

72-10,159

SAKIHARA, Mitsugu, 1928-
THE SIGNIFICANCE OF RYUKYU IN SATSUMA FINANCES
DURING THE TOKUGAWA PERIOD.

University of Hawaii, Ph.D., 1971
History, general

University Microfilms, A XEROX Company, Ann Arbor, Michigan

© 1971

Mitsugu Sakihara

ALL RIGHTS RESERVED

THIS DISSERTATION HAS BEEN MICROFILMED EXACTLY AS RECEIVED

THE SIGNIFICANCE OF RYUKYU IN SATSUMA FINANCES
DURING THE TOKUGAWA PERIOD

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE
UNIVERSITY OF HAWAII IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN HISTORY

AUGUST 1971

By

Mitsugu Sakihara

Dissertation Committee:

Shunzo Sakamaki, Chairman
Harry J. Lamley
William P. Lebra
Herbert F. Margulies
Robert K. Sakai

PLEASE NOTE:

Some Pages have indistinct
print. Filmed as received.

UNIVERSITY MICROFILMS

PREFACE

After Satsuma's conquest of the Ryukyu kingdom in 1609, for the next two-and-half centuries Ryukyu was in fact a vassal of Satsuma, but at the same time it posed as an independent state tributary to the Chinese Empire. This led to misunderstandings, both intentional and unintentional, concerning Satsuma's relationship with Ryukyu.

One area in particular where such misunderstandings flourished was that of their economic relationships. It was often alleged that the islanders were transformed into slaves for Satsuma, or that Ryukyu was robbed of fabulous trade profits by Satsuma. By and large, past studies of the Satsuma-Ryukyu economic relationship have been by Okinawan writers who criticized Satsuma or by those sympathetic to Satsuma who either maintained a discreet silence or were apologetic about the alleged past record of Satsuma.

This study is the first attempt, either in Japanese or in English, to provide a systematic analysis of the Satsuma-Ryukyu economic relationship in such areas as tribute-tax, monopoly of local products, and Ryukyu-China trade, and an evaluation of the role of Ryukyu in Satsuma's Tempō financial reform, 1830-1848.

This study is essential to the understanding of Ryukyuan history, of which the relationship with Satsuma clearly constitutes an important part. But it also contributes to elucidation of the significant change in the traditional power relationships between the Tokugawa and Satsuma governments which eventually led to the Meiji Restoration. In this sense, this study though local in scope is vitally related to the national history of Japan.

This writer, in transcribing Chinese terms, has used the Wade-Giles system. In transcribing Japanese terms, he has used the Hepburn romanization system. Ryukyuan readings have been employed only for the purely Ryukyuan terms such as pēchin (an official rank). Many important terms in economics and finance such as roku (a unit of grain measurement and therefore used to express productivity of land) obviously were imported from Satsuma after 1609. To render roku in its Ryukyuan reading of kuku would serve no useful purpose and might be confusing, so only the Japanese reading has been employed here. All dates given are from the solar calendar unless otherwise noted. The macron has been omitted from such common names as Tokyo, Kyoto, Osaka and Ryukyu.

It goes without saying that the present writer is indebted to many past students of Satsuma and Ryukyuan history and culture. He is especially grateful for the assistance and guidance given him by a number of people, particularly Dean Shunzo Sakamaki. Professor Robert K. Sakai has been generous enough to read the draft of this dissertation and has given valuable suggestions. Professor William P. Lebra has also been kind to read the draft and offer his useful comments. Mr. Higa Shunchō and the late Professor Nakahara Zenchū of Tokyo instructed him in the reading of old Ryukyuan manuscripts, and Professor Haraguchi Torao of the University of Kagoshima guided him through old Satsuma manuscripts. Without their patient guidance, the wealth of the manuscript materials in Dean Sakamaki's personal collection and in the Hawley Collection at the University of Hawaii might well have been lost to this writer. But none of the foregoing persons is, of course, responsible for any shortcoming or errors in this study, as these are the writer's own.

ABSTRACT

Contrary to the popular notion that Satsuma nearly enslaved the Ryukyans after the 1609 conquest, this study indicates that Satsuma's policy toward Ryukyu was relatively moderate until about 1830 when Satsuma embarked upon the Tempō financial reform. It was only then that for purposes of financial recovery Satsuma started to intensify exploitation of Ryukyu's resources and trade. Ryukyu's economic exhaustion at the beginning of the Meiji period has too often been assumed to have begun in 1609, but it should be dated from 1830. Moreover, this study points out that for the deplorable condition of Ryukyu in the late 19th century, Ryukyu's own ruling class had to share the responsibility along with the officials in Satsuma.

Ryukyu's tribute-tax to Satsuma grew from a small beginning in 1611 to a maximum amount of 14,200 koku or about 15% of the total official (nominal) production in the early 18th century. Distinct from the official production assessment, however, Ryukyu's actual production by that time had grown to such an extent that the proportionate weight of the tribute-tax had diminished to merely 4.5% of total actual production in the early 19th century.

With the start of the Tempō Reform, instead of increasing Ryukyu's tribute-tax, Satsuma required Ryukyu to pay a considerable portion in sugar at an extremely low conversion rate. In this way Satsuma was able to extract what was equivalent to about 41,000 koku of rice amounting to about 14% of the total production.

Satsuma also eliminated the Kagoshima merchant middlemen that had marketed Ryukyuan products. In their place it instituted a stringent government monopoly over sugar, turmeric, Corsican weeds and other local Ryukyuan products. In the Ryukyu-China trade, Satsuma and Ryukyu used to be partners sharing an equal investment, but in 1830 Satsuma took over the entire operation to monopolize the profits. The profits that Satsuma realized from all sources connected with Ryukyu amounted to about 6,500 kan of silver a year.

In Satsuma's Tempō Reform, the reform in domestic agricultural sector proved only a modest success. The government monopoly of sugar in Amami-Oshima was more successful but that success was short-lived and the prospect was already gloomy by the end of the decade of the 1830's. All such factors considered, the Ryukyuan contribution to Satsuma, of which the trade was the major part, remained to be the only bright spot in Satsuma's financial situation.

As to the significance of the Ryukyu-China trade for the Satsuma finances in comparison with that of the Nagasaki trade with the Chinese and Dutch for the Tokugawa finances, in spite of the larger volume of trade, during the Tempō period the latter earned for Tokugawa less than 1,500 kan of silver, which constituted a negligible 2% of the total Tokugawa revenue, but the Ryukyu-China trade netted about 4,200 kan of silver a year or about 60% of Satsuma's normal revenue.

The exposition of the above economic relationships leads to the hypothesis that Satsuma's control over Ryukyu with the considerable profits derived thereof was one of the important factors in Satsuma's successful financial recovery on the eve of the Meiji Restoration.

TABLE OF CONTENTS

	<u>Page</u>
PREFACE	ii
ABSTRACT	iv
LIST OF TABLES	viii
LIST OF CHARTS	xi
CHAPTER I. INTRODUCTION -- SATSUMA, RYUKYU, AND THE MEIJI RESTORATION	
1. Background and Problems	1
2. Satsuma's Invasion and Control of Ryukyu	8
CHAPTER II. ECONOMIC RESOURCES OF RYUKYU	
1. Official Productivity Assessment (<u>omote-daka</u>)	18
2. Actual Productivity Assessment (<u>jitsu-daka</u>)	21
3. Native Products	27
4. Population	41
CHAPTER III. TRIBUTE-TAX TO SATSUMA AND RYUKYU'S REVENUE AND PRODUCTION	
1. Tribute-tax to Satsuma	63
2. Land Tax	73
3. Poll Tax	89
4. Miscellaneous Tax	95
5. Ryukyu Government's Finance and the Tribute-tax to Satsuma	99
CHAPTER IV. SATSUMA'S MONOPOLY OF RYUKYU'S NATIVE PRODUCTS	
1. History of Sugar Manufacture	110
2. Origin and Nature of the Sugar Monopoly	114

3. Sugar Monopoly by Ryukyu and by Satsuma	121
4. Monopoly and Turmeric and Others	131
CHAPTER V. SATSUMA AND RYUKYU-CHINA TRADE	
1. Structure of the Ryukyu-China Tributary Trade	140
2. Silver for the China Trade	149
3. Exports to China	172
4. Imports from China	186
CHAPTER VI. CONCLUSION -- RYUKYU IN SATSUMA'S TEMPO REFORM	
1. Summary of the Findings	211
2. Satsuma's finances and Tempō Reform	216
3. Significance Evaluated	234
FOOTNOTES	244
BIBLIOGRAPHY	291

LIST OF TABLES

<u>Table</u>		<u>Page</u>
I	STANDARD YIELD	19
II	RYUKYU'S <u>KOKU-DAKA</u> - PRODUCTIVITY ASSESSMENT	27
III	LIST OF THE RYUKYUAN PRODUCTS FOR 1872	38
IV	POPULATION OF RYUKYU	42
V	BREAKDOWN OF THE TRADITIONAL CENSUS ACCORDING TO STATUS	44
VI	(1) POPULATION OF THE URBAN AREAS OF SHURI AND NAHA	45
VII	(2) POPULATION OF THE MIYAKO ARCHIPELAGO	46
VIII	(3) POPULATION OF THE YAEYAMA ARCHIPELAGO	47
IX	(4) RURAL POPULATION OF THE OKINAWA ARCHIPELAGO	48
X	POPULATION OF OKINAWA AND OTHER ISLANDS WITH PERCENTAGES	52
XI	URBAN POPULATION BREAKDOWN	55
XII	POPULATION DENSITY PER AREA FOR 1846	60
XIII	POPULATION DENSITY PER <u>KOKU-DAKA</u> FOR 1846	61
XIV	PRINCIPAL TRIBUTE-TAX RICE IN THE EARLY SEVENTEENTH CENTURY	68
XV	ANNUAL TAXES PAID TO SATSUMA	71
XVI	COMPOSITION OF <u>KASAMIDEMAI</u> (ADDITIONAL TAX)	76
XVII	REGULAR TAX COMPOSITION	78
XVIII	DIVISION OF THE INCOME FROM LAND	80
	(CONTINUED)	82
	(CONTINUED)	83
XIX	CATEGORIES OF LAND IN 1750	85
XX	ACREAGE COMPARISON BETWEEN 1611 AND 1750	86

<u>Table</u>	<u>Page</u>
XXI	PROPORTION OF THE WASTE FIELDS 88
XXII	POLL TAXES IN THE MIYAKO AND YAEYAMA ISLANDS 91
XXIII	AMOUNT OF CORVEE MONEY COLLECTED IN OKINAWA 96
XXIV	SPECIAL PRODUCTS: THEIR STATUTORY NUMBER AND TAX RATE 97
XXV	RYUKYU GOVERNMENT BUDGET 99
XXVI	ANALYSIS OF THE RYUKYU GOVERNMENT BUDGET 101
XXVII	RYUKYU'S PRODUCTION DISTRIBUTION 102
	CONTINUED (2) 102
	CONTINUED (3) 103
XXVIII	RYUKYU GOVERNMENT REVENUE LIST 104
XXIX	CONVERSION RATE BETWEEN TAX RICE AND TAX SUGAR 122
XXX	BREAKDOWN OF THE SUGAR DELIVERED TO THE RYUKYUAN LEGATION 127
XXXI	RYUKYUAN SHIPS IN CHINA, 1821-1874 147
XXXII	SATSUMA'S INVESTMENT IN RYUKYU-CHINA TRADE IN THE EARLY SEVENTEENTH CENTURY 149
XXXIII	STANDARD SUGAR CONSIGNMENT TO THE RYUKYUAN LEGATION 160
XXXIV	SUGAR SOLD TO PRODUCE THE SILVER FOR THE CHINA TRADE 162
XXXV	RYUKYU'S TRIBUTE TRADE MISSION CAPITAL BREAKDOWN FOR 1686-1716 164
XXXVI	RYUKYU'S TRIBUTE TRADE MISSION CAPITAL BREAKDOWN AFTER 1716 166
XXXVII	CHINA TRADE EXPENDITURE AS RECORDED IN THE RYUKYU GOVERNMENT'S FINANCIAL STATEMENT 168
XXXVIII	COMPARISON OF CHINA TRADE BUDGETS AS REPORTED TO SATSUMA AND AS RECORDED IN RYUKYU'S OWN FINANCIAL STATEMENT 169

<u>Table</u>	<u>Page</u>
XXXIX	EXPORTS TO CHINA 183
XL	IMPORTS FROM CHINA 205
XLI	SATSUMA'S PROFITS FROM THE SALES OF PHARMACOPOEIA AT THE NAGASAKI TRADING AGENCY 197
XLII	PHARMACOPOEIA IMPORTS AND SALES AT NAGASAKI 198
XLIII	SATSUMA'S TOTAL NET PROFITS FROM PHARMACOPOEIA FOR THE PERIOD 1847-1849 199
XLIV	SATSUMA'S AVERAGE NET PROFITS FROM PHARMACOPOEIA FOR 1821-1848 200
XLV	SATSUMA'S AVERAGE GROSS SALES OF CINNABAR FOR 1821-1848 201
XLVI	SATSUMA'S GROSS SALES OF CINNABAR AND PHARMACOPOEIA FOR 1821-1848 201
XLVII	SATSUMA'S REVENUE FROM RYUKYU SOURCES AFTER 1830 214
XLVIII	SATSUMA'S FINANCES IN 1801 217
XLIX	SATSUMA'S REVENUE STRUCTURE AND GROWTH 218
L	FIVE MOST IMPORTANT EXPORTS FROM SATSUMA TO OSAKA MARKET DURING THE TEMPŌ PERIOD 219
LI	SATSUMA'S DEBT 221
LII	AMAMI-OSHIMA'S SUGAR PRODUCTION 226
LIII	GROSS INCOME FROM SUGAR 228
LIV	SUGAR SHIPMENT TO OSAKA MARKET DURING THE TEMPŌ PERIOD 231
LV	TOKUGAWA GOVERNMENT'S REVENUE IN 1842 238
LVI	TOKUGAWA'S ORDINARY REVENUE ACCORDING TO THE SOURCES 241

LIST OF CHARTS

<u>Chart</u>		<u>Page</u>
1	RYUKYU'S PRODUCTION GROWTH DURING THE TOKUGAWA PERIOD (1611-1868)	107
2	TRIBUTE-TAX AND THE TOTAL PRODUCTION OF RYUKYU DURING THE TEMPŌ PERIOD (1830-1843)	108
3	ANNUAL SUGAR PRODUCTION IN AMAMI-OSHIMA	227
4	RAW SUGAR PRICE AT OSAKA MARKET, 1830-1848	230

CHAPTER I

INTRODUCTION -- SATSUMA, RYUKYU, AND THE MEIJI RESTORATION

1. Background and Problems

In the early nineteenth century there began to be noticeable developments that repeatedly shook the foundation of the Tokugawa political system. In advanced areas of the nation, commercialization and specialization of agriculture, which provided the most important tax base, was developing to such a degree that it was outgrowing the Tokugawa political system.¹

The daimyo, some of whom were already impoverished at the beginning of the Tokugawa period, were by now almost without exception deep in debt to the Osaka merchants. According to the estimate of Satō Nobuhiro, a well known economist of the time, about 70% of the nation's wealth was in the hands of the rich merchants, and even the great daimyo could not meet his expenses except by continuing to borrow and thus going deeper and deeper into debt to the rich merchants.² A more dramatic but just as true description may be that of Gamō Kunpei: "A single expression of displeasure by the great Osaka merchants causes the lords to tremble."³ In the case of Satsuma, on the eve of the Tempō Reform, the han debt had mounted to the staggering sum of 5,000,000 ryō of gold, the interest on which alone was about five times as much as the han annual income, so that Satsuma was on the verge of total bankruptcy.⁴ Satsuma's case may be extreme, but the difference seemed to have been only in degree, and almost all the han were in financial distress.⁵

Popular unrest was witnessed everywhere and more and more frequently. Peasants' uprisings progressed from mere blind expression of their immediate pains to the more concrete demand for reform.⁶ The most shocking event for the Tokugawa political system was the abortive rebellion in Osaka in 1837 led by Ōshio Heihachirō, a scholar-official of the Tokugawa government itself.⁷ Its repercussion was felt throughout the land. Four months later, in the sixth month of 1837, there was another abortive rebellion led by Ikuta Yorozu, a nationalist scholar, in Echigo province on the Japan Sea coast.⁸

In the same month, at Uraga near Edo, there was another uproar, caused by an event of a far different nature. It was the visit of an American vessel, the Morrison, which brought a number of Japanese castaways for repatriation with the hope of receiving permission to trade.⁹ Although the Morrison was repulsed at the time, it was a foreboding of the coming of the overwhelming power of the West to force open the long closed door of Japan and to end the days of the Tokugawa government. Even before the end of the Tempō period, the Japanese leaders were shocked into realizing the formidable power of the West at the news of China's defeat in the Opium War.¹⁰

These events of the Tempō period described above were the prototypes of the essential forces that later brought about the Meiji Restoration.¹¹ To cope with the most pressing problem of the government finances, Tokugawa and other han resorted to various reform measures. As they all started sometime during the Tempō period (1830-1845), these are generally called the Tempō Reform. But Tokugawa's Tempō Reform (1841-1843) under the leadership of Mizuno Tadakuni was a failure. According

to a Marxian viewpoint, the turbulence of the Tempō period and Tokugawa's failure to reform were indications of the inevitable corrosion of feudalism due to the development of merchant capitalism and the commercialization of agriculture.¹² It is open to question whether it was inevitable but it does seem that Tokugawa's Tempō Reform failed because among other factors it could not effectively control commercialized agriculture in its own domains, mostly advanced areas around Edo and Osaka.¹³

However, the most basic and underlying factor responsible for these developments must be sought in Tokugawa's own autocratic self-centered policy - especially in its control of the daimyo which was aimed at keeping the latter perennially impoverished and unable to challenge the Tokugawa hegemony. The daimyos' alternate attendance at the shogun's court and their family's permanent stay in Edo served not only to constrain the daimyo but to keep them drained of any surplus wealth. If a daimyo was still thought to have anything left, he would then be subject to imposition of extra work on behalf of the Tokugawa.

These policies of the Tokugawa government greatly increased the daimyo's need for cash. Usually he obtained it from the sales of the tax rice at the Osaka market. But it was more effective for the han government to concentrate on special local products over which it had peculiar advantage over other han such as sugar in case of Satsuma.¹⁴ These trends encouraged the growing of marketable crops rather than basic staple food crops. As such transactions were controlled by the merchants of Osaka, it meant the disproportionate accumulation of the nation's wealth in the hands of the Osaka merchants. The financial

basis of the Tokugawa government was, however, also deeply imbedded in agriculture as was that of the han governments. Thus whatever weakened the financial basis of the han governments could not but do the same to that of the Tokugawa government, no matter how indirectly it might have been. In this sense, the development of merchant capitalism and commercialization of agriculture were not inevitable but the unanticipated results of a deliberate and chosen policy of the Tokugawa government.¹⁵

Under the Tokugawa political system, the shogun had the dual character of being a daimyo, although the largest one, and of being the head of the nation's central government. The Tokugawa became the central government by virtue of its overwhelming military power, but its success as the central government owed more to its control of the nation's important economic centers such as Osaka, Kyoto, Sakai, and Nagasaki. Through the control of the privileged merchants in these cities, the Tokugawa was able to bring under control the domestic markets all over the nation. On the one hand, the Tokugawa forced the daimyo to become dependent upon the merchants, for instance, by enforcing the requirements of the sankin kōtai alternate attendance system, and on the other it controlled these merchants. Thus, to the extent that a daimyo was dependent upon the merchants, he was vulnerable to the Tokugawa. The so-called seclusion policy with its concomitant exclusive trade at Nagasaki was but another link indispensable for Tokugawa to hold the monopolistic control of foreign trade.¹⁶

With the advance of agricultural technology and urban money economy, many provinces, especially in the advanced regions under Tokugawa's direct control, began to produce their own specialized commercial

products which were aimed more at the urban markets than the needs of the local, rural society. Despite this shifting emphasis in the nation's agriculture, Bakufu financial policy continued to be dictated by the neo-Confucian philosophy that only agriculture was the respectable source of government revenue. This philosophy was reflected also in the traditional warrior's scorn for such worldly matters as commerce. "When the agrarian tax base became inadequate to meet the needs and wishes of the ruling class," according to Totman, "this economic orthodoxy became the principal stumbling block to a reorganized fiscal base securely anchored in the commercial wealth of eighteenth- to nineteenth-century Japan."¹⁷

In varying degrees, most han bureaucrats shared this neo-Confucian economic orthodoxy, but being desperately pressed by the ever growing financial difficulties, many han began looking more favorably on commercial profits, and they joined in the effort to profit from the nation's central market in Osaka.¹⁸ Osaka merchants used to be in a stronger bargaining position vis-a-vis the daimyos who sold their products there because Osaka was the Tokugawa territory where the daimyos' political power did not extend and where they had to compete with the other daimyo for the merchants' services. But to the extent that the han governments monopolized their special products, they could dictate the price for their products. Thus, the han monopolies tended to force the price of commodities to go up in spite of the Bakufu's repeated attempts at stabilization of market, and the Bakufu with its main base in the nation's largest consumption center of Edo proved to be the biggest sufferer from the consequences.¹⁹ In this sense, increasing

intensification of the han monopolies in the middle nineteenth century tended to strengthen the financial power of the han and to weaken that of the Tokugawa government.

According to Tōyama Shigeki, one of the foremost historians on the Meiji Restoration, "the significance of the Tempō period lay in the fact that all the social and political forces which were later to play their parts in the Meiji Restoration had come to the fore during this period."²⁰ This was particularly true of Satsuma, the leading protagonist in the Meiji Restoration. It was only through the remarkable success of its own Tempō Reform that Satsuma was freed from chronic financial distress. Financial solvency, in turn, enabled Shimazu Nariakira (1809-58) to modernize Satsuma's army and navy to lead the nation. The importance of the Tempō Reform of Satsuma has not gone unnoticed by scholars.²¹ In the words of Professor Robert K. Sakai, it was Satsuma's Tempō Reform "which enabled her later to assume the leadership for overthrowing the bakufu."²²

Many of these studies, however, are marred by one common deficiency; they often fail to take into consideration the full economic contribution of Ryukyu to the Tempō Reform of Satsuma. While some of them do give recognition to the role of Ryukyu, lack of a definitive study seems to have prevented them to go beyond what was described either in the pioneering work of Tsuchiya Takao in 1927 or the standard version in the Kagoshima kenshi of 1940.²³

This lack of a study devoted to the role of Ryukyu in Satsuma finances is all the more glaring in view of the fact that the importance of the role of Ryukyu to the economy of Satsuma in general and its

Tempō Reform in particular has been so widely acknowledged. According to Tokutomi Ichirō, "Ryukyu was a treasury to Satsuma just as India was to Britain."²⁴ And George Sansom stated more specifically that "Satsuma continued to make great profits from trade with the Luchu Islands, which strictly speaking was smuggling, since the Luchus supplied articles obtained by trade with China and other Asian markets. The fief's most lucrative business was the sale of sugar from the Luchus and other islands south of Kyushu."²⁵ In these statements they lack no support from the local historians of Ryukyu and Satsuma and also from the general historians of Japan.²⁶

For this strange ambivalence of recognizing the importance of Ryukyu as a factor in Satsuma's finance on the one hand and of actually neglecting its study on the other there are several reasons. First, prior to 1945, in addition to the strong tendency of the professional historians to be concerned with the national history, study of the Ryukyuan culture and past was deliberately discouraged by the government as a matter of the policy of Japanization of Okinawans. This left the field of Ryukyuan history largely in the hands of dilettanti with a few exceptions. Second, after World War II when Japanese historians began to give more attention to local history, they found that much of the priceless collections of documents and data in Okinawa had been wiped out by the war. In addition, their work was hampered by the isolation of Okinawa under the U.S. occupation. Third, because the major part of its history was naturally in the area of foreign relations, much material relating to Ryukyu is still stored in countries outside Ryukyu and Japan such as in China, Korea, the United States, and European

countries.²⁷

In addition to these general difficulties, another factor that tended to make scholars minimize the economic importance of Ryukyu to Satsuma was an erroneous idea about the productive capacity of Satsuma. Craig believes that Chōshū and Satsuma were able to take leading roles in the Meiji Restoration because "Chōshū was probably about the fourth or fifth largest han in Tokugawa Japan. Satsuma, ... was probably second or third. Considering their size, it is not at all surprising that they were able to act when so many others could not."²⁸ To the extent that this was assumed to be a sufficient factor for explaining Satsuma's ability to act, it lessened the need to look elsewhere for possible factors including Ryukyu.

In reality, however, Satsuma's productive capacity was computed in terms of unhulled rice whereas the other han computed theirs in terms of hulled rice. As the ratio of unhulled rice to hulled rice is 2:1, this fact reduces Satsuma's productive capacity to about half the official figure.²⁹ If Satsuma's own productive capacity was not as large as it has been claimed, inversely the proportional contribution of Ryukyu becomes more significant. Thus a study of the economic contribution Ryukyu made to Satsuma becomes imperative if a balanced view of Satsuma's Tempō Reform and her later activities is desired.

2. Satsuma's Invasion and Control of Ryukyu

The details of Satsuma's invasion of Ryukyu in 1609 have no relevancy to the purpose of this dissertation.³⁰ However, a certain interpretation of the motive of Satsuma in precipitating that invasion has some

relevancy. It is the 'Ryukyu as Satsuma's cormorant theory,' that is, Ryukyu under Satsuma is compared with the cormorant of the Nagara River in Japan which would catch fish only to be made to disgorge it to its master. More fully it is expressed in the following sequence:³¹

1. Ryukyu's foreign trade was fabulously profitable.
2. Tokugawa Japan was closed to foreign trade except at Nagasaki which was under Tokugawa control.
3. Therefore, Satsuma invaded Ryukyu, which was outside the cordon of the Tokugawa seclusion law, to pluck the fabulous profit of Ryukyu's foreign trade.

This theory of Ryukyu as a cormorant for Satsuma seems to have appealed to many historians of Ryukyu and influenced their judgment on the history of Ryukyu-Satsuma relations.³²

The first assumption in the cormorant theory may have been true of an earlier period such as the fifteenth century but definitely not of the post-1609 period. "Toward the end of the fourteenth century there began a period of far-flung trading enterprises that saw Ryukyuan ships sailing on hundreds of expeditions to China, Japan, and Korea, and to Siam, Annam, Malacca, Sumatra, Java, and Luzon, in a vast and generally very profitably entrepot trade,"³³ but "it began to decline during the long reign of Shō Shin (1477-1526).... [and] from the time of King Shō Gen (1557-1572) the Ryukyuan gave up their southern voyages and limited themselves perforce to trade between China and Japan, which was lucrative but on a relatively limited scale."³⁴

On the basis of the theory that Ryukyu was a cormorant for Satsuma, it was stated that "the immediate effect of the Keichō invasion was a

sharp break with the past; the Okinawans were cut off from the lively trade which had provided the life-blood of the island economy.... Now, at the opening of the 17th century, all was changed."³⁵ But the fact was that Ryukyu's overseas trade was already at a low ebb before Satsuma's invasion of 1609 and there was no lively overseas trade. Satsuma's restriction of Ryukyu's foreign trade with China only must be interpreted to be merely a confirmation of the status quo.

The second assumption in the cormorant theory is a case of an incomplete truth. Although Tokugawa Japan is known for its seclusion policy, the first step was not taken until 1624 and the policy was not complete until 1639. In other words, at the time of Satsuma's invasion of Ryukyu in 1609, Shimazu and other daimyo were still active in foreign trade both receiving foreign ships in their ports and dispatching theirs overseas.³⁶ No doubt, trade with China was one of the major motives but it was not the only one for Satsuma's invasion of Ryukyu.³⁷ The Tokugawa as well as Satsuma were interested in Ryukyu as intermediary in restoring official trade between China and Japan.³⁸ When that effort failed, it seems as though Satsuma did not know what to do with Ryukyu except to obtain some luxury goods from China for the personal use of the Shimazu daimyo. It was only after 1630 that Satsuma began to use Ryukyu as a proxy in its own trade with China.³⁹

The fourth false assumption is that during the Tokugawa period Ryukyu was outside the cordon of the Tokugawa seclusion law and not a part of Japan. Although it is conceded that Ryukyu's tributary relationship with China does lend some credence to such an assumption, Ryukyu's dual sovereignty did not mean it was shared equally by Japan

and China. If a decision must be made as to which side of the cordon of the Tokugawa seclusion law Ryukyu fell, it must be answered that the major and substantive portion of Ryukyu's policy fell well within the pale of Tokugawa Japan.

"The Ryukyu king was not unlike the shiryōshu (private territorial lords), vassals of the Satsuma daimyo who placed at his disposal their own tax resources and personal armies on demand."⁴⁰ Appointment of the Ryukyu king and his chief ministers was subject to the prior approval of Satsuma, and the investiture of the king from the Chinese emperor "was a ritual that had nothing to do with the ascendancy of the kind to political authority; it merely confirmed it."⁴¹ Tokugawa's nation-wide laws, such as the anti-Christian edicts, also reached Ryukyu such as in the years 1638, 1661, 1667, 1682, and 1687.⁴² Such edicts were not merely promulgated but were actually enforced, and the offenders were punished throughout the Tokugawa period.⁴³ The Tokugawa government also ensured the safety of Ryukyu's tribute trade ships en route to and from China, such as in 1670 when on behalf of Ryukyu the Tokugawa government negotiated with Koxinga in Formosa to have redressed damages done to a Ryukyuan tribute ship by one of Koxinga's men.⁴⁴ Or earlier in 1634 and 1636 Satsuma negotiated with the Dutch at Nagasaki, with apparent knowledge of the Tokugawa government, for a safe conduct pass for the Ryukyuan tribute ships which would pass by Formosa which was under the Dutch control at the time.⁴⁵

If it appears that Ryukyu enjoyed more autonomy than other sub-vassals, it was due largely to the geographical factor of insularity and the political factor of being a vassal of Satsuma, which itself was

known for its own stringent isolationism, and of Satsuma's deliberate policy of keeping Ryukyu aloof from the rest of Japan.⁴⁶ These factors accentuated the degree of Ryukyu's isolation and consequent autonomy, which was heightened by Ryukyu's facade of independence such as shown in her sending of missions to Edo to be treated in the same category as the Korean missions. But in the area that made substantial differences, Ryukyu's autonomy was probably closer to that of other vassals than to that of an independent state. In economic aspects, its economy was tied to that of Japan, through Satsuma, using the same monetary system and koku-daka system, excepting some local variations. Even its trade with China, often pointed out as prima facie evidence for Ryukyu's being outside Tokugawa Japan, was actually subject to Tokugawa control.⁴⁷

As to the so-called fabulous trade profits, by the beginning of the seventeenth century it was already a thing of the past. In the heyday of Ryukyu's maritime trade, perhaps in the fifteenth century, it was really fabulous as, for instance, Ryukyu sold pepper "in China for 750 to 1500 times the original price."⁴⁸ But in the seventeenth century, Ryukyu could expect to sell Chinese imports in Japan at only about twice the original price.⁴⁹ It was profitable but not fabulously profitable.

