

## RESEARCH REPORTS

### MEASURES TO STABILIZE THE PRICES OF PRIMARY PRODUCTS IN SOUTHEAST ASIA

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#### *Introduction*

The volume under review is a result of the joint study by Nagao Watanabe, Sadashirō Ebe, Jun'ichirō Uchiyama, Kunitoshi Takahashi, Staff Members of the Bank of Japan.

While industrially advanced countries of the world are following a smooth course of development, the economies of developing countries in Southeast Asia and other regions are growing at a snail's pace. One of the main causes of this is the slump in the export of primary products due to their price instability. The purpose of this study is to clarify the effects and limitations of measures taken to stabilize the prices of primary products, particularly in the economies of Southeast Asian countries, and to suggest desirable measures for the future.

In approaching this problem, we first analyzed factors which caused price fluctuations in order to determine the effectiveness and limitations of International Commodity Agreements in stabilizing prices. Factors analyzed included bilateral agreements, various commodity study groups, domestic measures taken in Southeast Asian countries and an international scheme for compensatory financing. We also tried to analyze the interrelationships of these measures, discussed which price stabilization measures should be improved and analyzed what future course the Southeast Asian economy should take.

In our study we emphasized the following points: First, in analyzing what determined the price of each commodity, we tried to clarify whether the factor of supply or that of demand, is more significant in causing price fluctuations. We tackled this question in order to seek conditions and means necessary for effective international agreements and other measures to stabilize the prices of primary products. Second, in studying the effects and limitations of international agreements, we focussed our attention not only on whether or not such agreements are effective in stabilizing prices but also on whether or not they are effective in increasing the total export income *i.e.* the amount where unit value of export is multiplied by its quantity. This is because we took the stand that an international price agreement, though aimed primarily at stabilizing export prices, cannot achieve its goal unless it stabilizes export income itself. Third, we sought to find a key to price stabilization of primary products by a detailed analysis of international agree-

ments to determine how effectively they remove the causes for the fluctuation of the price of each commodity.

### *1. Importance of Price Stabilization*

Before proceeding to the main issue, we briefly discussed the urgency of solving the problems of primary products in Southeast Asia and particularly of stabilizing their prices. The economies of Southeast Asian countries are centred on the production of primary products. Therefore, more than 60 per cent of exports of Southeast Asian countries are a few primary products. Consequently, the Southeast Asian economy is extremely influenced by changes in the export of primary products due to their price fluctuations. Because of its pressure on the international balance of payments and its unfavourable effects on the treasury revenue and national income, the instability of exports has been a major obstacle to the economic development of Southeast Asia.

The prices of primary products have been characterized by a downward tendency and large fluctuations in the short-run. The former, coupled with unchanged prices of imports, tends to aggravate terms of trade for Southeast Asian countries, making it impossible for them to import capital goods necessary for industrial development. The latter are apt to cause large export fluctuations, ranging from 15 to 20 per cent and occasionally from 30 to 50 per cent of the total foreign exchange reserves. Such a situation is by no means favourable to economic development.

It is against this background that the problem of primary products has been discussed repeatedly as a major subject at many international conferences since 1959. But the situation is such that no satisfactory solution has yet been found. It will be clear, therefore, that the problem of primary products must be solved as soon as possible, although the task is very difficult. (Chapter I)

### *2. Causes for Price Fluctuations of Primary Products*

Before discussing stabilization measures, we analyzed factors responsible for price fluctuation.

In the postwar period, the prices of primary products, which rose sharply after the outbreak of the Korean War, began to fall in 1953 and continued to fall up to the first half of 1959 except for a short-lived rise during the Suez crisis. Though these prices recovered to a considerable extent during the worldwide boom in advanced countries from the autumn of 1959 to the spring of 1960, they began to decline in the latter half of 1960 and have been relatively low since 1961, despite economic recovery of the U.S.

