealers; they may, for example, merely admit tacitly that each is entitled to a reasonable share of the market or they may accept the leadership of one of their number for pricing. Thus, there is an incentive to avoid price competition and to seek business by other methods. The significant fact is that the fully competitive price may be modified without resort to formal agreements; a non-aggressive attitude toward pricing can be sufficient; each firm merely adheres to a margin, price or mark-up and thus avoids the use of price in a fully competitive sense as a means of attracting business. Such pricing policies on the part of a few firms may distort prices from what they would be under perfect competition, but they do not necessarily lead to abnormal profits in the long run, for either the high price or margin attracts new firms or the various services involved in non-price competition tend to absorb the potential profits. In either case the net result does not represent the best use of resources.

Thus, there should be included among the essential marketing facilities those which guard against the distortion of the terms of trade in a market environment where there is lack of price competition. Even though it may be difficult to prove that such distortion is costly in terms of resource use and development of trade or that exploitation is serious, nevertheless people are convinced that it is bad and insist upon adequate protection.

A possible safeguard against the various practices associated with non-price competition is to extend the scope of legislation which deals with business practices which are in restraint of trade. Those which limit competition as well as those which involve irresponsible price cutting need to be clearly defined and prohibited. The enforcement agency, however, should be required to devote at least as much effort to research and interpretation as to the punitive aspects of such legislation. Marketing firms, farmers, and consumers favour price competition if the bargaining powers of the parties involved are somewhat equal. Therefore, additional advice and aid in removing the causes which impel business to avoid price competition or to indulge in price cutting would probably be welcomed.

The other approach is to try to equalize the bargaining power on both sides of the market by combining small buyers and sellers into marketing groups. This is the essence of the Canadian legislation which permits the setting up of marketing boards by farmers to bargain for all producers. It is an attempt to lift them out of the position of the classical trader into the modern world of bargaining groups.

A voluntary solution to the problem is by way of co-operative selling organizations. It is hardly necessary to stress the importance of co-operatives as producer and consumer bargaining agents. Their role may increase too if agricultural production units further abandon their characteristic classical individualism and if vertical integration develops.

Retailing

Retailing has two characteristics which are significant in developing and expanding markets for agricultural products. One is that it is costly in the sense that it absorbs a sizable proportion of consumers' expenditures for food. The other is the fact that in many countries retailing uses resources in a manner which hides considerable under-employment.

Food retailing has undergone a drastic change in Canada and the United States with the introduction of the supermarket style of distribution. The principles involved are (1) to offer attractive wares, (2) to give the customer free access to the merchandise so that he will not only fall victim to 'impulse' buying but will do most of the work himself, and (3) to eliminate delivery and credit services. The savings have been impressive, although many independent retailers still exist on the basis of business done after supermarket hours and by offering credit and home delivery. Nevertheless, retailing is an area where real savings have occurred by cutting back on services, and the ready acceptance of this by consumers indicates that they may not really wish to purchase extensive services from the retail trade. The streamlined retailing system for food, however, makes its greatest appeal to the middle income group who own refrigerators and automobiles which enable them to buy in quantity and to provide self-delivery at minimum inconvenience or expense. Also, the lower time preferences associated with a higher income make it much easier for the middle income group to pay cash and avoid costly credit arrangements. It is a real challenge to marketing policy to bring the economies of this type of food distribution to families with low incomes.

In connexion with underemployment, Galbraith has noted the expensive form of retailing in Puerto Rico where numerous stores whose volumes of business are small offered credit and individual attention to customers, all of which added up to a very high requirement for labour and other resources.[1] In the prevailing circumstances, however, any adjustment toward a more efficient system was impeded

[1] J. K. Galbraith and R. H. Holton, *Marketing Efficiency in Puerto Rico*, Harvard University Press, Cambridge, Mass., 1955.

by the fact that the retail sector harboured a large number of underemployed persons. Persons in this category are very difficult to dislodge because they do not or cannot respond to the stimulus of competition and opportunity costs. Secondly, if these underemployed are replaced by an efficient high volume minimum service system, they constitute a welfare problem unless the growth and development of the economy as a whole can absorb them in more productive forms of employment. This problem is a fairly universal one; retailing has a low minimum capital requirement and provides a means of self-employment that in fact often turns out to be underemployment. It is a problem that must be handled somewhat gingerly because of its welfare aspects, but it should be tackled because it exists in an area where real savings can be effected.

