

# AN ECONOMIC AND INSTITUTIONAL ANALYSIS OF THE RICE EXPORT POLICY OF THAILAND: WITH SPECIAL REFERENCE TO THE RICE PREMIUM POLICY

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**T**HAI RICE export policy and related institutions experienced a very uncertain and unstable early postwar period but were stabilized after 1956 [24, pp. 292–99]. The rice premium, a specific rice export duty, was formally instituted in 1955, although an export duty also called a “rice premium” has been levied on private rice export since 1951 [10, pp. 493–94] [19, p. 21]. The government’s use of the rice premium as a policy instrument has been in effect up to the present day and this has been one of the most disputed and researched policies in postwar Thailand. Supplementing the rice premium policy was the intermittent use of the rice export quota and the reserve stock policies.

The main focus of this study is the 1956–72 period, for which I will try to (1) analyze in economic terms the mechanism and function of the rice premium policy and its supplementary policies, (2) identify the objectives of the rice premium policy and describe how the relative importance of these objectives changed in the 1956–65 and the 1966–77 periods, and (3) analyze and evaluate in economic terms the disputes of the rice premium policy, using in part a result from my econometric study of the international rice market [22].

## I. THE MECHANISM AND FUNCTION OF THE RICE PREMIUM POLICY AND ITS SUPPLEMENTARY POLICIES

From 1956 until the present day, Thai rice has been exported through two channels: government export and private export. These exports have been conducted under the previously mentioned rice premium policy, the export quota policy, and the reserve stock policy.

Before I discuss the rice export policies, I would first like to describe briefly how the government and private exports of rice are conducted. The government exporting is carried out as follows: The Department of Foreign Trade of the Ministry of Commerce<sup>1</sup> concludes contracts with foreign governments specifying

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<sup>1</sup> This ministry was called Ministry of Economic Affairs before 1972.

the price and amount of rice to be exported. It then procures the rice from the private domestic market and allows private exporters to export it. This government export rice is actually handled by private firms on a commission basis. Management of the government rice export by the Department of Foreign Trade is done only by handling trade papers. The domestic price of rice is lower than the export price because of the rice premium and other export levies, which will be discussed later, and thus the government makes vast profits on its exports. The difference between the price at which the government buys rice and the export price is also called the rice premium [13, p. 2]. In earlier periods, the department bought up the rice for export at an official price which was lower than the domestic price [19, p. 26],<sup>2</sup> but recently the price has been decided on the basis of tenders from private firms and has reached the level of the domestic market price.

Next, I would like to turn to an examination of the private rice export system, which operates according to the following basic pattern: The exporter who is licensed by the government independently concludes a contract with a foreign importer and then obtains permission to export the rice from the government. He then pays the rice premium and other duties and exports the rice. The rice premium is calculated according to the grade and quantity of rice and is paid in full at the time of export by the exporter.

According to the Board of Trade of Thailand, there are 126 rice exporting companies [7]. However, many are not exporting rice at present. Of those which do, many are also involved in internal distribution and operate rice warehouses and mills. The top 5 companies handle about 30 per cent of the exports and are also said to control the domestic rice market to some extent.<sup>3</sup>

Government exports of rice increased gradually from 1956 after its total cessation in 1955, and in the 1960s they accounted for 26–46 per cent of total exports. The gradual increase in the government share does not indicate a government intention to control the rice export. Private exporters can export rice simply by paying the rice premium and other duties to the government. The director general of the Department of Foreign Trade in the Ministry of Commerce, Mr. Suthee Natvaratat, stated that the department did not intend to control the entire rice export and gave the following reasons for the coexistence of government and private exports: Importing countries required government exports, and since private exporters could not handle the large orders characteristic of government-to-government contracts government exports supplemented private exports.<sup>4</sup>

The rice export policy of Thailand consists mainly of the rice premium policy, the export quota policy, and the reserve stock policy. I would now like to discuss the contents and functions of these policies, while noting some of their interdependent aspects. First, I would like to take up the rice premium policy. The rice premium is one of three rice export levies: (1) the rice export premium

<sup>2</sup> This price was adjusted at intervals according to supply and demand.

<sup>3</sup> According to my interviews with rice exporters.

<sup>4</sup> Interview with the author, July 1974.

(which was and will be referred to as the rice premium), (2) the rice export tax, and (3) the local tax on exported rice [2, p. 96].

The rice premium is a specific export duty [11, p. 247].<sup>5</sup> As shown in Table I, with the exception of 1971-73 and 1975, the premium amounted to 21-35 per

