Super Quality (similar to rice imported by the Philippines) reaches its peak in May, when the Philippines might be placing import orders.[16] Seasonal low is in December, coinciding with the Philippine harvest. With U.S. harvests in late August and September, low prices there also would tend to come during seasons of Philippine surplus. (Should the Philippines enter the export market, the Thailand export price index, taken as a proxy of world prices, suggests highest prices during the season when Philippine prices are also rising. as of 1971)

Periods of Asian import needs are somewhat more accommodating. Indonesia's season of shortage occurs before their major harvest starting in April, a time when harvest surpluses are plentiful in Luzon. In East Pakistan and many parts of India, prices are highest in mid-year, also favorable to the availability of Philippine harvest surpluses.[17] However, if the Philippines should find need later for imports, prices on similar qualities would tend to have risen.

4). Annual price ranges in contrast to those of seasonal indices. The seasonal index is a neat tool but can lead the user to unjustified conclusions if he is not wary. The range between the low and the high of a seasonal index covering a period of years may approach (or even be less than) the costs of holding stocks seasonally, and yet annual price variations may

---

[16] Basic data from Rice Committee, Board of Trade of Thailand (as reported in correspondence with Delane E. Welsch). Taiwanese rice prices also reach their seasonal peak in April/May.

[17] Price Indices for India from, Report on the Marketing of Rice in India, Indian Ministry of Food and Agriculture, Marketing Series No. 75, Government of India Press, Calcutta (1955), pp. 100-ff.

be very much greater or less than storage costs. Years of high profits can be balanced by other years of low or even negative profits. As Mellor has pointed out, such erratic seasonal patterns can, by the uncertainties they raise, inhibit technological change in milling and processing and their elimination would form a major objective of price policy on this ground alone.[18] Extreme variations on the high side also can bring serious political concern as was evident in July 1971.[19]

In spite of the fact that price spreads of the seasonal retail price indices in major trading centers in the Philippines approached holding costs (approximately 10 percent of cost), as evident from Table VIII-2, extreme annual variations have occurred frequently. As shown on Table VIII-4, in two of the years from 1957 to 1969 retail price peaks were over 40 percent higher than the harvest lows in Manila, Iloilo and Cotabato. In at least 3 additional years (5 in Manila) in all four market centers, the spread was between 20 and 40 percent above the low. In not more than three of the years (four in Iligan) was the spread below 10 percent, or within the range of holding costs.[20] Farm price variations were appreciably wider than retail,

---

[18] John W. Mellor, "The Agricultural Marketing System and Price Stabilization Policies," mimeographed paper presented at First Asian Conference on Agricultural Credit and Cooperatives, No. ACACC/CP/5/1, Manila, Philippines (December 7, 1970), p. 3.

[19] See, for example, the editorial in The Sunday Times, "Rice Statistics and the Rice Dispute," Manila (August 15, 1971), p. 4.

[20] The relatively low seasonal index resulted, in spite of the high annual spreads, partly because weather conditions and other exogenous influences resulted in different timing of peaks and troughs from year to year.

TABLE VIII-4

Frequency of Annual Price Spread Magnitudes for Selected Market Centers and their Hinterland Regions

Market Centers and their Hinterland Regions	1957/69 % Seasonal High Above Seasonal Low	No. of Years the Maximum Price Spread as a Perc[illegible] age of the Annual Low was Within Limits Indic[illegible] Neg.	0-4.9%	5-9.9%	10-19.9%	20-39.9%	40% & Over
		Retail Prices 1/					
1. Manila	9.1	1	0	2	4	5	2
2. Iloilo	14.3	2	0	2	3	4	2
3. Cotabato	10.4	1	0	2	3	4	2
4. Iligan 3/	5.8	1	3	0	5	3	0
		Farm Prices 2/					
1. Central Luzon	16.4	0	0	1	2	8	1
2. Western Visayas	21.2	0	0	0	2	7	3
3. S.W. Mindanao	13.1	0	0	1	1	9	3
4. N.E. Mindanao 3/	11.7	0	0	0	3	7	2

1/ Price spread within calendar years.

2/ Price spread within crop years, taken for this purpose as August to July to cover price cycle.

3/ Iligan is in the Northern and Eastern Mindanao region but is not a major rice marketing center and often imports part of its requirements from other regions. It is included here to contrast with major marketing centers and their hinterlands.

Sources: Basic prices: See Appendix I.

only approaching holding cost levels during one year in two of the regions and not in any of the years in the other two regions.[21/]

It is most unlikely that this erratic pattern of annual price fluctuations arises from any serious collusive monopolistic nature of the private Filipino trader, a stereotype often suggested. More probably, as found in a number of careful marketing studies in other developing countries, an important explanation is in the lack of knowledge concerning crop prospects, consumption requirements and rice stocks in storage.[22/] The Philippines has been continuously improving their information system over the past few years but crop forecasts still are frequently delayed and stock levels generally collected only on a quarterly basis. Price information is broadcast daily but still gives only a rough basis for decisions when grades and standards are so loosely interpreted and often not realistic.[23/] Even the late distribution of information is apt to reach primarily only the larger traders and millers, seldom reaching to farm level except for prices.

21/ Annual variations in farm prices of this same order were found in Malaya in the 1950's, see UN-FAO, Report to the Government of the Federation of Malaya on the Marketing of Rice, Rome, Italy (May 1954) p. 16.