As to Satsuma's control of Ryukyu, Satsuma extracted written oaths of allegiance from the king and his ministers, and that Satsuma reserved the power to nominate their successors, and "since all the important officials of the kingdom's central and local governments were appointed and supervised by the king and the State Council, Satsuma was thus in a position to control the whole governmental organization of the kingdom."⁵⁰ Satsuma also demanded royal hostages from Ryukyu as a sign of allegiance,

but this practice ceased in 1626, and Satsuma's nomination of the each successive king and ministers also became a routine formality.⁵¹

In place of these earlier practices which soon lapsed into discontinuance or into mere formality, there appeared two important permanent organs of control. One was Satsuma's resident magistrate in Ryukyu, the zaiban bugyō, and the other Ryukyu's resident representative in Satsuma, the zaiban oyakata. The former post was filled by two men for a term of three years and so was the latter. Also attached to the former office were two Ryukyuan liaison officers, and similarly attached to the latter were two Satsuma liaison officers. It was these officers, assisted by their aides, who kept close contact between Satsuma and Ryukyu to insure smooth relationship.⁵²

Some of these measures of control are said to be modeled upon the Tokugawa system of control of the daimyo.⁵³ Excepting Satsuma's resident magistracy in Ryukyu, Satsuma's control measures seem to have been more lenient than that imposed by the Tokugawa upon the daimyo because the Ryukyuan king was not required to spend alternate years in Satsuma nor was his family required to stay there permanently. The only possible hostages that Satsuma had were two Ryukyu representatives at Kagoshima who were high officials but not members of the royal family. Satsuma only once exercised its power to curtail the Ryukyuan king's territory.⁵⁴

Despite its markedly lenient system, Satsuma's control of Ryukyu was quite successful because there was not a single attempt to revolt against Satsuma during the entire Tokugawa period. What made Satsuma's control system work so well? Iha Fuyū once attributed the absence of rebellion on the part of Ryukyu to the nebulous concept of the national

character of the Ryukyuans which had become one of servile docility as a result of the Satsuma invasion.⁵⁵ Granted that Satsuma's system of resident magistracy was effective, it is still amazing that a handful of Satsuma officials stationed in Naha could keep constant vigil upon the situation in all the islands for more than 250 years. That in spite of the fact that many of them were not quite diligent in their proper duties.⁵⁶ Probably reasons for the success of Satsuma's control of Ryukyu should be sought elsewhere than in any particular political apparatus or in any supposed change of national character.

Satsuma resorted to the conventional means of control by holding royal hostages from Ryukyu until it was discontinued in 1626. It may be surmised that in later years the two representatives at the Ryukyuan legation in Kagoshima served as hostages. As they were high officials with certain influences on their home government, undoubtedly they served as hostages to a certain degree. However, they were not of the royal blood. It may be open to question, therefore, if holding them as hostages would have served as enough deterrent if Ryukyu were really to revolt against Satsuma. It should be borne in mind that if Ryukyu's two representatives at Kagoshima were to serve as hostages, there seems little reason to prevent Ryukyu from holding Satsuma's two resident magistrates in Ryukyu as hostages against Satsuma.

Probably more effective than holding hostages was the potential of military reprisal from Satsuma in the event of any attempted rebellion. This possibility must be assumed to have always existed. Interestingly enough, however, Satsuma's military power was effective as the means of control not because of its destructive power in case of rebellion against

Satsuma but because of its stabilizing power in the Ryukyuan politics. There are evidences that of the elite leaders of Ryukyu, at least two outstanding statesmen in the Ryukyuan history, Shō Shōken and Sai On, viewed Satsuma's military power not so much as the power which might be used against them but rather as that to be used to support them vis-a-vis dissident elements within Ryukyu who might challenge the ruling elite.⁵⁷ Apparently Ryukyu's ruling class felt more affinity with Satsuma's ruling class than with some of their countrymen. Satsuma's military power was viewed as the power for the stabilization of the status quo which was in favor of the ruling elite. In this sense, Satsuma's control of Ryukyu through the military power was successful not because of its latent threat against the ruling class but because it proved to be an effective stabilizing factor.⁵⁸

Lastly, there was probably an unintentional economic factor, which made maintenance of amicable relations with Satsuma vitally important for Ryukyu. Dr. Sakamaki attributed the decline of Ryukyu's maritime activities in the sixteenth century to the following factors: "(1) a deterioration in the fortunes of the Ming Empire; (2) the rise of burgeoning pirate fleets that ravaged the east Asian littoral and preyed on shipping on the high seas; (3) the advent of the Portuguese in the southern regions; and (4) the development of strong albeit forbidden maritime activity on the part of the merchants of Fukien and Kwangtung provinces."⁵⁹ After the Ch'ing dynasty became firmly established in the late seventeenth century, factors (1) and (2) ceased to operate, but factors (3) and (4) continued to operate effectively throughout the Tokugawa period except that the Portuguese had been replaced by other

Europeans, notably the Dutch.

The effect of these factors upon Ryukyu was that its trading activities were now restricted to China and Japan. In the main, Ryukyu carried Chinese goods to Japan where silver was obtained in return, which would then be exported to China to start the cycle again. In other words, Ryukyu's China trade was possible only because Japan as the market and as the supplier of silver was accessible to Ryukyu through the intermediary of Satsuma. In all probability, Japan in these capacities - as the market not only for Chinese imports but also for Ryukyu's native products, and as the supplier of not only silver specie but also other consumer goods - was more indispensable to Ryukyu than Ryukyu was to Japan. Ryukyu supplied Japan with luxury Chinese goods and sugar, neither of which was the exclusive monopoly of Ryukyu. Satsuma was the best geographical gateway to Japan, and she made sure of being able to capitalize on this advantage.

To have its sugar, Ryukyu's best cash crop, sold in Japan by its purveyor-agents, Ryukyu as a vassal of Satsuma had to first obtain Satsuma's permission as to how much and when it could do so. To have the debased Japanese silver currency reminted to make it passable in China, Ryukyu was dependent upon Satsuma which would obtain the permission from Tokugawa. And it was largely due to Satsuma's political power that a certain quota for silver export to China through Ryukyu was obtained from Tokugawa.⁶⁰ As a matter of course, Satsuma carefully restricted contacts between the Ryukyuan and the other Japanese so that their control of Ryukyu would not be corroded.⁶¹

In addition to the silver needed for the China trade, Ryukyu was also quite dependent upon Satsuma for the supply of copper and iron cash. In accordance with the current bullionistic economic philosophy as well as the feudalistic ideal of regional self-sufficiency,⁶² Satsuma generally restricted the outflow of gold, silver, and copper coins not only to Ryukyu but also to the rest of Japan beyond its borders.⁶³ Because Ryukyu had no other effective means of obtaining coins, especially copper cash, to meet the demand of the gradually expanding population, from time to time Ryukyu had to petition Satsuma for the replenishment of copper currency.⁶⁴

It must have been the realization of these various factors, which were largely in the self-interest of Ryukyu, or at least of the ruling elite, that supported Satsuma's control of Ryukyu for over 250 years without any major mishap. Sai On (1682-1761), one of the outstanding statesmen in Ryukyuan history, said in 1750 that annual tribute-tax rice to Satsuma might appear as a considerable loss to Ryukyu but actually it was not so, and in the final analysis it was Ryukyu that had much to gain [from the present status of arrangements with Satsuma].⁶⁵ This was neither flattery to Satsuma nor an idle apology for the status quo but a true description of the situation by one who was in a position to know at first-hand.

CHAPTER II
ECONOMIC RESOURCES OF RYUKYU

1. Official Productivity Assessment (omote-daka)

The beginning of land and taxation system in Ryukyu has been ascribed traditionally to King Eiso (1260-1299), who is said to have had the land surveyed and distributed equally and to have had a simple taxation system instituted, a sheaf of unhulled rice per person being collected whenever there was a need.¹

However, the land and taxation systems that prevailed during most of the nineteenth century can be clearly traced to the cadastral survey conducted by Satsuma officials in 1610-1611. The team of 168 men under 14 commissioners of survey (saoire bugyō) recorded, in 273 cadastral registers (kenchichō), not only the size and quality of agricultural areas but information on taxable plants and other items (uwaki) such as abaca plants, Chinese hemp, rushes, mulberry trees, lacquer trees, salterns, hemp palms, fishing nets, dugout boats, Mandarin orange trees, vinegar trees, lemon trees, Chinese bamboos, and cows and horses.²

Taking into consideration such factors as soil fertility, availability of irrigation, topography, and distance from the villages, arable land was classified into three ranks, and the rice yield rate (koku-mori) for each rank was calculated as follows, as shown in Table I.

After the survey, Kabayama Hisataka and three other councillors (karō) of Satsuma-han gave the Ministers of State (sanshikan) of Ryukyu a manifest of stipends, dated Ninth Month, Tenth Day, 16th Year of

TABLE I. STANDARD YIELD³Rice Paddies

Rank	Area	Unhulled rice	Yield rate (koku-mori)	Hulled rice
A	1 <u>tan</u>	3.2 <u>koku</u>	16	1.6 <u>koku</u>
B	"	2.8 "	14	1.4 "
C	"	2.4 "	12	1.2 "

Dry Fields

A	1 <u>tan</u>	1.6 <u>koku</u>	8	.8 <u>koku</u>
B	"	1.2 "	6	.6 "
C	"	.8 "	4	.4 "

Note: 1 tan = 0.245 acre 1 koku = 5.12 bushels

Keichō (1611), totalling 89,086 koku for the three island groups of Okinawa, Miyako, and Yaeyama, which constituted the Ryukyu Kingdom.⁴ Later, however, an error in the calculation of the koku-daka for Miyako was discovered, and 6,041 koku was deducted, resulting in a new total of 83,085 koku.⁵ This is the first official assessment of production of Ryukyu in terms of rice.

In 1634 Satsuma received an official grant of enfeoffment from the Tokugawa government setting the total koku-daka for Satsuma at 728,700 koku, with Ryukyu being included for the first time. The actual amount was less than this, but instead of asking the Tokugawa government to have it corrected, Satsuma decided to increase the standard rice yield rate for all the domains under its control to make up the deficit. Accordingly, Satsuma ordered Ryukyu to increase its koku-daka by 7.3651 per cent and to levy the uwaki tax on abaca plants, rushes, etc. By such means, Ryukyu's koku-daka was raised by 6,119 koku and an additional 1,679 koku was produced by the uwaki tax, making the total assessment 90,883 koku as of 1639.⁶

Satsuma's cadastral survey of 1659 did not include Ryukyu, but in 1722 another cadastral survey was ordered for all Satsuma provinces including Ryukyu. As such a survey would entail about a thousand men from Satsuma staying in Ryukyu for several years at the expense of the government of Ryukyu,⁷ the latter requested a postponement because of recent droughts and typhoons and also the expected arrival of an investiture mission from China.⁸ Satsuma was loathe to agree to postponement but a compromise was worked out, based on the cadastral survey of 1639. One-half of 7.3651 per cent increase made in 1639,

namely, 3.6825 per cent, totalling 3,347 koku, was agreed upon. Thus, in 1722 the total koku-daka of Ryukyu was set at 94,230 koku, and this was the official figure for the rest of the Tokugawa period.⁹

2. Actual Productivity Assessment (jitsu-daka)

The foregoing koku-daka figures are important because they are the so-called omote-daka (the officially assessed stipend) or mokuroku-daka (the officially recorded stipend), on the basis of which manpower or monetary obligations are imposed on the recipient of the stipend,¹⁰ and on the basis of which, also, the han ranking at the Tokugawa court was determined.¹¹ But these omote-daka figures, which may have been close to actuality at the beginning of the seventeenth century, became largely fictitious as time passed.¹²

In studying the economic situation of a han, attempts must be made to ascertain its jitsu-daka as well as its omote-daka. Jitsu-daka is difficult to compute because it was unofficial, and because it fluctuated from year to year. Moreover, no han, if it were richer than its omote-daka, would publicize the fact for fear of suspicion or of heavier imposition by the Tokugawa bakufu. Perhaps also the han government itself did not know the actual extent of the agricultural expansion and increased productivity because of similar factors such as the land-holders' fear of heavier taxation which would always make desirable the under-reporting of the results of reclamation. In the case of Ryukyu, there is at best a very incomplete picture.

Even if at the time of the first cadastral survey in 1611 there was little discrepancy between omote-daka and jitsu-daka, there soon began to appear signs of discrepancies. One of the ablest statesmen in Ryukyuan history, Shō Shōken (also called Haneji Chōshū) stated in 1673:¹³

When the peasants complained of being taxed for the land which had been rendered unproductive because of flood damages after the Satsuma survey (1611), the land was inspected and was taken out of the koku-daka. As the tax income was accordingly reduced, in previous year (1669) upon request we received permission from Satsuma to reclaim the land. As we have been diligent, we have now opened up more land than we had lost.

This statement by Shō Shōken points to two facts. In the years between 1611 and 1669, because of natural disasters the amount of land under cultivation decreased. After 1669 the Ryukyuan government encouraged reclamation of land, and by 1673 the total area under cultivation surpassed 8,790 chō of land producing 83,085 koku, which was the level of 1611.¹⁴

In fact, reclamation proceeded so rapidly that in order to protect villagers' common reserve and cattle grazing grounds, it had to be stopped in 1687. But the demand for more land was such that in 1697 permission was given again to reclaim forest land or alluvial plain or marsh land if it did not encroach upon the cattle grazing land or villagers' common reserve.¹⁵

Apparently the reclamation proceeded at a steady rate. In 1750 the chief minister, Sai On, said that his policy of the past twenty years had led to extra production of about 50,000 koku of rice, millet and other cereals and the country did not have to be afraid of famine even if a typhoon were to destroy the sweet potato crops.¹⁶ Therefore, in

1750 there was an actual assessment of more than 133,085 koku (more than 83,085 + 50,000).

Furthermore, the Genbun cadastral survey of 1750 reported 21,411 chō of land under cultivation. When this figure is compared with that of the Keichō survey of 1611, it shows that agricultural land had grown by 2.43 times between 1611 and 1750.¹⁷ Therefore, assuming that the rate of production remained the same, the total production for Ryukyu should have become 2.43 times that of 1611; in other words, 83,085 koku x 2.43, or 201,897 koku. Moreover, there must have been some progress in agricultural technique and efficiency during the period of 139 years, making the jitsu-daka greater than the figure of 201,897 koku. Thus, it seems certain that in 1750 Ryukyu's jitsu-daka reached at least 201,897 koku.

The next cadastral survey, carried out in 1899-1903, showed 33,197 chō of land under cultivation in Okinawa.¹⁸ As this was an increase of 1.62 times over the 21,411 chō figure of 1750, it indicated an average increase rate of .54 times every 50 years. Thus in 1850, or 100 years after 1750, the land under cultivation could have increased by 1.08 times, for a total of 218,057 koku, or the Genbun koku-daka of 201,897 koku times 1.08.

The jitsu-daka for the first half of the nineteenth century may be tested against the actual observation of a third party. Dr. D. S. Green, a specialist in Commodore M. C. Perry's expedition to Japan in 1853-54, wrote a "Report made to Commodore Perry on the Medical Topography and Agriculture of the Island of Great Lew Chew," in which he states that "the surface of the island is 400,000 or 500,000 acres, or which at

least one-eighth, probably more, is in cultivation."¹⁹ At the conversion rate of 1 chō = 2.45 acres, 400,000 and 500,000 acres would be 162,264 and 204,080 chō respectively, and one-eighth would be 20,408 and 25,510 chō respectively. The average of these two figures is 22,959 chō. It is close to the estimate of 22,131 chō for 1850, which was arrived at by multiplying 20,492 chō of 1750 by 1.08 times.

That the jitsu-daka far surpassed the omote-daka was later substantiated by an official of the Meiji government after making an exhaustive study of the local conditions in Okinawa. Ichiki Kitokurō, a secretary in the Ministry of Home Affairs, wrote in a report dated 1894, that the great discrepancy between jitsu-daka and omote-daka was rather widespread and for instance the official land register (saoire-chō) listed 3,726 chō of rice paddies and 8,323 chō of dry fields, whereas the current listing [of 1894] for the same land showed 6,580 chō and 23,070 chō respectively. Furthermore, he said, even this current listing was not based on an actual survey, and there were wide local variations in methods of investigation, but from his personal experience he was convinced that the actual size was greater than those given above.²⁰

Also in 1879, when Ryukyu-han became Okinawa Prefecture, the last king, Shō Tai, was granted a pension of Y200,000 by the Meiji government. As the amount of the pension was calculated on the basis of the koku-daka, namely, Y10,000 per 10,000 koku, the amount of Shō Tai's pension indicated that his domain was worth 200,000 koku. Also, whereas the bonds of other former feudal lords in Japan representing their pensions carried 5% interest per annum, the bonds given Shō Tai

carried 10% interest per annum. This meant that Shō Tai's income of Y20,000 was equal to that of a lord whose former domain was calculated at 400,000 koku.²¹ Ichiki Kitokurō reveals that the principal tax in Okinawa, based upon the harvest from rice paddies and dry fields, averaged Y306,976 between 1886 and 1890.²² If so, the Japanese government merely gave Shō Tai what belonged to him anyway.

Furthermore, Nishimura Sutezō, who was governor of the Okinawa Prefecture for two years and five months between 1883 and 1886 stated that Ryukyu was comparable to a feudal domain with a koku-daka of over 300,000 koku, and elsewhere he stated that while Ryukyu, including Amami-Ōshima, had a koku-daka of 100,000 koku three hundred years ago, but now was equal to a Japanese domain of 500,000 koku.²³ Amami-Ōshima's official assessment in 1722 was about 52,000 koku. If her actual production increased in the nineteenth century to about 100,000 koku, then Ryukyu's production would be about 400,000 koku (500,000 - 100,000 = 400,000). Also, in 1893, Takao Ryōsuke, Chief Taxation Officer for Okinawa Prefecture, stated that area of agricultural land had increased about five-fold since 1611.²⁴ Thus, if the 1611 koku-daka is multiplied five-fold, the result would be the koku-daka in 1893. Therefore, 83,085 koku, multiplied five-fold, would be 415,425 koku. This figure matches well with the above quoted estimates given by Governor Nishimura.

Momi-daka and kome-daka. In contrast to the general practice in Japan of computing production in terms of hulled rice or kome-daka, Satsuma continued the old custom of computing in terms of unhulled rice or momi-daka.²⁵ Thus, in Satsuma's Keichō cadastral survey of 1611, one statutory koku was defined as unhulled rice 1.05 koku. In the

Kan'ei cadastral survey of 1635, actual content of one statutory koku was again changed and now to consist of unhulled rice 0.96 koku in all three home provinces of Satsuma, Ōsumi, and Hyūga but not in Amami-Ōshima and Ryukyu where the Keichō definition continued to prevail.²⁶

Thus, Ryukyu's statutory koku-daka in 1611 of 83,085 koku actually contained $83,085 \times 1.05$ or 87,239 koku in unhulled rice. To convert this figure into the more meaningful one of hulled rice, it must be determined how much hulled rice was obtained from one koku of unhulled rice. According to Ijichi Sueyasu, one shō of unhulled rice produced five gō of hulled rice.²⁷ Thus, the rate of conversion was 2:1, and 87,239 koku of unhulled rice could be converted into 43,620 koku of hulled rice.

Probably at the beginning of the seventeenth century Ryukyu's koku-daka was indicated in terms of unhulled rice. But a question remained as to whether it continued to be so indicated till the end of the Tokugawa period because such an assumption raises some difficult questions to answer by keeping Ryukyu's production at an unnaturally low level till well into the mid-nineteenth century.

In answer to such a question, it has been shown recently that although Satsuma continued to regard Ryukyu's production in terms of unhulled rice, it was changed to kome-daka or assessment in terms of hulled rice by the nineteenth century.²⁸ From the early seventeenth century, Ryukyu's koku-daka, although recorded in terms of unhulled rice in the Satsuma records, was not strictly computed in terms of unhulled rice. It was in reality what was called kongō-daka or mixed assessment in which the amount of non-rice grains was simply added to

that of rice without being converted into value equal to rice. Because of such an irregular practice, in addition to the existence of the second crop, Satsuma recorded Ryukyu's production as if it were in unhulled rice. However, from about the 1660's the emphasis of production shifted to rice, and later Ryukyu's rice production increased to such extent that now the amount of the single rice crop became equal to what had once been the total of double crops, and by the nineteenth century, Ryukyu's koku-daka became in fact kome-daka or assessment in terms of hulled rice.²⁹

TABLE II. RYUKYU'S KOKU-DAKA³⁰ -- PRODUCTIVITY ASSESSMENT

	Official Assessment	Estimate of Actual Yield
1611	83,085 <u>koku</u>	83,085 <u>koku</u>
1639	90,883 "	-
1722	94,230 "	-
1750	"	+133,085 " min. 201,897 " max.
1850	"	218,057 " min. 274,029 " ave. 330,000 " max.
1886-93	"	400,000 " min. 415,425 " max.

3. Native Products

The earliest information on the native products of Ryukyu during the Tokugawa period is contained in a Satsuma demand of tribute from

Ryukyu, dated the 10th day of the ninth month of the 16th year of Keichō (1611).³¹

1. Abaca cloth	3,000 bolts
2. Superior hempen cloth	6,000 "
3. Inferior hempen cloth	10,000 "
4. Ramie	1,300 <u>kin</u>
5. Cotton	3 <u>kan</u>
6. Red hemp-palm rope	100 each
7. Black hemp-palm rope	100 "
8. Staw-mat	3,800 sheets
9. Cow hide	200 each

Notes: kin = 0.601 kg. = 1.323 lb.

kan = 3.759 kg. = 8.27 lb.

This list may represent the major Ryukyuan native products of that time. As there is no information as to how these figures were arrived at, there is no way to estimate the total production. Missing from this list is sugar, which later became one of the most important Ryukyuan products.

As to the products of the late seventeenth and eighteenth centuries, there is little quantitative information. Though Chinese envoys wrote reports on Ryukyu, they tended to be men of letters, and their reports were mostly literary travelogues, with little information on quantitative aspects of Ryukyuan products. Furthermore, these Chinese scholar-diplomats tended to rely heavily upon, often copying en toto from, previous works rather than writing on the basis of their own

research and observation. For instance, a report written in 1866, by Envoy Chao Hsin, Hsü Liu-ch'iu-kuo, chih-lüeh [Supplement to a Brief Gazetteer of Liu-ch'iu] has a chapter on local products but the whole chapter is dismissed with less than a line stating that it had been recorded in Chou Huang's Liu-ch'iu-kuo chih-lüeh [Brief Gazetteer of the Liu-ch'iu Country] (1756) and therefore was being omitted.³² In Chao's eyes, things had stood still for more than one hundred years and nothing had changed.

As for Chou Huang's mission report of 1756, upon which Chao Hsin depended, much of the information gathered in Chüan 14 on local products was itself based upon still earlier works. Here are some excerpts from Chou Huang's report of 1756.³³

Grains

Rice: In Ryukyu, land is wide but people few. Mountains are many but the rice land small. In the tenth month, rice seedlings are planted and will become ripe in the fifth or sixth month next year. Kume and Yaeyama islands produce the most rice. Only the king, nobles, and officials can afford to eat rice, and the commoners eat sweet potatoes.

Beans: There are various kinds of beans such as green beans, red beans, white beans, black beans, horse beans, soy beans, and Indian beans.

Wheat: There are three kinds.

Sweet potato: It can be seen anywhere. There are several varieties. It grows even in barren land. It is the food for the natives.

There are also several varieties of millet and hemp.

Marketables

Silk: Natives do not know silk culture. But on Kume Island coarse and dark silk, unlike that of China, is produced.

Cotton: Although Hsia Tzu-yang's mission report (1606) says the land is not suitable for cotton, now they have cotton.

It is produced on such islands as Kume, Theya, and Yaeyama. It is very expensive.

Pongee: There is a pongee, woven with Chinese silk. Coarse pongee is produced in Kume Island.

Cloth: Cotton cloth is made of native cotton. Gauze is made of silk warp and hemp woof. There are also abaca and hemp cloth.

Straw mat: Extremely fine and used in homes and stores. Produced in Kume, Miyako, and Yaeyama islands.

Tea: Although Hsia Tsu-yang's report of 1606 says the land is not suitable for tea, they have it now. But much comes from Fukien Province, China.

Salt: It is sea salt. Its color is very white. Salterns are located in Ginowan and Nakijin.

Liquor: They brew their own liquor. It is very strong. When stored underground for many years, its taste is rich beyond comparison.

Sugar: Made by pulverizing small sugar cane and boiling the juice. They also have rock candy and white sugar. Heard there were sugar manufactories.

In similar fashion, with or without comments, Chou lists numerous commodities: paper, made of paper mulberry, of several kinds, and some coming from Korea; writing brushes; tobacco; fans; gold, uncertain whether produced locally; silver, much coming from Japan; swords; lacquerware, much coming from Japan; sulphur, from Torishima; over thirty varieties of vegetables; over twenty varieties of fruits, such as peaches, persimmons, chestnuts, cherries, and grapes; and numerous plants, trees, birds, animals, fish and insects.

Chou Huang's description of local products discloses changes that had taken place between 1606 and 1756. For instance, sweet potatoes, introduced to Ryukyu in 1605, had become the staple food of the lower classes of people by 1756, while rice was now reserved for the upper

classes. Cotton, introduced from Satsuma in 1611, was now being produced in Iheya, Kume, and Yaeyama, although it was not plentiful enough to be worn by the commoners. As to his remarks on sugar, he obviously knew little beyond what he saw at the dinner table in his guest quarters in Naha, although the sugar industry must have become of considerable size by then. Finally, in spite of continuing efforts since the late 17th century to reclaim the land for agriculture, at the time of Chou Huang's visit in 1756 it was still noted that the land was wide but the people few and the rice paddies small.

In general, it seems that the Chinese envoys seldom ventured far beyond their guest quarters, T'ien-shih kuan [House for the Heavenly Envoy] in Naha, and their observations were mostly limited to state rituals and cultural and literary pursuits, which did not entail venturing into the rural districts at all. Such a limited outlook of the Chinese envoys was doubtless not only welcomed but also encouraged and cultivated by their Ryukyuan hosts who were afraid lest their Chinese guests should discover the truth of the Ryukyu-Satsuma relationship.³⁴

In contrast to the reports of the Chinese scholar-diplomats, some Western visitors who arrived in Ryukyu in 1854 as members of Commodore M. C. Perry's expedition were trained in such fields as medicine, botany, or geology. The following sketch of Ryukyuan agriculture in the mid-nineteenth century is largely based upon their reports.

First, as to the soil of three regions, south, central, and north,

In the southern half of the island [of Okinawa] it lies upon limestone, which protrudes through it in many places on the tops and sides of ridges.... In this section, and indeed in all the island, there is little sandy loam or sandy soil. The uplands consist, in the main, of light, red-clay

loams, intermixed with pebbles of various sizes and color; some lower lands, chiefly basins, consist of a blue or slate-colored stiff clay; and the bottoms, are rich friable, argillaceous loams. The middle section is composed of hills and mountains; the soil of which, as far as observed, is generally a white clay mixed with sand, and lying upon red clay, hard, dry, and poor. The northern third or fourth of the island is also mountainous, but having some large plains. These consist of a rich, dark-colored loam.... Red-clay uplands show themselves, and the sides of some of the small mountains are of a greyish-colored gravelly soil.³⁵

While the area of the island was estimated to total some 400,000 or 500,000 acres, only about one-eighth or more was under cultivation because of the rugged topography of the middle and northern parts.³⁶ In fact, American observers noted that in the north where it was very mountainous the people planted sweet potatoes on the steep mountainsides by making small drains and banks and by changing their directions every few feet, to prevent the washing away of the soil during heavy rains.³⁷ One American observer said that "where the mountains are free from stones, [sago plants] are planted even to the very tops, some three hundred feet or more. The sides of some, too, rise at an angle of 75° nearly, if not quite; one of the party even suggested 80°."³⁸ And a Ryukyuan interpreter explained, "The north country in Lew Chew very uncomfortable [sic]; the poor people have to plant [sago]."³⁹

Even in the more fertile south, near the harbor of Naha, the principal city, "Every foot of ground appears to be carefully cultivated, unless from situation or barrenness cultivation would be unprofitable. Patches of sweet potatoes meet the eye in every direction, cultivated in broad, flat beds,.... But few of these beds have entire possession of the soil, for, generally, they have growing in them at the same time a crop of the common kidney-bean,... planted in rows 2 or

2 1/2 feet apart,...."⁴⁰ Such intense efforts at cultivation also meant that "there are no extensive alluvial deposits; and such as there are, are used, every foot of them, in the culture of rice, so that no swamps or marshes, however small, exist in Lew Chew."⁴¹

American observers were in agreement that rice was, if not the most important crop, at least one of the most valued and important crops in Ryukyu. They found the middle and eastern portion of the island had more and better rice lands than any other, although they also found that rice was planted wherever it was possible, even in the gorges of the mountains. As to the estimate of rice yield, "a gentleman from South Carolina, who saw much of it growing, thinks it will average about twenty bushels to the acre; at the same time remarking, that the head (panicle) was very large, owing to its having been 'set out' instead of being broadcast. From this fact, the average may be larger."⁴² Therefore, the estimated total rice land of 4,000 or 5,000 acres, at a conservative estimate of 20 bushels per acre, and with two crops per year, would yield about 160,000 or 200,000 bushels.⁴³

The accuracy of the estimate of the total rice land acreage has already been established in the discussion of the jitsu-daka. Now, as to the accuracy of the American's estimate of the total rice production, taking the average of the two figures given, 160,000 and 200,000 bushels, the total rice production was approximately 180,000 bushels, or 35,100 koku at 5.12 bushels per koku. According to a Japanese source dated 1877, the total rice production was approximately 32,000 koku.⁴⁴

Another principal grain, though less valued than the rice, was mugi, a generic term for wheat and barley. "Wheat...grows tolerably

well in all the central and limestone pastures of the island [but] very little was found in the northern parts. [As to its yield] the average would be less than 8 bushels [per acre].⁴⁵ "There are 5,000 or 6,000 acres in wheat, which, at eight bushels, would be 40,000 or 50,000 bushels."⁴⁶ The average of 45,000 would be 8,789 koku. Though this is considerably larger than a Japanese estimate of about 5,000 koku in the 1870's,⁴⁷ it should be noted that the estimate of 8 bushels per acre was an over-estimate as indicated by the sentence underlined above.