TABLE I  
RICE EXPORTS AND THE RICE PREMIUM

Year	Rice Exports			Rice Premium				Wholesale Price of 100% White Rice (Bangkok) (Baht/Ton)
	(1)	(2)	(3)	(4)	(5) <sup>a</sup>	Government Revenue from Premium		
	Volume (1,000 Tons)	Value (Million Baht)	Price (Baht/Ton)	Total Receipts from Premium (Million Baht)	Average Premium (Baht/Ton)	(6) <sup>b</sup> % of Export Value	(7) % of Total Government Revenue	
1950	1,418	1,672	1,179					
1951	1,474	1,824	1,237					1,738
1952	1,549	2,629	1,697					1,912
1953	1,359	3,747	2,757					1,718
1954	1,001	3,087	3,084					1,705
1955	1,236	3,133	2,535					1,880
1956	1,265	2,861	2,262	842	666	29	17	1,858
1957	1,570	3,622	2,307	840	535	23	16	1,771
1958	1,133	2,968	2,620	812	717	27	15	1,963
1959	1,092	2,576	2,359	756	692	29	13	1,800
1960	1,203	2,570	2,136	745	619	29	11	1,641
1961	1,576	3,598	2,283	872	553	24	12	1,731
1962	1,271	3,240	2,534	753	592	23	9	1,992
1963	1,418	3,424	2,416	819	578	24	9	1,799
1964	1,896	4,389	2,315	1,238	653	28	12	1,680
1965	1,895	4,334	2,281	1,192	629	28	11	1,649
1966	1,507	4,001	2,650	995	660	25	8	2,189
1967	1,482	4,653	3,144	995	671	21	7	2,532
1968	1,068	3,775	3,534	1,268	1,187	34	8	2,110
1969	1,023	2,945	2,879	1,037	1,014	35	6	2,377
1970	1,064	2,517	2,366	540	508	21	3	2,103
1971	1,576	2,909	1,846	225	142	8	1	1,787
1972	2,112	4,437	2,101	158	75	4	0.7	1,976
1973	849	3,594	4,233	333	392	9	1	3,007
1974	1,029	9,778	9,502	3,123	3,072	34	8	3,921
1975	953*	5,851*	6,140*	371	389*	6*	1	3,925

Sources: [4]; Bank of Thailand, *IMF Consultations*, 1960, 1970; Government of Thailand, Department of Customs, *Annual Statement of Foreign Trade*.

<sup>a</sup> (4) ÷ (1).

<sup>b</sup> (4) ÷ (2).

\* Estimate.

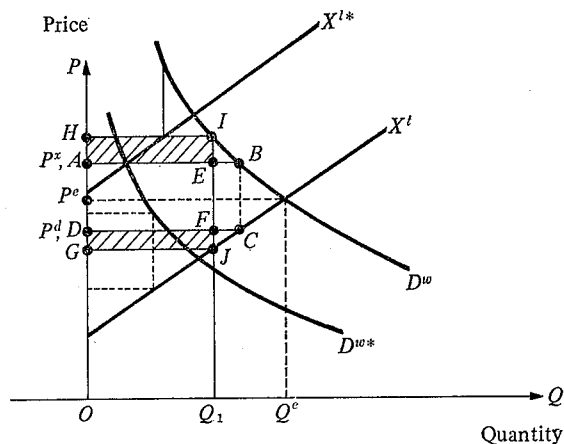
<sup>5</sup> Faced with the prospect of a domestic rice shortage and a sharp rise in the domestic price, in January 1967, the government made the rice premium an ad valorem duty based on an official price for each grade of rice. Even after the situation eased, the rice premium continued on an ad valorem basis until September 1969, when it once again became a specific duty.

cent of the total value of rice exports. Before 1965, the rice premium constituted between 9–17 per cent of total government revenue and was thus important to Thailand's overall finances. This proportion fell after 1966, rose to 8 per cent in 1974 in response to a strong international demand for rice, and then fell again in 1975. The premium differs for each of the many grades of rice, and on the average it is higher for private than for government exports [10, p. 247].

The rice export tax is a descendant of the prewar general export tax, and is an ad valorem duty ranging from 3.2 to 10 per cent of the official export price [2, p. 96].<sup>6</sup> The local tax on exported rice is collected by the Ministry of the Interior and is distributed to the towns and villages, in contrast to the rice premium and the rice export tax, which were channeled into the national revenue. Of these three types of levies, the rice premium is the most important in terms of the revenue per unit weight of rice exported and the percentage of government revenue [2, p. 96].

Next, I would like to analyze the influence of the rice premium to domestic and world rice markets theoretically through the use of a simple diagram. Figure 1 indicates the influence of the rice premium policy on the export price ( $P^x$ ), the domestic price ( $P^d$ ), and the amount exported ( $Q$ ), and on the domestic supply and demand. Also shown is the relationship between the rice premium policy and the rice export quota policy.  $D^w$  is the world demand curve for Thai rice and  $X^t$  is the Thai rice export curve (excess supply curve). In this figure, the domestic supply and demand curve corresponding to  $X^t$  could be drawn in the quadrant to the left of  $OP$  but is omitted for simplicity's sake.<sup>7</sup> Rice marketing costs are assumed to be zero for the same reason. The slope of  $D^w$ , or, more exactly speaking, price elasticity of the world demand for Thai rice, is an important point and will be dealt with in detail in Section III of this paper. The

Fig. 1. The Rice Premium and the Export Quota



<sup>6</sup> From my interview survey.

<sup>7</sup> This figure is based on the figure of [20, p. 78].

figure shows that if there were no rice premium, the amount exported would be at  $Q^e$ , and the export price and domestic price would be the same at  $P^e$ . But when there is a rice premium of  $BC$  per unit weight of exported rice, the amount exported becomes  $DC$ , the export price  $P^x$ , and the domestic price  $P^d$ . In other words, with a rice premium of  $BC$  and *ceteris paribus*, the amount of rice exported decreased from  $Q^e$  to  $DC$  and the export price and domestic price differed by a  $BC$  margin, i.e., the export price  $P^x$  is higher and the domestic price  $P^d$  lower than point  $P^e$ . Although not shown in Figure 1, because the domestic price falls in accordance with the rice premium  $BC$ , domestic rice supply decreases and demand increases. These changes in domestic supply and demand correspond to the fall in the amount exported from  $Q^e$  to  $DC$ .

Since the war, an export quota has been periodically instituted in Thailand. Figure 1 shows the relationship between this quota system and the rice premium. When the quota is  $OQ_1$  and the rice premium is  $BC$ , the quota is effective (the quota determines the amount of rice exported, the export price, and the domestic price), while the rice premium is ineffective. In this case, the excess profits (the rectangle  $GHII$ ) resulting from the quota is shared by the government and the exporters. The rectangle  $AEFD$  becomes public revenue from the rice premium and the two shaded areas accrue to the exporters. But if the quota is greater than  $DC$ , only the rice premium is effective, in which case, the Thai government receives all the premium revenue and no excess profits accrue to the exporters.

