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Economic Commission for Latin America and the Caribbean

REPORT OF THE MEETING ON THE ROLES OF COMMODITY EXCHANGES IN THE  
EXPANSION OF LATIN AMERICAN AND CARIBBEAN  
PRIMARY EXPORTS\*

(Santiago, Chile, 22-23 November 1990)

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## I. OPENING MEETING

The meeting was opened by Mr. Horacio Santamaría, Chief of the ECLAC Programme Planning and Co-ordination Office on behalf of the Executive Secretary of the Commission, Mr. Gert Rosenthal. He began his introductory remarks with some comments concerning the intergovernmental negotiations which had taken place during the last two decades on the subject of price stabilization. He expressed the opinion that "non-market" schemes, such as buffer stocks and export quotas, applied under international commodity agreements have had little success, owing principally to insufficient participation, limited financial support and their inherent incapacity to correct supply imbalances. Taking into account the recent tendency to search for "market-based" solutions, as well as the great instability of prices in recent decades, the use of commodity futures markets could be considered a viable option as a mechanism for managing price risk if a better understanding of its market mechanisms was achieved and if a better use was made of those mechanisms. The present trend towards the reduction of the State's role in the management of price risk, the deregulation of trade and the liberalization of foreign exchange operations made it all the more necessary to gain an understanding of the mechanisms of the commodity exchanges. Future markets could lead to the integration of the pricing systems of developing countries in world markets, as well as to an expansion of competition and a reduction of vertical integration at the international level.

The fact that agencies of developing countries participated very little in the commodity exchanges could be attributed, in

part, to a lack of knowledge concerning those markets' operations. However, it also reflected a different attitude from that of the developed countries with respect to the benefits and costs of participating in futures markets and the neutrality of the commodity exchanges. In principle, the exchanges functioned as "free" markets in which prices were determined by an ongoing system of competitive bidding. However, the developing countries maintained that, often in practice, various limitations and distortions tended to make commodity exchanges inaccessible under equitable conditions and not so advantageous as they might appear to be in theory. He expressed the desire that the above-mentioned questions would be dealt with in the seminar and that an analysis would be made of the issues relating to the efficiency of the utilization of futures markets by exporters and importers of developing countries.

The commodity exchanges had often been the subject of economic analyses, but research concerning the exchanges within a context of economic development had been very limited. The preparation of studies of that type from a Latin American and Caribbean perspective had not been given priority, and little information on the subject had been disseminated. In view of that situation, the secretariat had proceeded to prepare the series of studies which would be presented at the meeting in an attempt to fill this void. While thanking all those in attendance for their participation, he expressed the hope that the documents presented by the secretariat, as well as the active participation of the experts attending the meeting, would lead to a greater awareness of the importance of such markets and, in addition, to an evaluation of the possibilities for greater participation in futures markets on the part of the countries of the region. In conclusion, he reiterated the gratitude of the ECLAC secretariat for the continued support provided by the Government of the Netherlands and its particular interest in Project HOL/87/S55.

## II. PRESENTATION OF THE DOCUMENTS PREPARED BY THE SECRETARIAT AND COMMENTS THEREON

Futures markets have a long history and are not a new form of marketing commodities. However, the striking increase which has occurred in the trading of traditional commodity futures and financial instruments since the 1970s has in part been a response to changes in world economic conditions. Given the marked instability of commodity prices themselves and the expansion of the portfolio investments of institutional investors, commodities have ever-increasing significance as financial assets and as a part of investment portfolios (along with other assets such as stocks bonds and foreign currencies). At least in the short run, their prices are influenced not only by fundamental market factors, but also by the newly-generated, and unpredictable, information concerning macroeconomic variables in the principal industrialized countries.

It was noted that commodity markets had become progressively more integrated with global financial operations, thereby making the utilization of such markets a more complex undertaking for relatively inexperienced traders, such as those in the developing countries. It was agreed that while there were various ways of setting commodity prices, it was becoming increasingly common for trade in a particular product to be based on prices which were in some way determined by or linked with the exchanges' quotations. Reference was made to the fact that the inveterate systems of administered producer prices in world markets had given way to price determination mechanisms based on the commodity exchanges in the case of such commodities as petroleum, copper, aluminium and nickel.

