CURRENT ECONOMIC STATUS OF THE HAWAIIAN SUGAR INDUSTRY

WITH SPECIAL REFERENCE TO THE GENERAL EXCISE TAX

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UNIVERSITY OF HAWAII

HONOLULU 14, HAWAII

LETTER OF TRANSMITTAL

February 15, 1962

To: The House of Representatives
State of Hawaii

Transmitted herewith is a report by the Economic Research Center of the University of Hawaii, entitled "Current Economic Status of the Hawaiian Sugar Industry, with Special Reference to the General Excise Tax." It was prepared in response to your request for a study of the economic status of the sugar industry.

The University is glad to have this opportunity to be of service to the people of this state.

Laurence H. Snyder
President

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TABLE OF CONTENTS

F O R E W O R D

The sugar and pineapple industries have been the traditional mainstays of the Hawaiian economy. In terms of value of output, source of income and employment, and contribution to public revenue, sugar has been the leading single productive activity in Hawaii, with pineapple closely behind. In recent years, the sharp expansion of defense-related and tourist expenditures has brought increasing prominence to these areas as major income and employment sources for the local economy. However, the effects of military and tourist spending are really dispersed among a wide variety of economic sectors, none of which yet is comparable to sugar or pineapple in terms of economic impact.

Along with the growing economic significance of defense and tourist expenditures, there has occurred a slackening in the growth rates of the sugar and pineapple industries. While a certain degree of diversification is to be expected and may even be desirable as a region achieves increasing economic and political maturity, the problems of the industries which face readjustment in this process should not be minimized.

In the American enterprise tradition, the majority of these problems are resolved by the firms and industries involved. Occasionally, the problems are of community or economy-wide nature and require the attention of public officials. In the case of sugar and pineapple, one of the primary public issues that has been brought to the attention of legislators is that of an adjustment in state excise tax rates levied on these industries.

The Economic Research Center was requested by the state legislature to bring together and analyze the relevant data on these two industries to provide the factual basis upon which public policy decisions must ultimately

be made. The task has proved challenging and difficult and has indeed revealed a surprising lack of information or informed opinion on subjects that are of such obvious interest to the people of this state. This report contains the basic information and major findings of the research on the current problems of the sugar industry. Another report of the Economic Research Center is directed toward the problems of the pineapple industry.

It should be strongly emphasized that both reports are preliminary or interim in nature and that the findings must be regarded as highly tentative and subject to considerable future modification on the basis of further research into these areas. A major limitation of this preliminary report on sugar was that because of its time of issuance, it was not possible to examine essential data for 1961. It should be noted that because of the strike in 1958, conditions in the industry from 1958 to 1960 cannot be considered normal and that 1961 would be a more normal year.

The Economic Research Center hopes to overcome these and other limitations of this report in more definitive studies of the economic status of these industries in the future. But policy-makers and others who may wish to evaluate the findings of this report should be forewarned as to its limitations.

Shelley M. Mark
Director

Honolulu, Hawaii
February 16, 1962

LIST OF TABLES

LIST OF CHARTS

INTRODUCTION

This report attempts to study the current status of the Hawaiian sugar industry and to analyse the equity and possible need for a reduction of the general excise tax on sugar in the State of Hawaii. Part I explains how the U.S. sugar quota system works, the nature of compliance payments, and how prices of sugar are determined. The operation of world sugar agreements and the impact of the current Cuban situation on U.S. sugar policy are not discussed in this paper except when they are related to the Hawaiian scene. It is assumed throughout this paper that in the foreseeable future, Hawaii will be able to keep its current basic quota and share in any increase in U.S. sugar consumption requrements due to population increases. It is hoped that in a long-term study, of which this paper is only a part, international, national, as well as Hawaiian sugar problems, and their interrelationships will be more thoroughly analysed.

Part II describes the structure of the Hawaiian sugar industry and the problems it faces today. Part III gives the history of the general excise tax on sugar, a discussion of the equity of such a tax, an analysis of the possible need for tax reduction, and an inquiry into whether a tax reduction will help the Hawaiian economy. A brief summary of findings follows Part III.

In preparing this report, the author has received full cooperation from the State of Hawaii Department of Taxation, especially Mr. James Nishikawa, assistant to the tax commissioner, the Hawaiian Sugar Planters' Association, the five sugar agencies and various sugar companies. To them, the author wishes to express his sincere appreciation. All the facts given in this paper have been carefully checked with the relevant sources. Of course, the responsibility of any possible error still rests with the author.

I. THE AMERICAN SUGAR INDUSTRY

The U. S. Quota System

The United States has the highest per capita consumption of sugar in the world. Roughly 45 per cent of the U.S. demand for sugar is satisfied by imports from foreign countries. Prior to the breaking up of the U.S.-Cuban relationship, about one-third of the sugar consumed in the United States came from Cuba, and another ten per cent from the Philippines. Since 1960, the unused Cuban quota has been allotted under the discretion of the President of the United States on a non-quota, temporary basis to a number of foreign countries, including the Philippines. A new sugar act, with provisions for more permanent arrangements, is being drafted and will be reenacted in June, 1962.

The U.S. quota system started to operate in 1934 with passage of the Jones-Costigan Act. Later sugar acts and amendments thereof changed some of the procedures by which U.S. consumption requrements are estimated and quotas established. However, the main objectives remain unchanged.

Under the current system, the Secretary of Agriculture is authorized to determine near the end of each calendar year the U.S. sugar consumption requirements of the next year, and to allot quotas to the various domestic producing areas and to foreign countries. In determining annual consumption requirements, the Secretary has to keep in mind that such a quantity should be marketed at a price which would not be excessive to consumers and which would maintain and protect the welfare of the domestic sugar industry. He may revise yearly estimates and quotas whenever necessary during any calendar year.

The 1956 amendment to the 1948 Sugar Act established the basic quotas which are still in use. For estimated sugar consumption requirements of 8,350,000 tons (short tons, raw value) or less, fixed quotas of 4,444,000 tons

and 980,000 tons respectively are to be allotted to the U.S. domestic areas and the Philippines. The remainder is to be distributed in the ratio of 96 per cent to Cuba and 4 per cent to foreign countries other than Cuba and the Philippines. When requirements are over the basic figure of 8,350,000 tons, 55 per cent of the excess goes to domestic areas, while the rest is divided among Cuba and other foreign countries excluding the Philippines. Hawaii's quota is fixed at 1,052,000 tons when U.S. sugar consumption requirement is 8,350,000 tons or less. When the consumption requirement is over 8,350,000 tons, Hawaii will share in the domestic portion (55 per cent) of the excess, after the first 188,000 tons go to domestic beet and mainland cane sugar, Puerto Rico and Virgin Islands. The exact distribution of quotas is shown in Table 1.

In case any area is unable to produce and deliver its full quota of sugar during any calendar year, such deficiency is to be prorated among other areas on the basis of their respective quotas and ability to supply the deficiency. The 1960 amendment of the 1948 Sugar Act, however, specifies that the proration of domestic deficits which would have gone to Cuba may be allocated to domestic areas which are able to provide additional sugar. Table 2 gives the basic and adjusted (i.e., after proration) sugar quotas, including unused Cuban quotas from 1958 to 1961. The allocation of the unused Cuban quotas for 1960 and 1961 is presented in Table 3.

The quotas mentioned above include raw sugar as well as sugar for direct consumption measured in terms of raw sugar equivalent. The law limits the portion of sugar which may be admitted from each foreign country and offshore area in liquid or refined form. The above-mentioned quotas, however, do not cover quotas for the amounts of sugar which may be refined and marketed for local consumption in Hawaii and Puerto Rico. The latter quotas are announced separately by the Department of Agriculture. The local consumption quota for Hawaii in 1960 was about 43,000 tons.

TABLE 1

DISTRIBUTION OF BASIC U.S. SUGAR QUOTAS

First 8,350,000 short tons, raw value:[a/]

Domestic	
Domestic beet	1,800,000 tons
Mainland cane	500,000
Hawaii	1,052,000
Puerto Rico	1,080,000
Virgin Islands	12,000
Total domestic areas	4,444,000 tons
Foreign	
Philippines	980,000 tons
Cuba	2,808,960
Other foreign	117,040
Total foreign areas	3,906,000 tons
Total quotas	8,350,000 tons

Excess over 8,350,000 tons

Domestic (55% of the excess)	
First 165,000 tons	domestic beet (51.5%) and mainland cane (48.5%)
Next 20,000 tons	Puerto Rico
Next 3,000 tons	Virgin Islands
Any amount over 188,000 tons	divided prorata among all domestic areas in proprotion to quotas adjusted with the above additions

Foreign[b/] (45% of the excess)	
Cuba	29.59%
Mexico	5.10
Dominican Republic	4.95
Peru	4.33
Others	1.03
Total	45.00%

[a/] Quotas for domestic areas and the Philippines are fixed. Any amount over 5,424,000 tons (up to the basic figure of 8,350,000 tons) is divided 96% to Cuba and 4% to foreign countries other than Cuba and the Philippines.

[b/] Effective Jan. 1, 1957. In 1956, the distribution was 43.2% to Cuba and 1.8% to the other countries.

Sources: Special Study on Sugar, U.S. Department of Agriculture, Feb. 14, 1961; and HSPA Sugar Manual, Hawaiian Sugar Planters' Association, revised, June, 1961.

TABLE 2

BASIC AND ADJUSTED SUGAR QUOTAS 1958 TO 1961

Area	(a) Basic quotas - final			
	1958	1959	1960	1961[a]/
	Short tons, raw value			
Domestic				
Domestic beet	1,998,717	2,043,480	2,267,301	2,177,773
Mainland cane	615,024	628,799	697,670	670,122
Hawaii	1,115,479	1,140,462	1,265,375	1,215,410
Puerto Rico	1,166,375	1,192,498	1,323,111	1,270,865
Virgin Islands	15,905	16,261	18,043	17,330
Total domestic areas	4,911,500	5,021,500	5,571,500	5,351,500
Foreign				
Philippines	980,000	980,000	980,000	980,000
Cuba	3,060,475	3,119,655	2,419,655[b]/	0
Other foreign	248,025	278,845	432,945	371,305
Total foreign areas	4,288,500	4,378,500	3,832,600	1,351,305
TOTAL QUOTAS	9,200,000	9,400,000	9,404,100	6,702,805
Unused Cuban quota	0	0	995,900	3,297,195
TOTAL REQUIREMENTS	9,200,000	9,400,000	10,400,000	10,000,000

Area	(b) Adjusted quotas - final			
	1958	1959	1960	1961[a]/
	Short tons, raw value			
Domestic				
Domestic beet	2,292,488	2,267,665	2,514,945	2,609,170
Mainland cane	720,805	697,783	773,873	715,000
Hawaii	700,000	977,970	940,444	1,030,000
Puerto Rico	815,000	969,875	893,620	980,000
Virgin Islands	6,100	12,405	8,618	17,330
Total domestic areas	4,534,393	4,925,698	5,131,500	5,351,500
Foreign				
Philippines	980,000	980,000	980,000	980,000
Cuba	3,437,582	3,215,457	2,419,655[b]/	0
Other foreign	279,304[c]/	278,845	432,945	371,305
Total Foreign areas	4,696,886[c]/	4,474,302	3,832,600	1,351,305
TOTAL QUOTAS	9,231,279[c]/	9,400,000	8,964,100	6,702,805
Unused Cuban quota	0	0	1,435,900	3,297,195
TOTAL REQUIREMENTS	9,200,000	9,400,000	10,400,000	10,000,000

[a]/Basic quotas, as announced April 1, 1961; adjusted quotas as announced July 31, 1961.

[b]/Includes 39,752 tons for balance of 1960 after July 6 as established by Proclamation No. 3355.

[c]/This is 31,279 tons larger than "basic", above, because Peru acceded to the International Sugar Agreement in November 1958. This entitled Peru to enter its full basic proration for the year even though the difference between her basic proration and the non-member limit pursuant to the Agreementhad been prorated to other full duty countries before her accession occurred.