Next, I will analyze the mechanism by which the rice premium is determined. This has been ignored by other analysts despite its relationship with some important issues related to the rice premium policy.<sup>8</sup> The rice premium is under the jurisdiction of the Department of Foreign Trade of the Ministry of Commerce, and the premium levels are based on a daily evaluation of supply and demand factors in the international and domestic rice markets. For both short periods, such as a week, and for longer periods when the quota is effective, the amount of exports can be considered constant. In such case, the premium levels are decided on the basis of the difference between the export price of each grade of rice and the sum of its domestic wholesale price, exporters' expenses, and normal profits. The goal is to guarantee normal profits for the exporters. But the premium cannot be determined by this method in the case of long term when the export quota is not effective, because the world demand for rice and the amount of rice exported are functions of price. In this case, the rice premium is decided by the Department of Foreign Trade through a consideration of the following factors: First, at any given time, the highest wholesale price and lowest farmer's price must remain within the bounds of political feasibility and social acceptability. Second, considerable revenue should accrue from the rice premium. Third, existing stable export markets for Thai rice should be safeguarded.<sup>9</sup> Thus, in

<sup>8</sup> The following description of the decision-making process is based on interviews with Mr. Suthee in July 1974, interviews with other people connected with the rice trade, and on various other related sources.

<sup>9</sup> In my interviews with the people responsible for the rice premium policy, I received the impression that the acquisition of foreign exchange from rice exports is not considered

the second case, the rice premium levels are determined by the government's evaluation of the political power relationship between itself, the consumers, and the farmers and also by its evaluation of financial and export market problems existing at the time.

The rice exporters can also influence the process by which the government decides the rice premium. The Rice Committee of the Board of Trade investigates the rice premium, and its Board of Directors may recommend to the government a change in the premium if deemed necessary.<sup>10</sup>

There is no formal committee concerned with the rice premium in the Department of Foreign Trade, but the director general of the department has a considerable say in deciding the premium. The department, however, may not change the premium without the cabinet's approval, and if this is not forthcoming, the ministers concerned form a temporary committee to investigate the levels of the premium.

The cause of the problem in the decision-making process lies in the method by which the factors which determine the premium, namely, the export price of rice and the domestic wholesale price are collected. These prices are quoted by the group of rice exporters who compose the Rice Price Subcommittee of the Board of Trade's Rice Committee. A quotation is made each Monday for that week, and the prices are reported to and approved by the Department of Foreign Trade. The Board of Trade of Thailand is a private organization set up to act as a liaison between and a coordinator of activities for the government, the traders, and the industrialists. It also promotes foreign trade and mediates commercial disputes. According to my interviews in the summer of 1974 with people connected with rice exports, the export price quoted by the Rice Price Subcommittee is the price the exporters can offer. However, this does not necessarily mean that it agrees with the actual export price, which is frequently higher. The Rice Price Subcommittee could manipulate to some degree its reporting prices to the Department of Foreign Trade. If the quoted and the actual prices differ, then in the short run or when the quotas are effective over a long-term period, it is possible for rice exporters to make large profits or suffer large losses. When the quotas are not effective over a long-term period, the exporters make consequent adjustments in their economic activities, and this directly influences their profits or losses. In either case, it is difficult for the government to carry out the rice premium policy to attain efficiently its objectives which will be discussed in the next section. For these reasons it is probably better if the Department of Foreign Trade uses the conclusions of independent surveys rather than relying on the export prices and domestic wholesale prices quoted by the rice exporters.

In order to supplement the rice premium policy, export quotas and the reserve

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very important in determining the rice premium. This is worth noting in view of the fact that my estimate of the relative price elasticity of demand for Thai rice in the world market approximates to unity.

<sup>10</sup> According to interviews at the Board of Trade of Thailand.

stock policy of rice have been adopted intermittently since 1955.<sup>11</sup> In recent years, the export quotas have been introduced in 1966–68 and 1972–74 periods, when the world rice market was very tight and the international rice price rose rapidly. During these periods, the rice premium policy, which has been in force continuously since 1955, and the export quotas were instituted concurrently. Leaving aside the question of whether or not the difference between the export price and the domestic price accrues to private exporters or to the government, the export quotas and the export tax are, in international economic theory, interchangeable policy instruments for adjusting the price and the amount of exports. In theory, either one should be sufficient in order to achieve a given policy objective vis-à-vis the export price and quantity. Why, then, are the rice premium and the quotas enforced simultaneously? In seeking to answer this question, I interviewed officials of the Department of Foreign Trade, rice exporters, and officials in the embassies of rice-importing countries. Based on these interviews, I offer the following explanation.

In practice, the rice premium alone is not sufficient to achieve policy aims on price and export quantities. Rice is the staple food and the major source of income of the Thai people, so stabilization of the domestic rice price is a very important issue for the government. When world demand for Thai rice increases rapidly (i.e., when  $D^w$  in Figure 1 shifts sharply to the right), the rice premium alone, as a specific duty, would require numerous adjustments over the short run in order to maintain the domestic price. However, the adjustment of the rice premium requires the cabinet's consent, and this takes time. Moreover, frequent changes of the premium provoke strong opposition from the exporters because of the uncertainty they create.<sup>12</sup> Also, in determining the rice premium, the position of the world demand curve for Thai rice must be calculated; however, accurate estimations are extremely difficult to make, especially in periods of its rapid shifts. However, the quotas allow domestic prices to be held stable when an acute increase in world demand makes the estimation of the demand curve difficult and quick adjustments of the rice premium are difficult. For example, if  $Q_1$  is the amount of the export quota in Figure 1, then the domestic price can be held at  $OG$ .