22/ See also discussion on this subject, John W. Mellor, ibid, pp. 2-ff, and his The Economics of Agricultural Development, Cornell University Press (1966), pp. 334-ff. Secretary of Agriculture Arturo Tanco publicly admitted that the steep price rise in 1971 resulted primarily not from a speculative climate but from inaccurate information of crop damage restraining the government from importing in time to maintain the seasonal price rise within reasonable limits. "Harvests Way Below Target," The Manila Times (August 20, 1971), pp. 1 and 8. Mahar Mangahas discusses method for improved forecasting in "Efficient Forecasting and Philippine Rice Import/Export Policy," U.P., IEDR Discussion Paper 69-20 (December 4, 1969).

23/ For instance, daily prices are reported by variety only with no distinction as to grade of milling. Until rigid standards are more frequently adhered to, grade distinctions lose much of their meaning relative to price distinctions.

This relatively inadequate information base of the farmer, when coupled with transport bottlenecks, would be expected to accentuate price fluctuations resulting because of credit and storage shortcomings that force the farmer to sell at harvest.

The Philippines has gone through periods when Government market support has helped to reduce price fluctuations. At other times, over-reaction or inadequate reaction has made matters worse. As long as the information system remains deficient, even though other aspects of the infrastructure are improved, there is a strong argument for an effectively administered buffer stock with floor and ceiling controls.[24/] Arguments remain for such a system even after information systems are more nearly sufficient. However, experience tells us that a control system poorly administered and insufficiently financed, cannot successfully fill its expected role -- it can make matters worse than they would have been without any controls.

As an aid in reducing annual price fluctuations, Philippine officials have often asked whether or not a futures market for rice would be useful in Manila, with speculators' actions expected to help reduce extreme fluctuations and instability. The answer is that any such market has little, if any, chance of success under present conditions. For the success of such a market, the following four basic prerequisites should be reasonably satisfied: 1) presence of an enforced system of grades and standards so rice traded can be identified in all respects, which also suggests concentration on one or a few major varieties; 2) modern storage where a large percentage

[24/] This is discussed more fully later in this study, see pp. 48-ff.

of the crop can be stored safely and available for prompt delivery; 3) assembly of a large enough quantity near the market to minimize delivery complications; and 4) a market structure including a large number of potential traders so that no group can control the risks and uncertainties which are necessary elements to induce the speculation required for the working of such a market.[25]

The Philippines do not fully satisfy any of the above conditions although for storage it could follow the example of Burma when it stored in palay form and then milled immediately before delivery. In fact, most rice producing countries have found one or more of the above conditions lacking. As a result, no large rice futures market can be found in the world today. Burma discarded theirs after World War II and the small markets in Milan, Italy and New York were the only ones active during the 1960's. Thailand, Japan and Taiwan would not qualify considering the degree of Government interference. In Mainland China and India, (where futures trading is also prohibited by law) there are too many varieties. In both Hongkong and Singapore, all prerequisites are missing.[26]

b. Probability of gain or loss from holding palay after harvest. Economists are guilty along with sociologists in perpetuating the stereotype that because the farmer lacks finance, he is forced to sell

---

[25] Some traders have also questioned whether futures contracts could be enforced given the legal difficulty connected with enforcement. Drilon and Darrah appear more hopeful that action could be taken to enable successful operation of a futures market in the Philippines, see J. D. Drilon and L. B. Darrah, "A Rice Futures Market," draft manuscript, U.P. College of Agriculture, College, Laguna (June 4, 1971).

[26] For a more complete analysis of the possibility of successful futures markets, see UN-FAO, "The Scope and Futures Trading in Rice," Consultative Sub-Committee on the Economic Aspects of Rice, Seventh Session, Document CCP/RICE 63/8 (15 November 1962).

his crop before or immediately after harvest, driving prices down. With credit, he could benefit by the higher post-harvest prices. Sacay gives emphasis to this stereotype as follows:

> "As a result of this (production) seasonality, prices are depressed during peak production periods and high during off-season months. For a farmer to take advantage of high prices, he must postpone the sale of his products. However, since the general level of farm income is low, agricultural products have to be sold immediately after harvest unless advances on future sales such as commodity loans are obtained."[27]

Mabbun in his use of the stereotype brings out the additional connotation that the middleman by buying at low prices benefits at the expense of the farmer, with windfalls from high prices going somehow automatically to those who can afford to hold stocks for later sale.[28] There is both truth and fallacy in this stereotype but it is only recently that studies are providing empirical evidence for distinguishing between the two.

Evidence has been given earlier demonstrating that intraseasonal price fluctuations can be large in the Philippines in some years. But are years with large annual price spreads apt to be interspersed with years with little or even negative price movements? In India, recent studies confirmed such year to year balancing in a number of rice, wheat and sorghum markets.

---

[27] Orlando J. Sacay, "The Role of Credit in the Marketing of Agricultural Products," in <u>1st National Seminar on Agricultural Marketing</u>, Manila (September 7-25, 1965), p. 133.

[28] Pablo N. Mabbun, "The Role of Farmers' Cooperatives in Raising Production and Income in the Philippines," <u>Economic Research Journal</u> (Sept. 1964), p. 99. These same inferences are expressed by E. U. Quintana, et al. "The Present Situation and Outlook of the Rice Marketing Facilities with Emphasis on their Implications on the Present Rice Problem of the Country," in <u>Rice and Related Statistics</u>, U.P. Statistical Center (1965), pp. 215-16.

On average over the years, prices rose seasonally sufficient to cover only storage costs and risk.[29] Thus, there could be a year to year off-setting of profits and losses that the trader does assume which involves risks that most small farmers would be unable to assume.