Not all products were tradeable or suitable for futures markets. It was unlikely that manufactures would ever be traded on the commodity exchanges owing to their greater degree of price

stability and their flexibility in absorbing price variability by means of price markups. The commodities that lent themselves the most to exchange trading were those that satisfied certain conditions in terms of a large volume of supply and demand, homogeneity and fungibility, and storability. Since the Second World War new futures contracts had been successfully introduced in the United States for aluminium, cattle on the hoof and pigs, frozen orange juice concentrate and others goods; however, the contracts which had been introduced for some other products, such as beef and frozen shrimp had not met with success.

The participants were of the opinion that, among the many operations carried out by Latin American agents, the most frequent purpose of such operations was price determination. Either through the services of intermediaries (traders) or the use of "executable orders", mechanisms were employed that permitted exporters to establish a sale price beforehand. Such mechanisms had come into wide use for sales of coffee, sugar, grain and some metals. Direct hedging by means of futures contracts was primarily carried out by large exporters, particularly those with close ties abroad. At present, some firms in the region were utilizing complex mechanisms for such purposes despite the length of preparatory time required in order to create a greater awareness of the benefits to be derived by the associated entities.

At the present time most of the developing countries were net commodity importers. Nevertheless, hedging on imports by the countries of the region was quite limited, in spite of the volume of such trade, particularly in the cases of grain and petroleum. It was pointed out that, by failing to use futures markets, the buyer ceded his right to any form of logistic flexibility to the seller. In general, public officials had less experience in adapting to the speculative nature of operations on such markets, which required rapid decisions, a sense of timing and a certain ability to deal with risk. Efficiency in purchasing was limited even further when

an organization did not have financial autonomy but was instead under the authority of some other body such as the Ministry of Finance or the Central Bank.

In recent years, options on many types of commodity futures had been introduced and had come to play a high important role in futures trading. However, the Latin American countries' participation in options markets was still very limited due to their lack of familiarity with these markets and to the fact that many regional operators felt that the price of these instruments was too high. Generally speaking, they engaged in options trading only in very specific situations in which they needed to set a firm price for a longer period than that permitted by futures contracts. Such operations tended to be part of more comprehensive risk management strategies in which they were used in combination with commodity futures and, if the operators had a solid understanding of their use, with financial futures. It was also suggested that medium-term instruments outside the exchanges, such as commodity bonds, gold bonds and swaps might possibly be used as well.

The documents indicated that it was now generally agreed that regardless of whether or not an exporter in a developing country participated in futures markets, the quotations of commodity exchanges provided essential information concerning the current status and future prospects of individual commodities. Even if the private sector, a trade board or a government agency did not propose to carry out hedging operations in those markets, the prices arrived at in the exchanges provided information to local producers and traders which was helpful to them in evaluating their production and marketing decisions. Futures prices also constituted useful predictions of the variables relating to physical merchandise prior to its delivery date.

The most obvious benefit to be derived from futures and options was hedging, which provided local producers and consumers

with guaranteed prices at virtually no risk over a given period in the future. Whereas sellers (or buyers) who did not hedge their transactions were frequently obliged to sell (buy) their products at unstable prices and irregular intervals, they could be assured of obtaining the average price over a specified period if they adopted a simple hedging strategy to compensate for any imbalances arising in their sales (purchasing) schemes in respect of physical merchandise. Futures hedging mechanisms also provided instruments which could be used by commodity traders to improve such firms' management of their cash flow and inventories. Seasonal imbalances could be smoothed out by means of offsetting sales and purchases of futures. In addition, excess stocks could be financed at a low cost by taking advantage of the contango in order to help cover the financing cost of such stocks. In the same way, the leverage conferred by the use of futures markets permitted a country lacking in foreign exchange to economize its operating capital and ensure control over resources having a much higher nominal value than the foreign exchange immobilized by margin requirements. In addition, futures markets afforded a greater certainty of contract performance, since this was guaranteed by the clearing houses of the exchanges.