The export quota alone is also not sufficient. First, if the export amount and price are determined solely by the quota, all large excess profits would accrue unfairly to the exporters. The concurrent use of the rice premium in effect allows the sharing of excess profits between the government and the exporters as described above. This is important to the Thai government, which until recently has lacked good sources of revenue. With proper management of the rice pre-

<sup>11</sup> For the intermittent application of the export quotas, see [17, p. 217] [19, p. 27]. For the reserve stock policy, see [1, pp. 141–65]. The export quotas and the reserve stock policy in effect in July 1974 began in 1972.

<sup>12</sup> According to people connected with rice export, contracts for private export are made two to three months before exporting, whereas the rice premium has to be paid at the time of exporting. If the rice premium is changed every month, for example, the exporters have difficulty in estimating profits.

mium and the quotas, the government can ensure that a fair proportion of profits will go to the exporters, which it hopes will be reinvested in the export trade.<sup>13</sup> Second, the rice premium can be adjusted faster than the export quotas. So if  $D^w$  or  $X^t$  shifts rapidly leftward, for example, to  $D^{w*}$  and  $X^{t*}$  in Figure 1, and prices and export quantity also have to be adjusted rapidly in order to keep the domestic rice price stable, and therefore, the rice premium is a better adjustment instrument than the quotas.

Thus the rice premium and quota policies are skillfully employed in concert to stabilize domestic prices and assure public revenue in the face of an extremely changeable world demand for Thai rice.

The export quotas are decided by the Department of Foreign Trade. At the beginning of the year, a forecast is made for both the rice production and the amount of expected surplus. That year's quotas, which represent the export target, are then determined.<sup>14</sup> Until the end of 1973, the quota for each exporter was based on the quantity which was exported by him in the past, but from January 1974, the amount held in his warehouses was also included in the calculations.<sup>15</sup> This quota is decided on a monthly basis, and each month's quota is effective for three months.<sup>16</sup>

Next I would like to briefly explain the second supplementary policy, the reserve stock policy, which was dealt with from theoretical viewpoint by Professor Chihiro Nakajima in conjunction with the rice premium and the export quotas in this issue. Under this policy, rice is purchased under compulsion from exporters at a low official price and is then sold to consumers below the market price when the domestic rice price soars.<sup>17</sup> The amount purchased from an exporter is a specified proportion (the reserve ratio) of the amount he exports privately. This policy began in March 1962 with a reserve ratio of 15 per cent and was in effect intermittently until March 1973 at reserve ratios ranging from 5 to 15 per cent. The 1972/73 rainy season crop in Thailand was poor, about 18 per cent less than the previous year, and from 1972 to 1973 the world market for cereals tightened considerably, with the international trade prices of cereals soaring. Domestic rice prices in Thailand started to rise rapidly at the end of 1972 and reached a peak in June 1973. From June to August 1973, Thailand faced a "rice crisis."<sup>18</sup> In this situation, much of the rice was collected under the reserve stock policy and was soon sold to consumers at a low price, and the reserve ratio was increased rapidly from March of that year to 200 per cent in

<sup>13</sup> In my interview with people connected with rice export in summer 1974, the opinion that the premium and the export quota were being used for this purpose was suggested.

<sup>14</sup> According to interviews at the Department of Foreign Trade in 1974. The total quota for white rice in 1974 was 12 million tons.

<sup>15</sup> According to interviews at the Department of Foreign Trade.

<sup>16</sup> The same as footnote 15.

<sup>17</sup> According to an interview at the Department of Foreign Trade in July 1974, the government bought rice from the exporters at about 99 dollars a ton and sold it to consumers at about 164 dollars a ton under the reserve stock policy. At that time, the market price was 197–213 dollars a ton.

<sup>18</sup> From June 12 to July 30, 1973, rice exports were banned.



August. This very high reserve ratio is virtually equivalent to the rice export ban. In this way, the reserve stock policy, together with the export quota adopted in 1972, was used to mitigate the acute domestic supply and demand situation from the end of 1972 to 1974.

This high reserve ratio provoked a strong reaction from the rice exporters, and in October 1973, it was gradually lowered by shifting the emphasis to the rice premium policy. However, the 1974 domestic price remained higher than that of 1973, and the reserve ratio rose to 50 per cent in July and 100 per cent by December 27, 1974. The reserve stock policy was abolished in January 1976.<sup>19</sup>

## II. THE OBJECTIVES OF THE RICE PREMIUM POLICY AND THE SHIFTS IN THEIR RELATIVE IMPORTANCE

In this section, I will look at the objectives of the rice premium policy, analyze what extent they were achieved, and evaluate how their relative importance changed overtime. These objectives are as follows: to secure government revenue, to stabilize the domestic rice price in the face of fluctuating world prices and changes in domestic supply, and to control the exporters' excess profits which result from the rice export quota and the licensing of exporters.<sup>20</sup> Judging from the process by which the policy was established and from the tradition of taxation underlying it,<sup>21</sup> the first objective—securing revenue—was probably regarded as more important at the time the policy was instituted. Recently, however, this objective has become secondary to the need for stabilizing domestic rice prices. This change in emphasis is described below.

As mentioned in the discussion of Table I, income from the rice premium constituted from 9 to 17 per cent of total government revenue before 1965 and was thought of as an important source of revenue by the government. After 1966, the importance of the premium as a source of revenue declined rapidly. In 1974, with the sharp rise in world rice prices, the premium on one ton of exported Thai rice rose to an unprecedented height, but government receipts from the premium reached only 8 per cent of total revenue (see Table I). This was the result of a recent structural change in government's revenue sources, namely, the shift from indirect tax to direct tax.