Attitudes toward marketing

My discussion has been based on the assumption that efficiency—in the sense of maximizing value added in relation to resources used—is the proper test of good marketing facilities. This leads to emphasis on grading, storage, transportation, financing, retailing, and price making.

There are other values and attitudes, however, that prevent the development of marketing policies based entirely on efficiency. Because of them producers and consumers view the input-output test as only one of several criteria by which marketing institutions should be judged. This stems from a number of ideas. The first is that the exchange of goods is not a productive process because the utility added is not physically apparent—a persistent notion that appeared early in the history of economic thought. Another is the suspicion that price making in the marketing sector is highly unilateral and serves to allocate too large a share of consumer expenditures to the persons who perform the marketing services. The third is a producer-held opinion that the market-place should operate so as to allocate a 'fair' share of the national income to occupational groups. It is apparent that the reconciliation of these attitudes with economic efficiency makes the creation of marketing policy a more complex process. The first idea has no substance and vanishes with dissemination of elementary knowledge as to the nature of production and of the functions of marketing. Even as it lingers in the background, however, it may be a deterrent to the expansion of services that constitute modern aggressive marketing methods.

The second attitude contains a mixture of economic fact and fiction. I have tried to say something about the substance contained in this idea in my reference to imperfect competition. The problem can be met by positive policies which reduce the possibility of unilateral price making. The last of these is more difficult to take into account because it imposes on marketing and pricing the twin tasks of efficiently transferring goods and of satisfactorily distributing income. The two are often inconsistent, though not necessarily so in the minds of those who want both. These persons expect that the two objectives can be accomplished if the price-making machinery operates correctly, which they interpret to mean equality of bargaining power between buyer and seller. Thus, they feel that if somehow farmers could arrange to bargain in groups or with government assistance the production sector would receive its 'fair' share. The difficulty is that the problem of low net income is only partly due to degree of bargaining power. The downward pressure on producer income has come from other fundamental causes, including low price and income elasticities of demand and rapid improvements in input-output ratios on the supply side. The marketing process is singularly ill adapted to cope with that problem and, to the extent that it is expected to provide 'fair' income distribution, it is prevented from providing efficiently the pricing and other marketing services.

D. R. BERGMANN, *Institut National Agronomique, Paris, France*

I agree with Professor Anderson on all his major issues and would limit my comments, therefore, to four further points. Efficiency in marketing often requires compulsion. One must try to organize an efficient channel of distribution; then make the farmers use it. This does not at all imply monopoly pricing; the Dutch fruit, flower, and vegetable auctions (*veilings*) are used, more or less compulsorily, by all producers in an area, but price determination there closely resembles that of perfect competition.

For instance, if one wished to improve meat marketing in France, one should compel all producers to sell their animals at central markets (or better, to sell carcasses at wholesale meat markets) and forbid purchases and slaughter by local butchers. This might lead to apparently unnecessary transport of animals and meat to satisfy the requirements of some villages and small towns. This would be compensated for, however, by improved productivity in processing and, above all, by better price formation.

Professor Anderson's comments on storage were limited to the problems of seasonal storage. Long-term storage aimed at stabilizing the flow of agricultural commodities from one year to the other may be worth considering—even though it will usually be undertaken by public agencies rather than by private persons. Several authors have examined this problem, including Gale Johnson in connexion with his study of forward pricing, and further research seems to be warranted. It might be useful to make use of the econometric models set up by electricity experts, in particular by Mr. Massé of *Electricité de France*, the national electricity board. The problem they tried to solve was of the following type: considering a flow of water of known variation and a dam of a given size, how must the dam be operated to maximize over time the total utility derived from the water? The decisions which are to be taken in managing stocks of agricultural commodities seems to be of a similar nature and could probably be guided by similar models.

The marketing system has, of course, very significant effects on the terms of trade of agriculture. This important question has been dwelt upon already, particularly in Professor Hanau's paper, but perhaps I may give a small example. In one area of western Brittany, farmers gave up domestic bread making in the nineteen-twenties. They brought flour to the baker's and received bread in exchange. In 1930, 60 kg. of bread were obtained for 50 kg. of flour. In 1939, the exchange value of that same quantity of flour had fallen to 50 kg. of bread. From 1956 to date, farmers have been getting only about 40 kg. These barter ratios are far from measuring the general terms of trade of agriculture but they are significant since there has been no visible quality change in the two commodities. It may well be that part of this deterioration in the ratio can be explained by dissimilar rates of progress of productivity in wheat production and in bread making. In spite of that, it seems probable that it is partly related to differences in bargaining power between farmers and bakers. Concrete observations of this kind can throw much light on the factors influencing farmers' terms of trade.