Source: Sugar Reports, Sugar Division, U.S. Dept. of Agriculture, Oct. 1961 p.42.

TABLE 3

ALLOTMENT OF UNUSED CUBAN QUOTAS, 1960 TO 1961
(Short tons, raw value)

Country	1960	1961[a/]
Philippines	176,426	490,731
Peru	135,000	514,870
Dominican Republic	321,857	222,723
Mexico	284,628	589,591
Nicaragua	22,000	25,897
Haiti	26,567	37,005
Netherlands	6,129	5,851
China (Formosa)	6,258	166,048
Panama	6,258	6,020
Costa Rica	6,267	26,282
Canada	1,657	1,266
United Kingdom	1,355	1,034
Belgium	478	1,453
HongKong	8	27
British West Indies and British Guiana	92,765	265,923
El Savador	6,000	12,000
Guatemala	6,000	17,000
Brazil	100,347	306,474
Ecuador	0	36,000
Colombia	0	46,000
French West Indies	0	75,000
Australia	0	90,000
Paraguay	0	5,000
India	0	175,000
Not authorized for entry	235,900	180,000
Total	1,435,900	3,297,195

[a/] As of October 23, 1961.

Source: Sugar Reports, Sugar Division, U.S. Department of Agriculture, October 1961, p. 43.

Traditionally, the United States levies a duty on the importation of sugar from foreign countries. Cuban sugar, up to 1960, paid a tariff 20 per cent below the full rate. Since 1956, the Philippines have been paying a tariff on sugar which is scheduled to gradually increase from 5 per cent of the Cuban rate to the full duty level in 1974. All other countries pay the full duty which at present is 62.5 cents per 100 pounds raw value.

There is also a processing tax under the U.S. sugar quota system. The tax is levied on domestically produced and imported sugar at a rate equivalent to 50 cents per 100 pounds raw value. The proceeds of this tax is used to make compliance payments to producers in domestic areas in return for meeting the following conditions: (1) the payment of not less than officially determined wages, (2) the observance of restrictions on employment of child labor, (3) the adjustment and control of production and marketing under the determination of the Secretary of Agriculture, and (4) the payment of not less than officially determined minimum prices for sugar beets and sugar canes to growers.

Compliance Payments

Compliance payments vary with the size of the producers. The marginal rate of payment per 100 pounds raw value gradually drops from 80 cents for smaller outputs to 30 cents for outputs of over 30,000 tons. The relationship between compliance payments and the size of production is given in Table 4.

It is the contention of the sugar industry that the compliance payments are not benefit payments or subsidies.[1] It is argued that they represent a

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[1]See, for example, HSPA Sugar Manual, Hawaiian Sugar Planters' Association, revised edition, June 1961, p. 41, and Slator M. Miller, "Hawaiian Sugar-Present and Future," a talk given to the Honolulu Rotary Club, Sept. 12, 1961, p. 7.

TABLE 4

COMPLIANCE PAYMENTS AS RELATED TO SIZE OF PRODUCTION
(Cents per 100 pounds raw value)

Output	Payments
Less than 350 tons	80
350-700 tons	75
700-1,000 tons	70
1,000-1,500 tons	60
1,500-3,000 tons	55
3,000-6,000 tons	52.5
6,000-12,000 tons	50
12,000-30,000 tons	47.5
Over 30,000 tons	30

Source: Sugar Division, Department of Agriculture

return, either partially or more than the amount paid, of the processing tax conditioned on the fulfillment of certain requirements. The opinion of the Department of Agriculture, however, is that "at a given level of quotas, an excise tax reduces the income to both the foreign and domestic sugar growers and processors by the amount of the tax, assuming the quotas are filled. But the anticipated effects of the excise tax on growers' and processors' incomes are considered when (annual sugar consumption) requirements are determined and this results in the establishment of lower quotas than would exist in the absence of the tax, with consequent upward effects on sugar prices and shifting of the burden to consumers."[2] By restricting the quotas on imports and domestic production of sugar, the Department of Agriculture has in effect raised the price of sugar sufficiently so that consumers bear the burden of the tax. It follows that since consumers have already paid the tax in the form of higher prices, any payment out of tax proceeds involves a subsidy, although the subsidy may be conditioned on the fulfillment of certain requirements.

Determination of Sugar Prices

The U.S. price of sugar, raw or refined, is directly affected by the quota system and the tariff levied on sugar. A "premium" of over two dollars per 100 pounds raw value as compared to the price in the "world free market" has been maintained in recent years. However, it must be cautioned that the price of sugar in the "world free market" may not be representative of the price which would have prevailed under worldwide free trade. This is because about 60 per cent of the world trade in sugar moves under special arrangements such

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[2] Special Study on Sugar, a report of the Special Study Group on Sugar of the U.S. Department of Agriculture, Feb. 14, 1961, p. 23. Words in parenthesis added.

as the U.S. quota system, so that the "world free market" price is actually set by the smaller portion of the total volume. The price premium received by British Commonwealth sugar producers is approximately the same as the price premium accruing to U.S. domestic areas and foreign suppliers under the U.S. system. Preferential arrangements in other groups of countries have similar effects on sugar prices. The elimination of restriction on the production and movement of sugar throughout the world would probably raise the price of sugar in the world market above what it is now, with consequent price reductions in the currently protected countries.[3]

The pricing of sugar in the United States is very complicated. Raw sugar prices at the New York Coffee and Sugar Exchange are determined by the interplay of demand and supply, subject to the influence of the Department of Agriculture through its program of restricting production and imports. Not all of the raw sugar refined in the United States, however, is traded on the New York exchange. Some sugar mills send their raw sugar directly to a cooperatively-owned refinery and are remunerated on the basis of net sales proceeds of refined sugar after the deduction of all refinery costs including operating, shipping and marketing costs, and an allowed return on capital stock. In this case, the payment received on a ton of raw sugar may be quite different from the price quoted in the New York exchange.

New York raw sugar prices do not apply to beet sugar because the production process does not require the intermediate stage of raw beet sugar.[4] Beet sugar processors pay independent growers a price on beet which takes into consideration

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[3]See Special Study on Sugar, op. cit., pp. 23-29.

[4]For a discussion of production and processing of beet sugar, see Jack T. Turner, Marketing of Sugar, Indiana University School of Business Study No. 38, 1955, pp. 22-44.

both the price of refined sugar and the processing, transportation and selling costs of the processors. This price is subject to review by the Department of Agriculture as one of the conditions for compliance payments. A similar method is used in determining payments to independent cane growers.

The wholesale refined sugar prices in the various regions of the United States are established under the basing point system. Customarily, the seaboard cane refining centers serve as the bases. These centers include San Francisco, Houston, New Orleans, Savannah, Baltimore, Philadelphia, New York, and Boston. Within each region, the sugar is sold at the basing point price plus freight charges from the base to the point of delivery.[5]

Phantom freight or freight absorption may arise because of the fact that the wholesale price of refined sugar is the same in each city regardless of where the sugar comes from. A refiner may collect a phantom freight if his actual cost of shipping is lower than the freight charges from the base. On the other hand, he may absorb a part of the freight if his actual shipping cost is higher

Although fully refined sugar derived from beets or cane are identical, beet refiners formerly sold their product at a price slightly below that established for cane sugar. The consumers have gradually accepted beet sugar as a substitute for cane sugar, and the price differential is disappearing. In addition, increased competition from beet on the Pacific Coast since about 1958 has resulted in lower beet and cane sugar prices.[6]

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[5] Ibid. pp. 188-191.

[6] Special Study on Sugar, op. cit., pp. 36-40.

The New York wholesale refined sugar prices are often quoted as being representative for the whole nation. The Department of Agriculture, in determining annual consumption requirements, tries to maintain a proper relationship between New York prices and the general cost of living. This is done by making allowance for inventories of sugar on hand, population and other demand factors, the level and trend of consumer purchasing power, and anticipated effects of the determination of requirements on sugar prices. The movement of retail sugar prices since 1947 has generally been in line with changes in food and other retail prices (see Table 5). For example, in 1960, the average U.S. retail price of sugar was 21 per cent over that of the base period, 1947-1949, as compared with an increase in price of 20 per cent for all foods and of 26 per cent for all retail items over the same period. On the other hand, the wholesale price of sugar has increased faster than that of all foods (18 per cent vs. 6 per cent). Consequently, the margin between retail refined and raw sugar prices has not increased as much as the farm to retail price spreads on other foods.

TABLE 5

PRICES OF SUGAR, OF ALL FOODS, AND OF ALL RETAIL ITEMS, 1947-1960

Calendar Year	Raw Sugar Duty Paid New York	Refined Sugar Wholesale New York[a]	Refined Sugar Retail U.S. Av.	All Foods Wholesale U.S. Av.[a]	All Foods Retail U.S. Av.	All Items Retail U.S. Av.
		Prices (cents per pound)				
1947	6.22	8.29	9.73			
1948	5.56	7.76	9.37			
1949	5.81	7.97	9.53			
1950	5.93	8.00	9.75[b]			
1951	6.06	8.38	10.12			
1952	6.26	8.62	10.31			
1953	6.29	8.72	10.56			
1954	6.09	8.72	10.52			
1955	5.95	8.59	10.42			
1956	6.09	8.77	10.57			
1957	6.24	9.15	11.03			
1958	6.27	9.27	11.26			
1959	6.24	9.33	11.43			
1960	6.30	9.43	11.63			
		Price Index (1947-49=100)				
1947	106	104	102	98	96	96
1948	95	97	98	106	104	103
1949	99	100	100	96	110	102
1950	101	100	102	98	101	103
1951	103	105	106	110	113	111
1952	107	108	108	109	115	114
1953	107	109	111	104	113	114
1954	104	109	110	104	113	115
1955	102	107	109	101	111	114
1956	104	110	111	101	112	116
1957	106	114	115	104	115	120
1958	107	116	117	110	120	124
1959	106	117	119	104	118	125
1960	107	118	121	106	120	126

[a]/Gross subject to 2 percent cash discount.

[b]/Beginning January 1950, the Bureau of Labor Statistics reports price on 5-pound package; price shown is pound equivalent.

Source: Sugar Reports, Sugar Division, U.S. Department of Agriculture, Oct. 1961, p. 34.

II. THE SUGAR INDUSTRY OF HAWAII

Structure of Industry

The Hawaiian sugar industry is composed of 27 plantations and over 1,200 independent growers. The plantations own almost 60 per cent of the cane-growing land in Hawaii and lease another 36 per cent from 221 lessors, including the State of Hawaii. The remaining 4 per cent is owned by independent growers, who also lease or sublease a small amount of land from the plantations. The distribution of sugar land in terms of utilization and ownership is shown in Table 6.

In terms of production, independent growers produce about 8 per cent of the sugar cane grown in Hawaii. This cane is hauled to various plantation mills for processing under a special contract. The raw sugar so produced goes through the regular channels of refining and marketing, and is listed as part of the production of the plantations.

Twenty five of the 27 plantation companies are represented by five agencies, the so-called "Big-Five" factors, which own part or, in many cases, a large majority of their stock.[7] Of the remaining two plantations, one is represented by a trust company while the other is independent. The agencies provide a variety of services to the plantations, such as technical, financial, accounting, buying, and shipping services. The 1959 and 1960 production figures of the plantations, grouped under the various factors are given in Table 7.

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[7]See Vernon A. Mund and Fred C. Hung, Interlocking Relationships in Hawaii and Public Regulation of Ocean Transportation, Economic Research Center, University of Hawaii, 1961, especially pp. 33 and 58.

TABLE 6

TENURE OF SUGAR LAND[a/] (UNIT: ACRES)

Land Utilized in Growing Plantation Cane:	
1. Owned in fee simple	151,224
2. Leased (from 221 lessors)	92,334
Total	243,558
Land Utilized in Growing Cane by 1,284 Independent Growers and Adherent Planters:	
1. Plantation-owned land leased to planters	4,798
2. Plantation-leased land subleased to planters	2,446
3. Planter-owned land or land leased by planters from outside source	11,498
Total	18,742
Total land utilized	262,300

a/ Figures include attributable land such as mill sites and roads.