The world rice price was comparatively stable from 1955 to 1965, as reflected in the average export price for Thai rice in Table I. In this period, it was not necessary to stabilize the domestic rice price by adjusting the rice premium to absorb fluctuations in world rice prices. The average rice premium changed only slightly from 1955 to 1965 and the domestic rice price was stable in this period (see Table I).

From 1966 to 1975, the world rice price, indicated in Table I by the average

<sup>19</sup> For the reserve stock policy and the "rice crisis," I base my description on interviews with the policymakers and rice exporters in Thailand. See [1, p. 164] [9].

<sup>20</sup> A discussion of the objectives can be found in Sura [19, p. 20].

<sup>21</sup> Concerning the establishment of the rice premium policy and the tradition of taxation, see Tsujii [24, pp. 291-99].

export price for Thai rice, fluctuated wildly. In 1967, there was a severe drought in Thailand and rice production fell steeply. In addition, the international rice price rose sharply in 1967 and 1968. As a result, the average rice premium per ton of rice exported in 1968 and 1969 increased to more than one thousand baht, almost double the previous level, and the rice premium for different grades changed frequently from 1967 to 1969. The rice export quota was in operation from late 1966 to approximately 1968. Unfortunately there is little written about the details of the quota policy, but it is thought to have been effective from 1966 to 1968, alternating with the rice premium.<sup>22</sup> As a result of these government measures, rice exports fell sharply to about 1 million tons per year in 1968 and 1969. Wholesale prices of white rice in Bangkok, which indicate the state of domestic supply and demand, fell in 1968 when world prices were at a peak. This illustrates the use of the rice premium in conjunction with the export quota policy in easing the tightness of the domestic market and in stabilizing the domestic price of rice.

In 1971, both the world and domestic demand for rice greatly slackened, and the export price for Thai rice suddenly fell. In response, the government began lowering the rice premium on all grades of rice and eventually fixed at zero level with the exception of the two highest grades (100 per cent and 5 per cent). As shown in Table I, the average rice premium per ton of rice exported fell to 142 baht in 1971 and 75 baht in 1972. By greatly lowering the rice premium, rice exports were stimulated and the sharp fall in the domestic price was checked.

From 1972 to 1974, the domestic and international rice markets became extremely tight and the rice price rose sharply. In 1973, the government stepped up its compulsory purchases under the reserve stock policy in order to supply consumers with low-priced rice. The average price of exported rice, as seen from Table I, was 9,502 baht a ton in 1974, almost four times the average price after the war. The rice premium had also been greatly increased and averaged 3,072 baht in a ton in 1974. As previously mentioned, the rice export quota was in operation from 1972 to 1974 and rice exports were banned from June 12 to July 30, 1973. As for the quota, I feel that there were both months in which it was effective and ineffective during the 1972-74 period.<sup>23</sup> The rice premium policy and its supplementary policies succeeded in keeping rice exports at a low

<sup>22</sup> The rice premium is decided for each grade of rice, but the export quota is applied to the total quantity of rice exports. It is comparatively easy for exporters to alter the grade of rice through mixing and shifting. So even when the quota is effective, changes in a rice premium on one grade of rice can have some effect on wholesale prices, on export prices, and on the amount exported of the various grades of Thai rice. According to Ingram [11, pp. 247, 250-52], from January 1967 to September 1969, the rice premium was an ad valorem duty.

<sup>23</sup> The data is incomplete, but as an example, in 1974 the quota for private exports was 80,000 tons in January; 100,000 tons in February; 65,000 tons in August; and 65,000 tons in September, whereas actual exports in these months were about 74,000, 144,000, 23,000 and 56,000 tons, respectively. Private exports in February used a quota carried over from 1973. For 1974 the quota for the year was 1,200,000 tons and the actual amount exported was 1,050,000 tons. See various issues of [5] [9] in 1974.

level in 1973 and 1974, as seen in Table I, and they limited the upswing of domestic prices in 1974 to a level which was a little over twice the average postwar price.<sup>24</sup>

The preceding discussion of the aims of the rice premium and the supplementary policies has shown that from 1965, procurement of government revenue became subordinate to the stabilization of the domestic rice price, and that the latter aim was largely accomplished. In an interview with the author in July 1974, the director general of the Department of Foreign Trade, Mr. Suthee explained that "the important aims of the rice premium policy are, firstly, to keep the rice price for domestic consumers at a reasonable level, and, secondly, to provide a fair rice price for the farmers. The rice premium is not regarded as very important as a source of government revenue." This corresponds with the above-mentioned change in emphasis of the rice premium policy. However, as can be deduced from the earlier discussion of the method of determining the rice premium, it is generally difficult to achieve simultaneously a "reasonable" consumers' rice price and a "fair" farmers' rice price through the premium alone since the farmers' price and the consumers' price would shift in the same direction if the premium is changed.

Although the export price of rice changes frequently, in the eleven years from 1956 to 1966 the premium for the main grades of rice changed from only two to nine times. As a result, fluctuations in the exported and wholesale prices of Thai rice showed high positive correlation on a weekly or monthly basis. Thus, some scholars have concluded that the rice premium has little stabilizing effect on the domestic price [8, pp. 37-41] [11, pp. 247-53] [19, p. 28]. After 1967 the rice premium was adjusted more often, though still far too infrequently when compared with the movement of export prices. Thus the view that the rice premium has little stabilizing effect is correct when viewed from a short-term (i.e., weekly or monthly) perspective. However, as this analysis of the rice premium and its supplementary policies demonstrates, from 1966 to 1975 the rice premium did achieve its goal of stabilizing domestic rice prices when viewed from a long-term (i.e., annual) perspective. This long-term domestic rice price stabilization is, in my opinion, politically more required and more realistic than the short-run (i.e., weekly or monthly) stabilization in Thailand.