On the question of the relation between the organization of marketing and the terms of trade, I think that one should not adopt too passive an attitude. Farmers can improve their lot by sales efforts and also by vertical integration, a subject which will be examined, I understand, by Professor Dantwala. Father de Farcy, who recently wrote a book giving many concrete instances of sales promotion for farm products, may also have something to say about the results which can be obtained in that field—at least by some producers.

M. L. DANTWALA, *University of Bombay, Bombay, India*

One point in Professor Anderson's paper which has great significance in many Asian countries relates to the unequal bargaining power of those who provide the marketing services (the middlemen and the traders) on the one hand and the producers and consumers on the other.

It is a strange feature of the economic system that trading profits are generally high in the poorer communities. In India our experience shows that marketing margins are unconscionably large in the tribal areas. Further, although I am unable to adduce statistical evidence, I think these margins are larger for cereals than for industrial raw materials, where the consumer-cum-manufacturing interests are well organized and powerful. These powerful interests would not permit trading margins larger than are warranted by actual costs and, if and when necessary, they will themselves enter the trade. The situation naturally varies from commodity to commodity, depending upon the strength of the consumer's interest—for that of the producers, with the exception of the growers of plantation crops, may be taken to be almost identical. At least, if such a differentiation exists between the marketing of cereals consumed by a large mass of unorganized consumers and that of industrial raw materials used in organized industries, it gives added support to the contention about bargaining power.

Professor Anderson has spoken of vertical integration as one of the devices for reducing price uncertainties. The integration that he envisages, I presume, is between the producing and the marketing firms. Instead, what actually happens is an integration of manufacturing and marketing firms or, if not integration, a well-understood liaison. In this case, the consequences of vertical integration are entirely different. Where a few powerful buyers dominate the market, there is certainly a possibility of exploitation of the primary producer. I would like to submit, however, that no hasty conclusion should be drawn.

Professor Anderson rightly points out that mere absence of collusion may not be a conclusive proof of absence of exploitation; a non-aggressive attitude can be sufficient to modify fully competitive prices. But does that mean that aggressive bidding and stubborn refusal to share the market are necessary conditions of free competition? Suppose a non-exploitative co-operative organization (of either manufacturers or consumers) enters the market tomorrow, what would it be expected to do? Resort to aggressive bidding to prove its *bona fides?* I would submit that each situation will have to be judged on its merit.

Before I come to the next question of institutional remedies, I would like to hint at another aspect of this problem. In marketing, as in farming, there are both big and small operators. The small trader is often ineffective in the context of aggressive buying by the big, but he may not be ineffective in a situation of less-than-competitive prices created by a 'non-aggressive attitude' amongst the big operators.

Regarding the institutional remedies, I would like to emphasize that in the absence of comparable bargaining power, many of the improved devices and regulations may not yield the desired results for the protection of the producer and the consumer. Such improvements as regulation of up-country markets, grading of produce, provision of storage facilities, &c., are of course essential. But, as a study of regulated markets in Bombay State showed, even the most stringent provisions of the appropriate Act were somehow circumvented, and the needy seller was not in a position to resist. Thus, the provision that all sales must take place by auction in the market-place was occasionally evaded. The real sale took place outside the prescribed market-place and the formalities of auction were ceremoniously gone through, the original buyer if necessary out-bidding his competitors, since the transaction was already completed beforehand. My point is that the ultimate guarantee of good marketing lies in the equality of bargaining power as between buyer and seller. Regulation of marketing operations and procedures can eliminate crude and obvious malpractices such as numerous levies for charitable and other purposes, frauds in weighing and so on, but they may not be fully effective in preventing the exploitation of the primary producer. Provision of co-operative credit, marketing, and warehousing, however, is on a different footing; for it helps to increase the bargaining capacity of the farmer.

Finally, one word more about institutional remedies—by which is sometimes meant the substitution for private enterprise of some sort of co-operative, if not State undertaking. If such reorganization is for the protection of the weak from the powerful, I would wholeheartedly support it. But from the very hypothesis, its purpose should be to strengthen the weak individual and create conditions in which he would no longer feel the need of such outside protection. By the very rationale of their origin they must wither away with the efflux of time, leaving the individual free and capable to protect his own interest and, in the case we are discussing, his bargaining power.