Americans also noted two or three varieties of millet in small quantities, beans which were very prolific and universally cultivated, large green peas with good flavor, Lew Chew radishes that were often two and three feet long and more than 12 inches in circumference, small and flat turnips, pickled in salt and water for future use, Lew Chew carrots and parsnips, small and long but well flavored mustard, coarse winter-greens, growing better than in south-eastern China but cultivated only around Naha and Tomari, the common cabbage, and cucumbers of immense size.⁴⁸

Both Chinese and American observers correctly noted that while the upper classes could afford to eat rice, the masses depended upon sweet potatoes as their staple food. There were two distinct varieties of sweet potatoes, red and white. According to an agricultural treatise written by Takara Chikudun Pechin of Naha, excepting some variation due to soil and weather, the time between planting and harvesting was as follows:⁴⁹

<u>Planting time</u>	<u>Harvesting time</u>
1st Month	7th Month
2nd Month	8th Month
3rd Month	8th Month
4th Month	9th and 10th Months
5th Month	10th Month
6th Month	12th and 1st Months
7th Month	2nd and 3rd Months
8th Month	3rd and 4th Months
9th Month	5th and 6th Months
10th Month	5th and 6th Months
11th Month	6th and 7th Months
12th Month	7th and 8th Months

As to their quality, "often they are watery, and small and stringy, and not as good as those of China nor can the yield per acre be so great, [therefore] they grate them soon after digging, and mix them with a coarse dry substance,... and dry the mass in balls as large as a hen's egg, when they are stored for future consumption."⁵⁰ As to the total yield, Americans are silent but according to a Japanese source dated 1877 it was said to be 135,000,000 kin at a conservative estimate.⁵¹ Estimating the average of 3 kin per day for every one, young and old, the crop is sufficient to feed about 123,278 persons a year.

As to domesticated animals, an American wrote:⁵²

The horses are small, but active and strong. They are chiefly used for riding by the rich; some carry burdens to market, &c., but almost all such labor is done by men and women. The cattle are universally black and

short-horned. Bulls are not large, but are in tolerable order,... Goats are kept, probably, for their flesh,... There are great numbers of hogs, two or three with pigs being kept in pens by every house in the villages. They are a small, black breed, rarely going beyond one hundred and fifty pounds, but becoming very fat,... Pork appears to be the chief or only animal food for the people of Lew Chew. It is preserved by salting. The domestic fowl is raised, and in considerable numbers, but the consumption of it is probably confined to the upper ranks.

There were such agricultural implements as plows, harrows, large and small hoes, sickles, and axes. Generally these were rude, simple, and light with iron used sparingly. But the peasants managed their implements adroitly and effectively so that only a few could be added with advantage, in the opinion of an American observer.⁵³ Farm labor was almost exclusively performed by human beings with only a small portion done by horses and bulls. Although the peasants were nearly naked while working in summer, at other times they were "decently" clothed. Their clothing was coarse and usually undyed. On an average about 100 households comprised a village which would be located on sterile ground unfit for agriculture. The streets were lined on either side by bamboos or evergreen trees such as fukugi (*Garcinia spicata* Hook. f.). "The houses themselves are of frame-work and boards, with plank floors and thatched roofs, comfortable, though small. These villages are quite romantic, and more beautiful than any of like pretensions [the writer has] ever seen."⁵⁴

There seemed to be sufficient meat and fish to keep the people healthy. Their granaries generally had the capacity of about 500 bushels and were constructed against the damages of rats and humidity. Manures were furnished by the stables, cowhouses, pig-pens, and the

compost holes in the fields.⁵⁵

On the level of agricultural technology, it was observed that "two objects seem to influence the islanders in all their operations, viz: the retention of water or moisture, and the avoidance of surface-washing. To effect these desirable ends, especially in a rolling country, a great quantity of grading is required, besides very deep culture; and here both of these have been done."⁵⁶ Another observer, after discussing in detail the Ryukyuan methods of irrigation, concluded that "the Lew Chewans understand the use and economy of water in flooding their flat rice-fields, and having reservoirs for watering their higher lands, as well as any people in the East."⁵⁷

A team of Americans undertook a geological exploration in an attempt to discover mineral resources. They did find a spot in Shioya about 62 miles north of Naha where there were some outcroppings of black bituminous slate, which usually accompanies coal, but for their purpose of steam navigation, it was useless.⁵⁸ The Ryukyans were conscious of the lack of mineral resources in their country. There are stories of folk heroes or dynastic founders who made their start by obtaining precious iron from overseas and distributing iron agricultural implements.⁵⁹ Sai On said in his "Soliloquy" in 1750 that of the five elements - metal, wood, water, fire, and earth - which are pre-requisites in any country, Ryukyu had everything but metal, but that Ryukyu had managed to maintain itself as a country because metal had been imported in sufficient quantities from Satsuma from ancient times.⁶⁰

The list below of Ryukyuan products, is from a Japanese government report dated 1873. Although it is from a period several decades after

Notes: ^aIn the original it is written "sheep" probably a clerical error for "goat".

^bThe figures for indigo are for the year 1783 and taken from Nishimura, Nantō kiji gaihen, II, 22-25.

^cIn the original, the figure for sesame seed oil was 156,000, which seems a clerical error for 1,560. Ijichi gives the figure for sesame oil in 1877 as 1,500 kin, Okinawa shi, II, 24a.

^dFigures for domesticated animals in 1882 are taken from Nishimura, Nantō kiji gaihen, II, folio 22-23.

^eThis was the amount of charcoal which Ukuda and Dakujaku villages in Goeku District produced for the government in lieu of regular taxes since 1690 and assumed to have been continued till the end of the Tokugawa period. "Gozaisei," folio 34-35.

Units of measurements

koku = 5.12 bushels

kan = 8.27 lbs.

kin = 1.323 lbs.

kanmon = monetary units also called kan = 1,000 mon. Only either iron or copper cash was counted in these units. In 1872, Ryukyuan 160 mon in thin iron cash was equal to Japanese 1 mon in copper cash.

4. Population

In spite of the fact that human labor was almost the only source of power and energy for production, and therefore an important economic asset, it is quite difficult to understand the population movement and structure in Ryukyu during the Tokugawa period.

For one thing it has rarely been studied before. During the Tokugawa period, a nation-wide census was begun in 1721 and was to have been repeated every six years. Thus, by 1864, there should have been 25 nation-wide censuses.⁶² Although Satsuma had investigated the population of Ryukyu even prior to 1721, Ryukyuan figures were not included in any of the 25 nation-wide censuses. It is not clear as to whether Satsuma reported Ryukyuan census figures to the Tokugawa bakufu and the latter withheld the information, or the information was not given by Satsuma to the Tokugawa.⁶³ Anyway, there was a lack of basic information on the population of Ryukyu during the Tokugawa period.

There are, however, occasional figures, often vague and unreliable, on the population of Ryukyu. Fleeting references to the population appear in a number of Satsuma and Ryukyu sources. But they are usually vague as to who were the object of the census or as to what areas were covered or how the census was taken.

To start with, a population census, which was a by-product of an investigation for the purpose of stamping out Christianity, has been collected from various sources and tabulated under Column 1 in the following chart for the Population of Ryukyu. The figures obtained from the investigation census, which will be called the traditional census, spanning almost two and a half centuries from 1632 to 1876, seem to

TABLE IV. POPULATION OF RYUKYU⁶⁵

<u>Year</u>	<u>Column 1</u>	<u>Column 2</u>	<u>Column 3</u>	<u>Remarks</u>
Pre-1609		70,000- 80,000		Column 1 = the traditional census
1632	108,958			
1636	111, 669			Column 2 = the modern census after 1870. For others see the text.
1659	112,764			
1665	110,241			
1672	116,483			Column 3 = estimates
1677	122,213			
1684	129,995			
1690	129,567			
1698	141,187			
1706	155,261			
1713	157,760			
1721	167,671			
1750		200,000		
1761	188,530			
1772	174,197			Great tidal wave in 1771 followed by epidemics and famines for several decades.
1800	155,637			
1826	140,549			
1854		150,000- <u>200,000*</u>	183,469- 280,000	*Estimates for Okinawa Is. only
1870		234,369		Meiji Restoration in 1868. Ryukyu-han established in 1872.
1873	165,930			
1876	167,067			
1879		310,545		Okinawa Prefecture established in 1879.
1880		351,374		
1883		360,695		
1885		363,830		
1890		405,031		

indicate a gradual increase over the years. A peak was reached in 1761 with a population of 188,530. The abrupt decrease after 1772 can be attributed to the great tidal wave of 1771 that decimated the populations of the Miyako and Yaeyama islands.

However, these traditional census figures contain a serious defect. That is, these figures belie the statement by Sai On, the Minister of the State of the Kingdom in the middle of the eighteenth century. In "Hitori monogatari" ["Soliloquy"] dated 1750, he said that "in previous era in our country there used to be about 70,000 to 80,000 people, but now there are 200,000 people..."⁶⁴ This would mean that the figures in the traditional census were considerably underestimated by about 20,000 to 30,000.

Higaonna Kanjun once commented on the tremendous jump in census figures for Ryukyu from about 165,000 in 1873 to about 360,000 in 1883.⁶⁶ He said that the population might have had a sudden increase because of an influx of officials and merchants from Japan Proper after the Kingdom became Okinawa Prefecture in 1879, but that the increase was too large to be solely accounted for by such an influx, and that therefore there might have been some errors in the 1873 census. In actuality the "influx" of Japanese officials and merchants was hardly of major proportions. According to the Statistics of Okinawa Prefecture for 1890, non-Ryukyuan residents in Ryukyu numbered 1,543, 1,938, 1,721, 2,764, and 1,720 in the years 1886, 1887, 1888, 1889, and 1890 respectively.⁶⁷

Nakahara Zenchū expressed his interpretation that the figure of 165,930 for 1873 must have been the number of peasant tax-payers and not

that of the total population.⁶⁸ According to Higa Shunchō, the traditional census figure for 1727, 129,642, represented the number of tax-payers ranging in age from 15 to 50.⁶⁹ This would conform to the proper and legal procedure promulgated by the Tokugawa bakufu in 1721 and apparently observed in Japan until the end of the Tokugawa period.⁷⁰ However, whether the practice of listing only the peasants, townsmen, and priests and excluding the samurai and their retainers and servants held true in Ryukyu is yet to be proved. Very few traditional census figures list components but some that do are presented below.

TABLE V. BREAKDOWN OF THE TRADITIONAL CENSUS
ACCORDING TO STATUS⁷¹

<u>Status</u>	<u>1706</u>	<u>1722</u>	<u>1800</u>	<u>1826</u>	<u>1873</u>	<u>1876</u>
Officials & samurai	14,014	37,323	43,479	50,700	59,355	59,820
Retainers & servants of the above	13,138	13,409	12,521	14,332	15,878	107,247
Peasants	127,780	123,254	99,637	75,418	90,518	
Priests & others	180	211	-	99	179	
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	155,112	174,197	155,637	140,549	165,930	167,067

The foregoing indicates that the traditional census in Ryukyu included those who were excluded under Tokugawa procedures, such as officials, samurai, their retainers and servants. This negates the hypothesis that the traditional census counted only tax-paying peasants. The Ryukyuan census figures were never included in the Tokugawa statistics

and the census in Ryukyu began long before the Tokugawa order of 1721. Was the traditional census in Ryukyu actually carried out at the initiative and for the convenience of the Satsuma authorities?

The answer may come from an analysis of population statistics of various geographical areas, as follows.

TABLE VI

(1) Population of the Urban Areas of Shuri and Naha⁷²

1654	17,283	
1690	30,340	
1706	27,327	
1772	50,732	
1800	56,000	
1815	56,742	
1826	65,032	
1873	75,233	traditional census
1880	48,585	modern census
1883	48,764	
1885	48,710	
1890	52,175	

Although there were sharp increases in the seventeenth and eighteenth centuries, there was some stability in the nineteenth century. The considerable drop of 16,648 between 1873 and 1880 was doubtless caused by the exodus of retainers and servants and lower class samurai from these areas when the samurai class was abolished. The traditional

and modern census figures for the urban areas of Shuri and Naha may be assumed therefore to be fairly reliable.

TABLE VII

(2) Population of the Miyako Archipelago⁷³

1815	28,743	
1873	26,171	traditional census
		- - - - -
1883	29,379	modern census
1885	26,690	

Although the population of Miyako Archipelago fluctuated within a range of 2,000 to 3,000 in the four census years, local history tells of frequent typhoons, famines, and epidemics, with casualties sometimes being very heavy. For instance, 3,600 died in 1852 and 1853.⁷⁴ Therefore, it can be assumed from the above table that the traditional census for Miyako was fairly reliable.

TABLE VIII

(3) Population of the Yaeyama Archipelago⁷⁵

1675	5,316	
1680	5,000	
1684	6,287	
1750	21,000	
1771	28,992	
1815	15,253	
1873	11,707	traditional census

1883	13,543	modern census
1890	14,770	
1892	15,139	

As in the case of the population of Shuri and Naha, there was a great increase of population from the late seventeenth century. If the data were available they might have shown the same phenomenon in the case of the Miyako archipelago. The population increase followed the introduction of the sweet potato into Ryukyu from southern China in 1605. It was not only highly resistant to drought and wind but could grow where rice could not. In addition, its yield per unit of land was far greater than that of any other grain. Nakayoshi Chōsuke, agricultural specialist, said that if there were no sweet potato but rice and other grains only as in the pre-1605 era, it would take land about 7 times as large as there is now to feed all Ryukyuans.⁷⁶

Apparently, this new high yield crop led to a growth of population. Between 1666 and 1676, eight new magiri districts, namely Misato, Kushi,

Motobu, Ginowan, Oroku, Onna, Ōgimi, and Yonagusuku were established on Okinawa.⁷⁷ The sweet potato was carried to the Yaeyama archipelago in 1694.⁷⁸ The 1750 census figure indicates that there was a large increase in population after the 1684 census. A population peak was reached in 1771 with a total of 28,992. The islands were subsequently hit by a disastrous tidal wave followed by vicious epidemics and years of famines.⁷⁹ The population began to increase again only after dropping to 11,707 in 1873.

The traditional census figure of 1873 showing 11,707 to the modern census of 1883 showing 13,543 seems to indicate only natural growth. This is another indication of the relative reliability of the traditional census.

TABLE IX

(4) Rural Population of the Okinawa Archipelago⁸⁰

1706	77,000	
1772	63,000	
1800	54,000	
1815	38,000	
1826	33,000	
1873	52,000	traditional census

1883	269,009	modern census
1885	274,670	
1890	304,631	

The traditional census figures for the rural areas of Okinawa show a consistent downward trend from 1706 to 1873, contrary to the generally rising trend in the Kingdom. Yet in the ten year period from 1873 to 1883, there was a sudden increase from 52,000 to 269,009.

Part of this increase may have been due to the influx of lower class samurai and the retainer and servant class from the urban areas of Shuri and Naha. But this accounts for only about 16,000 at the most, as indicated by the population statistics for the same period in the Shuri-Naha areas. Thus, of the total increase of 217,000, what about the remaining 201,000?

The suspicion is that the traditional census figures for the rural areas of Okinawa in the days of the Kingdom were consistently and considerably lower than the actual size of the population. As to the reasons for this disparity between actual population and census figure for the rural areas of Okinawa, there are several hypotheses. For instance, whereas in the Miyako and Yaeyama archipelagoes, taxation was based upon the number of population, viz., poll tax, forcing the government to keep an accurate population count, the basic tax-paying unit in the rural areas of Okinawa archipelago was not the individual but the village. Within the village the land was periodically re-allotted to all able-bodied peasants, male and female, and administration was left to the local government. The central government had little incentive to keep an accurate population count, as long as the tax assessments were met. This is the hypothesis advanced by Minamoto Takeo.⁸¹

This hypothesis rests upon three assumptions for which no proof is offered. The first assumption is that when the village was the basic tax paying unit, the government was not concerned about the actual number of peasant. However, in Tokugawa Japan the villages and not the individual peasants were the basic tax-paying units. The tax assessment was made on the village, and while it was prorated among the villagers, it was still the village as a whole that was responsible for payment of the tax. Since any decrease in the number of villagers could affect the tax-paying ability of the village, the government maintained close surveillance. Desertions could make the tax burden proportionately heavier upon the rest, thus the villagers were as eager as the government to restrain the peasants from leaving their native villages.⁸² According to Minamoto, the government had no incentive to keep close watch over the peasants so long as the tax was fully paid. However, the tax was often paid unwillingly and with great difficulty, so that the government had good reason to keep close watch over the peasants.⁸³

Another assumption made by Minamoto is that the land allotment was peculiar to rural Okinawa and was responsible for the government's laxity in census taking. However, the system seems to have been quite prevalent in old Japan. One authority names at least sixteen provinces in which it was practiced during the Tokugawa period.⁸⁴ Yet there seems to have been no governmental laxity regarding the control of the peasants in those areas.⁸⁵

Minamoto's third assumption is that the government of Ryukyu did not know the actual number of peasants in these areas. And yet it is likely that the government of Ryukyu purposely under-estimated the

census figures that were reported to the Satsuma authorities in order to avoid heavier tax assessments. For instance, under the system called rakuse [dropping acreage] Ryukyu government intentionally dropped about one-third of the actual acreage in reporting to Satsuma.⁸⁶ If Ryukyu under-reported the size of the land under cultivation, it could not report increased population without arousing suspicion from Satsuma. Another explanation for at least part of the large unreported population was the existence of numerous yādui (settlements of samurai) in rural Okinawa. Beginning early in the eighteenth century, under the administration of Minister Sai On, samurai who could not obtain government posts or other means of livelihood in Shuri and Naha were encouraged to migrate to rural areas, while retaining samurai status with its tax exemption privilege.⁸⁷ Ryukyu government reported to Satsuma only one-tenth of reclaimed land.⁸⁸ It was the samurai yādui settlers who held most of the reclaimed land. Furthermore, they established their yādui settlements away from the peasant villages, they retained their samurai status, and they did not participate in the local government affairs of the villages. It is most likely therefore that in the census they were either not counted at all or only in greatly reduced numbers. There are no data on the number of yādui residents during the Tempo period, but about 12,000 such households were reported in 1893.⁸⁹

In brief, the preceding discussion pointed out that in the traditional census, Ryukyu government perhaps purposely underreported the rural population of the Okinawa Archipelago. The size of such underreporting is difficult to determine, but in the 1870's it was close

to about 200,000. Now follows discussion on the population figures given in Column 2 in Table IV, Population of Ryukyu. These figures for 1870 and afterward were compiled by the central government in Tokyo. The figure of 200,000 for 1750 is from a statement made by Sai On, Minister for the Kingdom at the time.⁹⁰ Sai On also said that in a previous era there were some 70,000 to 80,000 people. Though there is some difference of opinion as to what he meant by "previous era," it may refer to the time prior to the Satsuma's invasion in 1609,⁹¹ or possibly to the time of the preceding dynasty.⁹²

For 1854, the estimates of 150,000 minimum and 200,000 are cited from Green's "Report made to Commodore Perry on the Medical Topography and Agriculture of the Island of Great Lew Chew."⁹³ But it should be noted here that his estimates concerned only the Island of Okinawa. To perfect an estimate for the entire Kingdom from Green's figures, the populations of 1883, 1885, and 1890 were divided into Okinawa Island and all the other islands, and their respective percentages were obtained as follows:

TABLE X. POPULATION OF OKINAWA AND⁹⁴
OTHER ISLANDS WITH PERCENTAGES

	<u>Okinawa Is.</u>		<u>Others</u>		<u>Total</u>	
1883	296,974	82%	63,721	18%	360,695	100%
1885	302,110	83%	61,720	17%	363,830	100%
1890	334,013	83%	71,018	17%	405,031	100%

Taking the ratio for 1883, namely, 82% for Okinawa and 18% for the rest, and applying it to Green's figure of 200,000 for Okinawa, representing 82% of the total, the remaining 18% would be 43,902 and the total would be 243,902. As Green's minimum estimate for Okinawa was 150,000, the total for the entire Kingdom would be 182,979. The average for the two figures would be 213,441 for Ryukyu in 1854.

Another way to estimate the past population of Ryukyu would be to take the growth rate after the modern census began and project it backward. The average growth rate for the years from 1887 to 1897 has been calculated as 2.5% and the population in 1873 has also been estimated to have been 280,600.⁹⁵ Assuming a constant growth rate, a projection backward to 1854 results in a figure of 183,469, but since this method incurs a greater margin of error because the period of projection extends more than a few years, the figure of 183,469 must be treated as a minimum estimate.

Third method for making population estimate is to estimate it on the basis of the known population density per production. Scholars of the population of Japan during the Tokugawa period agree that there was quite a strong tendency for the population density per production to stabilize at 1,000 persons per 1,000 koku.⁹⁶ If so, it follows that there was approximately 280,000 population in Ryukyu in 1850 because the actual production assessment for the same year was about 280,000 koku as indicated in Table II. As a conclusion, on the basis of several approaches described above, it seems reasonable to assume that the population of Ryukyu in the Tempō period (1830-43) was somewhere between 220,000 and 340,000.

Structural Analysis. Supposing the population during the Tempō period to be about 280,000, taking average of the two estimates above, how was it structured? How many of the people were doing what and living where?

In the simplest terms, there were about 70,000 residents in the urban area of Shuri and Naha (including Tomari and Kume). Here the commoners were outnumbered by the samurai by about 4 to 1, but all 70,000 persons, regardless of class status, were exempt from taxation. Then, there were about 210,000 peasants in some 540 villages in the Okinawa, Miyako, and Yaeyama archipelagoes. They tilled about 22,000 chō of land and their production of food and other materials was valued at from 218,057 to 250,000 koku of rice. There was approximately one tax-exempt urban resident for every three tax-paying rural residents.

TABLE XI. URBAN POPULATION BREAKDOWN⁹⁷

<u>Shuri</u>			
Samurai household heads:	2,924		
Their household members:	<u>34,590</u>		
Total:	37,541	Average:	16 per household
Commoner household heads:	536		
Their household members :	<u>6,859</u>		
Total:	7,431	Average:	12.8 "
Others (mainly priests):	<u>39</u>		
Total:	44,984		
<u>Naha</u>			
Samurai household heads:	1,274		
Their household members:	<u>8,311</u>		
Total:	9,585	Average:	6.5 per household
Commoner household heads:	524		
Their household members :	<u>4,464</u>		
Total:	4,988	Average:	8.5 "
Others :	<u>42</u>		
Total:	14,610		
<u>Tomari</u>			
Samurai household heads:	412		
Their household members:	<u>3,682</u>		
Total:	4,094	Average:	8.9 per household
Commoner household heads:	108		
Their household members :	<u>1,633</u>		
Total:	1,741	Average:	16 "
Others :	<u>2</u>		
Total:	5,837		
<u>Kume</u>			
Samurai household heads:	759		
Their household members:	<u>7,663</u>		
Total:	8,422	Average:	10 per household
Commoner household heads:	42		
Their household members :	<u>1,323</u>		
Total:	1,365	Average:	31 "
Others :	<u>13</u>		
Total:	9,800		

Noteworthy is the extraordinary size of the average household. In Shuri it was about 13 and in the Kume section of Naha it was 31 among the commoners. That this was unusual is apparent when compared with the size of the average household in rural Okinawa, which was less than 5 at the time. And, in the year 1883, after the collapse of Shuri as the political capital, the size of the average household in Shuri shrank to 5.9.⁹⁸

It was in the urban areas, mostly in Shuri, that lived the aristocrats called daimyō who supplied most of the top administrators in the central government. They numbered about 360 households.⁹⁹ Below them were about 5,000 middle and minor officials in the central and local governments at Shuri and Naha. Undoubtedly it was these middle and lower class households that produced about several thousand perennial students of Chinese, Japanese, and mathematics who were preparing themselves for government examinations for official positions or for the chance to study at Fukien or Peking. In 1873, Shuri had 1,980 such students, Kume 2,114, Naha 679, and Tomari 243.¹⁰⁰ Candidates for government posts were selected not only on the basis of ability shown in the examination but also on the basis of their place of residence. Students from Shuri had the widest choice of government posts, those from Kume were mostly restricted to posts related to China, and those from Tomari and Naha were mostly restricted to posts related to Satsuma.¹⁰¹ Thus, the large number of Kume students may indicate high prestige of Chinese studies and posts related to China.

Furthermore, what made the size of the urban households extraordinarily large was the existence of about 15,000 servants who were

largely recruited from their masters' fiefs in rural Okinawa. By virtue of their urban residence, they became exempt from taxation. They were not paid for their work except for board and room, but they were eager to so work without pay for several years because of the opportunity to receive informal education in reading and mathematics and, also, promotion to the posts of village elders upon their return to the native villages after a few years of satisfactory service. It was virtually their only chance to rise in their small rural world.

But in the urban areas, the commoner households also seem to have been excessively large. There seems to be no explanation for this except the fact that Naha and Shuri were the only urban areas with a virtual monopoly on various kinds of trades and manufactures. This no doubt attracted a large number of peasants who either through their own ambition or circumstances beyond their control indentured themselves in the urban areas.

Of course, this rural-urban migration was not unchecked. As early as 1654 rural residents were prohibited from taking up residence in Shuri or Naha.¹⁰² In 1671 the Minister of State, Shō Shōken, issued a directive stating that peasants had secretly taken up residence in the urban area under the guise of being servants of urban residents, to avoid taxation at home, and that because this reduced the number of men in the rural area and made their burden so much heavier, those who were living in the urban area illegally should be returned to their native villages. An exception was made in case a peasant was called to till the land of his master.¹⁰³ As the aristocrats were dependent upon the labor of the peasants, no aristocrat-statesman could completely ban an

aristocrat's use of his peasants without imperilling the economic basis of his own class. Furthermore, in 1680, the central government relaxed its prohibition of peasant migration to the urban areas by granting permission to peasants who indentured themselves in the urban areas for the purpose of payment of debts with the limit of the period of indenture being set at ten years.¹⁰⁴

Another possible explanation for the extraordinary large households in the urban areas seems to be the fact that, although there was no legal restriction against establishment of new branch households by the junior sons, the eldest son was given the larger say in the division of the inherited property. Probably this factor promoted larger households in order to ensure the concentration of family resources. In the rural areas this factor did not work because the land was distributed to any one eligible by the village.¹⁰⁵

If Shuri was the political capital of Ryukyu, Naha was the commercial capital, like Edo and Osaka in Tokugawa Japan, but since Naha was the port for Shuri it was more important to Shuri than Osaka to Edo. It was to the port at Naha that the several hundreds of small inter-island ships came with their cargoes of tax grains, barrels of sugar, piles of fire-woods, and other consumer goods. Some of these were transshipped to Kagoshima in bigger ships of which 20 or 30 could be seen at anchor within the harbor at almost any time. Many urban facilities to serve official and private travellers came to be established in Naha. These included inns and gay quarters, and the services of numerous manufacturers and vendors.¹⁰⁶

As to the 140,000 people in the rural areas, 27,500 lived in the Miyako archipelago and 13,500 in the Yaeyama archipelago. This meant that 99,000 people inhabited the rural areas of the Okinawa archipelago. According to the traditional census, however, rural Okinawa's population was only about 42,500. In other words, some 56,500 people were not counted in the census. This may mean some 12,000 households averaging five persons per household.

Population density. As Ryukyu had an area of some 155 square li (at 590 square acre),¹⁰⁷ the census would indicate a density of 903 persons per square li. But the actual population figure of 280,000 in the Tempō period would raise the density per square li to 1,806 persons. The average for Japan, excluding Ryukyu, was 1,373 persons per square li in 1846.¹⁰⁸ The population densities of the provinces of Japan, including Ryukyu, are as follows:

TABLE XII. POPULATION DENSITY PER AREA FOR 1846¹⁰⁸

1. +6,000 Yamashiro, Settsu, Owari
2. +5,000 Kawachi, Izumi
3. +4,000 Musashi, Awa (in Chiba)
4. +3,000 Bizen, Awaji, Sanuki, Chikugo, Iki
5. +2,750 -
6. +2,500 Kazusa, Shimofusa
7. +2,250 Sagami, Harima, Suhō
8. +2,000 Ise, Shima, Mikawa, Ōmi, Tango, Bitchū, Chikuzen, Hizen
9. +1,750 Yamato, Iga, Tōtōmi, Sado, Aki, Iyo, Buzen, Ryukyu (actual)
10. +1,500 Hitachi, Echizen, Kaga, Etchū, Echigo, Izumo, Bingo, Awa
(in Shikoku), Higo
11. +1,250 Suruga, Mino, Wakasa, Noto, Tanba, Inaba, Hōki, Nagato, Kii,
Bungo
12. +1,000 Kai, Izu, Kōzuke, Tajima, Iwami, Oki, Tosa
13. +750 Shinano, Shimotsuke, Mimasaku, Ryukyu (official)
14. +500 Mutsu, Dewa, Satsuma
15. -500 Hida, Hyūga, Ōsumi, Tsushima

During the Tokugawa period, however, there was no such concept as population density per area. Instead, population density was discussed in terms of productivity, namely, koku-daka. It is in a sense more expressive of the true situation than the population density of an area that may include much uninhabitable or non-arable land. Thus if population density per koku-daka is computed on the basis of the census figures and official assessment, namely, 140,000 persons per 94,000 koku, it comes to 1,488 persons per 1,000 koku. On the other hand, if based upon the actual population and koku-daka of 280,000 persons per 274,000 koku, the actual population density was 942 persons per 1,000 koku. The following table shows the comparative position of Ryukyu among the provinces of Japan.