These trends in the market of primary products are ascribed to a structural change in demand, or to a relative decline in the demand for primary products rather than to increased supply of these products as a result of the increased use of substitutes or efficient utilization of raw

materials. A typical example of a substitute is synthetic rubber, which is fast replacing natural rubber. The production ratio of natural rubber to its synthetic substitute, which had stood at 75:25 in 1950, changed to 53:47 in 1960. Particularly in the United States, which accounts for 40 per cent of the world's total consumption of natural rubber, the consumption ratio of synthetic rubber to natural rubber has been reversed to 70:30.

We must note the increased production of artificial fibres—spun rayon and filament yarn, and synthetic fibres—as against natural fibres such as cotton and wool. Synthetic detergents are rapidly replacing copra (soap) for industrial use. Copra is also competing sharply with other animal fats and vegetable oils as a raw material for margarine. Demand for jute is marking time due to the increased loading of unbagged grains and the growing popularity of paper bags.

We cannot but view with great concern the recent release of strategic materials in stock. U.S. and British purchases of strategic materials once served as a favourable factor to the market of primary products. But since 1956, when they began the release of these materials as a result of the re-examination of their proper reserve levels, the market has become over-supplied. Of particular importance is the release of rubber and tin. As these releases of surplus stock are not expected to end soon, pressure will be put on the market. This will result in a long-term unfavourable situation for producers of primary products.

Mention must also be made of interference in the free world market by the Soviet Union, China and other Communist bloc countries. It is true that the production and consumption of primary products in Communist countries is generally not so great as to influence the free world market directly, but sometimes their moves in the market may cause price instability in the market. Further their unpredictable moves are apt to make price fluctuations all the greater.

Next, we examined factors for the fluctuation of the prices of industrial raw materials such as rubber, tin and copra; textile raw materials such as cotton and jute, and foodstuffs, such as rice, tea and sugar. Emphasis in this study was laid on determining where in demand or supply are the real causes for price fluctuation.

Of the industrial raw materials, rubber and tin show similar trends. Their prices fluctuate according to demand rather than supply. This can be explained by the fact that the price of rubber is closely related to the production of automobiles and that of tin to the production galvanized steel sheets. Therefore, these prices are influenced directly by economic conditions in advanced countries. But the situation differs with copra. Generally speaking, its export price is related to the change in the amount of production. This is because its use as a material for foodstuffs is expanding and because demand for it as an industrial raw material for soap is not so easily influenced by general economic conditions in advanced countries. Furthermore, the supply of this raw material is apt to be in-

fluenced by climatic conditions more than that of rubber or tin.

The export prices of foodstuffs are determined by factors on the part of the supplier. Of the foodstuffs produced in Southeast Asia, the export price of rice is seen to be in inverse proportion not to the amount of production but to export volume. On the other hand, the export prices of sugar and tea are generally related to both production and export volume. This is because the export ability of the countries producing tea or sugar depends almost entirely on the amount of production. The export price of rice, however, which is consumed domestically in large quantities, is influenced largely by the amount of surplus rice that can be earmarked for export.

The prices of the textile raw materials, jute and cotton, are generally in inverse proportion to their production. This is because these commodities are agricultural products, whose production is influenced greatly by climatic conditions rather than industrial raw materials. Consequently, like the price of copra, which is an industrial raw material, the prices of these commodities are comparatively less influenced by economic conditions in advanced countries, and the amount of production (supply) is the determining factor in the market. (Chapter II)

### *3. Effect and Limitations of International Commodity Agreements*

We will now study the effects and limitations of various kinds of price stabilization measures, keeping in mind the above-mentioned characteristics in the price fluctuations of these primary products. The measures currently enforced to stabilize the prices of primary products include such international arrangements as International Commodity Agreements, Commodity Study Groups and bilateral commodity trade agreements as well as such domestic measures as price adjustment by customs duties and marketing boards. (Detailed description of the contents of these measures, explained in Chapters III and IV, are omitted here.)