The point was made both in the case studies and by the participants in the meeting that, in evaluating such potential benefits within the framework of a real-world situation, several questions must be raised. At times the usefulness of futures markets as a price discovery and hedging mechanism for a given commodity varied either because some markets were better price predictors than others or because they were more representative of the conditions in a particular country than in world markets.

The document on grain trading and the experts in this field maintained, for example, that one of the main obstacles to greater participation by the countries of the region was the dissimilarity of price trends on the exchanges of the developed market economy



countries and in local markets. In addition, the performance of the futures markets with respect to products exported by developing countries, such as cocoa and coffee, might differ from their performance in relation to products such as cotton and sugar, which were exported by both developed and developing countries and were residual markets (i.e., international trade in these products represented only a fraction of world production). In this regard, the study on coffee, cocoa and sugar trading argued that different results were observed in terms of the relation between price quotations on the exchange and the level of stocks.

In the opinion of some participants, the basis risk was often greater than the price risk in, for example, grain trading due to market interference stemming from the trade policies of some exporting countries or because the factors that influenced supply and demand in each competitor country were different. The representatives of the grain sector pointed out that a temporary imbalance in the supply and demand for grain in the main producing countries could lead to competition between local consumption and exports which would be reflected more markedly in FOB prices than on the Chicago Board of Trade. The cross-seasonality of the northern and the southern hemispheres was also mentioned as a factor causing unpredictable variations in premiums. In addition, in the short run, price elasticities of commodities were low, and supply and demand were therefore slow to adjust to changes in the relevant variables. Due to the lags in the response to fundamental factors of supply and demand, any changes which occurred in the market in the interim could cause commodity prices to deviate from a long-term equilibrium trend.

Consideration was given to the fact that there was always an element of quality-related risk as well. The desire to attract a sufficient number of speculators to the futures markets could lead to the introduction of a certain degree of flexibility in the contract specifications sought by the industry. Indeed, the study

on metals had noted that the copper contracts of the LME and COMEX had been refined in order to reflect the interests of the industry more fully. Although standardized premiums and discounts were taken into account for other grades of metals, such standardized compensatory mechanisms could underestimate the premiums and overestimate the discounts actually paid in the cash market.

Exchange instability was another cause of discrepancies between local and international prices. Theoretically, the market could be used for currency hedging. However, an efficient reduction of exchange risk depended on the degree of interdependence between commodity price risk and the movements of exchange rates. This interaction could give rise to differentials between the risk associated with the maintenance of stocks and the risk entailed by futures contracts. Similarly, it could also produce differences between the way in which the variation of the basis was perceived by foreign hedgers, on the one hand, and by their national counterparts, on the other. Some experts felt that a stable currency unit for price determination was necessary in order for local futures markets to operate efficiently and noted that this was what was being done in the case of the successful "dollar" futures contracts for grain which were traded in Buenos Aires. The complicated method of daily adjustments in the value of trading positions in relation to changes in the official exchange rate between the dollar and the local currency hampered futures transactions.

It was pointed out that it was not always possible to stabilize exports earnings by using hedges to set forward prices. If the relationship between the average price and the variation in income was such that a lower rate of variability were achieved at the cost of projected earnings, then the benefits of hedging might be lessened. If futures operations could not moderate the variation in export earnings attributable to swings in output, then the optimum level of hedging could be considerably lower than the

projected level of output when the price, the exchange rate and the uncertainties related to production were evident. In particular, large producers had much greater difficulty than the smaller ones in completely eliminating uncertainty with respect to their earnings, since production disturbances experienced by large producers would affect the price of the commodity concerned. The conclusion reached was that the net efficiency of such markets must be examined on a product-by-product basis at the national level, taking into account the country's share in world production, the size of its domestic market and foreign exchange variables.

It was noted that futures markets provided access to more readily available and less expensive financing due to the fact that the credit standing of the borrower was not impaired by a sharp decline in market prices if the value of his merchandise had been protected through hedging. Therefore, futures could be used as part of a strategy for financing new production projects. In this connection, one representative emphasized the idea of utilizing investment associations in order to "share the risk" between producer and consumer organizations.