Source: HSPA Sugar Manual, Hawaiian Sugar Planters' Association, revised, June 1961, p. 17.

TABLE 7

PRODUCTION OF HAWAIIAN SUGAR PLANTATIONS, 1959 AND 1960
(In short tons, raw value)

Agencies and Plantations	1959	1960
Alexander & Baldwin, Ltd.		
Hawaiian Commercial & Sugar Co., Ltd.	141,691	143,440
Kahuku Plantation Company	16,613	16,264
McBryde Sugar Company, Ltd.	17,978	22,577
Total	176,282	182,281
American Factors, Ltd.		
Kekaha Sugar Co., Ltd.	33,815	37,023
Lihue Plantation Co., Ltd., The	52,423	51,078
Oahu Sugar Co., Ltd.	54,084	63,564
Pioneer Mill Co., Ltd.	44,667	48,846
Puna Sugar Co., Ltd.	51,836	43,480
Waimea Sugar Mill Co., Ltd., The	4,690	3,690
Total	241,515	247,681
C. Brewer & Co., Ltd.		
Hakalau Sugar Co., Ltd.	29,615	23,287
Hawaiian Agricultural Co.	40,746	45,098
Hilo Sugar Co., Ltd.	30,584[a]	25,018
Hutchinson Sugar Co., Ltd.	25,345	25,151
Kilauea Sugar Co., Ltd.	12,805	14,969
Olokele Sugar Co., Ltd.	20,491	24,385
Onomea Sugar Co.	29,433	24,726
Paauhau Sugar Co., Ltd.	24,223	15,927
Pepeekeo Sugar Co.	29,981	23,576
Wailuku Sugar Co.	27,847	22,962
Total	271,070	245,099
Castle & Cooke, Inc.		
Ewa Plantation Co.	34,899	44,283
Kohala Sugar Co.	50,253	41,934
Waialua Agricultural Company, Ltd.	56,115	57,694
Total	141,267	143,911
Theo. H. Davies & Co., Ltd.		
Hamakua Mill Co.	27,159	20,786
Laupahoehoe Sugar Co.	41,234	33,182
Honokaa Sugar Co.	31,712	22,653
Total	100,105	76,621
Bishop Trust Co., Ltd.		
Gay & Robinson	16,737	12,761
Grove Farm Co., Ltd.		
Grove Farm Co., Ltd.	27,656	27,390
Grand Total	974,632	935,744

[a] There is a misprinting in the Hawaiian Securities Manual. Figure given here has been checked with company annual report.

Sources: HSPA Sugar Manual, Hawaiian Sugar Planters' Association, revised, June 1961, pp. 14-15; Manual of Hawaiian Securities, Honolulu Stock Exchange, 1961, p. 147.

The 27 plantations jointly own the stock of the California and Hawaiian Sugar Refining Corporation, a cooperative organized under the Capper-Volstead Act, a Federal law which authorizes the formation and operation of marketing associations by producers of agricultural products. C & H operates a large refinery in Crockett, California, with a capacity of approximately 775,000 tons of raw sugar per year, and a smaller plant in Aiea, near Honolulu. About 95 per cent of the raw sugar produced in Hawaii is shipped to the Mainland, mostly to Crockett but with some surplus going to the Gulf and Atlantic Coast areas, to be refined and marketed. The other 5 per cent is refined at Aiea and sold for local consumption.

Only about 20 per cent of the Hawaiian raw sugar shipped to the Mainland, the part which goes to the Gulf and Atlantic Coast areas, is sold at a price directly related to New York raw sugar prices. The other 80 per cent which is refined by C & H is marketed in refined form in the 11 Western States, a traditional market for C & H, and the Midwest. Proceeds from the sale of raw and refined sugar (including the part sold for local consumption), minus the expenses incurred by C & H for processing and marketing, constitute the net return on Hawaiian sugar. This amount is then distributed to plantations in approximate proportion to their sugar production. Thus the price which Hawaiian producers get for their sugar is not known until the end of the sugar year. This price may not have any direct relationship to New York raw sugar prices

In computing costs, C & H is entitled under the law to include an 8 per cent dividend on stated capital value. This in effect represents a payment of interest on the investments of the 27 plantations in C & H.[8] Since C & H is organized as a cooperative, it is not subject to Federal and California state income taxes.

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[8]Plantations receive 8% return on C & H Stated Capital, which comprises original and subsequent plantation investments in the cooperative. In addition to Stated Capital there is a Capital Reserve about twice the value of Stated Capital in 1961(reflected in current working capital and assets), on which it is claimed plantations do not receive 8% dividends. Thus industry claims that plantations are entitled to but are not receiving 8% return on their total investments in C & H.

The independent growers, under their special contracts with the plantations, are paid the price per ton of raw sugar which the plantation receives from C & H, minus charges for hauling, harvesting, processing and marketing their sugar. A special formula, which is subject to open hearing and the approval of the Department of Agriculture, is used in computing the net return to each grower. Since individual cases vary, it is not possible to find a "representative" formula. The following formula used for one grower in 1960 serves only as an illustration:

TABLE 8

COMPUTATION OF PAYMENT TO AN INDEPENDENT GROWER, 1960
(per ton of raw sugar)

Revenues:		
Sugar	$121.56	
Molasses	5.71	$127.27[a/]
Charges for services bought from the mill:		
Marketing	$ 9.07	
Processing fee	46.71	
Harvesting	18.95	
Hauling	22.06	
Road	6.04	102.83
Payment to independent grower		$ 24.44[a/]

a/ Not including compliance payment of $10.00

Source: Public hearings at Hilo, January 9, 1962.

Competition from Beet Sugar

As mentioned earlier, the Department of Agriculture is charged with the duty of maintaining reasonable prices for both consumers and domestic producers of sugar. Being more interested in the national scene, the Department of Agriculture usually takes the New York wholesale refined sugar price as the "representative" price. However, this price is losing, if it has not already lost, its representativeness as a result of competition for markets and advances in distribution technology in recent years. Sales of refined sugar in bulk or pre-packed consumer-size packages have increased, with the result that the 100-pound bag price quotations of the New York exchange have become less

representative than they formerly were.[9]

Furthermore, the New York wholesale refined sugar prices are losing their significance in the Midwest and the Pacific Coast. Use of the basing point system at one time assured reasonably uniform prices throughout the country. Differences in delivery prices at various cities were due mainly to differences in freight charges from the basing points. Now, with relatively lower prices in the West and the Midwest as a result of competition from beet sugar, a wider discrepancy in price has developed between these areas and the East Coast (see Chart 1). Consequently, to the extent that the U.S. quota system is intended to maintain a reasonable New York price, it has not afforded the fullest protection to the Hawaiian industry, which sells primarily in the more competitive Midwestern and Western markets.

The production of beet sugar in the United States fluctuates from year to year. But since 1956 it has climbed up steadily (see column 2 of Table 9). Part of this increase is due to greater yield per acre through technological improvements; mechanization and the use of monogerm seeds have cut down unit costs of production. The failure of Hawaii and Puerto Rico in recent years to fulfill their basic quotas provided another stimulus to step up beet sugar production. This was especially so in 1960 since the proration of the deficit which would have gone to Cuba as additional quota went mainly to domestic beet growers. In 1961, because additional production was needed to fill marketing quotas for domestic areas and to provide adequate carryover, no acreage restriction was imposed on any of the domestic sugar producing areas. As a consequence, the production of beet sugar in 1961 is expected to rise by another 10 per cent

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[9] The points in this and the following paragraph with respect to the "representativeness" of New York wholesale refined sugar prices are discussed in Special Study on Sugar, op. cit., pp. 36-41.

CHART 1

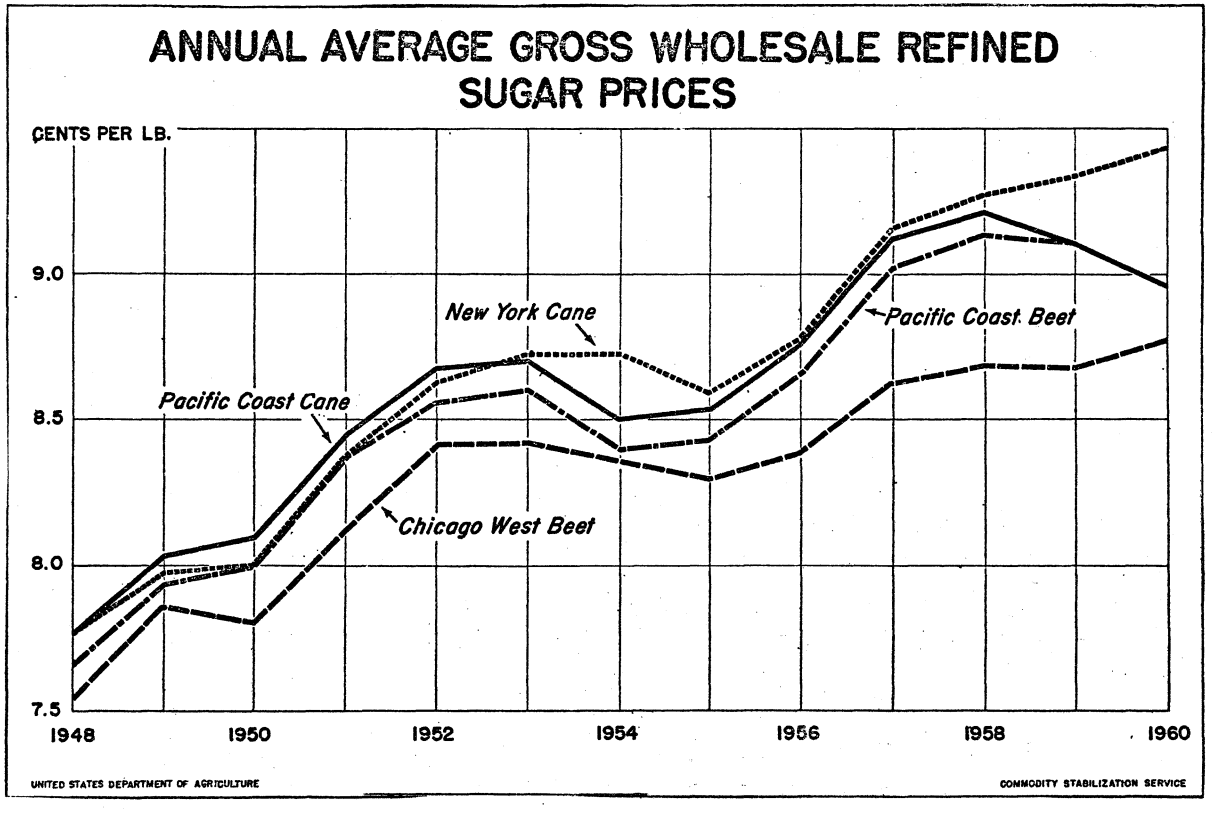
ANNUAL AVERAGE GROSS WHOLESALE REFINED SUGAR PRICES
CENTS PER LB.
9.0
8.5
8.0
7.5
1948
1950
1952
1954
1956
1958
1960
New York Cane
Pacific Coast Beet
Pacific Coast Cane
Chicago West Beet
UNITED STATES DEPARTMENT OF AGRICULTURE
COMMODITY STABILIZATION SERVICE

TABLE 9

U. S. BEET SUGAR AND HAWAIIAN CANE SUGAR
PRODUCTION 1945 - 1960
(unit: 1,000 tons)

Year	U. S. Beet Refined	Hawaiian Cane Raw Value
1945	1,191	821
1946	1,422	680
1947	1,719	872
1948	1,280	835
1949	1,461	956
1950	1,878	961
1951	1,448	996
1952	1,407	1,021
1953	1,697	1,099
1954	1,909	1,077
1955	1,625	1,140
1956	1,837	1,100
1957	2,050	1,087
1958	2,056	765
1959	2,187	975
1960	2,224[a/]	938

[a/] Preliminary

Source: HSPA Sugar Manual, Hawaiian Sugar Planter's Association, revised, June, 1961, pp. 21 and 28.

over 1960.[10]

In contrast to the rising production of beet sugar on the Mainland, Hawaii suffered great losses in sugar output because of the long strike in 1958. Since sugar cane is a two-year crop, damage of the strike was felt in the succeeding years (see Table 9). Not until 1961 was Hawaii able to recover fully and approach the output of 1957.[11]

Sugar beets are grown in 20 states and processed in 15. Table 10 shows that of the 11 Western states, in which C & H has its traditional market, 8 are large producers of beet sugar.[12] The sharp competition between beet and cane sugar in this area since 1958 has forced down the price of sugar. This competition has resulted in larger shipments than previously of C & H sugar to Midwest markets. But in order to sell in the Midwest, C & H must absorb the difference in freight charges under the current basing point system. For example, it costs $19.20 to ship a ton of sugar from San Francisco to Chicago, but the cost is only $12.00 to ship the same amount of sugar from New Orleans. The freight absorption for C & H is therefore $7.20, with consequent reduction in profits of Hawaiian sugar companies.