At present there is an International Commodity Agreement for each of the following commodities: Tin, sugar, wheat, coffee and olive oil. First, we will analyze the agreement on tin, which is of special importance to countries in Southeast Asia.

Of all the non-ferrous metals, tin is the most susceptible product to changes in world economic conditions. However, in the postwar period, and particularly after the enforcement of the agreement on this commodity in 1956, the price of tin was remarkably stabilized. Let us examine measures taken to stabilize its price during a period of declining prices from the latter half of 1957 to the autumn of 1958, and during a period of sharp upward price after June, 1961. To prevent tin from having a further price decline, the Council of the Tin Agreement started buying operations to build up its "buffer stock" in April of 1957 and required the countries concerned to make an additional contribution to the funds for the "buffer stock" in December of the same year to continue its buying operations.

But as the price continued to sag, the council finally took a bold step towards an export quota system. It gradually reduced the export quota amount for about one year after December, 1957. Thus, at the end of 1958, the export quota amount dropped to half of the average amount exported in 1957. As a result, the market gradually recovered. Later, when the price might have risen sharply due to an economic recovery in the U.S., a jump in the tin price was forestalled by both easing the export quota amount and releasing a part of the buffer stock.

After March, 1961, the tin price hit a high level second only to that reached during the Korean War. But there was no effective measure to cope with this tendency, as the quota for the exporting countries had already been abolished and as there were not sufficient stockpiles in the buffer stock to enable the council to start selling operations. However, the market tumbled in 1962, when large quantities of strategic materials were released.

The systems of the export quota and the buffer stock, which can be used as needed by virtue of the tin agreement have been considerably effective in stabilizing the price.

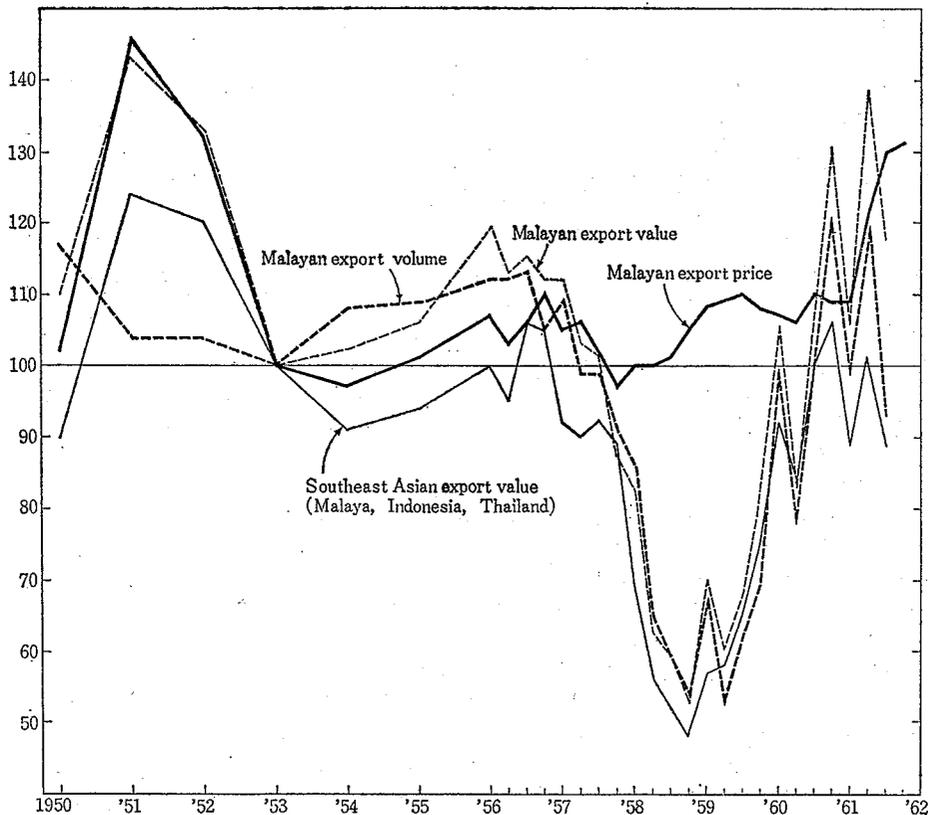
This raises the question of whether this price-stabilizing effect is accompanied by the stabilizing of export income. If we examine changes in the total export income from tin of Malaya, Indonesia and Thailand (See Fig. 1), it will be clear that in spite of the stabilized tin price, the export income of tin tended to decline coincidentally with a drastic fall in the export volume. This indicates that a stabilized price of a primary product does not always stabilize export income. What if there had been no such agreement? Examination of the price movements in 1953 when the agreement had not yet been enforced, shows that a decline in the price led to a sharp fall in export income, though the export volume did not sink so much. It is dangerous to compare in a simple way what happened in 1953 with events of 1958, but this much is true—without the international agreement in the slump year of 1958, the export income would have dwindled more as a result of a sharp price decline. This would hold true even if there may have been almost no fall in the export volume.