### III. THE RICE PREMIUM POLICY DISPUTE

The rice premium policy has been the most discussed and researched economic policy in postwar Thailand. Here I would like to present a theoretical and empirical evaluation of the dispute.

Before investigating this dispute, the relationship between the rice premium policy and its supplementary policies, i.e., the export quota, and the reserve stock policy should be clarified. This has not been attempted in previous studies

<sup>24</sup> In interviews, Thai rice exporters often mentioned that the rice premium policy used together with the export quota had prevented the internal price from rising rapidly.

of the dispute. Prior to March 1973, the reserve stock policy had little influence on the domestic and international rice markets since the reserve ratio was very low and was not included in the dispute over the rice premium policy. For this reason I will not deal with the relationship between these two policies in this section. However, when dealing with recent export policies, the relationship between these two must be kept in mind since the reserve ratio rose steeply from 1973 and remained high throughout 1974 and 1975.

As previously explained, when the export quota policy is effective, the rice premium does not influence the export price, the amount exported, or the domestic wholesale prices.<sup>25</sup> However, it does influence the division of the excess profits that accompany the quota policy between the government and the rice exporters. But this question of profit distribution concerns the quota system and the relationship between the two policies, rather than the rice premium policy itself, and for this reason, it has not previously figured in the rice premium dispute. The quota system has only been applied during periods of very tight supply and demand, and the data in footnote 23 indicate a number of months when the quota was ineffective. For these reasons I will focus this discussion on cases where only the rice premium was effective.

Most opponents of the rice premium policy are economists or agricultural economists<sup>26</sup> and the gist of their argument is as follows: They hold that both the international and domestic rice markets are competitive. When the rice premium is levied, it forces about an equivalent decrease in both the domestic wholesale price and the farmers' price. Because farmers are responsive to price changes, rice production falls, and the income of farmers, who make up more than 70 per cent of Thailand's population, is greatly reduced. The small group of city dwellers, whose per capita income is much higher than that of the farmers, can purchase rice, their staple food, more cheaply thanks to the rice premium. Consequently the rice premium is actually a policy of a heavy taxation of the farmers and results in the unfair transfer of income from the majority of poor farmers to the minority of relatively affluent city dwellers. The total demand for rice in Thailand increases because of the decrease of the wholesale rice price. And from the point of view of rice exports, the decrease in Thailand's rice production and the increase in demand decreases the amount of rice exported. The opponents of the rice premium policy contend that since the world rice market is competitive, this decrease in exports brings about a proportional decrease in foreign currency receipts and is thus undesirable. Although they admit that the rice premium is an important source of government revenue, they hold that alternative sources can be easily found. Thus the opponents of the rice premium policy are of the opinion that the rice premium should be abolished or greatly reduced.

The supporters of the rice premium policy are mainly Thai government offi-

<sup>25</sup> This is not necessarily true for each grade of rice, as explained in footnote 22, but is true for Thai rice as a whole.

<sup>26</sup> For example, the views of the opponents of the rice premium policy can be found in [6, pp. 10-13, 337] [8, pp. 56-57] [26, pp. 206-30] [19] [16, pp. 20-24] [27].

cials.<sup>27</sup> One group holds that the domestic rice market is not competitive, and that if the rice premium is abolished, the profit will all be absorbed by middlemen, with the farmers' price remaining at a low level. This assertion rests on their belief that the domestic market is not competitive because the rice merchants take collusive actions. This point holds when the licensing the exporters and assigning the rice export quotas to the licensed exporters exist. These institutions limit the number of people involved and the competition in the rice trade and the excess profits resulting from this limitation in competition will accrue to the rice merchants when the rice premium policy is abolished. I would now like to turn to the views of another group of proponents of the rice premium policy who argue that the domestic market is competitive.

This group of supporters asserts that "because the rice premium had raised the export price of rice in comparison with when there was no premium, part of the premium is being paid by the countries importing Thai rice [11, p. 248]. Namely, they view the world market for Thai rice as one of imperfect competition.

These supporters of the policy do not deny that the rice premium has increased government revenue and has forced down farmers' income by lowering the rice price at farm level. But they assert that farmers are ultimately compensated for the loss of income by government-financed development projects, by the diffusion of new farming techniques, and by the investment in irrigation and road construction. In this way, the increased government revenue from the rice premium is considered to be restored to the rice farmers. They also say that the rice premium is an indispensable source of revenue, for which a suitable replacement would be difficult to find. In essence they argue that the payment of part of the rice premium is done by the rice-importing countries and that the fall in rice farmers' income is compensated for by the government expenditure in agriculture.

Some members of this group think that farmers are not price responsive and do not respond to lower rice prices by cutting down rice production during times when the rice premium is in operation. They, therefore, argue that the rice premium represses neither domestic production nor rice exports.

The argument of those who feel that rice production does respond to price can be summarized as follows: Because the rice premium keeps the domestic rice price at a low level, it promotes the development of Thai agriculture by encouraging crop diversification by making rice less profitable vis-à-vis other crops. Second, since rice is the staple food of the Thai people, its low and stable price is useful in stabilizing the wages of workers and thus contributes favorably to Thailand's industrialization. And third, a low rice price is one of the prerequisites for political stability in Thailand.

Four main questions emerge from this dispute [21, p. 44].