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[10]The Sugar Situation, Agricultural Marketing Service, U.S. Department of Agriculture, March 1961, p. 8.

[11]According to Mr. Slator Miller, vice president of the Hawaiian Sugar Planters' Association, the Hawaiian production of sugar in 1961 was about 1,075,000 to 1,085,000 tons, raw value. The production in 1957 was 1,087.000 tons.

[12]These are California, Colorado, Idaho, Montana, Oregon, Utah, Washington and Wyoming. The other three states are Arizona, Nevada, and New Mexico.

TABLE 10

BEET SUGAR PRODUCTION IN FIFTEEN STATES --1956-57 TO 1960-61

State	1960-61[a]	1959-60	1958-59	1957-58	1956-57
California	10,943,374	12,396,527	9,350,672	11,240,300	9,431,015
Colorado	9,409,233	7,152,315	7,887,498	7,836,142	6,525,555
Idaho	4,349,073	4,663,465	4,682,160	4,408,812	3,769,041
Minnesota	3,700,586	2,632,021	3,210,552	2,667,926	2,781,638
Nebraska	3,662,624	2,913,224	2,464,187	2,364,582	2,365,930
Montana	2,679,618	2,347,225	2,582,403	2,577,635	2,477,915
Washington	2,325,728	2,145,556	2,259,385	2,247,664	1,914,240
Michigan	2,276,325	2,273,632	2,430,822	1,972,172	1,797,857
Wyoming	1,842,122	1,642,418	1,648,837	1,551,413	1,477,339
Oregon	1,602,067	1,753,678	1,832,132	1,647,755	1,535,735
Utah	1,481,139	1,585,630	1,290,184	1,364,153	1,382,209
Ohio	1,036,544	763,841	859,328	758,929	564,923
South Dakota	331,719	324,016	294,415	245,077	301,613
Iowa	238,854	231,097	247,412	231,371	297,350
Wisconsin	183,873	224,365	343,487	245,858	233,375
TOTAL - BAGS (Refined)	46,062,879	43,049,010	41,383,474	41,359,789	36,855,735
TOTAL - (Short tons, raw value)	2,464,364	2,303,122	2,214,016	2,212,748	1,971,782

[a]Partly estimated.

Statistics by crop year, which is for spring planting and fall harvesting in first year named, except in Imperial Valley of California, where figure is for fall planting in first year named and spring harvesting in following year. Sugar beets are grown also in Illinois, Indiana, North Dakota, New Mexico and Texas, and processed in plants located in states listed above.

Source: HSPA Sugar Manual, Hawaiian Sugar Planters' Association, revised, June, 1961, p. 27.

Hawaii's Disadvantages in Competing with Beet

The Hawaiian sugar industry has cited the following major disadvantages in competing with beet sugar on the Mainland:[13]

(1) High transportation cost. Hawaii has to haul its product 2,200 miles or more across the ocean to be refined and then marketed; beet sugar refineries are close to beet growers. In 1961, the freight and handling cost per ton of raw sugar from Hawaii to Crockett was about $7.60.

(2) Hawaii (or C & H) has to absorb freight when selling in the Midwest. On the other hand, the beet sugar producers because of their closeness to the market may in most cases benefit from phantom freight and in some cases absorb less freight than C & H does.

(3) High labor cost. The average daily earnings of all Hawaiian sugar workers were $17.58 -- $13.18 in cash and $4.40 in fringe benefits. This compares with $8.90 for the mainland beet area.

(4) The compliance payments benefit beet sugar producers more because they are mostly small producers.[14] In 1960, beet growers received an average payment of $15.80 per ton of sugar, raw value, against Hawaii's average of $9.54 per ton.

(5) The State of Hawaii levies a general excise tax of 2 per cent on the production of sugar; beet sugar producers on the Mainland do not have to pay this tax.

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[13] For an excellent presentation of the viewpoints of the Hawaiian sugar industry, see Slator M. Miller, "Hawaiian Sugar - Present and Future," op. cit.

[14] See previous section on compliance payments in Part I.

These may be valid arguments to a large extent. But the success of a business firm or an industry often depends on its ability to achieve high efficiency and overcome some of the handicaps imposed by nature or human institutions. Thus, the disadvantages which Hawaiian sugar has in terms of distance to the market would have to be counterbalanced by lower unit costs of production. The large scale of production and the high degree of mechanization in Hawaii have been conducive in the past to high efficiency and lower unit costs of production. But Hawaii may be approaching a high plateau in its technological development, while beet sugar production continues to benefit from the introduction of monogerm seeds and increased mechanization. Thus, the advantages in productive efficiency which the Hawaiian sugar producers have enjoyed may be disappearing, while the disadvantage due to distance seem to be more permanent.[15]

Although wages of sugar workers in Hawaii may be high in comparison with mainland cane and beet areas, because of the high degree of mechanization and the high yield per acre of land, Hawaii's labor cost per ton of sugar does not compare too unfavorably with other areas. A Department of Agriculture study shows that in 1960 Hawaii had the highest hourly wages for field workers but the lowest man-hour requirement per ton of sugar produced among all the domestic sugar producing areas (see Table 11). Thus, Hawaii's labor cost per ton of sugar was $30, as compared to Louisiana's $36, Florida's $24, Puerto Rico's $45 and the beet area's $27 (these figures exclude fringe benefits). On the other hand, Hawaii had the largest increase in hourly wages over the 1947-1949 base period. This resulted in an increase of 11 per cent in labor cost per

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15 The Hawaiian sugar industry since 1958 has been able to reduce its transporation cost of sugar from Hawaii to Crockett by about 20 per cent through containerization.

TABLE 11

FARM LABOR COSTS AND MAN-HOURS PER TON OF SUGAR, AND HOURLY EARNINGS OF FIELDWORKERS

Area	Labor Costs Per Ton Sugar a/			Man-Hours Per Ton Sugar			Hourly Earnings of Fieldworkers a/		
	1947-49	1960	Change %	1947-49	1960	Change %	1947-49	1960	Change %
Louisiana	$48	$36	-25	118	48	-59	$.41	$ .74	+80
Florida	38	24	-37	58	22	-62	.66	1.11	+68
Hawaii	27	30	+11	30	17	-43	.93	1.74	+87
Puerto Rico	44	45	+ 2	134	89	-34	.33	.50	+52
Beet Area	33	27	-18	41	23	-44	.82	1.18	+44

a/ Excludes fringe benefits.

Source: "Labor Productivity On Sugar Beet and Sugar Cane Farms in the United States," Sugar Reports, Sugar Division, U.S. Department of Agriculture, November 1961, p. 30.

ton of sugar over the same period, although man-hour requirements per ton declined 43 per cent. For most other areas, there was a reduction in labor cost per ton of sugar. The reduction for beet areas was 18 per cent.[16]

Labor cost is just a part of the cost of production. In order to maintain the high productivity of labor, it is necessary among other things to maintain a high level of capital investment. The gains from technological improvements must, in addition to providing higher wages, be sufficient to defray added costs for non-labor inputs and amortization of capital outlays for production facilities. On the basis of the data shown in Table 11, the Department of Agriculture concludes that in Hawaii "workers received through higher earnings essentially all of the savings in labor cost resulting from technological gains."[17]

It must be cautioned, however, that 1960 was still a low production year for Hawaii, and that 1961 is more likely to bring a more normal return to the Hawaiian sugar industry.[18] Had the Department of Agriculture comparison been made for the year 1961, the results could be quite different. However, the entire problem of productivity measurement and the sharing of gains from productivity is a major study in itself and will not be dealt with further in this report.

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[16] "Labor Productivity on Sugar Beet and Sugar cane Farms in the United States," Sugar Reports, Sugar Division, U.S. Dept. of Agriculture, Nov., 1961, pp. 19-31.

[17] Ibid., p. 31.

[18] See discussion on page 22 and in footnote 11.

With respect to the higher compliance payments to beet growers, these stem from the workings of the overall U.S. quota system. While past sugar legislation was intended to benefit all domestic producers, there can be little doubt that the beet growing states constitute a formidable bloc in Congress. Thus, it is not likely that Congress will change the method of payment, since the interests of so many beet-growing states are involved. This is a fact which the Hawaiian sugar industry has recognized.

With respect to the 2 per cent excise tax, whether or not it should be considered a special burden on the tax-paying industry depends on the extent to which the tax may be shifted. In view of the competitive nature of the sugar market on the Mainland, however, it is not likely that the tax could practically be shifted forward to consumers. Neither is it likely that the tax would be shifted backward to the suppliers of labor, materials and other services, given the strong position of the ILWU on the islands and the tight control which the five factors have on the sugar companies. From this it may be concluded that the general excise tax is a burden which mainland competitors of the Hawaiian sugar industry do not have although it is possible that other states may have some other taxes which are more burdensome to sugar growers than in Hawaii. Yet any state of the Union is free, within its constitutional rights, to levy a tax which it considers to be fit. Whether a tax is a burden is therefore a different problem than whether it is fair or whether a tax reduction is necessary to provide relief to the industry. These latter problems will be analyzed in later sections of this report.

The above discussion suggests that Hawaiian sugar is facing serious competition from mainland beet sugar. Yet the fact of competition alone would not seem to justify a major change in public policy toward a private industry,

particularly in a private enterprise economy which presumably thrives on competition. A more relevant consideration would seem to be whether or not the industry can still earn a fair rate of return in the face of increasing competition

Profitability of the Hawaiian Sugar Industry

At first glance, the financial records of the Hawaiian sugar companies do not show that they have been able to make adequate profits in recent years. A study of the annual reports issued by 24 of the 27 companies reveals that the number of firms which reported a net profit after taxes dropped from 21 in 1956 to 18 in 1957 and 8 in 1958 and then went up to 11 in both 1959 and 1960. But it should be noted that many of the companies have for a number of years followed the practice of writing off as extraordinary charges, a static balance of deferred crop costs, which had been carried on their books since 1952.[19] The net profit figures so derived do not give an accurate indication of the operating results of the current years. In accordance with standard accounting procedures, net profits after taxes, but before the deduction of extraordinary charges, are therefore used in the compilation of Table 12 to show the profitability of the sugar companies during the years 1956 to 1960.

According to this revised method of indicating profitability, all 24 companies made profits in 1956, 22 showed profits in 1957, but only nine were profitable in 1958, the year of the strike. The recovery was slow. Fourteen firms made profits in 1959 and 13 in 1960.[20] In terms of absolute profits, fewer firms

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[19] The static balance of deferred crop costs was created when the companies changed their accounting method from the crop accrual to the annual accrual method. Under this new system, all direct field costs incurred in each calendar year in bringing current and future crops to maturity are charged against the net income for the year, and none of the expenditures are deferred to the year in which the particular crops are harvested as formerly done under the crop accrual method.