We can say from the above that the present international agreement is considerably effective in stabilizing a primary product's price. But little effect can be expected to increase the export income in case very severe restrictive measures for the exporting countries are taken under it. However, we should not underestimate the fact that it has been effective in averting a shattering shock and confusion which the sharp decline in the price might otherwise have caused. Also to be noted is the fact that in the case of industrial raw materials such as tin, any attempt on the part of the supplier to prevent a price decline is doomed to failure unless active efforts for adjustment are made at the same time on the part of the purchaser.

We next will examine the International Sugar Agreement. During about two years after 1954, sugar price movement were confined within a

range prescribed by the Agreement. Later in 1956, the price picked up sharply in spite of an increase in the export quota and its further abolition. This situation continued until the latter half of 1957. From the latter half of 1957 to the end of 1958, the market was comparatively quiet. Later, the market weakened. But thanks to the institution of the export quota system, during 1960 the price did not undergo sharp fluctuations but was stabilized, though on low levels, towards the end of 1960. In 1961, however, the market was disrupted by the U.S. boycott of Cuban sugar. Thus, the International Sugar Agreement, under which the export quota system is the sole possible means of stabilizing the price, is only effective in stabilizing the price in case the price fluctuates within a small range, as in

**Figure 1. MOVEMENT OF TIN EXPORTS FROM SOUTHEAST ASIA**  
(1953=100)



Source: Compiled from IMF, *International Financial Statistics*.

Note: From 1956 on, the statistics have been made on a quarterly basis.

1959 when the market was weak in tone, but is not expected to achieve any positive results when price fluctuations are sharp. Since sugar is an agricultural product, it is impossible for any country to slash exports as drastically as in the case of tin. Consequently, excessive stock works as a constant pressure on the market so that the price is stabilized only on low levels. What is the effect of this Agreement on export income? Judging from movement in the export of sugar from Taiwan, export value is liable to be influenced by the volume of export. If there were no International Sugar Agreement at a time when the market is weak, a price decline would not necessarily result in a decrease in supply since sugar supply is not flexible. The result would be that the downward tendency of the price will be accelerated and that the export income will be reduced further. Therefore, we may conclude that the International Agreement has been effective in preventing a sharp drop in the price of sugar and consequently in alleviating a decline in the export income.

The International Wheat Agreement is probably the most effective of all the commodity agreements, because the price fluctuations, in general, have been within a range stipulated by the Agreement. This is partly because the export quota system under this agreement is supported by purchase obligations on the part of the importing countries. More important still is the fact that both the importing and exporting countries of wheat are industrially advanced or high-income countries. Consequently, the exporting countries can afford to stockpile large quantities of wheat at home and thereby stabilize its prices by adjusting the demand-supply situation. They have ample funds at their disposal for this purpose. (Section I, Chapter V)

#### 4. *Appraisal of Other Stabilization Measures*

Apart from International Commodity Agreements, there are International Commodity Study Groups on rubber, wool, lead, zinc and other commodities. However, these groups are limited in scope because they facilitate mostly information exchange among members and are not authorized to make any decision binding on their members. Therefore, it is desirable that these study groups be gradually developed into inter-governmental commodity agreements even though this course may prove difficult to follow.