TABLE XIII. POPULATION DENSITY PER KOKU-DAKA FOR 1846¹¹⁰
(per 1,000 koku)

1.	+1,800	Yamashiro, Settsu, Shima, Oki
2.	+1,700	Aki
3.	+1,600	Awa (in Shikoku)
4.	+1,500	Hida
5.	+1,400	Awa (in Chiba), Sanuki, <u>Ryukyu</u> (official)
6.	+1,300	Izu, Musashi, Iwami, Iyo, Tosa
7.	+1,200	Tajima, Awaji, Higo
8.	+1,100	Izumi, Owari, Suruga, Kii, Bungo
9.	+1,000	Sagami, Shinano, Echigo, Tango, Izumo, Bingo, Hizen
10.	+900	Mikawa, Tōtōmi, Kai, Harima, Bitchū, <u>Ryukyu</u> (actual)
11.	+800	Iga, Kazusa, Mino, Wakasa, Tanba, Hōki, Suhō, Iki
12.	+700	Yamato, Kawachi, Shimofusa, Dewa, Sado, Inaba, Chikugo, Hyūga, Satsuma
13.	+600	Ise, Ōmi, Kōzuke, Noto, Mimasaku, Bizen, Nagato, Buzen
14.	+500	Hitachi, Mutsu, Echizen, Chikuzen, Ōsumi
15.	-500	Shimotsuke, Kaga, Etchū

As the average for all Japan, exclusive of Ryukyu, was 1,000 persons per 1,000 koku,¹¹¹ it is clear that the official population density per koku-daka was quite high at 1,488 persons per 1,000 koku. It indicates a very crowded condition, suggesting a low standard of living in a dominantly agricultural society without sizeable commerce or industry. However, the actual population density at 918 persons per 1,000 koku reveals that the actual condition may not have been as serious as it appeared on the surface. In comparison with the three provinces of the Satsuma-han, Satsuma, Hyūga, and Ōsumi, whose population density ranged from +500 to +700, Ryukyu's official density of 1,488 was about twice as high, but actually there was not as much difference.

CHAPTER III

TRIBUTE-TAX TO SATSUMA AND RYUKYU'S REVENUE AND PRODUCTION

1. Tribute-tax to Satsuma

Satsuma was expected in the manner prevalent in all Japan to manage with the revenue collected from its own directly controlled Land for the Lord's Treasury (kuraireji). This revenue from the Land for the Lord's Treasury constituted the principal revenue, but the han government could, whenever necessary, exact impositions from its vassals in service or money, or in kind, in lieu of military service. These were supposed to be temporary impositions and until about the beginning of the seventeenth century the amounts varied according to the occasion and need. But as Satsuma's financial situation became progressively more insolvent, the "temporary" impositions came to be levied every year and finally became part of the permanent taxation structure, being computed on the basis of the expenses of Satsuma's official quarters in Edo, Kyoto, Osaka, and Nagasaki.¹

When Satsuma conquered Ryukyu in 1610, it incorporated Amami-Ōshima into the Land for the Lord's Treasury and enfeoffed to King Shō Nei of Ryukyu the remaining three archipelagoes of Okinawa, Miyako, and Yaeyama with a production assessment of 89,086 koku.² Because the legal status of the 89,086 koku enfeoffed to the king of Ryukyu was the same as that of the lands enfeoffed to other vassals of Satsuma,³ it also became subject to temporary impositions in lieu of the military service that was owed by the king of Ryukyu, as a vassal of Satsuma.

These impositions were called copper cash per tan of land (tan-sen), silver per tan of land (tan-gin), or silver assessed on stipend (takayaku-gin), but from about the beginning of the eighteenth century these terms were gradually replaced by the terms, "products offered [to the lord]" (demono) or "rice offered [to the Lord]" (demai).⁴ In Ryukyu, the imposition was called "principal rice offered" (moto-demai) to distinguish it from other impositions. It was assessed, at the same rate that applied to other Satsuma vassals, for the purpose of defraying the han expenditures in Edo, Kyoto, Osaka, and Nagasaki and on the Lord's trips to and from Edo.⁵

Perhaps because of the original irregularity in amount and frequency of levy and in the terminology used, and because of the haphazard absorption into the permanent taxation structure, there seems to exist some confusion among historians as to amount and origin.

According to George H. Kerr, Ryukyu was required in 1611 to pay to Satsuma an annual total tribute of 19,935 koku.⁶ According to Higa Shunchō, Ryukyu was ordered in 1611 to pay an annual sum of about 9,000 koku of rice plus 19,000 rolls of textiles, 1,300 kin of Chinese hemp, 3 kan of floss silk, 100 bundles of hemp rope, 100 bundles of black rope, 3,800 straw mats, and 200 cow hides.⁷ Later, Higa made a similar statement but set the amount of rice tribute at about 7,000 koku.⁸ Still later, he repeated the same statement but revising the figure for the rice paid to about 8,000 koku.⁹ Higaonna Kanjun said that beginning in 1611 Ryukyu paid to Satsuma an annual tribute of about 7,000 koku of rice but he made no mention of other articles.¹⁰ Minamoto Takeo said that from 1611 Ryukyu paid reparations, equal in value to 8,000 koku of

rice, to Satsuma.¹¹ Yamazato Eikichi mentioned no rice tribute but listed the same tribute-articles given by Higa Shunchō above.¹²

As to the significance of such a tribute-tax, there was general agreement that the tax was inordinately large. G. H. Kerr said that "this was a disastrous blow to the economy [of Ryukyu]."¹³ Shimomura Fujio said that although the precise amount underwent changes, it constituted about 30% of the total production and it was always exploitative and unjustly heavy.¹⁴ Shinzato Keiji, with whom Higa Shunchō agreed, said also that since it was about 30% of the total production assessment of Ryukyu, its exaction was extremely ruthless.¹⁵ Nakamura Hidemitsu denounced the Shimazu family as devils threatening the life of the Ryukyuan race.¹⁶ Professor Inoue Kiyoshi at Kyoto University said that Satsuma's control of Ryukyu was "for the purpose of plundering the maximum tribute" and that "Satsuma's unmitigated plundering of Ryukyu crippled the economic development of Ryukyu to such an excessive degree that it was forced to become stagnant."¹⁷

Exactly how much and in what form did Ryukyu pay to Satsuma in 1611 and subsequently? According to the "Kyūki zatsuroku" ["Old Chronicle of Satsuma"], five councillors of Satsuma issued an order dated 16th Year of Keichō (1611), Ninth Month, Tenth Day, addressed to the ministers of Ryukyu, ordering Ryukyu to pay annually 3,000 rolls of abaca cloth, 1,000 rolls of fine cloth, 10,000 rolls of rough cloth, 1,300 kin of Chinese hemp, 3 kan of floss silk, 100 bundles of hemp ropes, 100 bundles of black ropes, 3,800 straw mats, and 200 cow hides.¹⁸ Nothing is mentioned about rice. Later Satsuma scholars and officials seemed to agree with the above account. For instance, Ijichi Sueyasu repeated the

same statement with no mention of rice tribute in 1611.¹⁹ The "Ryukyu ikkenchō" ["Dossier on Ryukyu"],²⁰ and Kawaminami Kōen's Sozei mondō [Questions and Answers on Taxation]²¹ not only support the above account but give a fuller explanation. According to these sources, the tribute-tax began in 1611 but consisted solely of the nine articles mentioned above. In 1613 when it proved difficult for Ryukyu to procure them, in lieu of these articles Ryukyu was ordered to pay 32 kan of silver in addition to supplying 83 corvee laborers (computed on the basis of one laborer per every 1,000 koku of 83,085 koku). It cost the Ryukyu government 83 kanmon of copper (equal to 25 momme of silver or about 2 koku of rice) to hire 83 corvee laborers to be supplied to Satsuma.²² Therefore, the total tribute-tax from Ryukyu to Satsuma in 1613 amounted to 32.025 kan of silver, equivalent to 2,669 koku of rice.

In 1615, because of Satsuma's involvement in the Battle of Osaka between the Tokugawa and the Toyotomi, the tribute-tax was doubled to 64 kan of silver. In 1617 Satsuma decided to treat the Ryukyu's tribute-tax on the same basis as the tax imposed upon the samurai fief holders in Satsuma, and Ryukyu was now required to pay 8 bu of silver per one koku of the total koku-daka, but as silver was scarce in Ryukyu it was to be paid in rice.²³

It is to be noted that up to 1617 tribute-tax was supposedly in lieu of the special Ryukyuan products, and its nature was more that of a tribute than of a tax. But after 1617 it was assigned to the total koku-daka production assessment, regardless of the special products, and became more of a tax. In the first few years, however, the amount was not fixed and was set on a year-to-year basis. This is the so-called

principal tribute-tax rice (motodemai), and the growth of its amount in its initial stage in the early seventeenth century is shown in Table XIV below.

In 1620 Satsuma ordered all of this principal tribute-tax to be paid in rice thenceforth. But the amount continued to be specified in terms of silver. In spite of the obvious convenience of silver over the bulky and perishable rice, Satsuma decided to shift from silver to rice. The reason for this move may lie in the difference in market prices between Naha and Edo. For example, one koku of rice cost about 12 momme of silver at Naha in 1615.²⁵ At this rate, 64 kan of silver Satsuma exacted from Ryukyu was equal to about 5,332 koku of rice. However, the same 64 kan of silver could buy only 3,200 koku of rice in Edo, as one koku of rice cost 20 momme of silver in Edo.²⁶ It was thus definitely more profitable for Satsuma to receive in rice rather than in cash.

As time passed, the market price of rice rose both in Satsuma and in Ryukyu. During the Kanbun period (1661-1672), one koku of rice in Satsuma cost 45 momme of silver and in Ryukyu it cost 40 momme of silver, but Ryukyu's tribute-tax rice to Satsuma continued to be computed at the previously fixed old price of 16 momme per koku, yielding about 60% profit for Satsuma.²⁷

In 1632 it was decided that the tribute-tax was to be fixed at 1.5 momme of silver per koku except that whenever the Chinese investiture envoy arrived from Peking it was to be reduced that year to 0.5 momme.²⁸ In 1634, however, there was an unexpected development in regard to Ryukyu's status and Satsuma's responsibility for it. In that year, Sakai

TABLE XIV. PRINCIPAL TRIBUTE-TAX RICE IN THE
EARLY SEVENTEENTH CENTURY²⁴

<u>Year</u>	<u>Levy in silver</u>	<u>Equivalent in rice</u>
1611	8 special products, worth 32 <u>kan</u> of silver	2,666 <u>koku</u>
1613	32.025 <u>kan</u> . Price of rice: 12 <u>momme</u> per <u>koku</u> .	2,669
1615	64 <u>kan</u> .	5,332
1617	.8 <u>momme</u> per <u>koku</u> . (.8 x 89,086 = 71.269 <u>kan</u>)	5,393
1618	1.0 " " (1 x 89,086 = 89,086 <u>kan</u>)	7,423
1619	" " " "	"
1620	.5 " " (.5 x 89,086 = 44.543 <u>kan</u>)	3,711
1624	.8 " " (.8 x 83,085 = 66.463 <u>kan</u>)	5,539
1625	.5 " " (.5 x 83,085 = 41.542 <u>kan</u>) Price of rice: 16 <u>momme</u> per <u>koku</u> .	2,956
1626	1.0 " " (1. x 83,085 = 83.085 <u>kan</u>)	5,912
1628	1.0 " " " "	"
1631	1.5 " " (1.5 x 83,085 = 124.628 <u>kan</u>)	-
1633	.5 " " (.5 x 83,085 = 41.542 <u>kan</u>)	-
1634	3.0 " " (3. x 83,085 = 249.255 <u>kan</u>)	-
1635	3.0 " " (3. x 90,883 = 272.649 <u>kan</u>)	-

Tadakatsu, Senior Councillor (rōjū) of the Tokugawa bakufu, asked Satsuma if it wished to have Ryukyu's koku-daka added to that of its own home provinces. With the approval of his lord, Shimazu Iehisa, Ise Tadamasu, Councillor of Satsuma, decided to conceal the facts of the taxation on Ryukyu, and replied that it was his Lord's belief that although it might benefit Satsuma in terms of more tax revenue if Ryukyu was added [implying that Ryukyu was not being taxed at the time], it would be quite difficult to actually collect taxes in case of emergencies [because Ryukyu lay far beyond oceans], and therefore it was best to leave everything as it was. In spite of this talk, a new enfeoffment letter from the third shōgun, Tokugawa Iemitsu, dated 1634 (Kan'ei 11/8/4), explicitly and for the first time listed Ryukyu with the assessment of 123,700 koku as a part of the domains granted to the House of Shimazu.²⁹ Satsuma was no doubt annoyed but it was in no position to protest. It could only do what was expected under the circumstances, that is, to raise the level of preparation to pay the feudal obligation to the Tokugawa by 123,700 koku. Thus, a document on the military duty assessment (gun'eki-daka) on Satsuma vassals, dated 1639, listed the total of 490,009 koku for the vassals, explicitly including Ryukyu, as liable for military service obligation.³⁰ It seems it was this change in the legal status of Ryukyu that brought about the abrupt increase in the principal tribute-tax in 1634 and in Ryukyu's assessment in 1635 accompanied by a further increase in the principal tribute-tax.

From 1632 the cost of transporting the tribute-tax rice from Ryukyu to Satsuma was to be borne by Ryukyu.³¹ In 1709 it was further decided that the principal tribute-tax rice should be 0.081 koku, or

0.11004 koku, including transportation cost of 0.02904 koku per koku. Thus the amount assessed was 7,361 koku as the principal tribute-tax, or 10,000 koku including the transportation cost of 2,639 koku.³²

In 1722 Ryukyu's koku-daka was raised to 94,230 koku and accordingly the principal tribute-tax rice was raised to 10,369 koku (7,633 koku of motodemai proper + 2,736 koku of transportation cost). As there was no further change in the koku-daka of Ryukyu, the amount of the principal tribute-tax remained unchanged during the rest of the Tokugawa period.

Corvee tax (bumai, also called ten'yakumai), originated in the Satsuma custom of collecting the corvee tax from all peasants. The peasants owed an equal amount of corvee without pay to the House of Shimazu, but actually the burden of corvee fell heaviest upon those living near the towns or along the important arteries of traffic where such labor was most often needed. In order to correct this unbalance and to equalize the burden among all the peasants, instead of actually drafting corvee labor, Satsuma collected the corvee tax which was used as payment for those who were actually hired. It was first levied in Ryukyu in 1695 but for a while it was irregular both as to amount and frequency of payment inasmuch as it was imposed on the same basis as in Satsuma.³³

In 1709 it became fixed at the rate of 0.011 koku for the corvee tax proper or 0.01495 koku inclusive of transportation cost per koku in the total koku-daka; that is to say, 1,000 koku for the corvee tax proper and 359 koku for the transportation cost, bringing the total to 1,359 koku. In 1722 as the Ryukyu's koku-daka increased to 94,230 koku,

the corvee tax proper also increased to 1,036 koku and the transportation charge to 372 koku, for a total of 1,408 koku.³⁴ This amount remained unchanged for the rest of the Tokugawa period.

Rice tax for cattle (gyūbademai) came into being in 1635 when Satsuma ordered a tax on the fields and hills computed on the basis of 0.25 momme of silver per head of cattle. In later years it was reduced to 0.2 momme per head and the number of cattle was fixed at 22,987. This number remained unchanged because, despite fluctuation in the number of cattle, the area of the hills and fields, which was supposed to be the real object of taxation, remained unchanged. 0.2 momme of silver per 22,987 heads of cattle amounted to 4.597 kan of silver, which was equal to 115 koku of rice. With the transportation charge of 41 koku, the total cattle tax amounted to 156 koku.³⁵ The rice in the amount of 156 koku was collected from the peasants by the Ryukyu government, and the Ryukyuan Legation in Kagoshima paid 4.597 kan of silver to Satsuma.³⁶

It was these three taxes, principal tribute-tax (motodemai), corvee tax (bumai), and cattle tax (gyūbademai), that were paid to Satsuma annually:³⁷

TABLE XV. ANNUAL TAXES PAID TO SATSUMA

	Tax proper	+	Transportation charge	=	Total
	_____		_____		_____
1. Principal tribute-tax	7,633 <u>koku</u>	+	2,736 <u>koku</u>	=	10,369 <u>koku</u>
2. Corvee tax	1,036 "	+	372 "	=	1,408 "
3. Cattle tax	115 "	+	41 "	=	156 "

Total	8,784 "	+	4,149 "	=	11,933 <u>koku</u>

The total of 11,933 roku was the final official figure of the tribute-tax paid by Ryukyu. But it is to be noted that the Satsuma-han government received 8,784 roku only, the transportation charge of 4,149 roku having gone to the shippers. This is assuming that all the tax-rice was carried in the han authorized, but privately managed, Satsuma bottoms, and that there was no shipping charge when it was carried on the kaisen, Ryukyu government ships that plied between Satsuma and Ryukyu. Actually, however, not all tribute-tax rice went to Satsuma. 1,322 roku was kept in Ryukyu to be cancelled against Satsuma's special orders such as textiles. It means that Ryukyu saved 929 roku of transportation charge for 1,322 roku.³⁸

But there was another practice, called leakage rice (kakemai), by which the actual amount paid was still further increased. The standard size of a bale of rice was 0.25 roku, making four bales equal to 1 roku. But in 1666 Ryukyu was required to add 0.03 roku to every bale to provide against leakage before arrival at the Satsuma-han treasury. In 1716, it was further decided that the shipper who was held responsible for any loss of tribute-tax rice during the voyage should also be given some leakage allowance beside his regular transportation cost. His leakage allowance was 0.0175 roku for every bale. Thus, every bale came to comprise 0.2975 roku.³⁹ As four bales made up 1 roku, the practical effect was to increase every roku by 0.19 roku. Thus, 8,784 roku multiplied by 1.19 would be 10,453 roku, which was the actual amount of tribute-tax received by the Satsuma-han. But Ryukyu was required to pay 14,200 roku (11,933 x 1.19) to fulfill this obligation.

To summarize, Ryukyu's tribute-tax originated in the sending of special local products as tributary gifts from a vassal to the overlord,

rather than taxes. As seen in the episode of 1634 related to the enfeoffment of Ryukyu to Satsuma, Satsuma was wary of the outright annexation of Ryukyu lest it should increase Satsuma's feudal obligation to its own overlord, the Tokugawa. Perhaps it was for this reason that in 1611 Satsuma exacted from Ryukyu token tributary gifts amounting in value to only 32 kan of silver, that it prohibited the Ryukyuan to adopt the Japanese ways and customs in 1617 and 1624,⁴⁰ and that it allowed more autonomy to the Ryukyuan king in 1624⁴¹... to assert that Ryukyu was not Satsuma. Against Satsuma's hope, however, Tokugawa explicitly enfeoffed Ryukyu to Satsuma in 1634, making the latter's feudal obligation to the Tokugawa overlord so much heavier, and forcing Satsuma to begin exercising its right to collect feudal dues in lieu of military service from Ryukyu, as a sub-vassal of Satsuma.

Thus, Ryukyu's tribute-tax to Satsuma was equal to 2,666 koku in 1611 and gradually grew so that by the early eighteenth century the official amount was 11,933 koku and the actual amount was 14,200 koku. It remained thus for the rest of the Tokugawa period. Was this tribute-tax so exorbitant as to cause the Ryukyuan economy to become stagnant? To answer such a question, it is necessary to investigate the Ryukyu tax structure and revenue.

2. Land Tax

All taxes in Ryukyu may be classified as: (1) land tax, (2) poll tax, (3) special product tax, and (4) miscellaneous tax. The land tax was the oldest and most important of the four. After the 1611 cadastral survey, the koku-daka for Ryukyu was assessed at 89,086 koku but as mentioned above, this was reduced to 83,085 koku later when an error was

found in the computation. Of this total, 50,000 koku was assigned to the Ryukyu's Department of the Royal Treasury (goshotaihō), and the rest to the Department of Stipends (gokyūchihō). Whatever was left over was to revert to the Department of the Royal Treasury.

Ideally, revenue from 83,085 koku of land should have been collected on the basis of a uniform tax rate.⁴² Yet it seems that the concept of a uniform tax rate failed either to occur or to appeal to the Ryukyuan rulers. Even after all Ryukyu was unified by Shō Hashi in the fifteenth century, the royal treasury depended, not so much upon the agricultural revenue from all Ryukyu, but mainly upon the agricultural revenue from the royal land and the then prosperous overseas trade.⁴³ Therefore, there never was any attempt to carry out a kingdom-wide cadastral survey or to establish a uniform tax rate prior to the Satsuma invasion.

Consequently, at the beginning of the seventeenth century, Ryukyu still retained diverse tax rates, a legacy from the remote past of independent anji petty local lords. Being at the nadir of their power and prestige due to the recent defeat in war, the Ryukyuan leaders were probably least eager for innovation in government or were wary of any popular discontent such innovation might incite. Moreover, the idea must have been so foreign to themselves. Thus, diverse tax rates were kept intact, resulting in extreme inequality in tax rates. On rice land it ranged from 0.756 to 0.21 per cent per koku, and on dry field it ranged from 0.25 to 0.005 per cent per koku, but the overall average rate was estimated to be about 40 per cent.⁴⁴

In 1635, Satsuma raised Ryukyu's koku-daka to 90,883 koku, leading to an increase in the tribute-tax due Satsuma. In 1637, the government

adopted a poll tax system in Miyako and Yaeyama. In 1722, Satsuma decided to send a cadastral survey team to Ryukyu, to increase the tribute-tax. The cadastral survey, which would have been costly to Ryukyu, was abandoned when she agreed to increasing the total assessment to 94,230 koku. In 1737-1750, Ryukyu completed a cadastral survey of its own. It showed a considerable increase in arable land but no tax increase or reform was attempted.⁴⁵

If the overall average rate of tax was about 40 per cent, $40/100 \times 94,239$ would have yielded 37,680 koku of tax revenue, but a record dated 1727 shows tax receipts of 31,100 koku or about 33 per cent of 94,239 koku.⁴⁶ In addition to the principal land tax, there were six surcharges. These were bumai, kōketsuchidemai, kakemashimai, gyūbademai, zaibandemai, and ukitokudemai.

Bumai was the corvee tax. For a while after it was begun in 1695,⁴⁷ the amount varied each year, but in 1709 it was fixed at 0.01495 koku, inclusive of transportation cost, per koku, and the total amounted to 1,408 koku (1,036 koku the corvee tax proper + 372 koku transportation charge).⁴⁸

Kōketsuchidemai was the tax to make up for loss in the principal land tax due to damage to the land after 1611. It began in 1682 when 0.017 per cent was levied upon every koku for a total of about 1,500 koku. After 1711, it was 0.01775 per cent of 87,399 koku, which was the pure land tax assessment, viz., total assessment minus special product assessment and some exempted areas such as the Tori and Kerama islands. It amounted to 1,551 koku and remained unchanged after that.⁴⁹

Kakemashimai was an additional tax of 0.00472 koku per koku levied in order to produce the increased tribute-tax of 418 koku when the total assessment was increased by 3,346 koku to 94,239 koku in 1727.⁵⁰ The foregoing three additional taxes were later combined and called kasamidemai, being made up of the following.

TABLE XVI. COMPOSITION OF⁵¹
KASAMIDEMAI (ADDITIONAL TAX)

1. <u>Bumai</u>	...	0.01495 <u>koku</u> per <u>koku</u>	
2. <u>Kōketsuchidemai</u>	...	0.01775	"
3. <u>Kakemashimai</u>	...	0.00472	"
		0.03742	

Gyūbademai was a tax levied for the first time in 1635 upon the hills and fields computed upon the basis of 0.25 momme of silver per head of cattle. Later it was reduced to 0.2 momme per head of cattle and the number of the cattle was computed to be 22,987, producing 4.597 kan of silver.⁵² This was equal to 115 koku of rice. Adding the transportation charge of 41 koku, the total cattle tax amounted to 156 koku. Rice equivalent of 156 koku was paid by the peasants to the Ryukyu government and transported to Kagoshima, where the Ryukyuan Legation paid 4.597 kan of silver to Satsuma.⁵³ However, in 1694 the Ryukyu government began collecting 0.01947 koku of rice per head of cattle whose number was now set at 22,773, producing 443 koku of rice. Out of this amount, 156 koku was paid to Satsuma, and the remaining 287 koku was kept as the Ryukyu government's revenue.⁵⁴

Zaibandemai was a tax of 0.0007 koku to produce stipends for the fourteen magistrates (zaiban) dispatched from the central Ryukyu government to the seven local districts on Okinawa and the six offshore islands, Kume, Aguni, Kerama, Tonaki, Ie, and Iheya, beginning in 1741. Each magistrate was granted a stipend equivalent to 4.5 koku of rice, and the total was 61 koku. To produce this 61 koku, 0.0007 koku was assessed on every koku in 87,866 koku, which was 6,364 koku, special product assessment, less than 94,230 koku, the total assessment of Ryukyu.⁵⁵

Ukitokudemai was a special product tax which was incorporated into the principal tax, namely, land tax. It was also called uwaki tax which was levied on fifteen non-agricultural items such as ramies, rushes, fishing boats and nets, and salterns. It seems to have been started soon after 1611. In 1699, the land planted in the three important products, abaca trees, ramies, and rushes, was taken out of the special product assessment and incorporated into the principal tax land and declared to have an equivalence of 354 koku. However, this 354 koku assessment produced 135 koku of principal tax revenue, which turned out to be 26 koku less than the government previously received from the same land when it was assessed as special product. Therefore, to make up this loss of revenue, 0.00038 per cent of 68,835 koku was instituted as the ukitokudemai.⁵⁶

In summary, the total of these taxes came to about 39%, or close to the figure in the "Gozaisei."

TABLE XVII. REGULAR TAX COMPOSITION

1. Principal tax	...	0.33%
2. Kasamidemai	...	0.03742
3. Gyūbademai	...	0.01947
4. Zaibandemai	...	0.0007
5. Ukitokudemai	...	<u>0.00038</u>
Total		0.38797%

Land was divided into several categories. Peasant land (hyakushō-ji), also called the Land granted by the government (osazuke-ji), constituted about 70% of the agricultural land.⁵⁷ It was considered to be owned by the government, and it was registered in the land survey of 1750 as rice paddies, dry fields, and forest land.⁵⁸ It was periodically re-allotted among the peasants every 4 or 5 years or at intervals as long as some 30 years in some cases. It could not be sold, transferred or mortgaged.⁵⁹ Re-allotment was left up to the villages, and in time, various local customs or measures became fixed so that by the middle of the nineteenth century, landholding in some villages had in fact become hereditary. Even if the land was re-allotted periodically, it became merely a formality in which plots of land exchanged hands with no attempt at adjustment to ensure fair distribution of land according to the number of members in a family or its tax paying ability. Sometimes villagers agreed to lease most of their land to others, paying rental to the government in the form of taxes. In other cases, some yādūi samurai residents, who were legally non-peasant and therefore not qualified, were included in the land re-allotment, or in still others peasants, who should have been included, were excluded. In short, there seems to have been no uniform system of land allotment.⁶⁰

A second category was stipend land, composed of the steward's land (jito-ji), the local official's land (oeka-ji), and the priestess' land (norokumoi-ji). These were portions of the peasant's land (hyakushō-ji) set aside for the benefit of officials and priestesses, and constituted about 20% of the total agricultural land.⁶¹ As the local officials and priestesses were appointed from among the local peasants, they tilled the allotted land themselves, but the stewards who resided in the capital, Shuri, had the land cultivated by the peasants who resided there, with whom they shared the crops. As these stipend lands were deemed to be part of the peasant lands, these were treated like the peasant land in all matters such as tax rate and prohibition of sale or of transfer to others.⁶²

Income from the stipend land was divided into three parts. One part was kept by the peasant tiller. The steward's share was that which remained after all the taxes had been paid to the government from the other two parts. The steward's share was paid directly by the peasant to the steward. Peasants on the steward's land were also subject to corvee service to the steward. Every one between the ages of 15 and 50 was to serve two days a year.⁶³

The following are actual cases of how the income from land was shared by the government, the stipend-holder, and the peasant.