[20] This revised method of indicating profitability gives a less pessimistic picture of the Hawaiian sugar industry because extraordinary charges, which reduce profits or increase losses of the current years, have been excluded. For a detailed listing of profit experience of Hawaiian sugar plantations, see Appendix.

TABLE 12

NET PROFITS AFTER TAXES BUT BEFORE THE DEDUCTION OF EXTRAORDINARY CHARGES,
24 HAWAIIAN SUGAR PLANTATIONS, 1956-1960

Number of Firms Making Losses						Number of Firms Making Profits				
1956	1957	1958	1959	1960		1956	1957	1958	1959	1960
-	1	4	-	2	Under $50,000	4	2	1	2	1
-	-	1	-	1	$50,000 - $100,000	1	2	-	-	1
-	-	4	7	4	$100,000 - $200,000	3	4	4	3	6
-	-	3	1	3	$200,000 - $300,000	6	4	2	7	-
-	-	-	-	-	$300,000 - $400,000	2	3	2	1	3
-	-	2	1	1	$400,000 - $500,000	2	2	-	-	1
-	1	-	1	-	$500,000 - $750,000	4	2	-	-	1
-	-	1	-	-	$750,000 - $1,000,000	1	2	-	1	-
-	-	-	-	-	Over $1,000,000	1	1	-	-	-
-	2	15	10	11		24	22	9	14	13

Sources: Annual reports of the companies; Manual of Hawaiian Securities, Honolulu Stock Exchange, 1957-1961.

were able to earn a large profit in 1958-1960 than in 1956-1957 while more firms suffered large losses. The worst year was, of course, 1958.

Based on the same procedure, it can be shown that only two of the 24 plantations made a profit (after taxes but before the deduction of extraordinary charges) consecutively during the five years, 1956-1960. Ten made profits in four out of the five years, nine in three years, two in two years, and one in only one year.

It is difficult to give an accurate estimate of the rate of return on stockholders' investment in the sugar companies. Taking the rate of return as profits (after taxes but before the deduction of extraordinary charges) divided by the average stockholders' equities during the year would yield the result that even in the normal years of 1956 and 1957, less than half of the companies made a return over 6 per cent. On the other hand, if the rate of return is taken as profits (again after taxes but before the deduction of extraordinary charges) divided by the average market prices of the stocks during the year, the rate of return would have been more than doubled for most of the companies. This is because the market prices of the stocks of most of the companies had been lower than half their book values during the period.[21]

The fact that market prices of many plantation stocks have continually been much lower than book values for a number of years suggests the possibility that although individual assets of plantations may be undervalued as claimed by the industry, the total value of all the assets belonging to the plantations as going concerns may have been overstated. This is because from the point of view of investors the unsatisfactory profit situation of the plantations may not justify the valuation of total assets as the summation of all individual asset values.

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[21] For example, the book value per share of common stock of McBryde Sugar Company was $15.89 in 1960 (average stockholders' equity of $7,466,392 divided by 470,000 shares), and earnings per share after taxes but before extraordinary charges $0.84 ($395,867 divided by number of shares), giving a rate of return of 0.84/15.89 or 5.29 per cent. On the other hand, using the average stock price of the year $6.125 as the base, the rate of return would be 0.84/6.125 or 13.72 per cent.

In accounting terminology, there may be negative goodwill. In economic terms, there may be some sunk costs which may have to be considered as losses (if there are no alternative profitable uses) rather than being included in the total value of assets. If this is the case, then the use of stockholders' equities (which is book value multiplied by the number of shares) in computing the rate of return may result in a downward bias. On the other hand, the use of market prices of stocks may yield an upward bias if the stocks are closely held and the sales are made only in small quantities by a few minority stockholders. Besides, stock prices may also be unduly influenced by psychological factors.

It may also be pointed out that the profits which appear on the books of the sugar companies depend, among other things, on transactions between the companies and their agencies which are also large stock owners of these companies. If the services which the factors render the sugar companies are over-charged, then profits of the companies would be understated by the same amount. This possibility will be subject to careful analysis in a later section. Due to the above difficulties, no attempt is made here to derive the rate of return in the Hawaiian sugar industry.[22]

Spokesmen for the Hawaiian sugar industry have maintained that the industry is facing serious difficulties because of competition from beet sugar and the high cost of producing and marketing Hawaiian sugar. If these statements are being made solely on the basis of recent experience, it should be remembered that 1958-1960 were abnormal years and that the 1961 output is quite likely to return to the 1957 level. Even though the return on raw sugar from C & H is lower (approximately $117.2 per ton in 1961 as compared to $121.6 in 1960),

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[22]The Department of Agriculture gives the estimate that " in recent years, earnings of beet sugar processors and cane sugar refiners as a percentage of net worth have averaged around 7 to 9 per cent. Strictly comparable data are not available for raw sugar mills, but it is believed these earnings average somewhat lower." (Special Study on Sugar, op. cit., p. 41)

1961 still promises to be a more profitable year than any of the three preceeding years. This is because a large volume usually results in reduction of the unit cost of producing sugar.

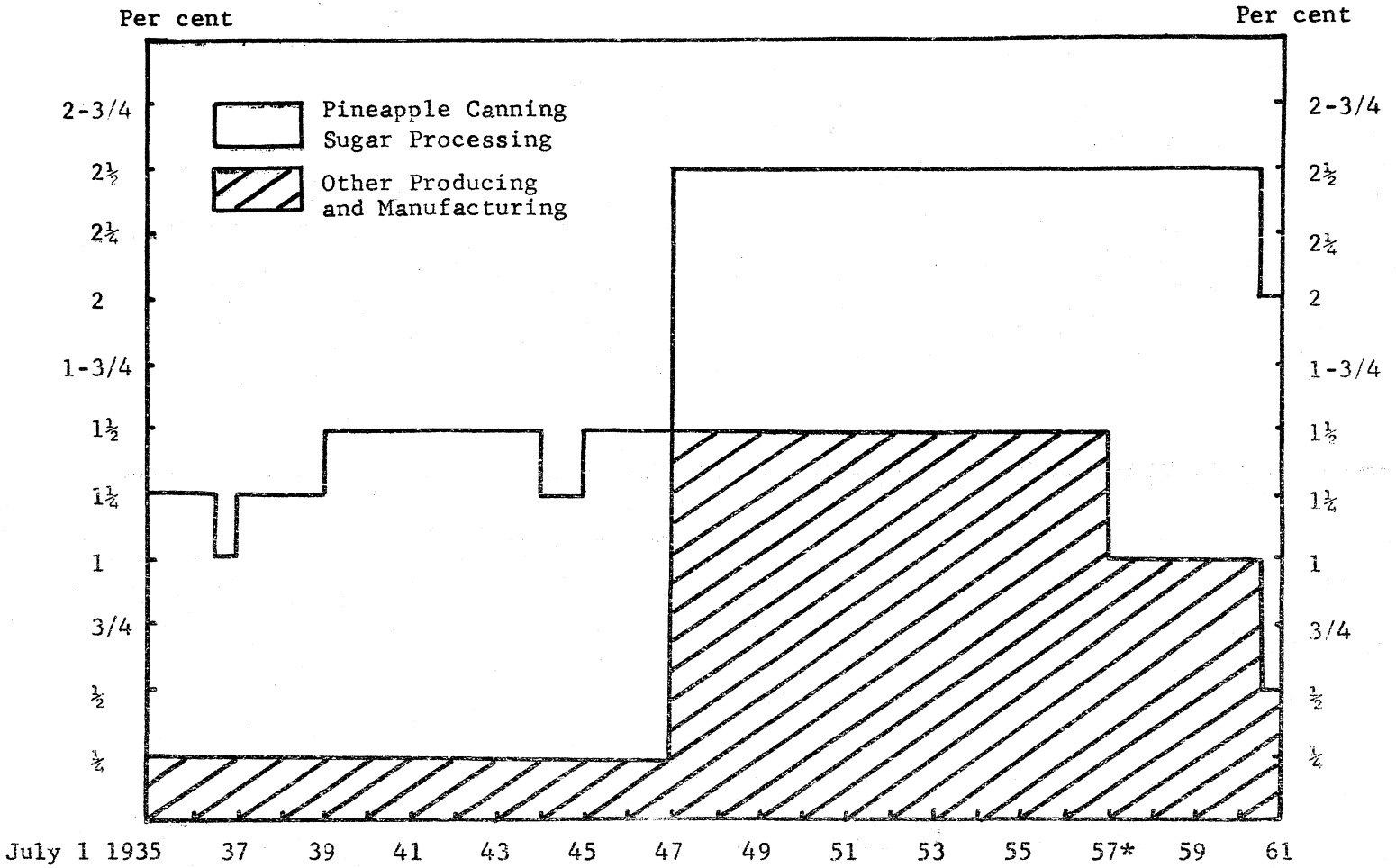
III. THE HAWAIIAN GENERAL EXCISE TAX ON SUGAR

Historical Background

The Hawaiian general excise tax on sugar processing and canning activities was first levied in July 1935. The rate at that time was 1 1/4 per cent, the same as that on retailing and other services, but higher than the 1/4 per cent on other manufacturing and producing. With the exception of a brief period in 1937, the tax on sugar and canning was kept at the level of 1 1/4 per cent until 1939, when it was raised to 1 1/2 per cent. This latter rate was maintained, with one interruption in the fiscal year 1944, until 1947. Effective July 1, 1947, the tax on sugar processing and canning activities was increased to 2 1/2 per cent. At the same time, the tax on other manufacturing and producing was increased from 1/4 per cent to 1 1/2 per cent. On July 1, 1957, the tax on other manufacturing and producing was reduced to 1 per cent. The law was also revised at this time so that other types of canning (except pineapple) were to be taxed at the same 1 per cent rate as other manufacturing and producing. At the same time, the tax on retailing and services was raised from 2 1/2 per cent to 3 1/2 per cent. As of January 1, 1961, the tax on sugar and pineapple was reduced to 2 per cent and the tax on other manufacturing and producing to 1/2 per cent. Chart 2 traces the trend of tax changes from 1935 to the present.

By law, the tax base for the 2 per cent general excise tax on sugar is the computed value of raw sugar before it enters interstate commerce plus the increase in value at the refinery in Hawaii on sugar refined and sold locally. The raw value is determined by subtracting from the net returns from C & H the following items: (1) an allowance for freight, handling and insurance charges from Hawaii to Crockett, to be determined every year jointly by the

CHART 2
TRENDS IN CERTAIN TAX RATES
Pineapple Canning and Sugar Processing Tax vs. Other Producing and Manufacturing Tax



*All types of canning taxed alike with pineapple canning until July 1, 1957 when pineapple canning alone segregated, and other types of canning were subjected to same tax rates as other producing and manufacturing.

Source: Tax Foundation of Hawaii, May 11, 1960.

State Department of Taxation and the sugar agencies on the basis of actual costs of the preceding year; and (2) a deduction of 8 per cent of the net returns from C & H "as a reasonable allowance for contingencies and for normal return attributable to the marketing of such product (on the Mainland)."[23]

As explained earlier, C & H returns all its proceeds from the sale of raw and refined sugar, including the part of the refined sugar sold for local consumption in Hawaii, to the Hawaiian sugar companies, after the deduction of all processing, marketing and shipping expenses incurred by C & H both at Crockett, and Aiea. Included among these expenses is the fifty cents per 100 pounds raw value equivalent processing tax levied by the Federal Government in connection with the quota system, and the 8 per cent dividend return on the stated capital value of stocks which the Hawaiian sugar companies own in C & H. But the freight between Hawaii and Crockett, is not a part of the expenses of C & H.[24]

In 1960, the net return which the Hawaiian sugar companies received from C & H was $121.56 per ton of sugar, raw value. The freight(handling and insurance) allowance for the same year was $7.601 per ton. The tax base per ton of sugar, raw value was therefore $104.23, i.e., $121.56 - $7.601 - 8 per cent of $121.56.

The compliance payments which the sugar processors and growers receive from the U. S. Department of Agriculture are considered by the state as other

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[23] Revised Laws of Hawaii, 1955, 117 - 14 a - 4. Words in parenthesis added.