Then, there are bilateral commodity trade agreements between importing and exporting countries. These measures, which were effectively employed as export-stabilizing measures during the period of postwar recovery, are gradually being abolished with the stabilization of the world economy and the progress of trade liberalization. Bilateral commodity trade agreements are now a special form of price stabilization measure, which in recent years has been usually applied to specific commodities such as rice. In addition to these, various domestic measures are taken to stabilize at high levels the prices of primary products. However, these

domestic measures are limited in their effectiveness, since they are taken within a country. (Section 2, and following sections, Chapter V)

Apart from the above-mentioned measures to stabilize directly the prices of commodities, there is a scheme for compensatory financing for a loss caused by a decline in the prices of primary products. Under this scheme, a special international organ will compensate for a loss (or part of a loss) in case a country suffers a sharp and sudden decline in exports due to a fall in the price of a specific primary product. Behind this scheme is the idea of international social security—that advanced countries should provide a fund to aid developing countries. Such a scheme is worthy of special note as a means of solving the problems of primary products. However, a lot of knotty technical problems would have to be solved before such a scheme is put into effect. Further, there is a danger—and this is more important—that countries lacking in efforts for self-help may profit more from such a scheme than others making their independent efforts for economic progress. (Chapter IV)

It may be said that viewed from this angle, International Commodity Agreements binding on the signatories are the core of measures for price stabilization and that all the other measures are supplementary to such agreements.

##### *5. Direction and Problems of Price Stabilization Measures*

We believe that in trying to stabilize the prices of primary products, international arrangements such as International Commodity Agreements should play a leading role, in spite of their limitations. In this case, it is important to see if the limitations of the currently enforced International Commodity Agreements are due to the inadequacies of the means provided for by the agreements or due to the characteristics of the commodities concerned. Shown in the following table are interrelationships between groups of commodities classified according to the factors for price fluctuation on the one hand and International Commodity Agreements and transaction relations on the other.

The first group consists of industrial raw materials, whose price fluctuations are caused mainly by factors on the part of the purchaser. Of these commodities, tin is the only one that is covered by an international commodity agreement. The drawback of this agreement lies in the fact that it provides only for the buffer stock and the export quota system as a means of regulating the price. It can not exercise control over the purchaser in spite of the fact that factors for the fluctuation of the tin price are the result of actions of the purchaser. The buffer stock, manipulated with an insufficient fund, is naturally limited in its effectiveness in case the market price falls sharply. This makes it necessary to resort to the export quota system—a measure used by the supplier—in order to cope with a sharp decline in the price. The result is that the price is stabilized at the expense of export income. Under these circumstances,

RELATIONSHIPS BETWEEN CHARACTERISTICS OF MAIN PRIMARY PRODUCTS AND PRICE STABILIZATION MEASURES

Factors	Commodities		Industrial raw materials		Textile raw materials		Grains		Foodstuffs	
	Tin	Rubber	Copra	Jute	Cotton	Wheat	Rice	Sugar	Others	
1. Main factors for price fluctuations										
2. Outline of commodity agreement										
(1) Share of member countries	99					98		90(3)	92	
Proportion of export of member countries to total export (%)										(1 4 30 n o u)
Proportion of import of member countries to total import (%)	46(1)					62		90(3)	×(3)	
(2) Management structure										
Regulation by exporter	○					×		○	○	
Production (stock)	○					○		○	○	
Circulation (export)	#					⊙		×	×	
Regulation by importer	⊙					×		×	×	
Circulation (import)										
Buffer stock system										
3. Transaction (conditions)										
(1) Transaction relations										
A v. A	○					⊙		○	○	
A v. D								⊗	○	
D v. D								×	×	
(2) Excessive inventory	×					○		×	⊗	×
(3) Competition with substitutes	×					⊗		×	×	×
(4) Influence of interference of Communist countries in market	○					×		×	×	×