There is another fine assumption involved in the above stereotype that adds further question to the conclusions drawn. This is the assumption that holding stocks either is costless or that there is zero opportunity cost of the capital tied up. But would it pay the farmer to hold stocks for post-harvest sale if he had to pay market charges for a loan and if he considered also the other economic costs of holding such as storage, insurance, losses and risks from uncertainty. Summary is given below of a more detailed study of these and related questions made by the authors to determine the actual situation faced by farmers and traders in the Philippines should they choose to hold stocks for sale after harvest.[30]

~~1)~~ Would the millers/traders benefit from holding stocks

Over the years from 1957/58 to 1968/69 millers and traders would have had monthly holding costs (excluding risk premium for uncertainty) that varied between 1.25 and 1.41 percent of palay cost. Without considering risk

---

[29] Uma Layant Lele, "Efficiency of Jowar Marketing: A Study of Regulated Markets in Western India," unpublished Ph.D. thesis, Cornell University (September 1965) and Malcolm J. Purvis, "Marketing of Foodgrains in India: An Economic Appraisal of Government Intervention," unpublished M.S. thesis, Cornell University (June 1964), both as reported by John W. Mellor, The Economics of Agricultural Development, op. cit., p. 334.

[30] Leon Mears and Teresa Anden, "Who Benefits from the Post-Harvest Rice Price Rise?" University of the Philippines, IEDR Discussion Paper # 71- (September 6, 1971).

premium, market prices would have had to rise monthly by these percentages if the miller/trader were to obtain a normal profit from sale of palay after holding. An examination of market price patterns in selected rice and palay markets was made to see whether prices over the years did rise monthly by this minimum. From this study, the probability of loss (percentage of years when the monthly price rise was less than the cumulative minimum holding cost) was determined, assuming that palay had been purchased during the low price harvest month (November in most markets studied). Probability of loss, compared to milling the palay and selling it as rice at once, was determined for each month after harvest, assuming the trader/miller was governed by a decision rule such that he milled an equal quantity of palay and sold it as rice during the same month after harvest in each of the years between 1957/8 and 1968/9.

Table VIII-5 provides an illustration of findings in the markets studied. For example, millers in Central Luzon who purchased their palay in November and sold 6 months later in Manila, would not have been able to cover minimum holding costs in 83.3 percent of the years. Their lowest probability of loss (66-2/3 percent) would have resulted if they had sold each year after holding for 11 months. If they had purchased palay in December rather than November, they generally would have had lower probabilities of loss with the optimum month of sale being the 9th month -- still with a 50 percent probability of loss. For January purchases, probability of loss declined a bit more, with only 38.5 percent probability of loss for sales in the 7th and 8th months after harvest.

Again referring to Table VIII-5, with high probabilities of loss,

TABLE VIII-5

Traders' Probability of Loss[1/] (after deducting holding costs[2/]) from Selling Equal Quantities of Rice at Retail During Each Year from 1957/8 to 1968/9, after Holding Palay for Months Indicated after Farm Gate Purchase in Month Shown[3/]
(in percent)

Case #	Farm Region/ Retail Market \ Months Held Before Selling	1	2	3	4	5	6	7	8	9	10	11	12	Month of Palay Purchase
1	Central Luzon/Manila	83.3	91.7	91.7	83.3	91.7	83.3	75.0	91.7	75.0	75.0	66.7	75.0	November
2	Central Luzon/Manila	75.0	75.0	75.0	83.3	75.0	66.7	66.7	66.7	50.0	58.3	58.3	75.0	December
3	Central Luzon/Manila	76.9	69.2	76.9	76.9	61.5	53.8	38.5	38.5	61.5	61.5	69.2	69.2	January
4	Central Luzon/Cabanatuan	83.3	83.3	83.3	83.3	91.7	91.7	75.0	83.3	91.7	66.7	83.3	83.3	November
5	S.W. Mindanao/Cotabato	75.0	83.3	58.3	66.7	41.7	41.7	50.0	50.0	50.0	66.7	58.3	83.3	November
6	Ilocos/Laoag	83.3	91.7	100.0	100.0	100.0	91.7	83.3	83.3	83.3	75.0	58.3	66.7	October
7	W. Visayas/Iloilo	100.0	91.7	100.0	100.0	91.7	75.0	66.7	66.7	58.3	58.3	66.7	75.0	November
8	Central Luzon/Manila[4/]	90.0	70.0	60.0	70.0	60.0	70.0	60.0	60.0	60.0	60.0	60.0	80.0	November

1/ Probability of Loss in % = $\frac{\text{Number of Years Showing a Loss}}{\text{Total Number of Years}} \times 100$

2/ No premium deducted for risk from uncertainty.
3/ Palay, Macan ordinario and rice, Macan 2nd class except for Case 8.
4/ Wagwag palay and Wagwag 1st class rice (1959/60 - 1968/69 only).

Sources: Basic prices, see Appendix I.

indicated for all selected markets, it is evident that favorable-price years were mixed with many years of unfavorable prices. The market area showing the lowest general probability of loss was the S.W. Mindanao/Cotabato region. There, probability of loss would have dropped to 41.7 percent if sales had always been made in either the 5th or 6th month after purchase. But even in this market area, during 1968/69 when price movements were least satisfactory, all sales made after the 1st month would have been at prices that did not cover holding costs, see Chart VIII-8. And, the 1.8 percent profit rate (21.4 percent on an annual basis) that could have been realized for that month was at least partially a payment for risk.31/ In the most favorable-price year (1962/63), losses would have resulted for all sales made before the 5th month. But for sales in the 6th or 8th month, extremely large profits would have been realized, even after deducting a portion for risk premium.