TABLE XVIII. DIVISION OF THE INCOME FROM LAND

Case 1⁶⁴

A.	Official assessment	...	22.27896 <u>koku</u>	
B.	Actual production	...	28.625 <u>koku</u>	
	(1)	4,765 bundles of unhulled rice		
	(2)	<u>1,200</u> " "	" "	
		5,965 " "	" "	(total product from A)
	In (1), 10 bundles produced .50 <u>koku</u> of hulled rice...thus, 23.825 <u>koku</u> of hulled rice.			
	In (2), 10 bundles produced .04 <u>koku</u> of hulled rice...thus, 4.80 <u>koku</u> of hulled rice.			
	23.825 + 4.80 = 28.625 ... actual production			
C.	Tax	...	12.69363 <u>koku</u>	C/A = 56%
	(1)	11.68042 <u>koku</u>	... 51.4% of A, the official assessment	C/B = 44%
	(2)	1.01321 <u>koku</u>	... surcharge & special	
		<u>12.69363</u> <u>koku</u>		
D.	Peasant's share	...	9.54168 <u>koku</u>	D/A = 43%
	This is 1/3 of, not A, the official assessment, but B, the actual production.			D/B = 33%
E.	Steward's share	...	6.3897 <u>koku</u>	E/A = 29%
	28.625	...	B	E/B = 23%
	<u>-22.2353</u>	...	C + D	
	6,3897			

TABLE XVIII. (Continued) DIVISION OF THE INCOME FROM LAND

Case II⁶⁵

A.	Official assessment ...	23.28962 <u>oku</u>	in rice paddies	
	Original survey ...	21.692		
	Increased ...	<u>1.59762</u>		
		23.28962		
B.	Actual production ...	32.95 <u>oku</u>		
	6,590 bundles of unhulled rice from A			
	X <u>.005</u> hulled rice per bundle			
		32.950 <u>oku</u>		
C.	Tax ...	12.67492 <u>oku</u>		C/A = 54%
	1.	11.24961 ...	principal tax	C/B = 38%
	2.	.62439 ...	corvee tax (<u>bumai</u>)	
	3.	.69162 ...	complementary tax (<u>kōketsujidemai</u>)	
	4.	.0153 ...	special product tax (<u>ukitokudemai</u>)	
	5.	<u>.094</u> ...	cattle tax (<u>gyūbademai</u>)	
		12.67492		
D.	Peasant's share ...	10.98333 <u>oku</u>		D/A = 47%
	This is 1/3 of, not A, the official assessment, but B, the actual production.			D/B = 33%
E.	Steward's share ...	9.29174 <u>oku</u>		E/A = 40%
	32.95 ...	B		E/B = 28%
	- <u>23.65824</u> ...	C + D		
	9.29175			

The next case is that of the land granted to either a local official or priestess. As they tilled the land themselves, they kept all that remained after paying the taxes.

TABLE XVIII. (Continued) DIVISION OF THE INCOME FROM LAND

Case III⁶⁶

A.	Official assessment	...	2.70273 <u>koku</u>	in rice paddies	
B.	Actual production	...	3.1 <u>koku</u>		
	62 bundles @ .05 <u>koku</u> of rice = 3.1 <u>koku</u>				
	B = C + D				
C.	Taxes	...	1.58034 <u>koku</u>		C/A = 59%
	1.	1.24055	...	principal tax	C/B = 51%
	2.	.14885	...	corvee tax	
	3.	.16488	...	complementary tax	
	4.	.00335	...	special product tax	
	5.	<u>.02241</u>	...	cattle tax	
		1.58034			
D.	Own share	...	1.51966 <u>koku</u>		D/A = 56%
					D/B = 49%

In all the foregoing cases, the actual production exceeded the official assessment, and the tax was levied on the basis of the official assessment. In Case I, the tax was officially 56%, but actually only 44%, of the production. The peasant's share was always 33% of the actual production. Officially, the tax took 56% and the steward took 29%, leaving only 15% for the peasant. But the actual divisions were 44%, 23%, and 33%. In Case II, officially the tax took 54% and the steward took 40%, leaving only 6% for the peasant, but the actual proportions were 38%, 28%, and 33%. In Case III, which involves only

the government and the local official land-holder, the tax officially was 59%, but actually 51%, and the land-holder's share was actually 49%, instead of 41%, of the production.

In the foregoing cases, the actual production exceeded the official assessment. In such cases, the tiller of the land, whether peasant or local official, kept more than the official records indicated. Now follows a case in which the actual production was far less than the official assessment.

TABLE XVIII. (Continued) DIVISION OF THE INCOME FROM LAND

Case IV⁶⁷

A. Official assessment	...	16.9676 <u>koku</u> in dry field	
B. Actual production	...	5.895 <u>koku</u>	
		393 bundles @ .015 <u>koku</u> = 5.895 <u>koku</u>	
C. Taxes	...	1.445 <u>koku</u>	C/A = 8%
		.0834925 per <u>koku</u> of A.	C/B = 23%
D. Peasant's share	...	1.965 <u>koku</u>	D/A = 11%
		1/3 of B.	D/B = 33%
E. Steward's share	...	2.485 <u>koku</u>	E/A = 14%
		E = B - D - C.	E/B = 44%

Note: Any additional taxes will be deducted from E.

In this case, in spite of the low productivity, the government still received its legal share of the production, namely, 8.35 per cent of the official assessment or 23% of the actual production. On the other hand, this did not necessarily mean that the peasant had to

suffer from the low productivity for he always kept 33% of the actual production.

A third category was reclaimed land, which had four sub-categories: (a) shiake-ukeji, (b) shiake-chigyōji, (c) ukeji, and (d) harai-ukeji. Shiake-ukeji was land reclaimed and owned by the peasant. The peasant owner received a reclaimed land certificate (ukejijō) from the government and possessed the right to do with the land as he saw fit. Taxation upon this land was the same as for peasant land (hyakushōji), after a certain initial period of time during which it was tax exempt. Shiake-chigyōji was land reclaimed by samurai, and the method of payment of taxes was slightly different from that of the shiake-ukeji. In all other respects it was treated the same as the shiake-ukeji. The ukeji was that part of the peasant land (hyakushōji) that was granted to samurai after it had been returned to the government because of the shortage of labor or some other reason. Although its tax obligations were still the same as for the peasant land, it was listed as reclaimed land because it was considered to be private land and could be sold or transferred at the owner's will.

The harai-ukeji was similar to the ukeji in that it was a part of the peasant land for which the villagers were unable to pay the taxes, but in this case the land was sold to a third party and the money was given to the village treasury. It was regarded as private property and the owner had the right to dispose of it as he wished although he still had to bear the same tax obligations as if it were peasant land.⁶⁸

The totals and percentages of these categories of land in the Okinawa archipelago, according to the cadastral survey of 1750, were as

shown in Table XIX. However, the taxes seemed to have been computed upon the basis of, not the Survey of 1750, but the Survey of 1611. In 1722, when Satsuma cancelled the proposed land survey of Ryukyu, it stipulated that the landholding in Ryukyu should be more equalized among the populace, implying the land was being gradually concentrated in the hands of a few rich peasants and the number of indigent tenant peasants was on the increase. Accordingly, Ryukyu conducted its own land survey from 1737 to 1750, but with the death of King Shō Kei in 1751, and with

TABLE XIX. CATEGORIES OF LAND IN 1750⁶⁹

	<u>Rice paddies</u>	<u>Dry fields</u>	<u>Total</u>	<u>%</u>
<u>Peasant land</u>	<u>31,220 tan</u>	<u>106,932</u>	<u>138,152</u>	<u>67.1</u>
<u>Stipend land</u>	<u>15,022</u>	<u>30,149</u>	<u>45,171</u>	<u>21.3</u>
Stewards	9,790	18,190	27,980	13. %
Local officials	4,516	9,991	14,507	7.
Priestesses	716	1,968	2,684	1.3
<u>Reclaimed land</u>	<u>11,555</u>	<u>11,006</u>	<u>22,561</u>	<u>10.9</u>
Shiake-ukeji	7,149	4,656	11,805	5.7
Shiake-chigyōji	2,277	867	3,144	1.5
Ukeji	1,667	2,377	4,044	2.0
Harai-ukeji	462	3,106	3,568	1.7
<u>Total</u>	<u>57,797</u>	<u>148,087</u>	<u>205,884</u>	<u>100.0</u>

impending arrival of the Chinese envoy for the investiture of the new King Shō Boku, the results of the new land survey could not be implemented, and land and taxation reform was postponed indefinitely.⁷⁰ Thus, during the Tokugawa period, there were only two Ryukyu-wide

surveys, the first in 1611 and the second in 1737-1750. Because the results of the second survey did not lead to tax changes, taxation in Ryukyu continued to be based on the first survey. Yet the results of the two surveys can be compared, as follows:

TABLE XX. ACREAGE COMPARISON BETWEEN 1611 AND 1750⁷¹

	<u>Rice paddies</u>		
	<u>1611</u>	<u>1750</u>	<u>Increase</u>
Okinawa archipelago	25,361 <u>tan</u>	57,797 <u>tan</u>	32,436 <u>tan</u>
Miyako & Yaeyama archipelagoes	<u>1,260</u> "	<u>2,760</u> "	<u>1,500</u> "
Total	26,621 "	60,557 "	33,936 "
	<u>Dry fields</u>		
	<u>1611</u>	<u>1750</u>	<u>Increase</u>
Okinawa archipelago	59,131 <u>tan</u>	148,057 <u>tan</u>	88,926 <u>tan</u>
Miyako & Yaeyama archipelagoes	<u>2,153</u> "	<u>5,496</u> "	<u>3,344</u> "
Total	61,284 "	153,553 "	92,269 "

Non-taxable land. There were five categories of non-taxable land: (1) residential land (yashiki-ji), (2) forest land (sanrin gen'ya), (3) cemetery land (funbo-ji), (4) Naha public land (Naha ukitoku-ji), and (5) waste land (kwēmi-batake).⁷²

Residential land of the samurai was wholly exempt from taxation, but residential land of the commoners was exempt only to the extent of 80 tsubo per household. Although the use of timber or fire-wood was allowed to people under government supervision, most of the forest land

could not be transferred or sold or mortgaged even if it should be privately owned. In general, cemetery land was located on barren land and its area was limited to 12 tsubo for a samurai household and 6 tsubo for a commoner household, but upper class samurai were often able to obtain a large tract of land as an adjunct to their cemetery land. Naha public land referred to some scattered plots of land near Naha, the revenue from which was set aside for public expenditure for the town of Naha.⁷³

Important was waste field, the kwēmi-batake, also called kinawa-batake, san'ya-batake, and akikae-batake. Most of it was located in the mountainous regions of the north where there was relatively little arable land. Officially it was "waste land," and therefore non-taxable, but with the government's permission it was opened up and tilled. Its yield was not considered high enough to warrant taxation, but years of diligent work made some places yield as much as regular agricultural land. It may be described as land one step short of reclaimed land, from which it differed only in that it was not taxed. Some indication of how widespread it was is presented below.

TABLE XXI. PROPORTION OF THE WASTE FIELDS⁷⁴Case 1: Ōgimi District

A. Total Peasant Land (Government land):

499 chō 2 tan 7 se 19 bu

B. Taxable land

a. Rice paddies 100 5 5 10

b. Dry fields 32 2 9

132 5 7 19

B/A = 27%

C. Non-taxable land

a. Rice paddies None

b. Dry fields 366 7

366 7

C/A = 73%

Case 2: Kunigami District

A. Total Peasant Land (Government land):

443 chō 6 tan 2 se 13 bu

B. Taxable land

a. Rice paddies 137 7 2 22

b. Dry fields 47 2 21

184 7 5 13

B/A = 42%

C. Non-taxable land

a. Rice paddies None

b. Dry fields 258 8 7

258 8 7

C/A = 58%

3. Poll tax

In both Miyako and Yaeyama, the land tax was collected for about 27 years after 1611. In 1636 a population census was carried out and the poll tax was instituted. From 1636 to 1659, the amount of tax collected fluctuated according to changes in the population, but in 1659, in order to achieve stability in government revenue, the population figure for 1658 was adopted as the basis on which the tax was to be levied thenceforth without regard to population fluctuation.⁷⁵

Miyako. In 1611 the koku-daka for Miyako was set at 11,288 koku and in 1635 at 12,458 koku.⁷⁶ In 1659 when the poll tax replaced the land tax, levies were based on the 1635 koku-daka. When the koku-daka was raised to 12,918 koku in 1727,⁷⁷ a surcharge was levied to yield an increase in the tax. According to the Miyakotō kimochō [Administrative Manual for the Miyako Islands] of 1749, the taxes were as follows:⁷⁸

1. 3,301 koku ... Principal tax
 2. 526 " ... Leakage & miscellaneous (kuchimai and totate)
 3. 466 " ... Surcharges to cover the koku-daka increases (kasami-awa)
 4. 306 " ... Storage keepers' fees (kurayakunin kokorozuke)
 5. 839 " ... Corvee tax (buchin)
- 5,438 koku

Of this amount, 2,778 koku was paid in millet which was the standard tax grain in Miyako, but the remaining 2,659 koku was converted into textiles, and 4,998 rolls of textiles (2,411 extra size rolls, about 55' x 1.7' of fine jōfu; 116 regular size rolls, about 37.5' x

1.4', of medium quality called chūfu; and 2,471 regular size rolls of low quality called gefu) were paid to the government.⁷⁹ Every year the central government in Shuri informed the Miyako Office of its textile needs for the next year and the order was filled on the basis of a set conversion rate.⁸⁰

Taxed was every one between the ages of 15 and 50, in four age groups: (a) 21-40, (b) 41-45, (c) 46-50, and (d) 15-20, without exempting the sick, the handicapped, or the insane. On the basis of the age group, combined with the productivity rating of the village, the total grain and textile taxes due from each village and the individual quotas of the villagers were determined.⁸¹

Yaeyama. In 1611 the koku-daka for Yaeyama was set at 5,981 koku; in 1635 it was increased to 6,637 koku, and in 1727 to 6,883 koku.⁸² As in Miyako, taxation was based on the 1635 koku-daka with surcharges added to cover the 1727 increase. Whereas in Miyako the koku-daka was composed of millet in spite of some rice production, in Yaeyama it was composed of rice in spite of some other grain production.⁸³ Also, according to the Yaeyama-tō kimochō [Administrative Manual for the Yaeyama Islands] of 1749, the tax was structured as follows:⁸⁴

- | | | | |
|----|-------------------|-----|---|
| 1. | 2,280 <u>koku</u> | ... | Principal tax |
| 2. | 353 " | ... | Leakage & miscellaneous (<u>kuchimai</u> & <u>totate</u>) |
| 3. | 245 " | ... | Surcharges to cover the <u>koku-daka</u> increases (<u>kasamidemai</u>) |
| 4. | 205 " | ... | Storage keepers' fees (<u>kurayakunin</u> <u>kokorozuke</u>) |
| 5. | <u>506</u> " | ... | Corvee tax (<u>buchin</u>) |
| | 3,595 (sic) | | |

Of this amount, 1,792 oku was paid in rice, but the remaining 1,803 oku was converted into textiles, in the amount of 3,544 rolls (1,226 extra size rolls of white jōfu, 46 regular size rolls of white chūfu, and 2,272 regular size rolls of white gefu).⁸⁵ Amount and kinds of textiles were subject to change depending upon the needs of the central government at Shuri.⁸⁶

To summarize, the percentages of the poll taxes in the Miyako and Yaeyama archipelagoes were as follows:

TABLE XXII. POLL TAXES IN THE MIYAKO AND YAEYAMA ISLANDS

	<u>Koku-daka</u>	<u>Tax</u>	<u>%</u>
Miyako	12,918	5,438 <u>oku</u>	42
Yaeyama	6,882	3,595 "	52
Total	19,800	9,033 "	46

As seen above, the average tax rate in the Miyako and Yaeyama islands was 46%, which is lighter than the standard rate of 50% set by the Tokugawa government.⁸⁷ Also, the fact that the poll tax was graduated upon a scale that combined four age groups and four productivity ratings of villages made it appear there was some degree of correlation between the tax burden and the ability to pay.⁸⁸

Yet there are several factors that need to be discussed before any conclusion can be reached on the poll tax system of Miyako and Yaeyama. First of these was the productivity ratings of villages. These were first set in 1659 but after that little revision was made. Whatever revisions were made seem to have been made not to ensure equity in

distributing the tax burden but to benefit the local gentry ruling class at the expense of the peasants. For instance, some villages were rated in the lowest tax category, with the lightest tax burden, despite convenient location and freedom from malaria, because these villages were inhabited mostly by samurai. Some other villages, impoverished and malaria-plagued on Iriomote Island, were rated in the top tax category with the heaviest tax burden because they were peasant villages whose inhabitants had no voice in the local government.⁸⁹

The village productivity rating was based on a population figure set in 1658, but the actual population figures underwent some severe fluctuations. Both Miyako and Yaeyama were often devastated by typhoons and famines and even tidal waves, but except for temporary relief measures no basic tax reform was ever carried out. In addition, Yaeyama had forest lands that could be cleared but that were plagued by malaria which often decimated the population and increased the tax burden that fell upon the survivors, and Miyako had little room for its increasing population.⁹⁰

The third factor was tax exemption. Although the central government in Shuri, in computing the total tax assessment, provided no exemptions, the local governments of Miyako and Yaeyama seemed to have granted exemptions, not so much to those who were in real need of relief, such as the sick or the handicapped, but to the local ruling class and their peasant aides, the amounts exempted being added to the tax burdens of the other peasants.⁹¹

In both Miyako and Yaeyama the highest local government was called kuramoto. Under direction from Shuri it supervised the village offices

called bansho. In contrast to the practice in the rural areas of Okinawa, where samurai residents were excluded from the local government, in Miyako and Yaeyama only they could hold positions in the local government, although petty aides or functionaries at the village level were appointed from among the peasants.

Toward the end of the Tokugawa period, in Miyako there were about 350 to 450 local samurai officials and 494 peasant functionaries.⁹² Yaeyama had about 340 local samurai officials and 533 peasant functionaries.⁹³ Depending upon their posts, they enjoyed various degrees of tax exemption ranging from the top exemption of men for five generations to the lowest peasant functionaries' exemption for one generation or during tenure in office.⁹⁴

Fourthly, these local officials and functionaries not only paid no taxes, they budgeted for themselves a disproportionately large part of the local government expenditures. It was said that their salaries and other expenditures ran, in the case of Miyako, to twice and in the case of Yaeyama, to three times as high as those of their counterparts in Japan.⁹⁵ Furthermore, as much as a third of them were merely sinecure positions without any useful service to the community.⁹⁶

Fifthly, there was the question of the conversion between the tax grain and the textiles. For instance, the government regulation set the best quality roll of dark blue striped jōfu as equivalent in value to about 1.7 koku of tax grain but the same cloth could command about 2.4 koku of rice on the market.⁹⁷ According to the regulation, the government could receive one best quality roll of dark blue jōfu in place of two rolls of regular white jōfu, but the former cost almost

sixteen times as much as the latter in Osaka.⁹⁸ These examples seem to show that the conversion rate, if not arbitrarily determined at the beginning in the late seventeenth century, was definitely and seriously out-of-date in the nineteenth century, to the great disadvantage of the peasants.

Sixthly, in Miyako there was an extra imposition called okagemai [thanks rice], totalling about 111 koku, levied upon the peasants and distributed as supplementary income among local officials some of whom had no official stipend.⁹⁹

Lastly, in both Miyako and Yaeyama, but more noticeably in the former, there existed the system of nago labor which was regarded as a part of the master's official stipend. For instance, in Miyako not only every one of about 400 officials but also some of their descendants, orphans, and widows, had a right to nago labor or grain payment according to his rank and position. In earlier times, nago corvees were drawn from among the general peasant population but by the nineteenth century the nago workers had become a hereditary group. Their houses were segregated from the others, and their number, officially limited to about 1,800, had grown to about 3,000 by the 1860's. As one nago's grain payment to his master averaged about 1.5 koku, the head administrator of Miyako who was entitled to eight nago could expect an income of about 12 koku. The nago's taxes to the central government were assumed by his master but his local taxes were shifted to other peasants.¹⁰⁰

Kume Island in the Okinawa archipelago is also said to have had a partial poll tax system similar to that of Miyako and Yaeyama. But although the system allowed payment of Kume pongee textiles in lieu of

tax grain, the basic tax structure was the same as in the rest of the Okinawa archipelago.¹⁰¹

4. Miscellaneous Taxes

Hiyōsen was corvee money that was levied on all peasants between the ages of 15 and 50 based upon a graduated scale of eight groups from 100% (5 days per month) to 50% (2 1/2% per month) depending upon the distance from the capital, Shuri. A male peasant in the 1st category paid 1 kanmon in copper cash and a female paid 500 mon or half a kanmon.¹⁰²

As there was little cash in Miyako and Yaeyama, male peasants had to pay in either millet or rice instead. Female peasants were exempted from this corvee money because they were needed to produce tax textiles. In 1732, the central government in Shuri received 958,091 kanmon in corvee money from Okinawa, 838 koku of corvee millet from Miyako, and 548 koku of corvee rice from Yaeyama.¹⁰³ From 1765 the number of peasants who paid this tax was held constant and about the same amount continued to be levied during the nineteenth century.¹⁰⁴

Ukeji busen was also corvee money, in the amount of 1 kanmon in copper cash, but it was levied for every koku of ukeji private land. It was kept by the district government and used for miscellaneous government expenditures.¹⁰⁵

The third was called chigyō-busen or ryōchi-busen, collected by the steward or deputy steward from his own district at the rate of 1 day for the former and 2 days for the latter, commuted at the rate of 1 kanmon for male and 0.5 kanmon for female.¹⁰⁶ The amounts recorded

in Okinawa during the nineteenth century were as in Table XXIII below.

TABLE XXIII. AMOUNT OF CORVEE MONEY COLLECTED IN OKINAWA¹⁰⁷

1. <u>Hiyōsen</u>	...	890,458	<u>kanmon</u>
2. <u>Ukeji-busen</u>	...	2,070	"
3. <u>Chigyō-busen</u>	...	<u>35,784</u>	"
		928,312	"

In Okinawa stewards and deputy stewards could requisition vegetables, eggs, meat, firewood, or timber from the districts or villages under them at fixed prices. These would be deducted from the corvee money owed by the villages and districts. In earlier periods when little cash was in circulation, this may have been convenient for the peasants, but gross abuse resulted when the statutory commodity prices lagged behind the rising market prices for more than 50 or 100 years, for whenever the stewards sent requisition note, called tegata, the district or village would have to procure the goods at the current market price and sell them at the much cheaper statutory price. The resulting loss was shouldered equally by the corvee-paying peasants. This had the practical effect of raising the amount of corvee money as high as commodity prices rose, at the expense of the peasants. In time this practice spread from the stewards to the government bureaus and departments which also requisitioned supplies at the old statutory prices.¹⁰⁸

Special product tax. Among the special products, abaca cloth, ramie, and rush were converted into the ukitoku-demai [special product

tax rice] in the amount of 354 koku which was added to the principal tax in 1699. The remaining articles, excepting lacquer which was exempted, continued to be taxed as before. Their number as of 1759 was fixed as the permanent number, upon which the tax was levied and no change was made till the end of the Kingdom.¹⁰⁹

TABLE XXIV. SPECIAL PRODUCTS: THEIR STATUTORY NUMBER AND TAX RATE¹¹⁰

<u>Items</u>	<u>Statutory Number</u>	<u>Tax Rate</u>
1. Mulberry trees	1,238	floss silk 3 to 3.3 <u>momme</u> ea.
2. Hemp palm trees	33,264	hemp palm hair 6.8 <u>momme</u> ea.
3. Salterns, large house small house	21 3	50 bales of salt per annum with some variations
4. Canoes	39	50 <u>kanmon</u> ea.
5. Dugout canoes	802	1 <u>kanmon</u>
6. Rope	591	550 <u>mon</u> ea.
7. Kunimbo orange trees	647	500 <u>mon</u> ea.
8. Bitter orange trees	550	250 <u>mon</u> ea.
9. Kunimbo lemon trees	984	"
10. Ōtō Kunimbo orange trees	500	500 <u>mon</u> ea.
11. Kābuchā kunimbo orange trees	17	"

In the late Tokugawa period they totalled 3,624,450 kanmon in cash and 14,139 kin of hemp rope (about 35,348 kanmon in value).¹¹¹

Liquor tax. Basically the Ryukyu government's liquor tax was not aimed at obtaining tax income so much as restricting the use of food

grains in the production of liquor. In the eyes of the authorities, liquor constituted not only the improvident use of valuable food grains but also a potential seducer of morality, ultimately detrimental to the diligence and industry of the people.¹¹²

During the nineteenth century, there were 40 government licensed breweries, located mostly in Shuri. They produced liquor mainly for official use either for local consumption or for export to Satsuma. Production was subject to government control.¹¹³ Without regard to the amount of production, each brewery was taxed 100 kanmon in copper cash every month.¹¹⁴

In the rural areas of Okinawa and in Miyako and Yaeyama, breweries that used sweet potatoes were not taxed, but they were subject to government regulations such as setting a limit of one brewery per village with the business being rotated among villagers from year to year.¹¹⁵

Shipping tax. Taxes on small canoes were included in the special product tax. Larger craft such as the so-called jibune that belonged to local governments were exempted. They were mainly for official purposes such as transporting tax grains and goods. But machibune or town ships, privately owned by the townsmen of Naha, and larger than 50 koku in capacity, were taxed on a monthly basis and for each voyage.¹¹⁶

Like the liquor tax, the shipping tax was not instituted for the purpose of raising revenue. Rather, it was a device to control and preserve valuable timber resources, and therefore it was placed under the jurisdiction of the forest commissioners.¹¹⁷

5. Ryukyu Government's Finance and the Tribute-tax to Satsuma

Following is an outline of the Ryukyu government's budget and the tribute-tax to Satsuma in the nineteenth century.

TABLE XXV. RYUKYU GOVERNMENT BUDGET¹¹⁸I: Department of Stipends: Production Assessment, 39,137.842 oku

<u>Revenue</u>	<u>Expenditure</u>
9,520	4,307 for <u>motodemai</u> for Satsuma
592 (1,183 in misc. grains)	5,805 for stipends, office emoluments, travel expenses
<u>10,112</u>	
<hr/>	<hr/>
10,112 total	10,112 total
<hr/>	<hr/>

II: Department of Royal Treasury: Production Assessment, 55,092.866 oku

<u>Revenue</u>	<u>Expenditure</u>
16,256	945 permanently fixed expenses for three royal households
2,071 (4,140 in misc. grains)	6,062 <u>motodemai</u> for Satsuma
<u>18,327</u>	1,408 <u>bumai</u> for Satsuma
	156 <u>gyūbademai</u> for Satsuma
	48 exempted
	3,719 purchase of Miyako & Yaeyama textiles to be used in the royal household and as gifts to Satsuma, etc.
	1,579 (3,159 in misc. grains) for official emoluments, for the purchase of sugar and other requisitions
	4,410 for official emoluments, and other expenses
<hr/>	<hr/>
18,327 total	18,327 total
<hr/>	<hr/>

TABLE XXV. (Continued) RYUKYU GOVERNMENT BUDGET¹¹⁸III: Total: Production Assessment: 94,230.608 oku

<u>Revenue</u>	<u>Expenditure</u>
28,439	4,307 <u>motodemai</u> for Stipends
	6,062 " for Royal Household
	1,408 <u>bumai</u> "
	<u>156 gyūbademai</u> "
	11,933 total tribute-tax
	10,215 stipends, emoluments, travel expenses, etc.
	945 three royal households
	3,719 textiles purchase
	1,579 sugar & other requisitions
	48 exemptions
<hr/> 28,439 total <hr/>	<hr/> 28,439 total <hr/>

For the purpose of determining the proportionate weight of the tribute-tax within the total financial structure of the Ryukyu government, the following analysis, based upon the preceding table of budget, has been made.

TABLE XXVI. ANALYSIS OF THE RYUKYU GOVERNMENT BUDGET

	<u>%</u>	<u>roku</u>
A. Total production assessment (<u>roku-daka</u>)		94,230
B. <u>Koku-daka</u> for Royal Treasury		55,092
C. <u>Koku-daka</u> for Vassals Stipends		39,137
1) B/A: % of Royal Treas. (B) in total <u>roku-daka</u> (A)	58.5%	
2) C/A: % of Vassals Stipends (C) in total <u>roku-daka</u> (A)	41.5%	
D. Royal Treasury revenue from 55,092 <u>roku</u> (B)		18,327
E. Vassals' Stipends revenue from 39,137 <u>roku</u> (C)		10,112
3) D/B: Tax rate in Royal Treas. land (B)	33.2%	
4) E/C: Tax rate in Vassals' Stipends land (C)	25.8%	
5) D + E/B + C: Average tax rate in the kingdom	30.1%	
F. Tribute-tax from Royal Treasury		7,626
G. Tribute-tax from Vassals' Stipends		4,307
6) F/D: % of tribute-tax (F) in Royal Treas. rev. (D)	41.6%	
7) G/E: % of tribute-tax (G) in Vassals' Sti. rev. (E)	42.5%	
8) F + G/D + E: Average % of tribute-tax (F + G) in total revenue (D + E)	41.9%	
9) F + G/A: % of tribute-tax (F + G) in total <u>roku-daka</u> (A)	12.6%	

According to the above analysis, the average tax rate, as shown under 5) in E, was only about 30.1% of the official production assessment. The tribute-tax to Satsuma constituted about 41.9% of the total tax revenue as shown under 8) in G. As to the distribution of the total production of 94,229 koku, 69.9% was kept by the tiller, and 30.1% went to the government and the vassals, but 41.9% of the latter was forwarded to Satsuma. Thus, the actual portion kept by the government and vassals was about 17.5% and the portion that was sent to Satsuma was about 12.6% of the total assessment as shown under 9) in G,¹¹⁹ viz.,

TABLE XXVII. RYUKYU'S PRODUCTION DISTRIBUTION (1)

Tiller	...	65,790 <u>koku</u>	69.9%
Gov't and vassals	...	16,507 "	17.5
Satsuma	...	<u>11,933 "</u>	<u>12.6</u>
		94,230 "	100.0

If leakage of 0.19 per koku is added and the tribute-tax is computed as 14,200 koku, it would be:

TABLE XXVII. (Continued) RYUKYU'S PRODUCTION DISTRIBUTION (2)

Tiller	...	65,790 <u>koku</u>	79.9%
Gov't and vassals	...	14,240 "	15.1%
Satsuma	...	<u>14,200 "</u>	<u>15.0%</u>
		94,230 "	100.0%

Although based upon the government record, the above analysis can be misleading simply because the revenue included only the principal land tax. If all the other taxes, such as the special product tax, the complementary tax, the corvee tax, and the cattle tax, were included, the result would considerably increase the government's share in the production distribution. Probably it would look like the following which was computed on the basis of, as shown in Section 2 of this chapter, the peasants' actual portion of 33%, with the remaining 67% being divided among the Royal Treasury, Vassals, and Satsuma.