[24] In arriving at the sales proceeds of C & H, the revenue from the sale of refined sugar at Aiea is included, together with an artificial freight payment by Aiea to the main office of C & H in California. This is the freight from Hawaii to Crockett. But since the expenses of Aiea are also a part of the C & H expenses, this is only an internal bookkeeping transaction with no effect on the tax base, although Aiea will show in its books a higher cost by the amount of the freight.

income, subject to the 3 1/2 per cent tax on retailing and services. This treatment is the same for "other incomes" of other manufacturers.

Formerly the independent growers paid a wholesale tax upon the sale of their cane to the mills for processing. But since 1956, they are treated as processors. They retain title to the sugar and are paid according to net returns from C & H per ton of raw sugar and the charges made by the mills for services rendered. As processors, they also pay the 2 per cent general excise tax on the value of raw sugar, and the 3 1/2 per cent tax on compliance payments.

The general excise tax applies equally to sugar refined and sold in Hawaii, but a credit is allowed on the amount of tax already paid on raw sugar. In other words, the refinery pays 2 per cent on the difference in value between refined and raw sugar. Molasses and other by-products, whether they are sold in California or in Hawaii, are taxed at the 1/2 per cent rate applicable to other manufacturing and producing.

The amounts of general excise tax on sugar collected in 1935-1960 are presented in Table 13. The dip in revenue in 1958 was due to the strike, but the drop in 1960 was largely because of tax relief for sugar producers in Kauai and Hawaii who suffered heavily from Hurricane Dot.

The Problem of Equity

The sugar and pineapple industries have made the case that the general excise tax on sugar and pineapple is inequitable because the rate is higher than on other manufacturers and producers. It has also been pointed out by their spokesmen that since sugar and pineapple are facing serious competition the state should not impose additional hardships on these two industries in the form of a general excise tax. These are two separate issues and should

TABLE 13

GENERAL EXCISE TAX COLLECTIONS ON SUGAR, 1935-1960

1935 (6 months)	273,414 a/
1936	773,560
1937	618,568
1938	618,294
1939	625,804
1940	692,121
1941	790,312
1942	776,354
1943	973,210
1944	865,429
1945	837,371
1946	943,129
1947	1,645,816
1948	1,837,081
1949	1,935,535
1950	2,736,551
1951	2,741,110
1952	2,699,106
1953	2,995,566
1954	2,787,998
1955	3,012,893
1956	2,598,708
1957	3,027,967
1958	1,683,942
1959	2,846,633
1960	1,968,830

a/ Including tax on canning.

Source: State of Hawaii Department of Taxation.

not be confused. The equity of the tax on sugar and the need for tax relief will be analyzed in this and the following section.[25]

In order to evaluate the equity of the sugar tax, it is necessary to compute an effective rate which takes into account the special deductions in computing the tax base that are not available to other manufactures and producers.[26] The problem of integration should also be considered since other industries may be subject to some tax pyramiding because of their inability to attain the same degree of integration as sugar. Thus, the simple comparison between the ½ per cent and 2 per cent rates is likely to lead to unwarranted conclusions on the equity of the tax.

The tax base for the 2 per cent general excise tax on sugar is supposedly the value of raw and refined sugar before entering interstate commerce. The value of raw sugar is arrived by working backwards from net returns from C & H and deducting the freight (handling and insurance) allowance and an 8 per cent allowance for contingencies and normal return for marketing on the Mainland. A number of problems arise because of this roundabout method of computation.

First, among the expenses of C & H there is included an 8 per cent dividend on the stated capital value of stocks which the Hawaiian sugar companies own in C & H. The point at issue here is not whether this rate is reasonable since it is specified by the Federal and California laws. But because of the very fact that this dividend has already been allowed in calculating net proceeds to Hawaiian sugar companies the question may be raised as to why another 8 per cent of the net returns from C & H should be provided for contingencies and normal returns for marketing on the Mainland. It is possible that if C & H

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[25]For discussions on the pineapple industry, see another study of the Economic Research Center of the University of Hawaii on The Economic Status of the Hawaiian Pineapple Industry.

[26]The other manufacturers and producers are allowed deductions for freight, handling and insurance charges and marketing expenses on the Mainland.

were an independent firm, it may charge a higher fee for its services and thus make a profit, including a normal return for marketing, higher than the 8 per cent on stated capital value, after the deduction of all expenses. Yet it was setup as a non-profit-making cooperative, and any excess over dividends must become a part of the net sales returns to the owner-plantations. Thus, it becomes contradictory to assert, on the one hand, that C & H is a cooperative and therefore should be exempted from Federal and California income taxes and on the other hand, that it should make a normal return on marketing in addition to the 8 per cent dividend allowed. The purpose of contingency allowances is to allow for possible changes in market prices on the Mainland. But since actual gross proceeds of sales are used, there is no uncertainty involved, and consequently no need for such a provision.

Second, the sales proceeds of C & H include revenues from sales of raw sugar in the Gulf and Atlantic areas. Under present legal interpretation, these sales of raw sugar enjoy the same 8 per cent allowance for contingencies and normal marketing returns that applies to sales of refined sugar. As explained above, the purpose of the roundabout computation is to arrive at the value of raw sugar for tax purposes backwards from the value of refined sugar. The justification of the 8 per cent allowance on net proceeds of refined sugar has already been questioned. It would appear even less justifiable to allow the same 8 per cent on raw sugar sold. From this analysis, it would seem that the principal effect of the 8 per cent deduction is to lower the effective rate of the general excise tax on sugar.[27]

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[27] The points discussed in this section of the paper are mainly from an economist's point of view. The current practice of computing the value of raw sugar before entering interstate commerce is sanctioned by a ruling of the State Attorney General. But the reasonableness of this method of computation may be questioned here.

Third, allowing the same deduction for freight, contingencies and normal marketing returns on raw sugar refined and sold by the Aiea refinery results in a lower net price of raw sugar at Aiea. In this case the question may be raised as to whether deductions should be allowed for sugar that has been kept within the state. However, since the refiner still pays the 2 per cent tax on the difference between the value of refined and raw sugar, the lower tax collected on raw sugar is compensated for by higher tax proceeds on refined sugar.

Fourth, if the average cost per ton for refining sugar at Aiea is higher than that at Crockett or if the net sales revenue per ton of refined sugar is lower in Hawaii than on the Mainland, then the inclusion of Aiea in the computation of revenues and expenses of C & H at Crockett would give a lower net return for mainland sales than otherwise. This would result in a lower estimate of the value of raw sugar before it enters interstate commerce, and a lower tax base. It is possible that the refinery at Aiea, being small, may have a higher unit cost. Furthermore, it is maintained by the manager of the Aiea refinery that the wholesale price of refined sugar in Hawaii is usually a few points below the basing point price at San Francisco. But since no detailed data are available to make a comparison of costs and revenues, and since the sales at Aiea represent only about 5 per cent of the total amount of raw sugar produced in Hawaii, this point may be disregarded.

Fifth, the 8 per cent dividend applies to the stated capital value of C & H, which includes about 1/3 of the equity on assets in the refinery at Aiea.[28] In other words, 8 per cent of about 1/3 of the value of investment at Aiea has been deducted as expenses of C & H in computing net returns to Hawaiian sugar

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[28]Not all of the equity is in the form of stated capital value. The other portion is the capital reserve which in 1961 was about twice the stated capital value. See footnote 8.

companies. Actually, the difference between the sales proceeds of C & H and all its expenses on the Mainland including the 8 per cent dividend on about 1/3 of its investment at Crockett with the further deduction of freight handling and insurance allowances (and the 8 per cent allowance for contingency and normal marketing returns, according to the current practice) should give the value of raw sugar which is about to enter interstate commerce. The inclusion of 8 per cent return on about 1/3 of investment at Aiea thus lowers the estimated value of raw sugar before leaving the state.

Last, but not least, molasses (and other by-products) are treated as by-products in the sugar mills and the C & H refineries. In cost accounting, if a manufacturer produces more than one product, the products may be considered as joint products, with proper allocation of overhead costs to each product. Or, if the other products are not too important in terms of total revenues, only one product may be regarded as the main product, with all the expenses charged to it. In this case, the sales proceeds of the by-products are included as part of the revenues of the main product. Since the Hawaiian sugar industry considers molasses (and other by-products) as by-products, their value in accordance with usual cost accounting procedure, should then be included in computing the value of raw or refined sugar, subject to the same 2 per cent tax. This is especially important at the C & H level since all the expenses of C & H have been deducted from sugar sales to arrive at net returns. However, the current practice has been to keep the sales proceeds of molasses separate and thus taxable only at the 1/2 per cent rate, applicable to other manufacturers and producers.

On the basis of the previous analysis, a formula may be derived to facilitate computation of the effective tax rate paid by the local sugar industry.

It reads as follows:

$$\text{Effective rate} = \frac{\text{Tax collected per ton of raw sugar}}{\text{Adjusted tax base per ton of raw sugar}}$$

$$= \frac{\text{2\% of adjusted C \& H net returns} + \frac{1}{2}\% \text{ of } \frac{\text{value of molasses}}{\text{raw sugar production}}}{\text{C \& H net returns} - \text{freight} + \frac{\text{value of molasses}}{\text{raw sugar production}} + \text{8\% of 1/3 of investment at Aiea}}$$

The tax collected includes 2 per cent of the adjusted C & H net returns (i.e., C & H net returns minus allowances for freight, handling and insurance charges and 8 per cent allowance for contingencies and normal marketing returns) and ½ per cent of the value of molasses per ton of raw sugar. The adjusted tax base is equal to C & H net returns minus freight (handling and insurance) allowances plus the value of molasses per ton of raw sugar and the 8 per cent of investment at Aiea also reduced to the per ton basis. The last two items (value of molasses and 8 per cent of 1/3 of investment are incomes of C & H which, according to our previous discussion, should be included as a part of C & H income for tax purposes.

In 1961, the net returns from C & H was $117.15 and the return from molasses around $5 per ton of raw sugar. The freight handling and insurance charges allowed for 1961 are not yet known, but the $7.6 per ton allowance of the preceding year may be used as an approximation. One third of the investment at Aiea is roughly $0.8 million and the production of 1961 is estimated at 1,080,000 tons of raw sugar. Using the above data, the effective tax rate being paid by the Hawaiian sugar industry in 1961 is calculated to be 1.77 per cent instead of 2 per cent.[29] But it should be noted that the 1.77 per cent

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[29] Effective rate $= \frac{2\% \times (117.15 - 7.6 - 8\% \times 117.15) + \frac{1}{2}\% \times 5}{117.5 - 7.6 + 5 + \frac{8\% \times 800{,}000}{1{,}080{,}000}}$

$= \frac{2\% \times (117.15 - 7.6 - 9.372) + 0.025}{117.15 - 7.6 + 5 + 0.059}$

$= 1.77\%$

rate has not yet taken account of the integration problems to which this report now turns.

The sugar industry in Hawaii is highly integrated. The sugar plantations own about 92 per cent of the sugar cane which they process. Moreover, the independent growers are now treated the same way as the plantations, paying no tax on the intermediate product, i.e., cane. In the case of coffee, the growers pay ½ per cent tax on the value of coffee beans, while the mills pay another ½ per cent tax on the total value of coffee produced, with no credit for the tax paid on coffee beans. Thus there would be a tax saving for sugar if it is taxed the same ½ per cent as other manufacturers and producers but only at the raw sugar level. Roughly, sugar cane accounts for about 25 per cent of the value of raw sugar.[30] Consequently, a 2 per cent tax on the raw value of sugar alone is equivalent to taxing 1.6 per cent on both the value of sugar cane and raw sugar (1.6 per cent = 2 per cent x 100/125).[31] Applying the ratio of 100/125 to 1.77 per cent given in the previous paragraph, the effective rate of sugar tax, after taking integration into consideration, would be 1.42 per cent for the year 1961.