Chart VIII-9 illustrates the extent to which favorable price years were offset by unfavorable ones in major trading regions. The overall average rates of profit or loss indicated would have resulted if equal holdings had been sold during the same month in all years. In the S.W. Mindanao market, losses would have accrued to any trader/miller selling before the sixth month or after the ninth. If this same selling pattern had been followed in Western Visayas or Central Luzon, traders/millers would have shown a loss no matter what month they had chosen for selling.

Neither the seasonal spread of seasonal price indeces as shown in

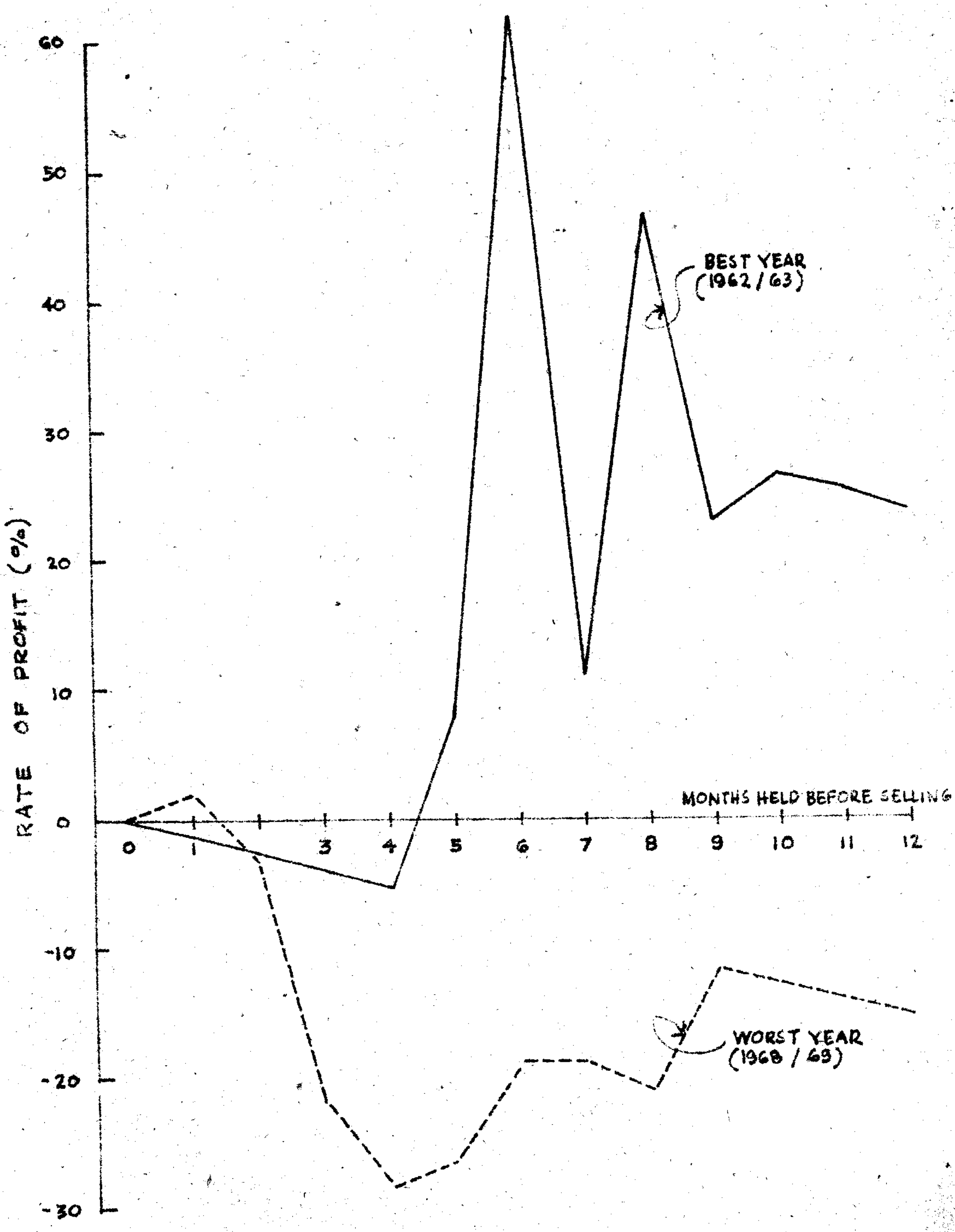
---

31/ See Mears and Anden, op. cit., for summaries of profit and yield calculations for millers/traders.

CHART VIII - 8

TRADERS' RATE OF PROFIT (OR LOSS) (AFTER DEDUCTING HOLDING COSTS BUT NOT INCLUDING RISK FROM UNCERTAINTY), FROM SELLING RICE AT RETAIL IN CITY MARKET IN 1962/63 AND 1968/69 AFTER HOLDING FOR MONTHS INDICATED AFTER FARM PURCHASE OF PALAY IN NOVEMBER, EXPRESSED AS A PERCENT OF THE NOVEMBER RETAIL PRICE.