TABLE XXVII. (Continued) RYUKYU'S PRODUCTION DISTRIBUTION (3)

Tiller	...	31,086 <u>koku</u>	33%
Gov't and vassals	...	48,944 "	52%
Satsuma	...	<u>14,200 "</u>	<u>15%</u>
		94,230 "	100%

Of these three production distribution analyses above, the last one, Table XXVII (3), is closer to actuality than the others. The figures are subject to further revision due to other hidden factors which might be brought to light, such as profits from trade, monopolies, and requisitioning of the government supplies at a fraction of the market price. It can be said that if all of these hidden factors are taken into consideration, they would considerably increase the revenue of the government and vassals, while the revenue of the tillers and for Satsuma would shrink in percentage, though not in actual amount. For the present, in an attempt to bring estimate of government revenue as

close as possible to actuality, a list is given below including not only the principal land tax and surcharges, but also the corvee money and special products.

TABLE XXVIII. RYUKYU GOVERNMENT REVENUE LIST¹²⁰

I. Principal Tax		
(1) Okinawa	<u>18,900.53125</u>	<u>oku</u>
a. Rice	16,237.17125	"
b. Misc. grains (5,326.72070 x 1/2)	2,663.36	"
(2) Miyako	<u>3,367.05872</u>	"
c. Millet	1,150.42292	"
d. Textiles	2,216.6358	"
(3) Yaeyama	<u>2,326.28980</u>	"
e. Rice	823.90520	"
f. Textiles	1,502.3846	"
II. Surcharges	<u>3,841.35941</u>	<u>oku</u>
g. <u>Bumai</u> (corvee rice)	1,422.98014	"
h. <u>Kōketsujidemai</u> (complementary rice)	1,518.38507	"
i. <u>Kakemashimai</u> (additional rice)	368.20264	"
j. <u>Gyūbademai</u> (cattle rice)	443.98413	"
k. <u>Zaibandemai</u> (commissioners' rice)	61.47804	"
l. <u>Ukitokudemai</u> (special products rice)	26.32939	"
III. Special Taxes		
m. <u>Hiyōsen</u> (corvee money)	985,091.956	<u>kan</u>
n. <u>Buchin'awa</u> (corvee millet)	839.19277	<u>oku</u>
o. <u>Buchinmai</u> (corvee rice)	549.12397	"

TABLE XXVIII. (Continued) RYUKYU GOVERNMENT REVENUE LIST

p.	<u>Ukitokusen</u> (special product money)	3,906.550	<u>kan</u>
q.	Hemp palm hair	16,964.64	<u>kin</u>
r.	Floss silk	4.755	"
s.	Salt (2,438.045 bales)	121.945	<u>koku</u>
t.	Inanchi reef fishing fee	240.	<u>kanmon</u>
u.	Sulphur	20,000.	<u>kin</u>
v.	Polished shells	800.	pieces
w.	Chinese bamboo	9,050.	poles
x.	"	2,145.	bundles
IV. Total Revenue			
y.	Rice (a + e + g-1 + o)	21,451.55983	<u>koku</u>
z.	Misc. grains (b) (5,326.72070 x 1/2)	2,663.36	"
aa.	Millet (c + n)	1,989.61569	"
ab.	Textiles (d + f)	3,719.0204	"
ac.	Copper cash (m + p + t)	962,238.506	<u>kanmon</u>
ad.	Hemp palm hair (q)	16,964.64	<u>kin</u>
ae.	Floss silk (r)	4.755	<u>kan</u>
af.	Salt (s)	121.945	<u>koku</u>
ag.	Sulphur (u)	20,000.	<u>kin</u>
ah.	Polished shells (v)	800.	pieces
ai.	Chinese bamboo (w, x)	9,050.	poles
		2,145.	bundles

As shown in Section 1 of this Chapter, the tribute-tax grew from 32 kan of silver (equal to 2,666 koku of rice) in 1611 to 14,200 koku by the early eighteenth century, or about 5.3 times. During the same period, Ryukyu's official production assessment grew from 83,085 koku to 94,230 koku, a mere 0.88 times. This points out the fact that Ryukyu's tribute-tax grew 5.3 times whereas its production assessment grew only 0.88 times during the same period. It follows that if Satsuma considered the tribute-tax of 32 kan of silver reasonable on 83,085 koku, then 14,200 koku tribute-tax on 94,230 koku assessment would have to be considered to be an unreasonably heavy burden upon Ryukyu.

Such a conclusion would be correct, however, only so far as it is discussed upon the basis of the official production assessment. As shown in Chapter II, Ryukyu's economic resources grew during the Tokugawa period and led to a considerable difference between official and actual production figures. Showing the relationship between the tribute-tax to Satsuma and Ryukyu's actual production are the following two charts based upon Chapter II and Section 1 of this chapter.

Chart 1, on Ryukyu's production growth during the Tokugawa period, indicates in Line A the growth of official production assessment from 83,085 koku in 1611 to 90,883 koku in 1639, and to 94,230 koku in 1722. Line C indicates the growth of the tribute-tax from 2,666 koku to 14,200 koku. It shows rapid growth in the early seventeenth century but for the most part thereafter it remained stationary, roughly parallel to the official production assessment. Line B indicates that actual production kept growing till it reached an average of about 310,000 koku for the Tempō period (1830-1843). As Chart 2, on the Tribute-tax and the

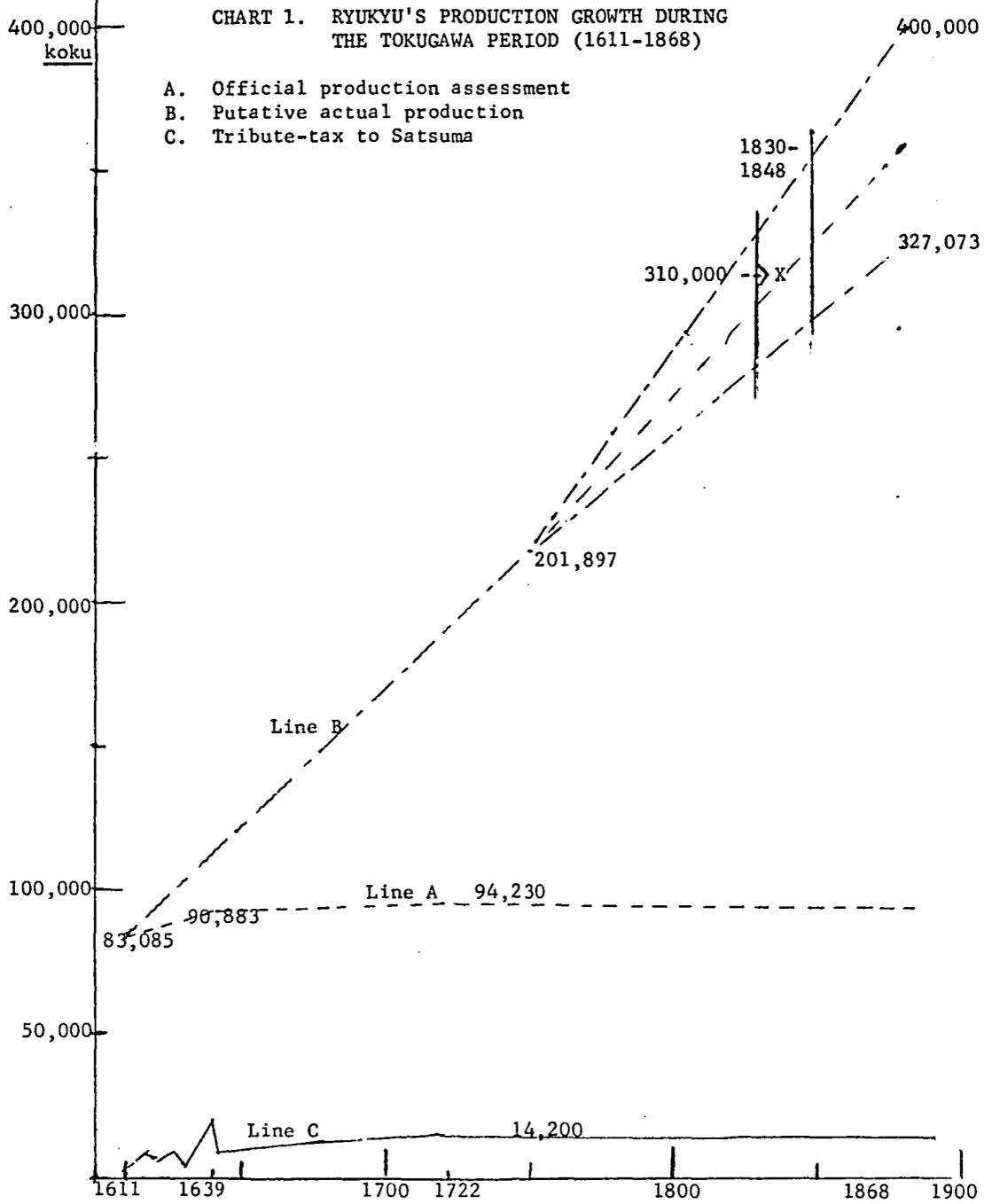
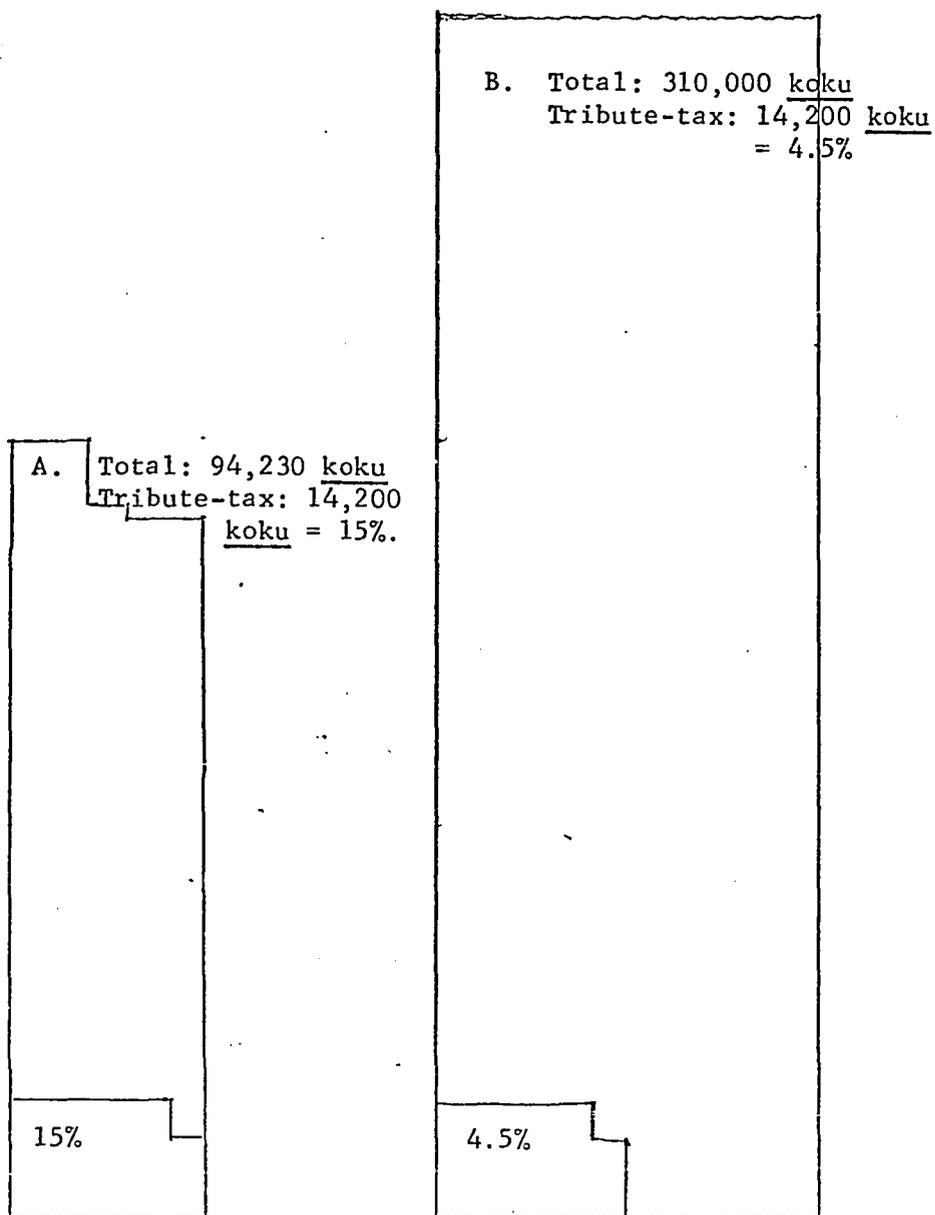


CHART 2. TRIBUTE-TAX AND THE TOTAL PRODUCTION
OF RYUKYU DURING THE TEMPO PERIOD

1 square = 1,000 koku

A. Official assessment

B. Putative actual production



production of Ryukyu, shows, the 14,200 oku tribute-tax to Satsuma was about 15% of the official production assessment but only 4.5% of the actual production of 310,000 oku.

CHAPTER IV

SATSUMA'S MONOPOLY OF RYUKYU'S NATIVE PRODUCTS

1. History of Sugar Manufacture

Sugar seems to have been introduced into Japan during the eighth century when there were frequent contacts with T'ang China. The earliest mention of the introduction of sugar in the records of Japan was for 754 when it was reported to have been brought back by a Buddhist priest.¹ From then until the twelfth century, scattered references to sugar appear in various records, indicating that it was a very expensive medicinal ingredient.²

During the twelfth and thirteenth centuries, however, sugar came to be used in cakes for aristocrats while drinking tea, which was becoming popular among them. During the fourteenth century the use of sugar became more common.³ It was perhaps during this time that Ryukyuan ships began bringing sugar to Japan. The sugar that Ryukyuan ships brought to Japan had most likely been imported from South China or the South Seas.⁴

At the turn of the seventeenth century, sugar ceased being treated as a rare medicine, but it was still a very much prized commodity. On three different occasions between 1605 and 1608, Shimazu, the Lord of Satsuma, sent gifts of sugar, ranging in quantity from 1,000 to 2,000 kin, to Tokugawa Ieyasu, the Shogun at Edo.⁵ Shimazu may have acquired the sugar either from visiting Chinese ships or from Ryukyuan ships bringing sugar from overseas.⁶

Origin of the sugar manufacture

There is no evidence that sugar cane existed in Japan proper before the seventeenth century. In Ryukyu, however, sugar cane seems to have been grown from ancient times. Ch'en K'an, Chinese investiture envoy to Ryukyu in 1534, noted that sugar cane was grown in Ryukyu, along with peaches and oranges.⁷ The fact that sugar cane was listed along with fruits implies that sugar cane was not grown as material to be processed into sugar but as something to be consumed directly. Several official chronicles of Ryukyu written in the early eighteenth century agree that sugar cane had existed in Ryukyu from olden times but that the people did not know how to manufacture sugar from the cane.⁸

Almost all the writings published in the twentieth century have credited Sunao Kawachi of Amami-Oshima Island as the first person to manufacture sugar. He is reported to have been shipwrecked on the South China coast where he learned the method of sugar manufacture and brought the process back to his native island in 1610.⁹ But recently it has been conclusively proved that the story of Sunao Kawachi was fabricated by the Tokyo government in 1880 and that the sugar industry spread to Amami-Oshima from Okinawa about the year 1698.¹⁰

This shifted the honor of being the first manufacturer of sugar to Gima Shinjō, steward of Kakinohana village in the suburbs of Naha and magistrate of agriculture (1609-1644) in the government of Ryukyu. In 1623, Gima sent one of his men to Fukien on a Ryukyuan tribute ship in order to study the method of sugar manufacture. When he came back, Gima conducted experiments himself and then endeavored to spread the method throughout the country.¹¹ Sugar became an important industry by the

1640's not only because the climate and soil were well suited for sugar cane culture, but because there was no other profitable cash crop. In 1647, just twenty four years after its introduction from China, sugar began to be exported to Satsuma.¹²

Method of sugar manufacture

Methods of sugar cane cultivation, of extracting the juice, and of processing the juice into solid sugar were all learned from China, but the rapid progress of the sugar industry in Ryukyu may be due to the fact that Ryukyu was able to start with the latest method which had just been developed in China -- the two-cylinder and three boiler method.¹³

In 1663, the Ryukyu government sent Taketomi Jūrin to Fukien to study the refining of white sugar and the making of sugar candy. Upon his return he taught the methods to the people in Urasoe.¹⁴ But the manufacture of white sugar and sugar candy seems to have failed to achieve importance. This failure is attributed by Majikina to lack of demand for these commodities as yet.¹⁵ Higuchi, while agreeing with Majikina, added that Ryukyu also lacked the ingredients necessary for the bleaching process.¹⁶ The first reason seems counter to the fact that a great amount of these commodities was being brought to Nagasaki by Chinese and Dutch merchants.¹⁷ Perhaps the Ryukyu government attempted to produce them locally because they knew of this great demand for white sugar and sugar candy in Japan. Probably the second reason, that of technical difficulty, was closer to the truth. A Ryukyuan government document from the early nineteenth century shows that white sugar continued to be produced, albeit only in limited quantities and

for limited uses by the king and other high ranking officials because of technical difficulties, and prohibitive labor and other costs.¹⁸

In 1671, Makiya Jissei of Shuri improved the two cylinder sugar cane juice extractor by adding another cylinder, achieving more effective juice extraction.¹⁹ The next improvement did not come until 1860 when the wooden cylinders were replaced with stone cylinders.²⁰ Thus it was the wooden three-cylinder and three boiler system produced by Makiya Jissei in 1671 that was in use during the Tempō Period (1830-1843).

In his search for a contemporary record on the sugar manufacture method, Nakahara Zenchū lamented that the earliest record he could find that described the process of sugar manufacture was dated 1907,²¹ but Commodore M. C. Perry's Narrative of the Expedition of an American Squadron to the China Seas and Japan contains two descriptive reports on sugar cane culture and sugar manufacture on Okinawa in 1854.

According to these reports, sugar cane was cultivated extensively in all the middle and southern regions of Okinawa. Strong clay lands, red and mullato, with limestone sub-soil were generally selected for sugar cane, but that in alluvial soil near streams the sugar cane attained a greater size. It was cultivated in small plots, seldom exceeding an acre in extent. The cane was planted in rows less than four feet apart, and very thickly -- about a foot or less apart. Cane stalks in the outside rows were tied together to prevent injury from the winds. The stalks were chopped down with sickles or hooks, and the leaves and tops stripped off, after which they were carried in bundles to the sugar-mills, several of which were in operation during harvest

time in January and February in almost every village in these regions.²²

On the sugar mills, the following is quoted from D. S. Green's report.²³

The mills deserve mention; they are simple, but effective. They consist of three cylinders of hard wood, held in an upright position by a timber frame. These are a foot or so in diameter, two feet high, and placed in a row with a mortise and wedge on either side to graduate the distance between them and the pressure. The central one has a wooden axle or shaft extending through the frame, some six feet high, to which is attached a curved lever of fifteen feet, by which the mill is easily worked. One bull or horse is the moving power, and he walks in a circle about thirty feet in diameter. This central cylinder has a row of cogs (hard wood) near its upper end, which play into mortises (instead of corresponding cogs) cut into the other two. This constitutes the whole apparatus, with conduits to lead the juice to a tub or receiver, placed in a hole near by. The cane is passed between the central and right roller; and before its escape, being seized on the opposite side and twisted together like a rope, is passed back between the central and left roller. This double operation seems to press it thoroughly, and to deprive it of its juices effectually. The juice is sweet, and appears to be very saccharine. It is boiled in adjoining temporary houses, in thin iron pans of eight or ten gallons.

2. Origin and Nature of the Sugar Monopoly

For about two decades after 1623 when sugar manufacture began, peasants in Ryukyu seemed to have enjoyed a free hand in making and selling sugar to seamen and merchants from Satsuma, who in turn brought various consumer goods much needed by the peasants. However, this period of free enterprise in sugar was short-lived because in 1646 the Ryukyu government decided, as will be described below, to overcome its financial crisis with profits from sugar and turmeric. The financial crisis that forced the Ryukyu government to establish a monopoly on sugar was largely a result of repercussion from the great upheavals accompanying the dynastic change from the Ming to the Ch'ing in China.

In 1644 the Ch'ing took over Peking and organized their regime. Yet the Ming loyalists put up a strenuous and prolonged resistance. It was only after the rebellion of the Three Viceroyes in the south had been suppressed in 1674-1681 and the naval forces led from 1645 to 1683 by the Cheng family on Formosa had been demolished that the Ch'ing rule was finally established. In Japan, both the Tokugawa and Satsuma-han governments demurred from a quick response to Ming requests for aid with Japanese expeditionary forces. Instead they tried to ascertain the true situation in China.²⁴ Ryukyu, being tributary to the Ming, could hardly avoid being affected. There was the dilemma of deciding to whom Ryukyu should pledge its allegiance, the Ming or the Ch'ing, while the outcome of the struggle was not certain. Another was the insecurity of the ocean voyage and of the tributary trade. Because of the decline of Ming naval power, the Ryukyu-Fukien sea route was infested with pirates.²⁵ Furthermore, there were repeated missions from refugee Ming throne claimants requesting aid. These in turn necessitated frequent Ryukyuan missions to Satsuma. All of these events caused further aggravation of Ryukyu's financial crisis.²⁶

In 1646, Min Pang-chi, envoy from T'ang Wang, Ming throne claimant in Fukien, arrived. The Ryukyu government, having insufficient funds to accommodate him, negotiated a loan of 400 kan of silver from Satsuma. In 1650 the Ryukyu government found that it was unable to pay the debt as promised within six years and sent an envoy to plead for postponement of the deadline.²⁷

In the same year, the Ryukyu government called a meeting of officials to discuss how to repay the 400 kan loan. Two officials,

Tōma Jūchin and Kohagura Gashin, proposed a government monopoly over sugar and turmeric, which would be purchased from the peasants by the government and sold in Satsuma at a good profit which would then be applied to the debt. Their proposal was approved and in the following year, 1647, they were given a sum of money raised by the sale of fifty koku of rice. With this money they purchased 6,000 kin of turmeric which was then sold in Kagoshima at a price that brought a great profit to the government.²⁸

Citing the above events, Majikina Ankō in 1916 and Ashitomi Matsuzō in 1919 stated that the double monopoly of sugar first by Ryukyu and then by Satsuma began in 1647.²⁹ Because they were the first to write on the sugar monopoly in Ryukyu, almost all who followed seemed to have accepted their theory excepting some minor variations.³⁰ In his Okinawa no rekishi [History of Okinawa], Higa Shunchō, introducing the event of 1646 when Tōma and Kohagura proposed sugar and turmeric monopolies, said that Satsuma welcomed the move as a means to monopolize the Okinawans sugar, and from then on Satsuma caused a part of the tribute-tax rice from Ryukyu to be paid in sugar in addition to some which were purchased.³¹ Another went further than Higa to say that Ryukyu was ordered by Satsuma to institute the sugar monopoly from 1647, under which Ryukyu annually paid Satsuma about 970,000 kin of sugar in lieu of 3,980 koku of rice, a part of Ryukyu's tribute-tax to Satsuma.³² This alleged monopoly of Ryukyu's sugar by Satsuma caused many to denounce Satsuma. One historian remarked that Okinawa's sugar industry was promoted solely for the purpose of exporting it to Satsuma who monopolized the profit.³³ Another said that annually Ryukyu was forced to send 720,000 kin of sugar out of the total output of 870,000 kin,

delivering a severe blow to the finance of the Ryukyu government.³⁴

Recently, however, the discovery of a manuscript entitled Ryukyu-kan monjo [Documents of the Ryukyuan legation] has led to revision of this traditional view of the beginning and the nature of the sugar monopoly system.³⁵ The manuscript is a copy of records of the Ryukyuan legation at Kagoshima, covering the years 1751-1831, supplying much primary information on sugar, trade, and other factors in Ryukyu-Satsuma relations.

The following three letters, from the Ryukyuan legation to the Satsuma authorities, are taken from the "Ryukyu-kan monjo."

1. Request for permission to sell sugar in the Osaka and Seto-naikai areas. From Ryukyu to Satsuma, 1760 (Hōreki 10/2).

Over 790,000 kin of sugar have been brought here this time on Satsuma and Ryukyu ships. All of it is supposed to be sold here [at Kagoshima], and the money thus raised is to be applied toward the purchase in the Kyoto-Osaka area of government supplies, which are to be sent to Ryukyu by autumn. But we find ourselves in trouble now because we cannot dispose of all the sugar here in Kagoshima. We shall be late for the season because we can neither dispose of all of it here quickly enough even after March 10, nor can we visit the other ports before July 10, as this was prohibited in 1757.

Therefore, we sincerely request permission to sell about 300,000 kin in the Osaka and Seto-naikai areas, after two or three ship loads of sugar from Amami-Oshima Islands have been sold.³⁶

2. Refusal of Satsuma's proposal to purchase 300,000 kin of sugar. From Ryukyu to Satsuma, 1773 (An'ei 2/9).

The annual sugar output in Ryukyu is 2,500,000 kin, of which 1,200,000 kin is purchased by the Ryukyuan legation at Kagoshima. The remaining 1,000,000 kin and about 200,000 to 300,000 kin from that purchased by the Ryukyuan legation is re-sold to the ships' captains and seamen from Kagoshima and is brought here [Kagoshima]....

Now you proposed that after the Ryukyuan legation purchased its quota of 1,200,000 kin, the Satsuma-han would like to purchase 300,000 kin starting next year, 1774, at a price higher by 200 mon than that paid by the Ryukyuan legation to the peasants so that they would not be inconvenienced by your proposal of extra purchase.

Sugar has been sent here to be sold. With the silver thus obtained, we have been able to meet various expenses such as the trips to China, taxes, and the payment of interest on the debt of 2,600 kan of silver contracted by the Ryukyuan legation. The amount of sugar shipped here has varied from year to year but has averaged about 1,000,000 kin.

It is our law that no one but the Ryukyuan legation is allowed to purchase the sugar. If it is otherwise, it must be that we are negligent in our duties. Therefore, we will have no excuse to our king if we agree to your proposal [which would be in violation of our law]. We are grateful to you for your proposal to raise the price of sugar, but we are forbidden to sell the sugar through irregular channels. And we have no alternative but to plead with you to forego your proposal.³⁷

3. Regarding Satsuma's proposal to have sugar in lieu of tax-rice.

From Ryukyu to Satsuma, 1789 (Kansei 1/3).

This is to acknowledge receipt of your letter proposing that if it is not inconvenient to Ryukyu, in regard to the annual tribute-tax rice, Ryukyu might pay 280,000 kin of sugar in lieu of 1,000 koku of rice, which you stated would be profitable to both Ryukyu and Satsuma.

Because Ryukyu was recently exempted from the kasami-dashimai tax rice and also was favorably treated in this year's tax payment, we ought to accede to your proposal, but to our great regret we are forced to decline your proposal.

Sugar cane can be planted only in the best of land, of which we have but little.... Besides it consumes a great amount of fertilizer and human labor to the detriment of the welfare of the peasants.... If we grow more sugar cane than now at the sacrifice of food grains, should some emergency arise peasants would have to starve. Then it is inevitable that Ryukyu will decline, and will not be able to send the tribute-mission to China as it has done in the past....³⁸

From these documents it is manifest that the sugar shipped from Ryukyu to Satsuma was actually not consigned to the Satsuma government,

but to the Ryukyuan legation at Kagoshima. Second, the sugar and turmeric monopoly that was started in 1647 was carried out by and for the Ryukyu government and the Satsuma-han had no part in it. Third, the sugar that was handled by the Satsuma-han came from Amami-Oshima. Fourth, vis-a-vis Ryukyu, Satsuma-han's role was supervisory, limiting the time and place where Ryukyu could dispose of its sugar so that the priority and advantage might be given to Satsuma-han's own sugar from Amami-Oshima. Fifth, it was only by the end of the eighteenth century, when the financial situation of the Satsuma government became so critical, that it began to cast its eyes upon the lucrative sugar from Ryukyu. However, it was not yet able to obtain any share of the monopoly. Sixth, during the eighteenth and nineteenth centuries, the Satsuma-Ryukyu relationship was not at all like a master-slave relationship in which the former could arbitrarily impose its will upon the latter, but rather it was like the relationship between the Tokugawa overlord and the daimyo feudal lords, the latter being allowed some degree of autonomy, and even some veto power especially in the late Tokugawa period.

If the sugar and turmeric monopolies that started in 1647 were carried out by and for the Ryukyu government, and the Satsuma government had no part in them, then the next question would be when did the Satsuma government begin to participate in them? In answer the following document of the Sugar Bureau of the Ryukyu government dated 1852 is quoted.

To: Magistrate of Finance
From: Three Ministers
Date: 1852 (Kaei 5/9/20)

Recently Ryukyu has had a series of difficulties such as the extra expenditures for the foreigners staying [British missionary family, the Bettelheims] but especially from 1831 when Ryukyu was ordered to pay sugar in lieu of tribute-tax rice to Satsuma.

When the plight of Ryukyu reached the ear of Lord Nariakira, despite the difficulties that Satsuma itself was facing then, he magnanimously decided to let Ryukyu pay rice instead of sugar to Satsuma again from the coming year, 1853.