- (a) Who bears the burden of the export tax and the rice premium?
- (b) To what extent are the domestic and export markets for Thai rice competitive?
- (c) How responsive are the rice farmers to price changes?

<sup>27</sup> International Bank for Reconstruction and Development also endorses the policy, see [12, pp. 68-69].

(d) How should resources and the burden of taxation be allocated between agriculture and other industries?

I would like to discuss (b) first. I consider the world market for Thai rice to be imperfectly competitive for the following reasons:

(1) The relative export price elasticity of world demand for Thai rice on the average, calculated from my econometric model of the international rice market, is approximately unity [21, p. 52]. This elasticity is calculated from the world rice model estimated from a time-series data for the 1950s and 1960s, with respect to the world demand for Thai rice and the relative price of the Thai rice export price index to the world export price index. Because this relative price was used, the elasticity can be thought of as a long-run elasticity. According to Figure 1, this elasticity is the approximate value of the long-run elasticity of the export amount  $Q$  with respect to the export price  $P^x$ , and for this reason it can be said that  $D^w$  slopes steeply downward to the right in the vicinity of the average values of  $P^x$  and  $Q$ .

(2) The Department of Foreign Trade, which controls Thai rice export, clearly recognizes competition among the main exporting countries of Burma, China, America, and Japan. These competitive conditions are important considerations in department's making decisions on rice export policies.<sup>28</sup>

(3) The Thai share of the world rice export market is very large (from 1966 to 1972 it averaged about 20 per cent) and the domestic rice market in most countries is kept separate from the world market by each country's rice policies.

(4) The Department of Foreign Trade can use the rice premium policy and the export quota as devices to control export price and quantity.

(5) In Asia, Thai rice is favored because of its reputation for being of high quality and because of the long relationship between Thailand and various importing countries.

Points (2) to (5) imply that the Thai government behaves oligopolistically toward the world rice market.

In connection with question (b), next I would like to look at competition in the domestic rice market. The works of Udhis and Usher on rice marketing in Thailand come to the conclusion that rice marketing is efficient and competitive [25] [26]. My own investigations of rice producers, millers, and middlemen have also shown that the rice trade was fairly competitive. For these reasons I conclude that the domestic rice market in Thailand is, in fact, competitive except the private rice export sector when effective rice export quotas with licensing rice exporters exist.

As for who must bear the burden of the rice premium, question (a), the considerable downward slope to the right of the long-term world demand curve and the rise to the right of the long-term Thai rice export curve together indicate that both the rice-importing countries and the rice-producing farmers bear this burden.

Next, I would like to discuss the price responsiveness of the farmers, referred to in question (c). Many works on this topic, for instance, Behrman's study of

<sup>28</sup> Based on my interviews in Thailand.

Thailand [6] and my previously mentioned econometric study, indicate a positive response. Most economists also agree with this view.

I would now like to assess the dispute on the rice premium policy based on a consideration of all of the factors discussed relating to (a), (b), and (c). The basic assumption of the opponents of the rice premium policy that the world rice market confronting Thailand is perfectly competitive is not supported by the evidence. The points (1) to (5) presented just above show that the market is imperfectly competitive. The main views of the opponents which follow from this assumption is not supported and must be greatly revised. These views include the following: (i) The rice premium is borne by the farmers only. (ii) There is an unfair transfer of income from the majority of poor farmers to the minority of relatively affluent town-dwellers. (iii) The domestic rice price is forced down by the same amount as the rice premium. (iv) As a result, rice production is reduced. (v) Rice exports decrease, which, in turn, decreases the earning of foreign exchange. Views (i) and (iii) are not substantiated by the evidence; the other assertions should be revised. The correctness of the basic assumption of the policy's supporters that the long-run world demand curve for Thai rice slopes downward to the right upholds their opinion that part of the rice premium is borne by importing countries. Both supporters and opponents agree that the domestic rice price will be forced down by the rice premium in the long run. Thus domestic rice producers will bear the burden of the portion of the rice premium not borne by the importing countries because of lower rice prices.

The assertions made in (ii), (iv), and (v) by the opponents of the rice premium policy are exaggerated, since the long-run world demand curve for Thai rice is fairly steep. In particular, the claim made in (v) that foreign currency receipts are lost under the rice premium policy errs near the averages if, as described above, the price elasticity of the long-run world demand curve for Thai rice approximates to unity at the averages. In this case, even if the rice premium is levied, foreign exchange revenue will not be greatly affected.

Lastly, I wish to examine question (d), taxation and expenditure patterns and the allocation of resources, in relation to the rice premium dispute. First, the position taken by rice premium policy supporters that receipts from this policy eventually return to the rice producers seems to be well supported by the emphasis placed on irrigation and road investment in past development plans and their implementation.<sup>29</sup> This is in line with the government thinking about the rice premium policy.<sup>30</sup> Second, Sura and Anan have studied alternative tax bases for the rice premium policy [19, pp. 128-30] [2, pp. 108, 142-60]. They agree that increased revenue is possible through direct taxes. These research results,

<sup>29</sup> The same opinion is found in Ingram [11, p. 259] in connection with the central region of Thailand.