MACAN ORDINARIO, SOUTHWESTERN MINDANAO/COTABATO

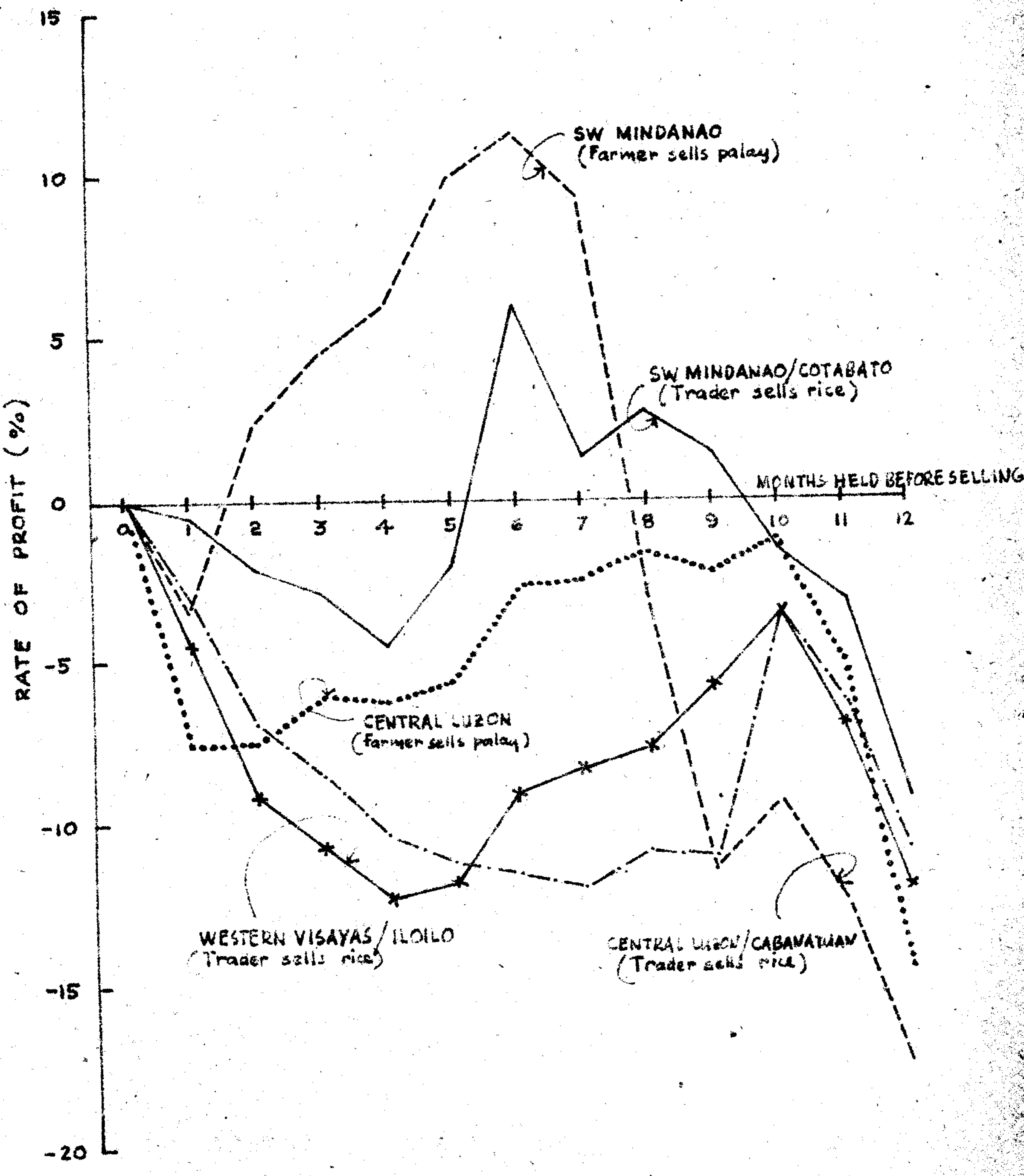


For Sources and Methodology:

See L. Mears and T. Anden, "Who Benefits from the Post-Harvest Rice Price Rise?" U.P., IEDR Discussion Paper # 71-18 (September 6, 1971).

CHART VIII – 9

TRADERS' AND FARMERS' RATE OF PROFIT (OR LOSS) (AFTER DEDUCTING HOLDING COSTS BUT NOT INCLUDING RISK FROM UNCERTAINTY) FROM SELLING EQUAL QUANTITIES OF RICE AT RETAIL IN CITY MARKETS (PALAY AT WHOLESALE) EACH YEAR FROM 1957/58 – 1968/69 AFTER HOLDING PALAY FOR MONTHS INDICATED AFTER FARM ACQUISITION IN NOVEMBER. (PALAY, MACAN ORDINARIO; RICE, MACAN 2ND CLASS)



For Sources and Methodology:

See L. Mears and T. Anden, "Who Benefits from the Post-Harvest Rice Price Rise?" U.P., IEDR Discussion Paper # 71-18 (September 6, 1971).

Table VIII-2 nor profit rates as shown in Chart VIII-9 provides a basis for accurately predicting whether profits or losses will result from holding stocks during any specific year. It is probable that this unpredictability arises from highly imperfect markets, but as Mellor suggests, these imperfections probably result more from imperfect knowledge than from collusion.[32]

2) What is the farmer's situation. The farmer faces a somewhat different set of alternatives. He could sell either at the farm gate or in the wholesale market with sales at harvest or later after storing palay either on the farm or in a commercial/miller's warehouse. If he obtains a commodity loan from a formal financial institution, the farmer would be obliged to store the palay in a commercial (or FaCoMa) warehouse. Under these circumstances, his costs of holding would be on the same basis as for the trader/miller, including all holding costs and averaging 1.8 percent of harvest time palay value per month over the storage period.

His probability of loss from selling an equal quantity in the Cabanatuan wholesale market in a given month each year from 1957/58-1967/68 would have been only slightly less than for the miller (see Case 4, Table VIII-6). Only for sales in the 7th or 10th month would it have been less than 50 percent. Given the different intraseasonal price structures at farm gate over these years, the farmer's probability of loss would have been somewhat reduced if he had chosen to make all sales at the farm (Case 1) rather than in the Cabanatuan wholesale market.