Another major issue from the standpoint of the developing countries was the use, either by the private sector or by official agencies, of transactions in futures markets as a substitute for participation in commodity price stabilization schemes, which had thus far been established primarily within the framework of international commodity agreements. Instead of using futures markets on an individual basis for purposes of conventional price setting and inventory maintenance, exporters could try to influence or support cash-market prices by trading futures on a collective basis.

A marked discrepancy was noted in the meeting between the desirability and the feasibility of using futures markets for these objectives. The benefits and costs arising in the case of the

Associated Coffee Producers (PANCAFE) were discussed. Such practices, whose implicit objective was to stabilize prices at levels which, on average, would be higher than long-term equilibrium prices, tended to lead to overproduction and to place the body in charge of the buffer stocks in the position of being the buyer of last resort, as occurred in the case of the tin crisis.

An alternative to collective action on the part of producers would be for each producer to trade on the futures markets. The view was expressed that, in general, futures markets probably offered greater security to producers than price stabilization plans did, providing that --and to the extent that-- such markets remained highly competitive. The comparative advantages of futures operations as an alternative to price stabilization schemes essentially arose out of the following factors: i) the flexibility that such operations provided to potential hedgers, permitting them to take into account a possible volume risk; ii) the possibility that price stabilization schemes could distort production incentives; and iii) the incentive provided by futures markets for the establishment of storage facilities and for the maintenance of stocks by the private sector.

Some participants observed, however, that in some instances official action was an important means of reducing price instability within the market framework (rather than of supporting price levels) and that, in the developed countries, a series of State mechanisms existed for correcting possible distortions, protecting users of the exchanges and increasing market transparency. Thus, a distinction was drawn between liberalization and deregulation.

In relation to the above subject, it was noted that the fundamental role of speculators in the exchanges was to provide the necessary liquidity and to assume the risk that hedgers were trying

to reduce. Some participants argued, however, that the practice of many speculators of depending heavily on technical analyses and the extrapolation of market trends could magnify the movement of the market in a given direction and perhaps distort it. In this respect as well, official intervention in futures markets was justified in order to protect the interests of the other users.

Taking into consideration that, in certain instances, the prices quoted on the exchanges of the developed countries had been relatively unrepresentative of the prices at which physical merchandise was traded in some areas of Latin America, during the course of the meeting the participants discussed the arguments in favour of local exchanges. In such exchanges, because of the characteristics of the contracts and the influence of the "fundamentals" to which they were linked, changes in futures quotations conformed closely to the price trends of the physical products. Thus, in this respect local exchanges were very useful and were viable, especially in cases where a large proportion of the product in question was consumed domestically. Such futures exchanges helped to make national markets more transparent and attracted buyers and sellers who did not have access to the exchanges of the developed countries.

Having examined a number of the advantages afforded by local exchanges, the participants then considered some of the major obstacles which hindered their operation. Firstly, the instability of domestic prices, unforeseen changes in trade and exchange regulations, and the existence of numerous delivery points with many different positions within a country had often caused trading volumes to fall to negligible levels. This situation was aggravated by the lack of liquidity that resulted from the absence of speculators, which was in turn due to the same factors of instability mentioned earlier and to the existence of a prejudice against speculation; a lack of information and of trained human

resources; and the diversion of physical merchandise by large foreign exporters, which diminished the supply in local markets.

The questions considered during the discussion concerning the development of local exchanges in the region included the minimum conditions (in terms of macroeconomic policies, market size, sectoral policies, credit policies, industrial and commercial systems compatible with futures markets, the legal framework for futures operations, cultural aspects and human resources) required in order for such exchanges to function satisfactorily. However, for the majority of the developing countries, the opening of new exchanges could not be considered a viable option unless they already had solidly-based, efficient markets for trade in physical merchandise.

During the privatization process which had taken place in some countries of the region, commodities exchanges had been seen as an alternative to regulatory agencies. However, in many countries the basic conditions required in order for these exchanges to operate successfully did not exist. Some of the participants were of the opinion that the exchanges should form part of the marketing system and possibly of agricultural policy as well, especially as it related to the food supply.