On the other hand, it may be legitimately argued that the compliance payments are actually an integral part of the sales proceeds of sugar and should be taxable at the 2 per cent rate instead of the 3½ per cent under the current law. The actual amounts of payment vary with the size of growers. But if we

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[30]Based on figures presented at Hilo Hearings, January 9, 1962.

[31]The value of cane is 25 per cent of the value of raw sugar. If both cane and raw sugar are taxed at 1.6 per cent, the amount of tax is the same as if only raw sugar is taxed, and at 2 per cent. In other words, 1.6 per cent on 125 per cent of the value of raw sugar (i.e., value of cane and raw sugar) is equal is 2 per cent on 100 per cent of the value of raw sugar. Thus, 1.6 per cent x 125 per cent = 2 per cent x 100 per cent, or 1.6 per cent = 2 per cent x 100/125.

assume that the average payment of $9.54 per ton of raw sugar for the year 1960 applies also to 1961, then the effective rate for 1961 would be raised from 1.42 per cent to 1.52 per cent.

Is this rate of 1.42 per cent or 1.52 per cent compared with the ½ per cent tax on other manufacturers and producers equitable to sugar? The answer is obviously no if attention is confined only to the general excise tax. But the canons of public finance do not require that every tax must be fair and equitable in order for the system to be considered equitable. The inequity of some taxes may be balanced out by other taxes which may err in the opposite direction. As a matter of fact, when the general excise tax of 1¼ per cent on sugar and canning activities was first levied in 1935, there was a long debate in both the Territorial House and Senate regarding the equity of this tax in relation to the ¼ per cent tax on other manufacturing and producing.[32] It was not possible to find an optimal solution then, but as a compromise, the tax rate on sugar and canning activities was cut from the original proposal of 2½ per cent and finally settled at 1¼ per cent.[33] In 1947, the repeal of the personal property tax was mainly responsible for the increase in general excise tax rates.[34] This gives further evidence to the interdependence of taxes within the same tax system.

Until very recently, the problem of integration has never been brought

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[32]"It is recognized . . . inequalities are inevitable, nor can every conceivable situation be properly provided for. Every effort has been made . . . to make this bill as equitable and fair as is possible under this form of taxation." Senate Ways and Means Committee, Territory of Hawaii, Session of 1935, Report no. 85, p. 421.

[33]The rate was first set as flexible between 2 per cent and 1¼ per cent, and finalized at 1¼ per cent.

[34]The tax on sugar and canning was raised from 1½ per cent to 2½ per cent; the tax on other manufacturing and producing from ¼ per cent to 1½ per cent.

up in the discussion of general excise taxes. But as indicated above it is also an important point to be considered in judging the equity of the overall tax system.

Another point which warrants consideration is that an inequitable tax in favor of other manufacturers and producers may be justified if it is deemed desirable to promote a more diversified economy for the state.

But such problems can best be considered in the context of a careful study of the over-all tax structure. It would be beyond the scope of this report to make such an evaluation. But a study of this nature is highly recommended and strongly urged.

The Problem of Tax Relief

Our discussion of the financial status of Hawaiian sugar industry has indicated that the industry was not able to make adequate profits in 1958-1960 because of the strike in 1958, but that 1961 promises to be a better year. In addition, the relationship between the five factors and the sugar companies should be studied to see if the recorded profits or losses are indicative of the real situation.

The five factors are large stockholders and have interlocking relationships in 25 of the 27 sugar plantations.[35] The fees which the factors charge the sugar companies for services rendered have been the subject of heated argument in political and business circles. On the one hand, it is charged that the factors over-price their services and are therefore milking the sugar companies to the detriment of minority stockholders. On the other hand, it is argued that the agency fees are set at cost plus a very small markup and

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[35] Interlocking relationships exist when the directors and/or officers of one company serve concurrently as directors and/or officers of another company. For more detailed discussion, see Mund and Hung, Interlocking Relationships in Hawaii and Public Regulation of Ocean Transportation, op. cit. Information on the other 2 companies are not available.

it would cost the plantations much more if they hire their own personnel to perform these services. The issue is often charged with emotion and further clouded by a lack of publicly available data to verify the position taken by either side. But any thorough assessment of the profitability of sugar operations cannot very well avoid this problem.

One point which needs clarification is that in judging the fairness of agency fees, the comparison is not to be based on what it would cost the sugar companies if they perform these functions themselves but rather on what these services would cost if the fees were determined competitively. There is no question that by providing financial, accounting, buying, shipping and technological advisory services to a number of companies, the factors are able to cut down the unit cost of these services and that some of the savings may be passed on to the sugar plantations. The question rather is whether or not the sugar companies would be able to obtain these services from the factors at a lower price if there were competitive arm's length bargaining.

The factors take the position that the agency fees they charge are fair and just. The fact that they own stocks of the sugar companies and that there are interlocking relationships, so they maintain, does not influence the fees they charge one way or other. It is possible, however, to visualize a situation in which the loyalty of a director and/or officer of company A may be subject to question if he is at the same time a director and/or officer of another company B which is in the process of bargaining with company A. The situation is even more difficult when B owns stocks in A and this person is elected director and/or officer of A because of B's stockholding in company A. A great deal of public anxiety can be dispelled if the factors and sugar plantations are able to prove that impartiality does exist under such difficult conditions.

The factors also allege that the agency fees are based on cost, and that in some cases the fees may not even be sufficient to cover cost. A great deal depends on how the factors' agency expenses are determined and allocated for services rendered the sugar companies. The practices vary widely among the factors according to individual judgments and philosophies.[36] Some factors attempt to establish an internal cost distribution system to determine exactly how much it costs to render services to plantations. A markup is then added for profit. Others use a straight percentage of sales system, presumably allowing for a profit in the percentage fee charged. It is the contention of the latter group that a system of exact cost allocation is very arbitrary, if not impossible. Thus, it would seem that if the factors cannot agree on how exactly to allocate the cost of services, the argument that all sugar companies have been charged on the basis of cost loses much validity.

The financial conditions of Hawaiian sugar plantations differ greatly. Some companies may be in serious trouble and this should be recognized by the state in planning its over-all policies. But the possibility of cutting cost in many areas should not be overlooked. The Hawaiian sugar industry leads the nation, even the world, in scientific and technological research on sugar. It is quite possible that continued research on operational efficiency at both industry and plantation levels can lead to further reductions in cost.[37]

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[36] This was clearly brought out in interviews with factor and plantation officials conducted by a staff member of the Economic Research Center. These interviews also provided the major source of information for this report on factor-plantation relationships.

[37] This point has been verified by interview with sugar industry people. There is ample evidence of industry attempts to improve operational efficiencies, particularly through mechanization. However, the industry recognizes the need for improvements for such things as harvesting and cane cleaning, irrigation, hauling and mill operations. There appears to be wide variance in operational and organizational efficiencies between plantations.

Among the problem areas that such studies could throw light on are the following: The possibility of stream lining the organization of certain plantations; the possibility of eliminating and consolidating some of the "marginal" plantations to make fuller use of the capacity of other existing mills; possible improvements in the current accounting system with regard to determination and allocation of costs; possible reconciliation of the wide discrepancy between stock market prices and book values;[38] the fairness of agency fees; the role of competition and arm's length bargaining in the determination of prices for machinery and equipment which the plantations buy through the factors; and the reasonableness of the cost of services such as trucking and insurance, which the plantations purchase from the factors or their other subsidiaries. In suggesting these problem areas, the author is not implying any possible abuses on the part of the factors and plantations. But a careful and comprehensive study made by a disinterested observer would help to dispel doubts in many people's minds and to support the case of some sugar plantations that may require assistance from the state.

Many of the independent sugar growers have been complaining that they suffer heavy losses on their crops and that some sugar companies over-charge them for services rendered.[39] They complain especially about the fairness of a 5 per cent markup which the mills charge as a profit above the cost of services other than processing. Their position is that the mills need the cane of independent growers just as much as the growers need the facilities of the mills in order to maintain capacity operations and hold down unit costs of processing. Thus, their argument goes, the arrangement is mutually beneficial,

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[38]For a discussion of discrepancy between Market Value and Book Value of Sugar Company Stocks, see pp. 31-32.

[39]Information obtained from public hearings in Hilo held by the Department of Agriculture on January 8-9, 1962.

and the mills should not make additional profit out of the transactions with growers. The Department of Agriculture is charged with the responsibility of reviewing the fairness of service fees charged by the mills at annual public hearings and also in more detail every four years. Yet there remains a great deal of dissatisfaction among the independent growers. Probably a study of the nature suggested in the previous paragraph will help to clarify this issue.

The analysis in this section has been necessarily limited and tentative because of the limited availability of data to justify a more definite statement. A more comprehensive analysis must await the availability of more precise and pertinent information on the operations of the various segments of the Hawaiian sugar industry.

Effects of Sugar Tax Reduction on the Hawaiian Economy

Will a sugar tax reduction help the Hawaiian economy? Where will the tax money go if a tax reduction is granted? Again the discussion must be tentative because there are so many uncertainties involved.

The tax savings for sugar companies, under the current system of computing the tax base, will be approximately $0.50 per ton of raw sugar if the tax is reduced from 2 per cent to 1½ per cent. Thus, ½ per cent tax reduction will mean, before federal and state corporate income taxes, savings to the Hawaiian sugar industry of about $600,000. This estimate is based on the assumption that Hawaii will be able to meet its basic quota of approximately 1.2 million tons of raw sugar in 1962.

For those companies which will be able to make a profit regardless of a tax reduction, the increased income resulted from tax savings will be subject to federal and state corporate income taxes. The federal rate is 30 per cent on total corporate incomes up to $25,000 and 52 per cent on any amount in excess of $25,000. The rates for the State of Hawaii are 5 per cent and

5½ per cent respectively. For those companies which will make a profit only because of a tax reduction, not all of the tax savings will be subject to corporate income taxes since the latter apply just to the profit portion. Of course, the corporate income taxes will not apply at all to companies which will still not be able to make a profit after a sugar tax reduction. In this case, the full amount of sugar tax savings will help to reduce losses, provided that there are no changes in other costs. The exact portions of sugar tax savings which will go to the Federal and State Governments in the form of corporate income taxes are hard to estimate. They depend on the number of companies which will make a profit before a tax reduction, and also on the size of their profits and losses after the reduction.

The ILWU has been interested in raising the wages of sugar workers. A tax reduction will tend to strengthen their position in asking for such a raise, although the actual outcome will depend on collective bargaining between the ILWU and sugar companies.

The sugar companies have been able to extract a concession from the Matson Navigation Company in lowering freight rates from Hawaii to the West Coast. This was made possible partly because of the program of containerization, and partly because the sugar industry was able to convince Matson that it could do its own shipping at a lower cost.[40] A tax reduction could pave the way for negotiations on a possible freight rate increase, especially in view of the fact that Matson has raised its freight rates on other cargoes three times since 1959.

The sugar plantations lease about 37 per cent of their land from 221 lessors. These leases are usually on long-term bases. Consequently, a tax reduction may not increase the lease fees in the short-run. But this is a possibility which cannot be completely ruled out when the time for renegotiation comes.

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[40]For a discussion of Matson freight rates, see Mund and Hung, op. cit., pp. 28-35.

Some factors have been complaining that the agency fees they charge some sugar plantations are not even enough to cover cost.[41] This may be an indication that if a tax reduction is granted, there may be an increase in agency fees.

The sugar companies may use whatever tax savings are left after the above-mentioned possible deductions, for investment purposes or for distribution of dividends to stockholders. In general, investment depends more on the profitability of investment than on the availability of internal source of financing. Investment decisions are not likely to be influenced to any large extent by the availability of funds due to tax savings. On the other hand, it would not be difficult to borrow funds from financial institutions as long as the contemplated investment promises good returns. Unless the tax savings change significantly the profit outlook of Hawaiian sugar industry, a tax reduction would have very little effect on the industry's investment in Hawaii. In view of the fact that the tax savings after all possible deductions would probably be rather small, it is not likely that investment in Hawaii would increase as a result of tax reduction. By similar reasoning, investment abroad may also not be affected.