This message was relayed to us from Shimazu Bungo [The Satsuma councillor in charge of the Ryukyuan affairs], according to the message from our Ryukyuan legation at Kagoshima. All of us should be grateful to him for his magnanimity and should inform the officials in charge and tell the peasants to pay the tribute-tax in rice from the coming year.³⁹

In corroboration of the above document, a manuscript entitled "Ryukyu ikkenchō" ["Dossier on Ryukyu] dated 1820, written by Ginowan Chōkon, one of the Three Ministers of Ryukyu then, has a side note entered in 1832 on a section on Ryukyu's tribute-tax to Satsuma, stating that "because sugar began to be sent [to Satsuma] last year (1831), the amount of the tribute-tax rice to Satsuma should accordingly be reduced."⁴⁰

These two documents cited above clearly state when the Satsuma government began participating in the sugar monopoly but do not tell the amount of sugar sent to Satsuma or the amount of rice reduced in return. In 1873, Yonaha Ryōketsu, one of the Three Ministers of Ryukyu, who was stationed in Tokyo then, submitted a report to the Tokyo government on Ryukyu's production assessment and tribute-tax. In this report he listed the tribute-tax rice to Satsuma as 8,669 koku [7,633 koku motodemai + 1,036 koku bumai], of which 3,680 koku was paid in sugar amounting to 970,000 kin. In explanation of this item, he said that "by order of the Satsuma-han, since 1831 Ryukyu had paid 750,000 kin of sugar in lieu of 2,800 koku of rice. When Ryukyu became financially hard pressed and petitioned for a relief, Ryukyu was exempted from the payment of sugar after 1853. But again in 1862 Ryukyu was ordered to pay in sugar as before [namely, 750,000 kin]. In 1865 Ryukyu was ordered to increase

the sugar payment in lieu of rice by 440,000 kin, but upon petition that it would mean great hardship for the peasants..., Satsuma agreed to reduce the extra levy to about one-half, viz. 200,000 kin [making the total amount of sugar paid 970,000 kin then.]⁴¹

3. Sugar Monopoly by Ryukyu and by Satsuma

When sugar became an important source of revenue, the entire process of sugar manufacture, from its sugar cane culture to the making of sugar barrels, passed under strict government control and supervision. First, the Ryukyu government decided that the sugar cane was to be planted in all the districts in southern and central Okinawa and four districts in northern Okinawa, Kin, Motobu, Nakikin, and Kunigami, in addition to Iejima. These areas had more dry fields than wet rice paddies, and sugar cane was already grown there so its cultivation would not compete for land with the important staple foods, rice and sweet potatoes. The islands of Miyako, Yaeyama, and Kume were exempted because they were already assigned the production of textiles in addition to the regular taxes in rice and millet.⁴²

Soon after 1623, a Bureau of Sugar (satō-za) was created in the Department of Provisions (yōihō) under the Board of Finance (monobugyōsho). Its chief duties had to do with exports to and imports from Satsuma. Sugar was the most important export item. Until 1662, the post of Director of the Bureau was filled by the Magistrate of Finance concurrently, but in that year a full time Director of Sugar (satō bugyō) was appointed to supervise sugar cane culture, among other duties.⁴³

According to the mode of government control, there were three categories of sugar: (1) tax sugar (kōtō), (2) requisitioned sugar (kaiagetō), and (3) extra sugar (takikatō). Tax sugar was that which was paid in lieu of the regular tax rice. Its conversion rate was as follows:

TABLE XXIX. CONVERSION RATE BETWEEN TAX RICE AND TAX SUGAR⁴⁴

1. Official rate	2. Actual rate with leakage
A) .375 <u>koku</u> of = 100 <u>kin</u> of rice sugar	.42 <u>koku</u> of = 100 <u>kin</u> of rice sugar

applicable to all districts in southern and central Okinawa (except Misato District) and Ie Island.

B) .4166 <u>koku</u> = 100 <u>kin</u> of rice of sugar	.47 <u>koku</u> = 100 <u>kin</u> of rice of sugar
---	--

applicable to the districts of Kin, Motobu, and Nakijin in the north and Misato in the central region. More rice was paid perhaps because of the inferior quality of rice in these districts.

The official amount of tax sugar in the nineteenth century was 870,903 kin, in addition to 36,557 kin of leakage which became the income for the sugar storage officials.⁴⁵

Requisitioned sugar seems to have originated in the government's attempt to expropriate the sugar that remained in the hands of the peasants after the tax sugar had been paid. While the tax sugar was supposed to be in lieu of the tax rice, requisitioned sugar was in lieu of the tax millet, wheat, and other miscellaneous grains. If the amount paid in sugar to the government was more than the amount of tax grain owed, the peasants were either paid in cash or in various household

utensils and agricultural implements imported from Japan by the government. In this case, the price of sugar was not the current market price but the government-set price, which was lower than the market price, thus providing the government with another chance to reap a profit. The official amount of the requisitioned sugar was 1,871,485 kin, in addition to the leakage of 93,562 kin.⁴⁶

The last category was the extra sugar. It was that which remained in the hands of the peasants after all the quotas of the tax sugar and the requisitioned sugar had been met. Any village or district that had this extra sugar was allowed to dispose of it freely but only after all neighboring villages and districts had also met their quotas. If any village or district failed to meet the quota, a neighboring village or district that had extra sugar was obligated to loan it to that village so that the government would always be assured of full sugar receipt. After the entire quota was met, any extra sugar still left was free to be disposed of to any one. Most of this usually went to Satsuma through ships' captains, seamen, and merchants.⁴⁷

There is a widely held notion that sugar production was restricted by the Ryukyu government from 1693. This may be partially correct in the sense that the Ryukyu government limited sugar cane culture to certain districts in Okinawa. But citing the Administrative Manual for the Central Region of Okinawa (Nakagami hōshiki chō), Nakayoshi Chōsuke, writing in 1907, stated that in 1693 production of sugar was limited to 4.5 kin per peasant a year and the total area planted in sugar cane to 1,500 chō.⁴⁸ Many accepted his statement, and some even went further to say that these restrictions must have been imposed upon the hapless

Ryukyu by Satsuma who wished thus to control the sugar price in Osaka.⁴⁹

However, in 1722, the first year in which confirmed sugar output figures are available, it was reported that 870,000 kin was sent to the Ryukyuan legation in Kagoshima.⁵⁰ If Nakayoshi is to be believed, to produce 870,000 kin would require the work of about 193,333 peasants. Yet, the official total population for all Ryukyu, though somewhat underreported, was only 167,671 in 1721,⁵¹ and a highly reliable population figure in 1750 was 200,000 for all of Ryukyu including a considerable urban population and non-sugar producing population in the Miyako and Yaeyama archipelagos.⁵²

Such incongruities as shown above and others based on Nakayoshi's account of sugar production restriction led Nakahara to re-examine the original passage in the Administrative Manual for the Central Region of Okinawa (Nakagami hōshiki chō). He found that Nakayoshi had misinterpreted who the peasants in question were. In 1692, not 1693, there was issued such a government directive, but the object of the restriction was not the peasants in general, as Nakayoshi had assumed, but applied to peasants residing in the fief of the stewards. The latter were limited in the amount of sugar their peasants could produce for them without compensation.⁵³ Furthermore, after studying another directive dated 1697 which restrained all peasants from arbitrarily planting sugar cane but which made no mention of limiting total production, he concluded that restraints were not rigidly fixed but were quite flexible, varying from year to year according to the need for staple food crops and the demand for sugar in Osaka.⁵⁴

As to the amount of sugar produced, Nakahara made an estimate of

about 1,500,000 kin for 1722. Of this total, 870,000 kin went to the Ryukyu government, and the remaining 430,000 kin, or a major portion of it at least, probably went to Japan through Satsuma merchants, ships' captains, and seamen.⁵⁵ It was a few years earlier, in 1713, that Ryukyuan sugar first appeared in Osaka market.⁵⁶ Of the 870,000 kin collected by the Ryukyu government, the Financial Policy [Gozaisei], dated 1722, states that 700,000 kin was tax-sugar collected in lieu of tax-rice and the remaining 170,000 kin was produced free for a handful of top nobles and officials to cover their official expenses (shoshi gomendaka or shoshi men-satō). From the total of 870,000 kin, 148,909 kin was set aside mainly to pay for transporting the sugar by Satsuma ships (127,535 kin), for use by the Ryukyuan and Satsuma officials (15,685 kin), and for other miscellanies. Of the remaining 721,090 kin, 180,000 kin was shipped on Ryukyuan government ships free of charge, and the 541,090 kin was shipped in Satsuma ships, at the cost of 127,535 kin as mentioned above. At Kagoshima, 721,090 kin was sold by the Ryukyuan legation to local purveyors at 35 momme of silver per 100 kin, yielding 252 kin and 381 momme of silver for the Ryukyuan government.⁵⁷

The Ryukyuan legation at Kagoshima, which had its own account separate from that of the home government at Shuri, paid Shuri for whatever goods it received and sold there. The tax-sugar received by the legation was worth 35 momme of silver per 100 kin. Of this, Shuri was paid 20 momme, the current market price in Ryukyu, and the difference of 15 momme was kept at the Ryukyuan legation to be accumulated as its own operating fund. Thus, the Ryukyuan legation's

income from the 700,000 kin of tax-sugar was 105 kan of silver and that of the home government at Shuri was 140 kan, totaling 245 kan of silver. The remaining 170,000 kin of sugar earmarked for the privileged top officials' expenditures was also sold by the Ryukyuan legation at 35 momme per 100 kin, but only 19.8 momme was remitted to these officials. The legation kept the remaining 15.2 momme. In other words, 170,000 kin of sugar yielded a total of 59.5 kan of silver, of which 33.66 kan was remitted to the privileged officials and 25.84 kan was kept at the legation, perhaps as a handling fee.⁵⁸

The conversion rate between tax-rice and tax-sugar was 1 koku of rice = 267 kin of sugar (or vice versa 100 kin of sugar = .375 koku). One koku of Ryukyuan rice brought 39.8 momme of silver in Kagoshima.⁵⁹ Yet 267 kin of sugar brought 93.45 momme of silver, increasing the value about 2.35 times, to the benefit of the Ryukyuan government. In other words, instead of 2,625 koku of rice which would have netted 104.475 kan of silver, the Ryukyu government collected 700,000 kin of sugar which netted 245 kan of silver, resulting in an extra income of 140.525 kan of silver. It was as though the Ryukyu government collected 6,169 koku of rice instead of 2,625 koku, the formal amount due the government.

It was this profit that supported many important activities of the Ryukyu government such as the China trade, Ryukyuan missions to Edo or Kagoshima, and receiving Chinese missions to Ryukyu. The Ryukyu government had two separate budgets, labelled rice and silver. Silver income consisted mainly of the receipts from sugar, turmeric and silk yarn imported from China in the previous year. Total silver income was 437 kan, of which the income from sugar was the most important, as it

amounted to 245 kan or about 56%.⁶⁰

From 1722 sugar production grew steadily. By 1773, some fifty years later, the total production was reported to be about 2,500,000 kin, of which about one-half went to the Ryukyuan legation at Kagoshima and the other half went to the ship captains and seamen from Satsuma.⁶¹ By 1822, another fifty years later, 3,500,000 kin was delivered to the Ryukyuan legation, the breakdown of which is as follows:

TABLE XXX. BREAKDOWN OF THE SUGAR DELIVERED
TO THE RYUKYUAN LEGATION⁶²

1.	1,500,000 <u>kin</u>	...	43%	...	Ryukyu government income
2.	240,000 <u>kin</u>	...	6.7%	...	In payment of the government loan from Moriyama Kakunojō
			<u>49.7%</u>		
3.	940,000 <u>kin</u>	...	26.8%	...	Earmarked for the <u>shoshi</u> , or privileged Ryukyuan nobles
4.	820,000 <u>kin</u>	...	23.5%	...	Earmarked for the Satsuma officials in Ryukyu and Satsuma's ship captains and seamen
			<u>50.3%</u>		
	<hr/>				
	3,500,000 <u>kin</u>		100.0%		

As the above shows, the proportion that actually went to the Ryukyu government's finance was only about 50%, while the other 50% was set aside for the profit of a few Ryukyuan nobles, a handful of Satsuma officials in Ryukyu, and Satsuma men engaged in shipping between Ryukyu and Satsuma. The profit for the latter is attested to by Suda Sōemon, a shipper of Uchiura, Satsuma, who, in a petition to Satsuma authorities for a subsidy on shipbuilding for Edo route, dated 1799, stated that for the shippers even two round-trips to Edo were not as profitable as one

to Ryukyu....⁶³ Also the Satsuma shippers compelled themselves to draw lots for turns to go to Amami-Oshima and Ryukyu in order to avoid the evils of unregulated competition among themselves.⁶⁴ In summary, it may be said that the official sugar monopoly, which was established to aid government finance, was quite seriously encroached upon by a few Ryukyuan aristocrat-officials, Satsuma officials in Ryukyu, and Satsuma shippers, by the beginning of the nineteenth century.

In the early nineteenth century, both the Ryukyu and Satsuma governments were in financial trouble.⁶⁵ Yet the top Ryukyuan aristocrat-officials seem to have paid scant attention to the problems of government finance. They simply sought more loans from Satsuma and Kagoshima merchant-purveyors, entreated Satsuma to reduce their obligations, or forced "permanent loans" from rich Ryukyuan commoners in return for granting samurai status. In the meanwhile they continued to appropriate a considerable portion of the sugar, the most important cash crop, with the connivance of the Satsuma officials in Ryukyu who shared in the profits.

Satsuma government made attempts in 1773, 1789, and 1801 to recover some sugar from unofficial channels. In 1801 Satsuma-han proposed to set aside 250,000 kin of sugar out of the quota for the Ryukyuan legation and from the officials' private sugar for the purpose of liquidating the Ryukyu government's loan from the Satsuma government. The proposal failed because of opposition from Ryukyuan officials who wanted to preserve their share of the profit from the existing system.⁶⁶

The Satsuma government's inability to correct the situation indicates two things. One was the general decline of authority of the

Satsuma overlord vis-a-vis Ryukyu. Ryukyuan officials in the seventeenth century would not have dared to reject a proposal or even a suggestion from Satsuma, but now the wishes of the Satsuma authorities often met with evasion and sometimes outright refusal from the Ryukyu government.⁶⁷ Secondly, a number of the high class Satsuma samurai, from among whom the resident magistrate to Ryukyu was appointed, in alliance with a group of wealthy Satsuma shippers and purveyors to the Ryukyu government, had deep vested interests in the status quo.⁶⁸

In the late 1820's, however, when Satsuma's financial situation became desperate, Shimazu Shigehide empowered Zusho Shōzaemon (Hirosato) with extraordinary authority to carry out what was later known as the Tempō reform in Satsuma, one of the few successful reforms in the late Tokugawa period.⁶⁹ One of his multi-faceted financial reforms was to have a part of the annual tax-rice from Ryukyu paid in sugar. The idea was suggested by one of his subordinate, Takada Shōgorō, who as the resident magistrate in Ryukyu at the time, must have been aware of the enormous amount of sugar which was being diverted from the government monopoly in the interests of a few officials and merchants.⁷⁰ The decision which required Ryukyu to pay 750,000 kin of sugar in lieu of 2,800 koku of rice, had a double-purpose. One was to realize greater profits from 750,000 kin of sugar than was possible from the 2,800 koku of rice. The other was to establish strict control of the sugar supply for the purpose of maintaining a good price level for Satsuma-han's own sugar from Amami-Oshima. A letter dated 1832 from the Satsuma officials in charge of sugar affairs in Amami-Oshima complained that although in 1830 the sugar from Amami-Oshima brought great profit to the lord's

treasury, Ryukyuan sugar in 1831 flooded the market and brought down the price level to the detriment of the lord's treasury.⁷¹

Thus, it seems that faced with the extraordinary emergency powers wielded by Zusho Shōzaemon, Ryukyu paid 750,000 kin of sugar in lieu of 2,800 koku of rice from 1831. In return, assurance was given that Ryukyu would be allowed to continue to export 1,500,000 kin of sugar through the Ryukyuan legation. 750,000 kin was to be made available for Satsuma at any cost, even after poor crops. Only after exhausting all means, would any shortage in sugar be allowed to be made up in rice.⁷² This arrangement continued until 1853 when it was suspended upon a plea from Ryukyu for relief. After an interruption of nine years, Ryukyu began paying 750,000 kin of sugar again 1862, and the amount was increased to 970,000 kin in 1865 and continued for several years even after the end of the Tokugawa period.⁷³

In summary, in the 18 year period from 1831 to 1848, Satsuma annually received 750,000 kin of sugar for a total of 13,500,000 kin. This was in lieu of an annual income of 2,800 koku of rice, totaling 52,400 koku.⁷⁴

The financial gain to Satsuma must be estimated by first determining how much Satsuma expected to make from 52,400 koku of rice as against profits from 13,500,000 kin of sugar. The price of Ryukyu rice was consistently 2 momme of silver less than that of Satsuma rice per koku.⁷⁵ Satsuma rice, which itself was of low quality in Japan,⁷⁶ brought an average price of 52.812 momme of silver per koku during the Bunsei period (1818-1829), but the Tempō Reform with stricter agricultural supervision and improved processing raised the price of Satsuma rice

during the Tempō period (1830-43) to an average of 96.383 momme of silver per koku.⁷⁷ However, Satsuma's Tempō Reform did not extend to Ryukyu, so Ryukyuan rice may have brought 2 momme of silver less than that of Satsuma rice of the Bunsei period, or 50.812 momme per koku. If that is correct, 52,400 koku of Ryukyuan rice would have brought 2,662.449 kan of silver. But Satsuma received 13,500,000 kin of sugar, which at 1.175 momme per kin,⁷⁸ brought 15,862.500 kan of silver, or about six times more than the aforementioned rice.

It has been claimed that for 232 years from 1647 to 1879, from the beginning of the sugar monopoly to the end of the Ryukyu kingdom, Satsuma 'exacted' from Ryukyu a total of 992,662,000 kin of sugar, netting a gross profit of 448,981 kan of silver,⁷⁹ but this was about twenty times more than the amount that Satsuma actually made.

4. Monopoly of Turmeric and Others

In earlier days, the main supplier of turmeric to Japan had been Siam, but after the 1630's, only a small amount was brought in on Chinese ships at the port of Nagasaki.⁸⁰ Therefore, the supply of turmeric could not keep up with the demand and the price kept rising.

Tōma Jūchin, originally from Satsuma, may have known of this situation when he and Kohagura Gashin proposed in 1646 that the Ryukyu government establish a monopoly on turmeric. With 50 koku of the government's rice, 6,000 kin of turmeric was purchased and sold in Kagoshima for 12 kan of silver.⁸¹ In other words, the Ryukyu government paid about .83 koku of rice for 100 kin of turmeric, which was then sold for 200 momme of silver. But one koku of rice at the time cost only

140 mon of copper or 35 momme of silver, and this means that the Ryukyu government bought 100 kin of turmeric for less than 35 momme and sold it for 200 momme, or six times the purchase price.⁸²

In 1712 it was said that much of the turmeric in the Osaka markets came from Ryukyu and that good Ryukyuan turmeric, called gomotsu, had a deep yellow color, and was excellent for dyeing cotton and paper. The term "gomotsu" literally means "the honorable goods," indicating government goods as distinguished from private goods.⁸³ This indicates that the good turmeric was handled through the Ryukyuan government monopoly. Also the fact that only good Ryukyuan turmeric was called gomotsu indicates turmeric of inferior quality may have been sold through private channels, most likely by those engaged in shipping between Satsuma and Ryukyu.⁸⁴

Peasants in Amami-Oshima and Ryukyu increased their turmeric production, which led eventually to lower prices. Thus, in 1725, the Ryukyu government purchased 30,000 kin of turmeric from the peasants at 34.3454 momme per 100 kin. It was sold at auction at the Ryukyuan legation at Kagoshima for 58 momme per 100 kin, or only 1.7 times the purchase price.⁸⁵ There were thirteen purveyors in Kagoshima who were authorized by the Ryukyu government to participate in the bidding for sugar, turmeric, and other goods at the Ryukyuan legation, and in return for this privilege they accommodated the Ryukyu government with loans or advance payments at low interest.⁸⁶

At the beginning of the eighteenth century turmeric was not so lucrative as it used to be, but it was one of the few valuable cash crops of Ryukyu, and it was dominant among the medicinal herbs exported

from Satsuma to Osaka.⁸⁷ By the end of the century its price level seems to have recovered sufficiently to lead to several attempts by those who did not belong to the group of thirteen authorized purveyors to cut in on the trade in Ryukyuan turmeric. In 1798 Yuda Nakagorō, a Kagoshima merchant submitted a petition to the Satsuma government for permission to purchase turmeric and Corsican weed from Ryukyu. In answer to Yuda's petition, the Ryukyuan legation said that "because Ryukyu has only a few products, the government made the peasants grow such things as turmeric, which would be purchased and sent to Satsuma every year. It is with the profit made from this transaction that various expenses have been met. Therefore, it has been prohibited for anyone to freely engage in selling and buying these products, but often shippers and seamen have been found smuggling. We have requested our home government to be more strict in prohibition of smuggling and to send us as much [turmeric and Corsican weed] as possible. From the last year we have had Corsican weed sent here to help supplement our income. If we allow free trade, it is expected that the buyers will compete by raising the price, and the peasants will be lured into smuggling, which will not only make them criminals but also reduce the government's income. Consequently, we are compelled to request that Yuda Nakagorō's petition be denied."⁸⁸

In 1800 Samejima Hanji, another Kagoshima merchant, attempted to cut in on the Ryukyu government's turmeric monopoly. His proposal was that the Satsuma government should purchase the turmeric from the Ryukyu government at a price higher by 10 momme of silver per 100 kin than the average price of the past five years. Then the Satsuma

government would sell it to him at a profit, and he would then ship it to Osaka. By giving Satsuma a share of the profit Samejima felt that there would be an incentive for the Satsuma government to approve the proposal, and by raising the price to be paid to the Ryukyu government, he hoped to eliminate objections from that government. The Ryukyuan legation rejected the proposal, but the Satsuma government in financial straits for many years past, tried to make Samejima's proposition more acceptable to Ryukyu by giving more concessions. It finally took the unusual step of simply notifying Ryukyu that Samejima had already been given a tentative approval.⁸⁹

The Ryukyuan legation remained adamant stating that because in recent years Ryukyu's China missions and other expenses had been financed by loans from the thirteen purveyors at Kagoshima who had monopoly rights over turmeric and sugar, Ryukyu could not possibly ignore their rights and give them to Samejima, and Ryukyu could agree to Satsuma's action only when all the debts had been cleared. To this Satsuma had no effective reply, and Samejima's proposal came to naught.⁹⁰

In 1805, the Satsuma government tried in vain to purchase all the Ryukyuan turmeric at 150 momme per 100 kin.⁹¹ In 1808, in reply to an offer from Satsuma of a higher price for all Ryukyuan turmeric, the Ryukyu legation said that the average amount of turmeric production was about 50,000 kin a year and that the price per 100 kin had gone down to 54 momme in 1807 and 60 momme in 1808.⁹² In other words, the Ryukyu government paid a total of 18 kan of silver for 50,000 kin of turmeric at the rate of 36 momme per 100 kin. This was sold to the thirteen authorized purveyors at Kagoshima for 30 kan of silver, or 60 momme per

100 kin.⁹³ In the 1820's, however, the Ryukyu government reduced the amount of turmeric released to 30,000 kin a year. This caused a rise in price to 220 momme per 100 kin in 1827 and 1828, returning a total of 66 kan of silver to the Ryukyu government on an investment of 10.8 kan, indicating an increase in value of almost six times.⁹⁴

The sugar and turmeric monopolies of the Ryukyu government finally were broken in 1830 when Zusho Shōzaemon was given the task of trying to save the Satsuma-han from imminent bankruptcy, with enormous emergency powers that could override any veto exercised by the Ryukyu government.

Ebihara Yōsai, one of Zusho's chief lieutenants, described the situation in this way, in 1840:

Although Ryukyuan turmeric was a special, unique local product and Satsuma tried several different methods in its sale, there was no use trying to make much profit, because there was too much turmeric going through irregular channels that kept the turmeric price down in Osaka and Kyoto. It was ordered therefore that all turmeric plants in Amami-Oshima be destroyed and that only specially designated areas in Ryukyu be allowed to grow turmeric. The processing, shipping, and sale of turmeric were strictly supervised so as to eliminate smuggling to Kyoto and Osaka. Such measures helped raise the turmeric price to a very high 15 momme per kin (1,500 momme per 100 kin) in 1836, at which level it persisted. Since the year before last (1838), with smuggling completely stopped, the Kyoto and Osaka merchants became very low in their stocks of turmeric and the volume of sale increased markedly. The situation became such that even several tens of thousand kin could be handled without trouble, so last winter we even directed Ryukyu to increase production....⁹⁵

When the Tempō Reform began, the Ryukyu government delivered 30,000 kin of turmeric a year to Satsuma-han at a price of 150 momme per 100 kin, or a total of 45 kan. But whereas well over 30,000 kin used to be shipped before 1830, only 10,000 kin a year was now released for sale in Osaka in order to reduce the turmeric stock and to raise the price. This

was quite effective. Now 10,000 kin of turmeric was sold at the rate of 1,000 momme per 100 kin, yielding the total of 100 kan of silver, while only 15 kan of silver had been paid to Ryukyu. When the stock was completely exhausted and the demand rose even higher, 30,000 kin a year was released at a price of 1,500 momme per 100 kin. This amounted to a total income of 450 kan of silver (7,500 ryō of gold), while only 45 kan of silver had been paid to Ryukyu.⁹⁶

To summarize, prior to 1830, the Ryukyu government paid the peasants 34 momme of silver for 100 kin of turmeric which it sold to the thirteen authorized purveyors in Kagoshima for 50 to 220 momme per 100 kin. The purveyors then shipped it to Osaka. With the beginning of the Tempō Reform in 1830, however, the thirteen purveyors were eliminated, and the Ryukyu government sold the turmeric at 150 momme per 100 kin directly to the Satsuma government which then sold it in Osaka at 1,500 momme per 100 kin.⁹⁷

Between 1830 and 1835, the Satsuma government purchased from the Ryukyu government 30,000 kin of turmeric a year, but released to the Osaka markets only 10,000 kin a year at 100 kan of silver. For these five years Satsuma's gross receipt would be 500 kan of silver. The remaining 20,000 kin a year, totalling 100,000 kin in five years, was presumably sold when the price reached 1,500 momme per 100 kin, for a gross total of 1,500 kan of silver. Thus, the Satsuma government earned 2,000 kan of silver for the 150,000 kin of turmeric, for which it had paid 225 kan of silver. For the next thirteen years, from 1836 to 1848, the Satsuma government continued to pay 45 kan of silver to the Ryukyu government for 30,000 kin of turmeric, which was then sold in Osaka for

450 kan of silver. Its annual gross profit was 405 kan of silver or, for thirteen years, 5,265 kan of silver. Thus, the gross profit that the Satsuma government realized from the turmeric monopoly during the Tempō Reform would be 7,040 kan of silver.

As in the case of sugar, the fact that the Ryukyu government began the monopoly of turmeric in 1647 has too often been misinterpreted to mean that the Satsuma government was from the beginning an unwelcome partner pocketing the major profit itself at the sacrifice of Ryukyu for over 200 years.⁹⁸ However, the Satsuma government did not participate in the turmeric monopoly until 1830, and when it did so it was not the Ryukyu government or the Ryukyuan people but the thirteen Kagoshima purveyors who were hurt. Although Satsuma profited more than Ryukyu, Ryukyu's own share increased more than fourfold.

Miscellaneous local products

Although sugar and turmeric were clearly the major Ryukyuan products in which the Satsuma government was interested, there were also others from which Satsuma gained profits. Important among these was Corsican weed (kaininsō or makuri). It grew in the waters off Ryukyu and was sold all over Japan as the most popular and indispensable anthelmintic.⁹⁹ A record of 1834 indicates that during the Tempō period Satsuma purchased 3,300 kin of Corsican weed a year for about 3.3 kan of silver, or at a rate of 300 momme per 100 kin.¹⁰⁰ Also according to the same document, Ryukyu sent to the Ryukyuan legation at Kagoshima 200 jars of the Ryukyuan liquor (awamori), with 100 shō in each jar, totaling 20,000 shō. Of these, 34 jars were for the members of the legation and about 100 jars were for the thirteen purveyors at the discount price of 36.8

momme a jar, and the remaining 66 jars were used either as gifts or sold for petty cash. In addition to these 200 jars, an unspecified number of jars was sold in Satsuma at 52.2 momme a jar.¹⁰¹ Also about 5,000 kin of black hemp rope for maritime use was sold in Satsuma at 3.500 kan of copper per 100 kin.¹⁰² No information is available as to the prices that the Satsuma government was able to get when reselling these goods.

Every year the Ryukyu government collected from the Miyako and Yaeyama archipelagoes and Kume Island hundred of rolls of textiles in lieu of tax-grains, at an officially determined exchange rate. According to an account dated 1820, the Ryukyu government collected 7,312 rolls of pongee and crepe, of which 4,620 rolls or roughly 63% went to the Satsuma government.¹⁰³ Because some of these were for consumption by the members of the Shimazu family or for use as gifts, it cannot be determined exactly how much gain the Satsuma government made from the transaction. But it is known that some tax-textile rolls brought about twice as much, and the best quality rolls brought even sixteen times as much, in Osaka as the Ryukyu government had paid for them.¹⁰⁴

Ryukyu also produced high grade indigo used for dyeing of kasuri (splashed pattern) textiles. It was privately sold at market price to the Satsuma seamen, was exchanged for much needed iron pots and pans and hoes, or was brought to Satsuma by the Ryukyuan officials to pay for their private expenses. It also caught the eyes of the Satsuma merchants who attempted in 1794 and in 1799 again to obtain the franchise on the purchase of all Ryukyuan indigo in exchange for payment of taxes and fees to the Satsuma government. The Ryukyu government succeeded in dissuading the Satsuma government from granting such a franchise in 1794

but it is not known if it succeeded in 1799.¹⁰⁵

In fact not all Ryukyuan attempts to prevent Satsuma merchants from obtaining a monopoly in the Ryukyuan market were successful. In the early 1780's Satsuma granted to Yokoyama Kisuke, a Kagoshima merchant, the franchise on the sale of cotton and laminaria in Ryukyu, which soon pushed up the price of these commodities. In 1785 the ship laden with laminaria cargo failed to arrive, causing severe shortage and inconvenience to the people and the officials who needed it for their China trade and consumption. In 1789 the laminaria price rose to the height of from 90 mon to 124 mon per kin, forcing the trade mission ships to China to leave without the laminaria cargo. The franchise was finally cancelled in 1791. But in 1794 it was reported that another merchant, Yokoyama Kinjirō, was seeking the same franchise again, and the Ryukyuan legation submitted to the Satsuma government a desperate petition against such a franchise.¹⁰⁶

Finally, "Sasshū sanbutsuroku" ["Record of Satsuma's Products"], written by Satō Shigehiro in 1792, noted that native Ryukyuan products imported into Satsuma included, besides sugar, turmeric, and Corsican weed, such things as lacquerware, copperware, liquor, mattresses, and textiles, while goods exported to Ryukyu included lumber from Yaku Island, paper, tobacco, camphor, whale entrails, shark fins, and herbs.¹⁰⁷

CHAPTER V

SATSUMA AND RYUKYU-CHINA TRADE

Ryukyu established official relationship with the Ch'ing dynasty when King Shō Shitsu sent an envoy in 1649, and a formal tribute envoy the following year. In 1653 Ryukyu dispatched Ba Sōki (Ma Tsung-I in Chinese) to return the state seal granted to Ryukyu by the Ming dynasty and to request investiture from the Ch'ing dynasty. In 1654 Emperor Shun-chih appointed Chang Hsüeh-li as the investiture envoy but his actual departure from Foochow was delayed almost ten years until 1663. The Ch'ing-Ryukyu tributary trade lasted until the 1870's.¹

1. Structure of the Ryukyu-China Tributary Trade

Satsuma's control over Ryukyuan trade with China was formalized in three articles of an ordinance promulgated by the four Satsuma councillors in 1611 as follows.²

1. Except as directed by Satsuma, nothing shall be ordered from China.
1. Without the official seal of Satsuma, no merchant shall be permitted [in Ryukyu].
1. Ryukyu shall dispatch no trading vessel to any foreign country.