Problems related to the size of the local market provided a basis for an argument in support of establishing regional exchanges, which a number of participants emphasized as an important and viable area for action. Other participants, however, felt that the same problems associated with local exchanges would be encountered in an even more severe form by regional exchanges. For example, the standardization of the quality of products coming from different points of supply could pose a difficult problem.

Nevertheless, it had been seen that as national economies became more stable and as trade and exchange regulations became

more favourable less subject to change, increasing interest was shown not only in participating in international exchanges, but also in promoting the development of local and regional exchanges. In this respect, some participants attached importance to the fact that local financial futures contracts were beginning to be introduced in some exchanges, and went on to state that the establishment of the legal standing and provisions necessary for their operation, coupled with the "critical mass" of speculators needed to furnish the required liquidity, could constitute a sound basis for the subsequent introduction of commodity contracts.

Margin requirements were often cited as one of the principal obstacles facing new agents, those who traded only sporadically, and those who engaged in a relatively small volume of trading. Agents who did not inspire sufficient confidence in the exchange community found themselves obliged to finance their operations with their own resources, and those resources had to be held in locations and in instruments which guaranteed their immediate availability. On the other hand, the higher the profile and the greater the stability of and confidence in a participant, the less difficulty that agent would have in financing margins. Another factor was that the expenses associated with participation in futures exchanges were generally not provided for in the foreign exchange regulations of the countries of the region, and the foreign exchange needed to cover such expenses therefore had to be purchased outside the official market. In some cases, the difficulty of obtaining foreign exchange promptly when it was needed had made it necessary for traders to liquidate their positions in order to cover margins.

With regard to the idea that international agencies might have the capacity to provide the necessary guarantees to permit producers and traders in the region to protect their positions in the exchanges, the meeting was informed that at the present time

consideration was not being given by such agencies to the establishment of credit facilities of that nature.

One of the reasons why so few producers in developed and developing countries hedged their future sales, was that the customary size of the trading units of futures contracts was larger than the total output of most individual producers. However, any significant reduction in the size of trading units would probably raise the costs of future transactions unduly. This was undoubtedly the case in the agricultural sector, but it was not entirely inapplicable to the mining sector either, since many small and medium-sized mining companies abstained from trading in futures owing to those costs.

In view of the above facts, it was recognized that, in order for individual producers to be able to reduce their risk by means of hedging, governments should utilize collective hedging schemes or encourage the private sector to carry out hedging operations under its auspices. For example, large companies having an international credit standing should take full advantage of the flexibility afforded by the various brokers with which they did business. Their ability to obtain more lines of credit at lower rates through the intermediation of diversified brokers could then be passed along to smaller firms.



## III. RECOMMENDATIONS

A priority task was to familiarize the relevant agents with the operations of the exchanges and with the real benefits to be derived from using them for purposes of risk management. This was necessary in order to overcome the prejudices existing in the private and public sectors concerning exchange operations and to refute the notion that they were purely speculative or manipulative. Consciousness-raising efforts in this area should be carried out within the framework of the information activities conducted by the exchanges themselves and their associations, some export-related organizations and brokerage firms.

Another important area of endeavour was the training of the technical teams in charge of trading operations, the staff responsible for designing comprehensive strategies and the executive-level personnel who approved them. As had already been done in some Latin American countries, training and advisory activities could be undertaken in cooperation with exchange officials and their associations, brokerage houses and institutional users of the futures markets, in conjunction with the competent international bodies. At a later stage it would be necessary to form national or subregional core groups to promote, organize and carry out the corresponding technical assistance activities.

To that end, a training and technical assistance programme having the following components could be implemented: i) training of government officials responsible for defining policies and regulations governing activities relating to exchange operations (possible participants could include officials of the ministries of economic affairs, finance and foreign trade, central banks, regulatory bodies, concerned with commerce, etc.); and ii) the

training of technicians from public institutions and private firms (cooperatives, small and medium-sized producers or exporters).