It is possible that the state may earmark the tax savings for investment or research in Hawaii only. This could be done through a tax credit plan which allows the sugar companies to deduct a part of their investment or research during the year as a tax credit.[42]

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[41]Information from interview with factor officials.

[42]For the presentation of a tax credit plan to earmark the tax savings for investment in Hawaii, see Robert M. Kamins, Tax Problems and Fiscal Policy in Hawaii, Legislative Reference Bureau, University of Hawaii, 1962, pp.30-31.

The portion of the tax savings which might go to sugar workers, Matson, owners of land, the factors, and the stockholders of sugar plantations could also generate income in the State of Hawaii through increased consumption and investment.[43] The net effect of a tax cut is hard to determine since we also have to consider what the state will do with the money if no tax reduction is granted.

As an alternative to a tax reduction the state may take a more direct approach to help the sugar industry. So far, research in sugar has been supported only by industry funds. The state may within its constitutional limits, instead of lowering the general excise tax, contribute funds or assistance to the Hawaiian Sugar Planters' Association Experiment Station, which is the official research organization of the sugar industry. Or the state may help build irrigation systems, roads or other facilities to facilitate the production and marketing of sugar. These are only suggestions. More detailed discussion of these matters is not attempted in this report.

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[43]Actually the amount of tax savings available, in most cases, will not be so large as to materially influence the dividend policy of individual plantations.

SUMMARY OF FINDINGS

The U.S. sugar quota system seeks to help domestic producers of sugar indirectly by maintaining higher prices through the restriction of production and imports. However, due to serious competition from beet sugar in the 11 Western States and the Midwest, Hawaii is not getting as much protection from this system as some other areas. The financial records of the Hawaiian sugar plantations in 1958-1960 have not been encouraging, but 1961 promise to be a better year.

The effective rate of the present general excise tax on sugar is in the neighborhood of 1.5 per cent as compared to ½ per cent for other manufacturing and producing. But the equity of the Hawaiian tax system in relation to sugar can only be determined after a careful study of the over-all tax structure is made. The inequity of some taxes may have been balanced off by other taxes which happen to err in the other direction.

An objective study of the cost structure of sugar plantations and their relationship with the five factors will help to determine if costs could be reduced through improved operational efficiency. It would also help to establish a case for state assistance to some plantations if such a need exists.

It is difficult to predict where the tax money will go if a tax reduction is granted to the sugar industry. Unless the state earmarks the use of tax savings there is no assurance that a significant amount will be made available for investment in Hawaii. A tax credit plan may be adopted for this purpose. The state may also help the sugar industry directly through providing funds for research, building of irrigation systems, roads and other facilities.

APPENDIX

NET INCOME DATA FOR 24 HAWAIIAN SUGAR PLANTATIONS, 1956-1960 (A)

		Net Income After Taxes But Before Extraordinary Charges	Net Income After Taxes And Extraordinary Charges	Total Stockholders Equity
Alexander & Baldwin, Ltd.				
Hawaiian Commercial and Sugar Company, Ltd.				
	1956*	$2,671,813	$2,165,184	$41,709,143
	1957	1,439,537	932,908	36,534,893
	1958	(267,152)	(794,652)	35,153,630
	1959	223,007	(217,768)	33,195,896
	1960	700,102	240,902	32,498,304
Kahuku Plantation Co.				
	1956*	$ 45,778	$ (9,673)	$ 2,919,718
	1957	55,940	(1,170)	2,418,548
	1958	37,189	(28,963)	2,349,585
	1959	(152,982)	(244,982)	1,996,987
	1960	(225,882)	(317,882)	1,679,105
McBryde Sugar Co., Ltd.				
	1956*	$ 298,785	$ 196,135	$ 9,095,418
	1957	214,800	112,150	8,224,568
	1958	(6,656)	(112,756)	8,111,812
	1959	(516,830)	(609,324)	7,394,959
	1960	395,867	236,867	7,537,826

*Amended figures.

APPENDIX

NET INCOME DATA FOR 24 HAWAIIAN SUGAR PLANTATIONS, 1956-1960 (B)

		Net Income After Taxes But Before Extraordinary Charges	Net Income After Taxes And Extraordinary Charges	Total Stockholders Equity
American Factors, Ltd.				
Kekaha Sugar Co., Ltd.				
	1956	$ 493,376	$ 418,508	$ 7,746,052
	1957	480,854	405,986	7,015,246
	1958	105,602	30,524	6,865,850
	1959	(123,193)	(200,602)	6,187,394
	1960	112,238	31,673	5,991,542
Lihue Plantation Co., Ltd.				
	1956	$ 587,342	$ 467,028	$14,752,948
	1957	588,507	449,290	14,800,467
	1958	219,182	90,918	14,791,385
	1959	(240,202)	(368,459)	14,385,426
	1960	(212,263)	(457,023)	13,663,370
Oahu Sugar Co., Ltd.				
	1956	$ 405,542	$ 195,410	$15,509,788
	1957	504,562	293,521	15,471,881
	1958	389,395	180,215	15,591,437
	1959	(135,537)	(358,827)	15,112,610
	1960	378,113	161,247	15,153,857
Pioneer Mill Co., Ltd.				
	1956	$ 794,628	$ 632,489	$ 9,220,999
	1957	867,098	704,958	9,578,557
	1958	(1,762)	(167,307)	9,344,087
	1959	(174,369)	(339,915)	9,004,172
	1960	47,852	(136,002)	8,868,170
Puna Sugar Co., Ltd. (Olaa)				
	1956	$ 541,892	$ 443,008	$ 5,589,662
	1957	(534,631)	(636,529)	4,952,329
	1958	(851,622)	(953,520)	3,998,810
	1959	895,711	793,814	4,792,623
	1960	(170,004)	(271,902)	4,520,721
(Waimea Sugar Mill Co., Ltd.)**				
	1956	$	$ 58,098	$
	1957		55,068	
	1958		13,439	
	1959		22,395	
	1960		(18,801)	

**Information given in annual reports of American Factors, Ltd.

APPENDIX

NET INCOME DATA FOR 24 HAWAIIAN SUGAR PLANTATIONS, 1956-1960 (C)

		Net Income After Taxes But Before Extraordinary Charges	Net Income After Taxes And Extraordinary Charges	Total Stockholders Equity
C. Brewer & Co., Ltd.				
Hakalau Sugar Co., Ltd.				
	1956*	$ 42,422	$ (7,734)	$1,756,546
	1957	14,185	(42,462)	1,714,084
	1958	(412,371)	(443,306)	1,270,778
	1959	(113,516)	(177,916)	1,092,863
	1960	(465,005)	(529,405)	3,563,458
Hawaiian Agricultural Co.				
	1956*	$ 37,263	$ (49,404)	$5,080,076
	1957	191,498	101,954	5,057,027
	1958	(146,488)	(202,392)	4,829,638
	1959	375,468	289,199	5,050,087
	1960	471,509	385,239	5,310,326
Hilo Sugar Co., Ltd.				
	1956*	$ 288,490	$ 228,214	$3,170,363
	1957	268,425	208,149	3,378,512
	1958	(13,193)	(51,958)	3,326,554
	1959	234,292	174,171	3,500,725
	1960	105,356	43,852	3,544,578
Hutchinson Sugar Co., Ltd.				
	1956*	$ 185,708	$ 141,119	$3,668,255
	1957	238,096	193,507	3,816,762
	1958	273,902	251,721	4,028,483
	1959	230,958	186,568	4,130,051
	1960	198,404	154,014	4,184,065
Kilauea Sugar Co., Ltd.				
	1956*	$ 83,404	$ 25,369	$1,598,020
	1957	(5,113)	(68,931)	1,529,089
	1958	(150,278)	(220,660)	1,308,428
	1959	(413,235)	(500,935)	807,494
	1960	(112,027)	(199,727)	1,507,767
Olokele Sugar Co., Ltd.				
	1956*	$ 316,029	258,506	$5,385,234
	1957	277,040	219,518	5,447,252
	1958	(172,449)	(196,092)	5,219,659
	1959	(152,304)	(212,588)	5,007,072
	1960	107,373	38,789	5,006,486

APPENDIX (Continued)
(C)

		Net Income After Taxes But Before Extraordinary Charges	Net Income After Taxes And Extraordinary Charges	Total Stockholders Equity
C. Brewer & Co., Ltd.				
Onomea Sugar Co.				
	1956*	$ 244,152	$ 139,133	$ 430,807
	1957	350,157	245,138	675,944
	1958	(421,113)	(473,764)	202,181
	1959	219,926	108,526	310,706
	1960	58,582	(48,958)	3,261,748
Paauhau Sugar Co., Ltd.				
	1956*	$ 179,602	$ 107,377	$2,423,156
	1957	118,961	46,736	2,409,892
	1958	148,530	91,124	2,461,016
	1959	255,402	183,257	2,559,274
	1960	(29,212)	(102,021)	2,357,253
Pepeekeo Sugar Co.				
	1956*	$ 241,277	$ 180,380	$3,669,560
	1957	189,981	129,085	3,798,645
	1958	(60,598)	(98,520)	3,700,125
	1959	131,320	70,502	3,770,627
	1960	(16,084)	(77,549)	3,693,078
Wailuku Sugar Co.				
	1956*	$ 246,744	$ 170,948	$5,850,631
	1957	73,326	(2,469)	5,638,161
	1958	(47,494)	(150,470)	5,457,691
	1959	294,578	217,402	5,585,094
	1960	131,047	31,628	5,526,721

*Amended figures.

APPENDIX

NET INCOME DATA FOR 24 HAWAIIAN SUGAR PLANTATIONS, 1956-1960 (D)

		Net Income After Taxes But Before Extraordinary Charges	Net Income After Taxes And Extraordinary Charges	Total Stockholders Equity
Castle & Cooke, Inc.				
Ewa Plantation Co.				
	1956	$ 648,619	$ 648,619	$10,669,899
	1957	711,390	711,390	10,901,289
	1958	(238,392)	(238,392)	10,602,897
	1959	(138,878)	(138,878)	10,423,036
	1960	162,674	100,994	10,179,727
Kohala Sugar Co.				
	1956	$ 323,245	$ 323,245	$ 6,397,916
	1957	313,464	313,464	6,711,380
	1958	(224,273)	(224,273)	5,892,107
	1959	249,209	249,209	6,141,316
	1960	(71,604)	(71,604)	6,069,712
Waialua Agricultural Company, Ltd.				
	1956	$ 652,216	$ 652,216	$11,183,260
	1957	482,756	482,756	11,222,398
	1958	341,217	341,217	11,323,614
	1959	133,826	133,826	11,217,441
	1960	315,629	410,190	11,281,717

APPENDIX

NET INCOME DATA FOR 24 HAWAIIAN SUGAR PLANTATIONS, 1956-1960 (E)

		Net Income After Taxes But Before Extraordinary Charges	Net Income After Taxes And Extraordinary Charges	Total Stockholders Equity
Theo. H. Davies & Co., Ltd.				
Hamakua Mill Co.				
	1956	$ 49,386	$ 49,386	$4,131,733
	1957	4	(105,085)	3,502,093
	1958	170,184	65,095	3,567,188
	1959	8,903	(96,186)	3,471,002
	1960	(201,684)	(306,773)	3,164,229
Honokaa Sugar Co.				
	1956	$ 152,100	$ 152,100	$4,276,517
	1957	337,283	237,115	3,801,993
	1958	162,617	62,093	3,844,209
	1959	114,667	14,643	3,799,221
	1960	(126,346)	(227,570)	3,571,651
Laupahoehoe Sugar Co.				
	1956	243,134	243,134	6,227,044
	1957	170,505	58,151	5,363,965
	1958	(133,446)	(247,800)	5,116,165
	1959	11,808	(150,046)	4,966,119
	1960	(142,118)	(303,972)	4,662,147

Sources: Company annual reports; Manual of Hawaiian Securities, Honolulu Stock Exchange, 1957-1961.