32/ John W. Mellor, The Economics of Agricultural Development, op. cit., p. 335.

TABLE VIII-6

Farmers' Probability of Loss[1/] (after deducting holding costs[2/]) from Selling Equal Quantities of Palay -- at Farm Gate or Wholesale Market -- During Each Year from 1957/8 to 1967/8, after Holding for Number of Months Indicated after November Harvest[3/]

(in percent)

#	Farm Region \ Months Held Before Selling	1	2	3	4	5	6	7	8	9	10	11	12	Place of Sale	Co[illegible] Hol[illegible] Ded[illegible]
	Central Luzon	63.6	54.5	36.4	36.4	27.3	27.3	36.4	27.3	27.3	54.5	81.8	90.9	farm gate	all
	Central Luzon	36.4	27.3	27.3	27.3	18.2	18.2	27.3	18.2	18.2	45.4	63.6	81.8	farm gate	loss[illegible] inte[illegible]
	Central Luzon	9.1	27.3	18.2	9.1	9.1	9.1	0	18.2	18.2	9.1	45.4	54.5	farm gate	loss[illegible]
	Central Luzon	91.7	83.3	75.0	83.3	66.7	58.3	41.7	58.3	50.0	41.7	50.0	91.7	Cabanatuan	all
	S.W. Mindanao	75.0	41.7	41.7	16.7	16.7	16.7	25.0	41.7	66.7	58.3	58.3	58.3	Cotabato	all
	S.W. Mindanao	63.6	27.3	45.4	45.4	36.4	36.4	45.4	27.3	63.6	45.4	72.7	81.8	farm gate	all

1/ Probability of Loss in % = $\frac{\text{Number of Years Showing a Loss}}{\text{Total Number of Years}} \times 100$

2/ Premium for risk from uncertainty not deducted.

3/ Palay, Macan ordinario.

4/ All costs include interest, storage, insurance and losses.

[illegible]ce: Basic prices, see Appendix I.

It is interesting to observe that price structures were such that the S.W. Mindanao farmer would have had lower probability of loss if he had followed a strategy opposite to the optimum for the Central Luzon farmer and made his sales at the Cotabato market rather than on the farm. It is interesting to observe that these high loss probabilities present quite a contrast to the picture of windfall profits inferred by the stereotype.

3) Comparison of the miller's and the farmer's situation

From the above, it is evident that there are substantial intraseasonal price fluctuations in certain years that provide the astute trader a chance for profits but this tends to be a profit from astute trading, not from the simple act of storing. And the trader must be able to absorb the loss if his speculation goes sour. Many less capable traders fail when they lose their gamble.[33] Lacking the background of the trader, it is likely that the farmer would be less successful in his trading and it is certain that few could stand the losses that some years would bring.

It is only when the farmer considers his own funds as having zero opportunity costs or can obtain an interest-free loan that his probability of loss would reach levels that might possibly be tolerable. Case 3 on Table VIII-6 assumes such a situation with sales made at farm gate and all storage costs except storage losses assumed away. On that rather non-economic basis (but one which might be in the minds of some farmers) the probability of loss over the 1957/58-1967/68 period dropped to zero for sales in the 7th month.

33/ For documentation of millers/traders who have failed, see Chesan A. Chua, "Rice Milling in the Philippines," unpublished MBA Thesis, U.P., College of Business Administration, Diliman, Q.C. (1957-58), pp. 11-[illegible] and was below 30 percent until the 10th month. But even under this somewhat unrealistic condition, unfavorable-price years did appear. Chart VIII-10 shows a comparison of the rates of loss that would have arisen in the best and worst price-years, according to whether a farmer in Central Luzon calculated holding costs on a full or partial basis.[34] If sales had been made in the wholesale market, rates of loss in the worst-price year would have been even longer (see Chart VIII-10).

Findings described above which conflict with the stereotype position should not be taken to suggest that wide price swings do not raise both economic and political problems. When rice prices rise, there is the concern for the urban poor and the small farmer who must buy rice from the market late in the season. At the farm level, the large drop in price as the market is flooded at harvest time can seriously reduce incentives to use modern high yielding inputs. And for the miller, if he cannot reasonably predict seasonal price changes, he must remain basically a trader with little concentration given to efficient processing.[35] Under these conditions the incentive is weak to invest in capital intensive modern milling equipment. At least until there is strong evidence that more accurate information can be made readily available upon which to base predictions, price policy implementation tied to buffer stocks should be seriously considered. Effectively