<sup>30</sup> According to Silcock [18, p. 217]. In my interviews with the director general of the Department of Foreign Trade, in July 1974, I was told that about 3 billion baht of that year's revenue from the rice premium had been officially earmarked for the stabilization of the rice price and for the encouragement of rice production.

together with the recent shift in emphasis in public finance towards direct taxation, support the views of policy opponents that an alternative tax base can be developed. Third, according to Silcock, Ayal, Marzouk, and others, the rice premium has been effective in diversifying agriculture [3, pp. 344–45] [14, pp.135–44] [18, pp. 231–57]. Thai agriculture has undergone rapid diversification while the rice premium policy was in force. This would probably substantiate the position of the premium policy supporters. Fourth, the supporters' proposition that the rice premium has stabilized domestic rice prices and has thus contributed to industrialization and political stability is confirmed. As previously stated, the rice premium stabilizes domestic rice prices over a long-term period (i.e., annually), and in view of the importance of rice to the Thai people, it cannot be denied that the stabilization of the rice price has contributed to both industrialization and political stability.<sup>31</sup> Thus the proponents of the policy are correct in three of their assertions pertaining to the taxation and expenditure pattern and to the allocation of resources, but mistaken on the feasibility of finding alternative sources of revenue.

In sum, with the exceptions of the price response of rice producers and the feasibility of finding alternative sources of revenue, the views of the opponents of the policy are either mistaken or in need of a large-scale revision. On the other hand, the opinions of the supporters of the policy are largely substantiated by the evidence.

#### IV. CONCLUSION

The rice premium policy is government revenue policy as well as rice price policy by taxing rice exports. It officially began in 1955, when the complex and unstable postwar system of rice exports was simplified and all revenue from rice exports accrued to the treasury.

From 1956, rice has been exported from Thailand through both private and official channels, and the government regarding its exports as complementing private exports. Rice for state export is bought at a price considerably lower than the contracted export price, and the difference between these prices, which flow into the national revenue, is also called the rice premium. Usually, however, the rice premium denotes the specific duty paid by private rice exporters to the government at the time of export according to the grade and weight of rice exported. It is sometimes supplemented by the export quotas and the reserve stock policy. The rice premium and the export quotas are employed concurrently as complementary policy measures aimed at stabilizing domestic rice prices and guaranteeing government revenue in the face of violently fluctuating world demand for Thai rice and unstable rice production in Thailand.

Of the three levies on rice export—the rice premium, the rice export tax, and the local tax—the rice premium's contribution to government revenue is most

<sup>31</sup> Rice price shooting up always preceded political turnover in 1973 Thailand, 1974 Vietnam, and 1966 Indonesia.



substantial. The rice premium is decided by the Department of Foreign Trade of the Ministry of Commerce, with cabinet approval. On a short-run basis, or in the long run when the export quota is effective, this is done through a consideration of domestic and export prices, with the aim of letting rice exporters achieve normal profits. When the export quota is not effective in the long run, the premium is decided upon by the Department of Foreign Trade and the cabinet with the aim of balancing the following political and economic considerations: the consumers' demand for a low rice price; the farmers' demand for a high paddy price; the desirability of high tax receipts from the rice premium; and the maintenance of existing stable export markets for Thai rice. Rice exporters can request changes in the rice premium through the Board of Trade of Thailand. The weakness in the process of deciding the rice premium is that domestic and export rice prices are supplied to the Department of Foreign Trade by the Board of Trade's Rice Price Subcommittee which consists of rice exporters.

The policy aims of the rice premium policy are to secure government revenue and to stabilize the domestic rice price. The first aim was paramount until the mid-1960s but became secondary with the shift in emphasis in the taxation structure to direct taxation which accompanied economic development. The second aim became primary after 1966. From 1955 to 1966 international rice prices had been comparatively stable, but from 1966 to 1975 they fluctuated violently. In fact, the rice premium and its supplementary policies have been applied more frequently since 1966, with the aim of stabilizing domestic rice prices and, judging from yearly average domestic rice prices, they have had a considerable stabilizing effect.

The rice premium policy is the most researched and disputed economic policy of postwar Thailand. Except in the periods 1971-73, and 1975, the rice premium has constituted 21 to 35 per cent of the export price of rice, and consequently is an important source of government revenue which greatly influences the Thai economy. This analysis of the rice premium dispute has dealt only with periods when the quota system was not effective and has ignored the reserve stock policy, for the reasons stated earlier.

The opponents of the rice premium policy assume the international rice market to be perfectly competitive. Thus they assert that the rice premium forces the domestic price of rice down by an amount equivalent to the premium, that this burden is borne only by the rice farmers, that the rice premium reduces rice production and farmers' income and results in an unfair transfer of income from the rural poor majority to the relatively affluent urban minority, and that it reduces foreign currency earnings by curtailing exports. However, the assumption of perfect competition is not valid. The international rice market confronting Thailand is imperfectly competitive; the Thai government occupies an oligopolistic position from which it can, to some extent, control the price or amount of rice exported through the rice premium (and the export quota). Therefore, the position of the rice premium policy opponents is either mistaken or else is in need of a great deal of revision. In particular, the suggestion that the rice premium reduces foreign currency earnings from rice export is not upheld on the aver-

age, since the relative price elasticity of world demand for Thai rice near the averages approximates to unity as shown in my econometric study.

The opinion of the rice premium policy's supporters that part of the premium is paid by importing countries is correct. This is because the rice premium raises the export price of Thai rice, that is, the long-run world demand curve for Thai rice falls to the right. But the assertion of some of the supporters that the rice-producing farmers are not responsive to the price of rice is not validated. From these conclusions it is proved that the rice premium is borne by both importing countries and Thai rice producers. The opinions of the supporters that revenue from the rice premium returns to the farmers through government agricultural expenditures, and that the rice premium policy contributes to political stability and promotes agricultural diversification and industrialization are also upheld. But their belief in the difficulty for the development of an alternative source of tax revenue which can replace the rice premium is rejected by the evidence. In conclusion, this analysis of the rice premium policy dispute endorses most of the views of the rice premium policy supporters and suggests that the policy opponents greatly revise some of their positions while abandoning others.

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