Participants in the exchanges usually had access to abundant information about the market in which futures exchanges were physically located. However, monitoring only the information originating in those markets was not sufficient; a permanent group of experts to compare and assess a country's performance (public or private) in relation to the international market was also needed. Given the dynamic nature of such information, it was recommended that the research effort should be organized on the basis of a technical and financial assistance programme for the public and private bodies responsible for monitoring and disseminating market information.

It should also be a matter of common interest to attain greater market transparency through an improvement in the quality of the statistical information generated by the exchanges and other competent institutions and through an increase in the frequency with which it was made available. In that connection, it was essential that a greater dissemination of information concerning the commodities exchanges should be achieved and that such information should be made more accessible. One very important step in that direction would be the acquisition by the developing countries of better communications systems and the establishment of closer links with relevant information sources outside the region.

At a more general level, in order for the developing countries to become active participants in such markets, technical assistance was necessary to help them to develop their capabilities for evaluating international marketing systems as a basis for designing more effective strategies for marketing their exports. International organizations such as the World Bank and the United Nations Conference on Trade and Development (UNCTAD) could play an important role in that regard through the preparation of technical

documents and bulletins on the operations of the commodity exchanges and their effects in terms of the marketing of exports and risk management, bearing in mind the interests of the developing countries.

Another important task was the preparation of a series of studies on the costs and benefits of creating a regional exchange and on the minimum conditions and the legal framework required for its establishment. Some of the questions which should be explored were whether or not the conditions necessary for the formation of an exchange actually existed; whether the effort required to create such an exchange would be justified by the expected benefits; what would have to be taken to begin the process of establishing such an exchange; and what degree and type of flexibility would be necessary in order to carry that process forward.

There was a great need for studies concerning the behaviour of local markets and their relation to the developed countries' markets. To that end, it would be helpful to hold seminars similar to the present meeting at the national level, with the support of the exchanges, brokerage houses and international institutions. It would also be important to make the analysis of futures markets a regular activity within the academic circles of the region and to promote the dissemination of the resulting information by the press. Recognition of the great importance of basis risk had paved the way for another trading alternative, known as "hedging the basis". Numerous studies on that alternative had been conducted from the vantage point of the developed countries, but not from that of the countries of Latin America and the Caribbean. Therefore it would be particularly relevant to quantify the basis risk and identify the factors which influenced the basis from the perspective of an exporter in a developing country.

The need could also arise to employ skilled and experienced auditors not associated with any organization or body involved in

the marketing of commodities to analyse market information and objectively assess the performance of public or private traders. An activity of that sort would have to be conducted without interfering with the daily operations of such agents, however, because it was necessary to create an atmosphere that would permit those in charge of public or private commodity sales to act rapidly. In any case, it was recommendable to have clear-cut regulations concerning operations linked with futures markets.

Given the unlikelihood that a mechanism to alleviate the problem related to margin financing would be established by any international organization, the most viable course of action appeared to be the modification of controls in order to ensure the necessary flow of foreign exchange required for hedging operations.

In order to avoid the problems posed by margin requirements, one alternative was to trade in options, since option buyers were not subject to margin calls. In view of the substantial benefits that they could have for the Latin American and Caribbean countries, information concerning the concepts underlying options trading should be broadly disseminated among potential users. However, given the very real complexities of options strategies and the determination of premiums, training courses should be organized in conjunction with the commodity exchanges themselves and other organizations which had expertise in that field.

In some cases the quality standards of the commodities accepted for delivery against futures contracts and their delivery points were chosen with a view to maximizing the commercial attractiveness of futures contracts (i.e., their "liquidity"), and in some instances futures contracts were therefore based, in practice, on supplies of a considerably lower commercial value than the products actually supplied by an exporter. In order to address that issue, it would be advisable to increase the representation of the industry on the executive boards and ad hoc committees of the

exchanges. In view of the difficulties encountered by small producers/exporters in using futures markets, plans for using collective hedging by governments or large firms could be established. With respect to imports, small countries could operate on a joint basis to take advantage of exchange mechanisms in order to ensure that they obtained the best purchase prices for their products, especially in the case of basic grains.