Notes: 1. ○ means the existence of what is referred to in the left column with regard to the product indicated at the top.  
 ⊙ means that the existence of what is referred to in the left column results in favourable effects.  
 ⊗ means that the existence of what is referred to in the left column results in unfavourable effects.  
 × means the non-existence of what is referred to in the left column with regard to the product indicated at the top.  
 # means that the non-existence of what is referred to in the left column results in unfavourable effects remarkably.  
 2. (1) Of the main importing countries, the United States and West Germany are not members.  
 (2) About 50 per cent, if trades on the preferential agreements between the United States and United Kingdom are excluded.  
 (3) No importing country was a member of the old agreement. (Inclusion of importing countries in the new agreement is still pending.)  
 (4) "A" stands for "advanced countries", and "D" for "developing countries".

Source: This table was prepared by the Economic Research Department of the Bank of Japan.

it is necessary first to strengthen its funds for the buffer stock financially and at the same time to induce the tin-importing countries to cooperate in some way or other in the smooth function of the agreement.

Rubber is another important industrial raw material produced in Southeast Asia. In discussing measures for stabilizing the rubber price, we should keep in mind problems similar to those involved in stabilizing the tin price. Further, there is a serious problem of competition with synthetic rubber. This problem is all the more serious because advanced rubber-using countries are also producers of synthetic rubber.

Included in the second group are foodstuffs and similar commodities, whose prices fluctuate due to factors on the part of the supplier. Of these, sugar, coffee and wheat are covered by respective International Commodity Agreements. The price of sugar could be regulated to a considerable extent; sharp fluctuations in the price are to be prevented by the institution of an export quota system by supplier under the international agreement. But the problem is that sugar stock is apt to be increased excessively as its production is not easily adjustable. The problem of excessive stock is more serious to coffee than to sugar. Unlike prices of coffee and sugar, the price of tea is comparatively stabilized. The pressure of stock is not so heavy on the market, as tea is produced mostly in India and Ceylon, and as the United Kingdom is its stabilized large consumer.

Of the foodstuffs, wheat is most stabilized in price owing to the fact that it is transacted between advanced countries and that imports of consuming countries are regulated under the agreement. In Southeast Asia, rice is bought by developing countries. The price of rice will be firm for some time to come as demand for it is rising due to increase in population in the area. There is a possibility, however, that rice may pose a serious question in the future, if it is in oversupply. This is because developing countries, unlike advanced countries, are financially weak.

The last group is comprised of textile raw materials and copra, industrial raw material. In order to stabilize the prices of these products, it is necessary first to regulate their production and export, as factors on the part of their supplier are mainly responsible for the fluctuation of their prices. However, these products hold out poor prospect for the future, because of expected declining demand.

As we have seen above, there are many difficult problems involved in the stabilization of the prices of primary products of Southeast Asia. However, we believe that price stabilization measures, if well-planned and worked out in consideration of both various factors responsible for the price fluctuations and specific trading conditions, will go a long way toward effectively stabilizing prices of primary products. Necessary to this end are: on the part of producer countries, production adjustment and quality improvement and efforts to reduce production costs through rationalization. On the part of consumer countries, measures necessary include active

participation in International Commodity Agreements, promotion of the purchase of primary products through import liberalization policy, and adoption of other measures for international cooperation.

It goes without saying that these recommendations alone are not sufficient to solve the problem. It is necessary that steps toward price stabilization be supported by the efforts of developing countries to diversify their economic structures and industrialization. In order to quicken further the pace of industrialization, which at present is progressing slowly, it is vital for these countries, first, to develop human resources, and second, to confront, adjust and coordinate national economic development plans through regional cooperation. Southeast Asia can solve the difficult problems of primary products by promoting the above-mentioned measures in the future.

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