R. DE FARCY, *École Supèrieure d'Agriculture*, *Angers*, *France*

Dr. Anderson did not mention the sales promotion aspect of marketing. I refer to it for two reasons, first because it is a very important factor in marketing costs; in the more highly developed countries, for example, advertising expenses are already considerable. In the U.S.A. advertising costs exceed fifty dollars a year a head—almost as much as the average annual income in South-East Asia. In France, advertising expenses, which amount to 100 million francs (220 million U.S. dollars), equal the total net income of Madagascar. This is therefore an activity which causes—or appears to cause—an increase in prices and which consequently needs further study. Secondly, it seems that advertising should have considerable effects in improving agriculture's terms of trade.

Advertising specialists maintain, in effect, that advertising provides consumers with new and better reasons for buying particular products, increasing demand and rendering it more elastic when prices fall and more rigid when prices rise. In Rochester (N.Y.) an intensive advertising campaign between 1952 and 1956 had a twofold effect: on the one hand consumption per head went up by 4 per cent., when in the neighbouring towns it did not change appreciably. On the other, there was an increase in retail prices of 4 per cent., when in the neighbouring towns retail prices fell by 4 per cent.

This does not prove a causal connexion between advertising and improved prices, but it does underline the importance of objective research to determine the extent and limitation of sales promotion in its effect upon the terms of trade.

A. G. BAPTIST, *Rijkslandbouwhogeschool, Ghent, Belgium.*

I should like to make a few remarks based upon personal experiences. First I wish to say a little about what is called imperfect competition. Absence of competition has the immediate result that the consumer is not sufficiently aware of the quality of the product which is sold to him. For example, before the war there were milk distributors in Belgium who sold only about thirty litres a day. It was quite impossible for them to cover their costs, so they were obliged to add water to their produce. We have remedied the situation in a very simple way. It is now forbidden to sell milk in towns if one's sales do not exceed a certain amount, and we have established control of quality. But lack of competition gives rise to a further difficulty. The most efficient traders are able to increase their services, or provide what was called this morning fancy packaging. I wonder if the consumer always realizes the cost of these services which are often useless. Should not his attention be drawn to the cost in certain cases?

Another point: the Conference has drawn attention to the fact that the wishes of the consumers no longer reach the ears of the farmers. On this point I would emphasize that co-operative selling is often very efficient in restoring contact between farmer and consumer. In Belgium we have three institutions which provide for co-operative selling of pig meat—a problem which we have studied intensively. We have analysed the sales statistics for the last five years, and have verified that these co-operatives have paid the farmers on the basis of quality. This method of operation allows us to study producers' deficiencies in meeting the needs of consumers, and we have thus established that 85 per cent. of hams and 66 per cent. of sides sold in Belgium are not of the desired quality. The analysis of these figures also makes it possible to give very useful directions to those concerned with animal selection, and in turn makes possible the payment of the considerably higher price which high quality commands. Having analysed very large numbers we have determined the retail prices of live pigs. From these figures we have calculated the trade margins, both as percentages of the retail prices of pork and also as percentages of the prices of live pigs. The trade margin, which was on average 160 per cent. of the price paid to the pig producer, varied considerably in that it fell appreciably for the retailers when the price of pigs was rising, and rose appreciably when the price of pigs was very low. In this way the retailer unquestionably acts as a price stabilizer (or 'buffer') in the sense that he prevents considerable fluctuations in retail meat prices. But this is a very grave inconvenience to the extent that when the price of pigs is very low the price of meat should fall sufficiently, and should rise proportionately when pig prices are high. The present method of retail operation is the consequence of consumer attitude. The consumer would readily approve the lowering of meat prices when pig prices are very low, but would resist price increases following a rise in pig prices. The consumer does not like large price variations. As a result retail prices do not follow live pig prices closely enough when retail prices should especially encourage consumption—i.e. when pig prices are at their lowest.