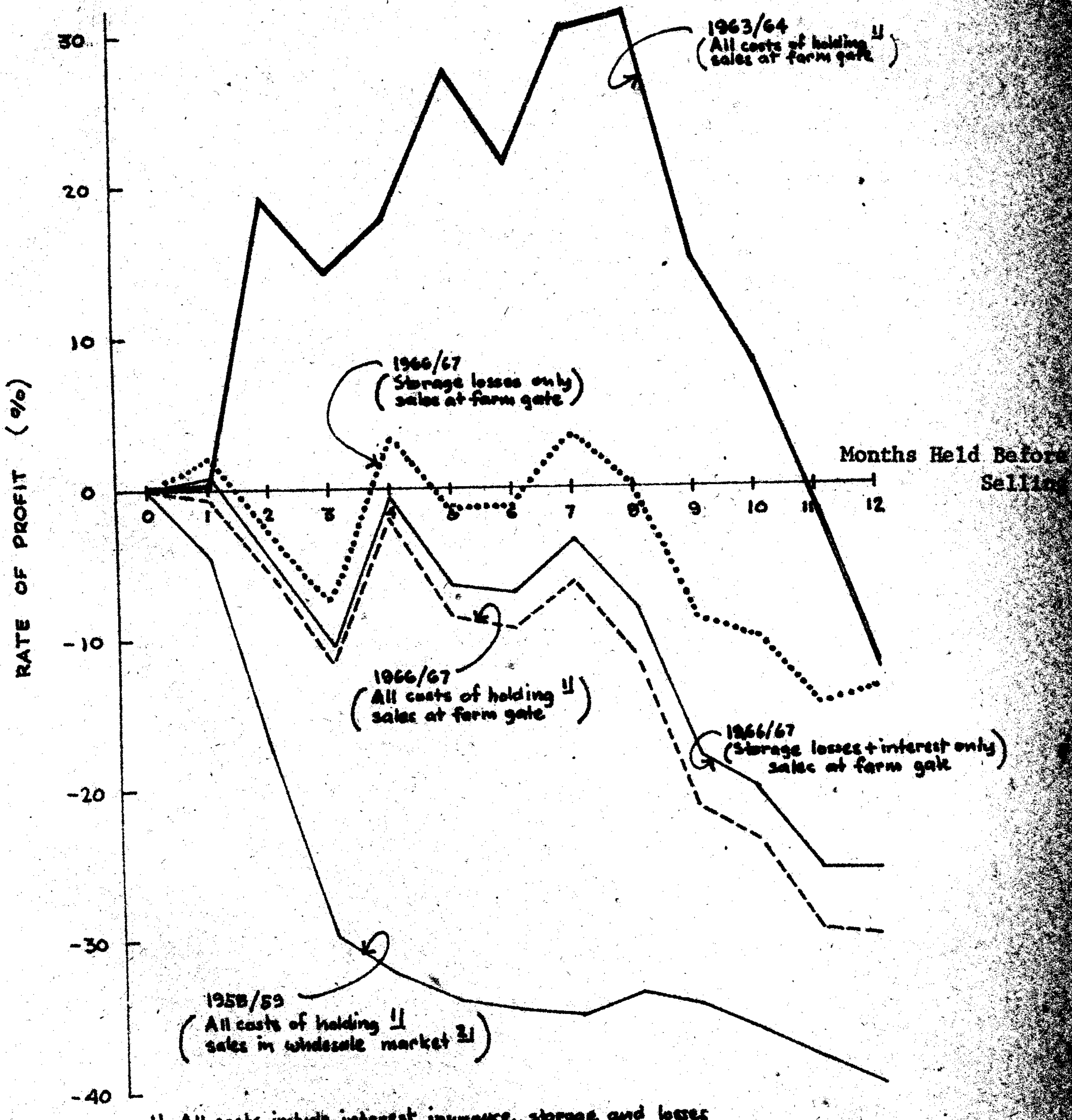
---

34/ See Mears and Anden, op. cit., for summaries of rate of profit yields to the farmer under different selling assumptions.

35/ Chesan A. Chua, in his study of Philippine Rice Milling, emphasizes general findings of the authors. He reports, "profits are made only from fluctuations or changes in the price of rice. Profits of the rice mills come not from the milling of rice, but from change or increase in the price of rice," op. cit., p. 11.

CHART VIII-10

FARMERS' RATE OF PROFIT (OR LOSS) (AFTER DEDUCTING HOLDING COSTS BUT NOT INCLUDING RISK FROM UNCERTAINTY) FROM SELLING PALAY IN 1963/64 1958/59 AND 1966/67 AFTER HOLDING PALAY FOR MONTHS INDICATED AFTER FARM PURCHASE IN NOVEMBER AT HARVEST TIME EXPRESSED AS A PERCENT OF THE PRICE OF PALAY IN NOVEMBER.
MACAN ORDINARIO, CENTRAL LUZON/CABANATUAN



1/ All costs include interest, insurance, storage and losses

2/ Cabanatuan wholesale market

For Sources and Methodology:
See L.A. Mears and T.L. Anden, "Who Benefits from the Post-Harvest Rice Price Rise?" U.P. IEDR Discussion Paper # 71-18 (September 6, 1971).

implemented, such a policy can reduce intraseasonal swings to levels close to holding costs, with success of milling more closely related to efficient mill operations than to price speculation.[35a/] This question is examined more closely later in this chapter.

III. Inter-spatial Prices

Excellent market performance from an inter-spatial viewpoint would approach that expected of a competitive market, with inter-market price differentials remaining less than transport costs between them. This transport cost includes not only direct shipping costs but also a premium to cover the risk that the differentials which prompted the arbitrage shipment may disappear before the shipment arrives. The more rapid and certain the shipping facilities, the less the risk premium and the closer the inter-market spread should approach actual shipping costs.

The existence of any major inter-market price differential provides opportunity for profit to traders through arbitrage shipments between markets which tend to restore price equality. These differentials also present an opportunity for collusion among traders with price manipulation for their own benefit. If the number of traders is small enough to permit collusion, traders have opportunity for added profits by maintaining relatively higher prices. One defense against such collusion is to disseminate widely price information that will attract increased arbitrage activities to improve market competitiveness. But the market information must be in sufficient detail to permit price comparison on like grades and qualities.