K. C. BASAK, *Indian Central Jute Committee, Calcutta, India*

I find it extremely doubtful whether futures markets do smooth out price fluctuations. Two of the most important characteristics of the futures market are that it is a speculative market where a large number of speculators operate who are gamblers first and foremost; and that it supposes frequent fluctuations in market prices. A gambler likes prices to fluctuate; otherwise he would not be a gambler. The element of risk inherent in speculation lies in price fluctuations. If there are none there will be no speculators and if there are no speculators there will be no futures market. Therefore, from a logical point of view, futures markets are of doubtful utility for smoothing price fluctuations. I will give one example, taken from the jute market, to test this theory. The Indian Central Jute Committee, in the course of a study of jute futures markets, considered two periods. In the first there was no futures market for raw jute, and in the second there was. We found no positive evidence that futures operations reduced price fluctuations nor was there any evidence that they induced price oscillations. It may be concluded that the futures markets are of doubtful value for price stabilization.

I now come to a second point—transport. In under-developed countries there are frequent transport bottlenecks with a twofold adverse effect. We have carried out certain inquiries and have found that the lack of transport facilities, leading to transport bottlenecks, has resulted in longer storage of jute in the growing areas. This means loss of weight through drying, and involves additional expenditure for storage, interest on capital and insurance, all of which raises the costs of the middleman. In our inquiry such difficulties ultimately resulted in a price recession in the local markets. The tradesmen wanted to push the whole thing backward on to the jute cultivator. The normal difference between the central market prices and the secondary market prices was something between 4 and 6 rupees, but this was doubled to between 8 and 12 rupees because of the transport bottleneck. The price differential was found to vary with the availability of transport at the dispatching stations. That is one side of the problem. Now, as you know, 70 per cent. of the people in the under-developed countries are both producers of primary commodities and consumers of essential commodities. Naturally, because of the transport bottlenecks, they lose on their own produce and also on manufactured goods like kerosene and cloth which come to them from the town. Their terms of trade are very adverse under these conditions.

G. H. WARD, *American University, Beirut, Lebanon*

With regard to 'pricing over time' Professor Anderson says that the alternative to a futures market is for the State to accept responsibility for price uncertainty by means of a forward price or support price programme. I should like to suggest co-operative marketing organizations as an alternative particularly for commodities which are harvested annually and marketed throughout the year or over an extended season. There are a number of examples of successful co-operatives in America and Europe which have reduced price fluctuations for individual farmers through their practice of paying members a seasonal or yearly average price. I have observed the same thing in developing countries. In Thailand, for example, I found that relatively uneducated farmers had studied price trends and, as officials of paddy marketing societies, marketed the members' paddy over a period of time. In this way many of the price fluctuations were eliminated and their members received the seasonal average prices. In addition, by federation, co-operative organizations can gain the advantages of vertical integration and pass on the gains of large-scale processing and marketing to the farmers. In Thailand the paddy societies are forming area federations for milling their paddy and are passing on the millers' profits to the farmer members. They are working also to develop an export organization which will carry back to the farmers the proceeds of marketing milled rice in foreign countries.

R. Bićanić, *University of Zagreb, Yugoslavia*

Supporting Professor Dantwala I would say that the exploitation of primary producers is greatest at the first level of exchange of goods, and I would suggest, therefore, that makers of economic policy should pay much more attention to the organization of that first market.

In relation to Professor de Farcy's remarks I would emphasize that I lived in a country that had no advertising for five years. The result was a considerable decline in the quality of goods. It is necessary to make the market transparent and to have a certain amount of competition.

I must give a warning about co-operatives. I myself am an old hand in co-operatives, but I would not consider them a panacea for all the market problems of the small family producer. Co-operative managements can strive for monopolistic powers and act against the general interest in the same way as private monopolists and managers of State enterprises can.

Finally, I would draw attention to the fact that in my country consumers' councils have been initiated to advise on retail trade.

W. J. Anderson (*in reply*)

The discussion has been most interesting to me and has served to give substance to the skeleton outline which I presented. I was struck by the emphasis on imperfect competition and particularly on the issue of exploitation. I know that this is a difficult area in which to reach definite conclusions and it is worthy of note that in Canada over the years we have had several royal commissions investigating price spreads. These commissions have been set up because the public suspected that there were elements of unilateral pricing. I gather from the comments that this is a world-wide problem.

Another point was the reference to the futures market. I was hoping that someone would come forward to defend it and to say a good word for the speculator and his role. I pointed out that there are two attitudes toward the speculator. One is that in following his own self-interest he tends to smooth out price fluctuations in the market. A strong case can be made for that position. On the other hand, there is the point made today that price movements are exaggerated by speculative buying and selling.