Imperfections with large inter-market differentials tend to reflect seasonal production patterns and inadequate regional storage, at times

---

[35a/] With smaller intraseasonal price swings, the phenomenon providing opportunity for speculative profits will tend to disappear, sounding a final death knell for the stereotype position mentioned above.

aggravated in the Philippines by typhoons or torrential rains that upset normal transport. (While increased storage facilities and buffer stocks are useful to provide reserves to improve market performance for short periods of shortage, the longer run solution would stress improved transport and information dissemination.) ficiency of P, Rc comparison

1. <u>Inter-regional price comparisons</u>. Varieties and grading practices tend to differ more between than within regions in the Philippines, with distance increasing the difficulty in making price comparisons. To minimize these difficulties, comparisons have been made between prices of the common variety of rice in each center. Until the late 1960's, Macan was the common variety most frequently found in the market. With spread of the new high yielding varieties, these have often replaced the Macan and older varieties. Thus, the price comparisons lack some degree of precision but provide a general guide of inter-market price performance.

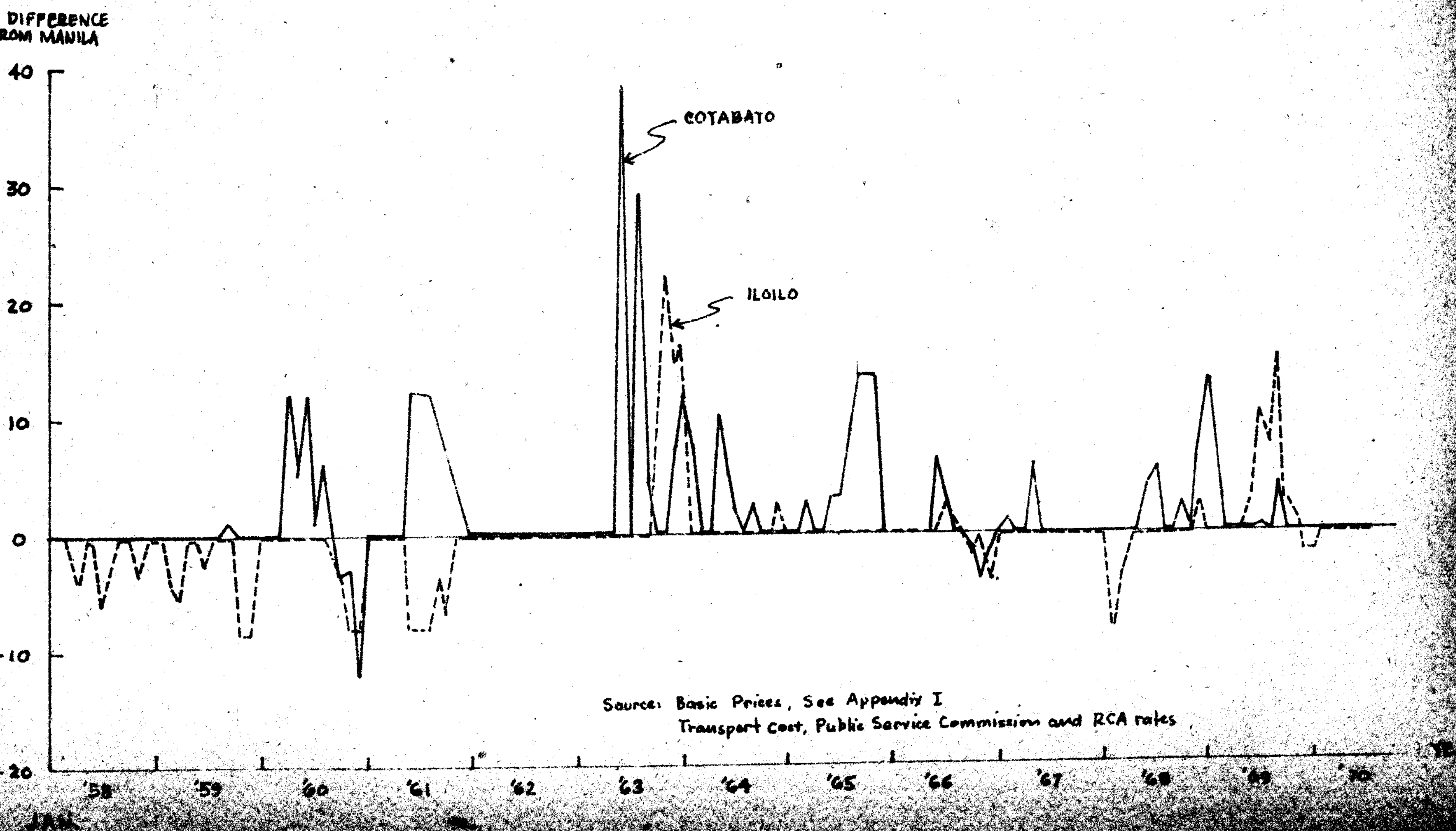
Chart VIII-11 illustrates how closely the retail prices in the major trading centers of Cotabato and Iloilo have agreed with those in Manila from 1958 to 1970, after allowing for inter-city transport costs. It was only for a period of 3 months in 1963 that prices in either Cotabato or Iloilo differed by more than 15 percent from those in Manila (after allowing for transport costs).[36] OK This contrasts markedly with the situation found in Indonesia in the mid-1950's when prices between major centers at times differed by as much as 100 percent and remained apart by more than 40 percent

---

[36] In the following discussion, when price differences are mentioned, such differences are <u>after</u> allowing for transport costs.

CHART VIII – II

PERCENTAGES THAT COTABATO AND ILOILO RETAIL PRICES
(IN EXCESS OF TRANSPORT COSTS) WERE ABOVE OR BELOW MANILA RETAIL PRICES
(MACAN 2ND CLASS, 1958-1970)



Source: Basic Prices, See Appendix I
Transport Cost, Public Service Commission and RCA rates