In the Satsuma government, one of the han councillors (karō) was in charge of Ryukyuan affairs (Ryukyu-gakari) starting in 1654, whereas previously it had been the joint responsibility of councillors (karō-za). The Ryukyuan affairs post was concurrently held by the councillor in

charge of han finance (katte-gata), which indicates that Satsuma's dominant interest in Ryukyu was economic in nature.³ Under this councillor was a Ryukyuan legation supervisor (Ryukyu-kariya mori; after 1784, Ryukyu-kan kikiyaku) in Kagoshima.⁴ He did not interfere with the internal affairs of the Ryukyuan legation but saw to it that Satsuma's orders to Ryukyu were enforced. Zusho Shōzaemon, who was already a han councillor, seems to have recognized the importance of this post when he assumed the office himself in 1838.⁵

Before a tribute mission left for China, a member of the mission would go to Satsuma to receive orders and instructions from Satsuma officials. Upon his return to Ryukyu, all members of the mission would sign a pledge in the presence of the Satsuma's resident magistrate and his deputy, and the Ryukyu regent and three ministers. The pledge would be that while in China no one would become a Christian, no one would talk about Ryukyu having been conquered by Satsuma, no one would talk about the state of welfare in Ryukyu, no one would engage in any transaction other than the official trade, no one would sell arms to the Chinese, no one would use poison against other members of the mission even in a quarrel, no Chinese stowaway would be harbored when returning from China, no one would put his private business before the state business so that the return voyage would not be delayed, and no one would display cowardice when attacked by a pirate ship en route.⁶ The amount of silver for the mission would be counted by the resident magistrate and again by the Ryukyuan authorities, after which the resident magistrate would give the final order for the departure of the mission.⁷

The Ryukyu government's Department of External Affairs (sashinosoba) which was under the Board of General Affairs (mōshikuchiō) handled matters involving China and Japan. However, the inspection of ships bound for and coming from China was carried out by the Bureau of Land Assessment and Grants (takajo).⁸ Satsuma's directives relating to the China trade were also relayed to Satsuma's resident magistrate in Ryukyu (after 1631, Ryukyu zaiban bugyō).⁹ He was appointed from among those with the rank of commandant (monogashira), and he was equal in status to han representatives in Edo, Osaka, and Kyoto (rusui-yaku).¹⁰ His main duties included the overseeing of the Ryukyu-China trade. Probably because of the importance of this duty, his office was located not at Shuri, the capital, but at the port of Naha. In the performance of his duties he was assisted by four petty officers (yoriki) and about 95 lower ranking samurai.¹¹

Ryukyu's biennial tribute mission consisted of two ships, one with a crew of about 120 and the other about 80. The sekkō mission in alternate years after 1678, ostensibly dispatched for the purpose of bringing the envoy back to Ryukyu, consisted of one ship with a crew of about 100.¹² The tribute ship would leave Naha during the third month of the year. At Kume Island it would wait for a favorable wind, then sail directly to Foochow. With a good tail wind, the ship would reach Wuhumen in Foochow within seven or eight days. From Naha to Wuhumen the distance was about 400 or 500 Japanese li.¹³

From Wuhumen, the tribute ship would go up the Min River about five li to the town of Min-an where officials would inspect the ship. A Chinese interpreter would come aboard the ship here. The ship would sail

on to Kuantuntun where the cargo would be transported to the Ryukyuan legation (Liu-ch'iu Kuan or Jou-yuan I) at Tapaoching. It had been built for the Ryukyuan by the Ch'ing government. Although smaller than the Ryukyuan legation at Kagoshima, it was said to be built exquisitely in all details.¹⁴

After seven or eight months, a group consisting of the envoy, the vice-envoy, a secretary and seventeen clerks and attendants would leave Foochow for the long journey (about forty days and 6,000 Chinese li) to Peking.¹⁵ At Peking, after an imperial audience, the Ryukyuan envoy would present gifts of sulphur, red copper, and tin, and receive in turn the imperial gifts to the Ryukyuan king and members of the mission, which were mainly Chinese silk fabrics and brocades.¹⁶ After a sojourn of about forty days in Peking, the mission would return to Foochow.¹⁷ Just before boarding the awaiting sekkō ship bound for home, "the envoy again called on the Financial Commissioner and received another entertainment under the heading... of 'tender mercies and hospitality to strangers from afar'.... Finally as a parting ceremony, dressed in full Liu-ch'iu costume, he performed a grand kotow to the Emperor on an elevated platform at the custom house..."¹⁸ By this time it was usually the fifth or sixth month, and the ship could take advantage of the summer monsoon blowing from the southwest. The customary route was from Wuhumen via the islands of Chi-lung, Hua-ping, P'eng-chia, Tiao-yu, Huang-i, Chih-i, Kume, and Kerama, to Naha. After 1644, a system of signal-fires was set up on the islands of Kume, Kerama, Tonaki, Aguni, Ie, and Iheya to inform the Ryukyu officials of the approach of the returning mission ship.¹⁹

Upon arrival at Naha and inspection of the cargo and the crew by Satsuma and Ryukyu officials, items were sorted into those remaining in Ryukyu and others going to Satsuma. The latter was shipped to Satsuma under the supervision of officials called supervisors of goods to be returned to Satsuma (henjōmono sairyōnin). They were accompanied by the tribute envoy who was now called the envoy to report on the China trip (Tō no shubi shisha) to Satsuma.²⁰

At Foochow, the Ryukyu trade started when the tribute ship arrived and lists of the tribute articles and the import cargoes (fu-ta huo-mu) were approved by the Financial Commissioner of Fukien Province (Fukien pu-cheng shih). There were ten Chinese brokers (ya-hang) like the Cohong in Canton. "After examining the list of imports, the official brokers, each undertaking to dispose of a certain share of the total, would state to the Liu-ch'iu traders the prices they were prepared to give for imports and to demand for exports."²¹ Exports were obtained through these ya-hang brokers. Often the Ryukyuan made advance payments to the brokers who would then make the necessary purchases in larger urban centers such as Amoy, Soochow, or Canton.²² The business transactions were completed and the ship with the export cargo had sailed back to Ryukyu by the time the tributary envoy departed for Peking in the ninth or tenth month. In the following year when the envoy returned to Foochow all accounts would be closed.²³

In addition to the tribute and related voyages, there were other missions that were sent to China under various pretexts and that engaged in trade too. There were missions dispatched to congratulate a new Chinese emperor, to report the death of a Ryukyuan king, to request the

imperial investiture, and to express gratitude for the conferring of investiture.²⁴ In 1734 a Ryukyuan ship that arrived at Foochow to repatriate Chinese who had been shipwrecked in Ryukyu was granted the privilege of duty-free trade, and this gave the Ryukyuan another way to increase trading opportunity.²⁵ The Chūzan seifu [Chūzan Genealogy] lists forty Chinese and Korean ships wrecked on the shores of Ryukyu during the years from 1801 to 1873.²⁶ Some of the shipwrecked people were sent back to Foochow aboard regular tribute mission ships but many were repatriated on specially dispatched ships.²⁷ A survey shows that some 278 Ryukyuan ships were stranded or wrecked on the shores of China, Korea, Annam, and Luzon, including 258 ships on the coast of China alone, during the period from 1701 to 1876.²⁸ If the shipwrecked seamen were few enough to be accommodated on a regular mission ship, they were forwarded to Foochow to await transportation to Ryukyu. But in case the number of seamen was large, the local authorities were responsible either to have the ship repaired or to have a new ship built for them. When such ships returned, they were often loaded with export cargo and were under the charge of Ryukyuan government officials.²⁹ After 1794 it became customary for the Ryukyuan to hire, with the one thousand taels granted them by the Chinese authorities, a Chinese merchant vessel to carry them home, instead of having a new ship built. Because a rented Chinese ship had to be returned with an escort ship from Ryukyu, it provided another convenient pretext for trade at Foochow.³⁰

For the period cited, an average of 0.54 Chinese and Korean ships were wrecked each year in Ryukyu and 1.97 Ryukyuan ships off China and other countries, for a total frequency of 2.51 a year. Some of these

shipwrecks went home on regular mission ships but others were repatriated on rented ships or those specially dispatched, thus creating extra trade opportunities. Because no accurate count can be made of either category, it is perhaps not amiss to assume that one-half of the shipwrecks returned home by other than regular mission ships. The frequency average of extra trade ships then would be 1.25 per year. If this is added to the 1.5 frequency average of the scheduled mission ships, Ryukyu was sending trade ships at a frequency rate of about 2.75 ships a year. This would support Shiohira Pēchin's statement in 1762 that Ryukyu was sending two or three ships a year to China.³¹ Table XXX, Ryukyuan Ships in China, 1821-1874, shows the number of regular and irregular visits to China by Ryukyuan ships. The shinkō and sekkō mission ships were dispatched according to schedule. But there is a remarkable pattern in the frequency of the irregular ships, mostly ship-wrecks and their escort ships. It seems more than mere coincidence that the frequency was highest during the period of the Tempō Reform in Satsuma, 1830-1848, and rapidly tapered off afterward. Possibly many shipwrecks were due to economic considerations, although one cannot determine how many were genuine shipwrecks.

TABLE XXXI. RYUKYUAN SHIPS³² IN CHINA, 1821-1874

<u>Period</u>	<u>Regular</u> (shinko/sekkō)	<u>Irregular^a</u> (shipwrecks, etc.)	<u>Total</u>
1821-29	14	10-13	24-27
1830-38	15	9-24	24-39
1839-48	16	4-8	20-24
1849-58	15	4-13	19-28
1859-68	15	1-2	16-17
1869-74	<u>8</u>	<u>0-2</u>	8-10
	83	28-62	

^aUncertainty as to the number of the ships wrecked on the China coast was due to the difficulty of identification because many of them were small fishing boats.

The ships that plied between Foochow and Ryukyu, excepting the rented Chinese ships and investiture envoy ships, were owned and operated by the Ryukyu government. After completing three voyages to Foochow, these ships were disarmed, remodelled, and transferred to the Ryukyu-Satsuma route. One of these ships, carrying a crew of fifty-two men, is said to have been about one hundred twenty feet long and about twenty seven feet wide, and to have had a cargo capacity of 1,260 koku (310,050 kin or 186 tons).³³ Perhaps, then, the larger tribute mission ship with a crew capacity of 120 men had twice the cargo capacity, i.e., more than 2,520 koku or 372 tons. Another account says that Ryukyuan ships were built with muku wood (*Aphananthe aspera*), and they were usually about 28 hiro (about 168 feet) long but sometimes as much as about 40 hiro (about 240 feet) long, with even a small vegetable garden aboard.³⁴ At the end of the Tokugawa period, an official investigation

reported that there were six Ryukyu government owned ships with a cargo capacity of over 1,000 koku, two privately owned ships of over 1,000 koku and 353 private ships of under 1,000 koku capacity, and 543 smaller private boats.³⁵

Between Satsuma and Ryukyu, however, in addition to these Ryukyuan ships, there were also Satsuma ships in operation. In contrast to Ryukyu's government owned and operated ships, Satsuma's ships were government controlled and subsidized but privately owned. For the Satsuma-Ryukyu route, there was a fleet of thirteen to fifteen ships, each making two trips to Ryukyu each year, in spring and autumn.³⁶ A record of eight such Satsuma ships shows that the largest had a capacity of 1,800 koku, followed by 1,750 koku and 1,650 koku, with the smallest being 850 koku.³⁷ Although these figures show that they were large ships, there is some evidence that their actual capacity was still larger than these officially reported figures.³⁸ Dr. J. B. Bettelheim, a British missionary in Ryukyu for 1846-54, reported that "Japan [Satsuma] sends annually thirty or forty junks to Lew Chew, of about four hundred and fifty tons each."³⁹ By comparison, the average size of the Japanese trade ships (goshuinsen) that plied between Japan and the South Seas in the sixteenth and early seventeenth centuries was only about 270 tons.⁴⁰ Many of these ships were, however, used to transport sugar and other native products and only four to six were designated as China trade ships (oitosen).⁴¹

2. Silver for the China Trade

Ryukyu paid silver for Chinese goods in Foochow and sold them in Japan where the major profits were to be made. Therefore, an important factor in Ryukyu's tribute trade with China was the amount of silver available for the China trade. It was called tribute silver (shinkō-gin or sekkō-gin), tribute fund (shinkō-ryō or sekkō-ryō), or China trade silver (to-Tō gin). In the early seventeenth century, it was largely supplied by the Satsuma government as shown by Table XXXII below.

TABLE XXXII. SATSUMA'S INVESTMENT⁴² IN RYUKYU-CHINA TRADE IN THE EARLY SEVENTEENTH CENTURY

1618	silver	10	<u>kan</u>
	copper	10,000	<u>kin</u>
1617	silver	30	<u>kan</u>
1622	"	100	"
1625	"	100	"
1631	"	300	"
1634	"	988.483	<u>kan</u>
	copper	300	<u>kin</u>
	Judas ear	169.5	"
1636	silver	1,012.172	<u>kan</u>
	copper	20,100	<u>kin</u>
	horse tail	416	"

Early in the seventeenth century there was no restriction upon the amount of silver for the China trade that Satsuma invested. In 1630, in order to do something about the Satsuma government's acknowledged debt of 7,000 kan of silver (which actually may have been as much as

20,000 kan of silver), Kawakami Tadamichi proposed that the Ryukyu-China trade be expanded in order to supplement the han income with the trade profits, and he himself went to Ryukyu as the first resident magistrate to supervise the trade operation.⁴³ As a result of this project, the Satsuma government's investment in the Ryukyu-China trade suddenly increased from 100 kan of silver in 1625 to about 300 kan in 1631 and to about 1,000 kan in 1634 and 1636, as shown in Table XXXII.

Satsuma's greatly increased trade activities after 1631 resulted in huge amounts of foreign luxury fabrics flooding the markets of Kyoto and Osaka.⁴⁴ This attracted the attention of Tokugawa officials who were beginning to be worried about the decreased gold and silver output of the mines in Japan, and the outflow of these precious metals from Japan.⁴⁵

In 1686, Ōkubo Kaganokami Tadatomo, a bakufu councillor (rōjū), requested from Satsuma information as to the amount of its trade with Ryukyu. Satsuma replied that Ryukyu's export into Satsuma amounted to about 3,000 ryō of gold a year. It was ordered to reduce the amount to 2,000 ryō a year in spite of Satsuma's plea that 3,000 ryō a year was the barest minimum amount of trade necessary for the welfare of Ryukyu.⁴⁶ As to the Ryukyu-China trade, Satsuma reported in 1687 that in 1682 two ships with 876 kan of silver (14,600 ryō of gold), in 1683 one ship with 426 kan of silver (7,100 ryō of gold), and in 1684 two ships with 887 kan of silver (14,783 ryō of gold) had been sent to China, and additionally articles of tribute and other goods had been purchased in Kyoto and Osaka and Satsuma.⁴⁷ While emphasizing the difficulty of reducing the amount of the trade, Satsuma offered to reduce it in the interest of Japan from 14,600 ryō to 13,400 ryō of gold for shinkō

mission and from 7,300 ryō to 6,700 ryō of gold for sekkō mission. The Tokugawa government accepted Satsuma's compromise proposal. Also, as the standard currency in China was silver, 13,400 ryō of gold was to be exchanged, at the rate of 1 ryō of gold for 60 momme of silver (.060 kan), for 804 kan of silver for a shinkō mission and 6,700 ryō of gold for 402 kan of silver for a sekkō mission.⁴⁸

According to Satsuma's report to Ōkubo Kaganokami Tadatomo, when the two ships on a shinkō mission returned one year, the Chinese yarn and silk fabrics brought back aboard these ships were sold in Satsuma for 15,800 ryō of gold, a reduction of 2,000 ryō from the previous cargoes worth 17,800 ryō of gold, in accordance with the bakufu's policy to curtail the outflow of the precious metal from Japan. Now, of this 15,800 ryō, 550 ryō would remain in either Satsuma or Osaka and Kyoto area in payment of tribute and other articles to be purchased there (of which the major items were copper and tin), 1,630 ryō would remain in Satsuma in payment of interest on a 13,400 ryō loan from the townsmen of Satsuma, and 220 ryō would also stay in Satsuma in payment of preparation of ships and other miscellaneous costs. Thus, out of 15,800 ryō, 2,400 ryō would stay in Japan and only 13,400 ryō would go to China. In China, 5,500 ryō out of the 13,400 ryō would be used to pay for tribute articles, for various taxes, for fabrics and other goods needed by the Ryukyu government and for other miscellaneous costs, and the remaining 7,900 ryō would be used to purchase various goods to be brought back and sold at twice the original price, or 15,800 ryō which would be the operational fund for the next year.⁴⁹

In the above description of the China trade, Satsuma attempted to

minimize the amount of precious metal flowing out of Japan, and tried to conceal the true role of the Satsuma government by making it seem that the trade was being carried on by and for the Ryukyu government only. In 1713, in a further attempt to conceal the extent of its involvement in the Ryukyu-China tributary trade, Satsuma issued a directive that "concerning the silver delivered to Ryukyu from the han treasury, although some uninformed people call it the silver for the China trade (to-Tō-gin), it shall henceforth be called the silver loaned to Ryukyu (Ryukyu haishaku gin). Furthermore, because the merchandise that the Ryukyuan purchase with this silver and bring back here should be regarded as repayment of the loan, it should never be referred to, even in private, as goods purchased in China (Tō-kaimono) but rather as goods brought back in repayment (henjōmono)."⁵⁰

The role of the Ryukyu government in the China trade in the seventeenth century had been minor and subordinate to that of the Satsuma government. In 1625 the Ryukyu government borrowed from the Satsuma government twenty kan of silver to invest in the China trade.⁵¹ In 1636 the total amount of silver invested in the China trade was about 1,200 kan of silver, of which 1,000 kan was supplied by the Satsuma government and only 200 kan by the Ryukyu government.⁵² A communication from the Ministers of Ryukyu to Satsuma, in 1666, stated that "in recent years because the China trade ship does not carry silver and trade goods from the royal treasury, there is no need [for us to send the trade ship]. With the way we are carrying it on now, that is, merely dispatching ships with borrowed silver, we are afraid that we may find ourselves unable to send any more tribute missions to China in the

future...."⁵³ It was decided that year that a tributary trade mission dispatch fund with no interest would be made available to the Ryukyu government by the Satsuma government, to be paid back from profits accruing to the share of the tributary trade that was allowed to the Ryukyu government. In a loan contract in 1666, signed by the head of the Ryukyuan legation at Kagoshima and addressed to the Satsuma Bureau of Finance (omonoza), it was stated that fifty kan of silver without interest was loaned to the Ryukyuan king, with the understanding that the loan would be invested in the China trade, the profits from which would then be applied to the repayment of the loan, and that such repayment would start in 1668 and be completed in 1670."⁵⁴

The aforementioned statement of the Ministers of Ryukyu that Ryukyu had no silver to be invested in the China trade may be questioned, for while Ryukyu tried to restrain Satsuma's investment in the tribute trade with China, it continued to invest more than it admitted. In 1625 Ryukyu advised Satsuma to limit its trade investment to about forty or fifty kan of silver.⁵⁵ In 1639 or so Ryukyu again advised Satsuma that about one hundred kan of silver was the maximum amount of trade capital which could be carried without inconvenience.⁵⁶ At the same time Ryukyu itself had made a secret investment of over one hundred forty kan of silver in 1634 and of over two hundred kan of silver in 1639.⁵⁷ Ryukyu also seems to have not informed Satsuma that "Chinese statutes did regulate the number of tribute ships from Liu-ch'iu, but... they placed no limit upon the size of the trade."⁵⁸

In the 1630's Satsuma's investment in the trade with China had grown rapidly but its enthusiasm had begun to diminish because of mounting

obstacles. First of all, the Ryukyans were not enthusiastic about promoting the interests of Satsuma. For instance, in 1631 they paid an excessive price for inferior quality yarn with pieces of lead mixed to increase the weight, resulting in a heavy loss for Satsuma. In 1635 and in 1636 the Ryukyans purchased inferior silk and caused a loss of some 400 kan of silver for Satsuma. Satsuma meted out punishments to the Ryukyuan officials concerned.⁵⁹

In spite of Satsuma's repeated reprimands and exhortations, the Satsuma trade with China failed to improve to any significant degree. In 1683 Satsuma ordered Ikegushiku Oyakata Anken, Ryukyu's envoy to China that year, to investigate the market conditions in China. He returned in 1685 to report that the basic cause of the difficulties of trade in Foochow lately was the recent peace in China which permitted many Chinese merchants to go overseas for trade. He suggested that in order to improve the trade two procurement secretaries should be appointed so that one of them could return on the next trip to take advantage of his previous year's experience, that more freedom should be given to make decisions on purchases deviating from the Satsuma's orders, and that permission be given for some private trade on the part of mission members to give them some motivation.⁶⁰ His basic report on market conditions in China was supported by the fact that in 1684 the Ch'ing dynasty rescinded the coastal area evacuation law following the surrender of the Koxinga clan in Taiwan so that during the next year, 1685, many Chinese ships arrived in Nagasaki including more than ten from Foochow. However, Satsuma was optimistic about the future because that same year the Tokugawa government alarmed over the sudden increase in the outflow of the precious metals, imposed restrictions upon Chinese

ships coming to Nagasaki, and Satsuma hoped that this would lead to lower prices in Foochow.⁶¹

In 1686, the Tokugawa government imposed a ceiling of 13,400 ryō (804 kan of silver). The Keichō silver in circulation at the time was .800 fine, but from 1695 to 1712 the government minted new silver coins with very low fineness: Genroku silver .640 fine, and four kinds of Hōei silver with .500 down to .200 fine.⁶² Since the silver content would be greatly reduced if the new Genroku and Hōei coins were to be used by Satsuma and Ryukyu in the China trade, Satsuma directed Ryukyu to send an envoy to appeal to the government. Miyahira Oyakata Ryōkyō in 1697 and Gushiken Oyakata Seibu in 1702 appealed to the government for an increase in trade capital in view of the debased new silver. Their appeals were rejected, and Satsuma's trade at Foochow declined. In a letter from Satsuma to Chatan Chōai, Ryukyu's regent, and three ministers, in 1706, it is stated that in spite of the inferior quality of goods purchased at Foochow their prices seemed to have risen year after year, despite repeated exhortations, and that their sales in Kyoto had brought little profit, and that the total sales situation had deteriorated further because of the new [debased] silver.⁶³ Satsuma's capital investment in the Ryukyu-China trade plummeted from about 1,000 kan of silver in 1634-36 to 100 kan in 1672.⁶⁴

In 1714 the Tokugawa government decided to mint Shōtoku silver coins, in which the silver content was raised to that of the Keichō silver coins. However, as this would increase the outflow of silver through the Ryukyu-China trade, the Tokugawa government ordered Satsuma to reduce the amount of trade capital from 804 kan to 604 kan for the shinkō

mission and from 402 kan to 302 kan for the sekkō mission, in terms of the newly upgraded silver. Thus, in 1716, Satsuma paid 1,208 kan of Hōei silver to the Tokugawa government for 604 kan of Shōtoku silver.⁶⁵

In 1736, however, minting of Bunji silver .460 fine was started, to continue until 1818.⁶⁶ For the China trade, Satsuma was able to gather enough Shōtoku silver until about 1741-43 when it was again forced to plead with the Tokugawa government to have the Bunji silver re-minted to upgrade the quality. In 1743, Satsuma's request was granted, and after that Satsuma continued to submit about twice as much silver currency as the required sum for the trade capital to the Tokugawa's treasury at Osaka (Osaka okura) and received the specially minted trade capital silver from the silver mint in Kyoto (Kyoto ginza); for instance, 1,205 kan of Bunji silver for 604 kan of trade silver in 1743.⁶⁷

The 804 kan ceiling on trade capital imposed by the government meant a reduction by about one-tenth in the reported size of the trade capital. Although Satsuma complained to the Tokugawa officials, the trade suffered very little. It is not known if Satsuma was informed or not, but in 1688 Ryukyu secured from China complete exemption from customs duty for all of the merchandise. This more than compensated for the 10 per cent curtailment of trade capital.⁶⁸

By the early decades of the eighteenth century, Satsuma seems to have relinquished the major role in the Ryukyu-China trade to the Ryukyu government. According to reports on the Ryukyu-China trade, dated 1713 and 1714, that Satsuma submitted to Tokugawa, the Ryukyans borrowed the trade capital mainly from the townsmen of Kagoshima, and only when necessary from the Satsuma government treasury. In payment of the loan,

the Ryukyuan brought back Chinese fabrics, yarns, etc., which were either handed over to these townsmen or sold in Kagoshima and Kyoto.⁶⁹

A Ryukyuan legation document stated that "in Ryukyu, we have no major product but sugar, and we have managed to gather enough silver for the China trade mainly by sales of sugar...."⁷⁰ In order for Ryukyu to obtain the silver for the China trade, the Ryukyuan legation had its Kagoshima purveyors deliver the silver currency to the Osaka Treasury of the Tokugawa government by the eighth month and receive the re-minted silver for the China trade from the authorized silver mint in Kyoto in the following month. The rate of conversion between the silver currency and the silver for the China trade was approximately 2 to 1.⁷¹ Kagoshima purveyors working for the Ryukyuan legation obtained the silver currency by selling Ryukyuan products, the most important of which was sugar.⁷² For instance, in 1778, the Ryukyuan legation requested Satsuma's permission to sell 3,500 barrels of sugar (420,000 kin) for the shinkō mission and 2,000 barrels (240,000 kin) for the sekkō mission to raise enough capital for the China trade. When the sugar shipment was delayed, they either raised the necessary sum themselves or borrowed it from Osaka merchants with the sugar crop as security.⁷³

Although Satsuma was no longer as enthusiastic as she used to be, she still retained interest in the China trade but was faced with growing financial difficulties, caused partly by the deliberate policy of the Tokugawa government. In 1753, the government ordered Satsuma to undertake a gigantic embankment project in the Kiso River delta area. Nominally Satsuma was only to help the Tokugawa project but the work plans were so drawn up that the major burden fell upon Satsuma. When the

work was completed in 1755, Satsuma had an additional new debt of 13,378 kan of silver (220,198 ryō of gold) caused by the project (which also cost the lives of eighty five Satsuma officials supervising the work) and other expenditures demanded by Tokugawa officials.⁷⁴

It was also in 1755 that the ten year old Shimazu Shigehide became the 25th Lord of Satsuma. Most of his long administration lasting until 1833, except for a few years toward the end, was characterized by extravagant spending that created serious problems for the han financially.⁷⁵

In 1754 a shinkō mission was scheduled, with a capitalization of 604 kan of silver. Satsuma wished to invest 302 kan, its share of the capital investment, but it could raise only 151 kan. When the Ryukyuan legation requested that it be increased, Satsuma added 51 kan for a total of 202 kan, and the remaining 402 kan was supplied by Ryukyu.⁷⁶ This case probably reflected the tremendous financial strain of the Kiso River project. In 1756 Ryukyu needed about 800 kan of silver to receive the Chinese investiture mission headed by Ch'uan K'uei. Ryukyu tried to negotiate a loan of 300 kan of silver from Satsuma, but was told that "...recently difficulties have been experienced in raising even the China trade capital...."⁷⁷

Satsuma was not only often unable to put up enough silver for its share of the trading enterprise but was also almost habitually late in the delivery of the silver promised. In 1752 the Ryukyuan legation had to remind the Satsuma authorities that they were being rather tardy in the silver delivery causing numerous inconveniences and losses in subsequent trading operations.⁷⁸ In 1773 the Ryukyuan legation had to

repeat essentially the same complaint to Satsuma.⁷⁹ Again in 1775 it had to tell Satsuma that in 1752 an arrangement had been made to have the silver delivered by about the ninth month every year, but after a few years delivery had become tardy again.⁸⁰

There were other signs of Satsuma's financial difficulties. In 1756, Satsuma told Ryukyu that because of the coinage debasement causing a 199% increase in the cost of Chinese merchandise and consequent trade disadvantages for Satsuma, she would like to decrease her trade investment. Ryukyu objected, and apparently Satsuma dropped the matter there.⁸¹ But in 1771, Satsuma again explained to Ryukyu that in recent years the China trade had not been profitable and therefore it would like to reduce its investment. Ryukyu again asked Satsuma to continue its investment and promised to do everything possible to obtain greater profits for Satsuma.⁸² In 1808 Satsuma told Ryukyu that it had to reduce the silver for the China trade because of financial difficulties, and Ryukyu again was reluctant to agree.⁸³ It seems that Ryukyu was able to dissuade Satsuma from stopping the investment in the China trade altogether, but in the 1820's Satsuma was still investing only token sums of about 22 or 23 kan of silver.⁸⁴

In contrast to Satsuma's dwindling capital investment in the China trade, Ryukyu seemed able to continue to invest on a substantial scale largely because of the stable and sizeable silver income from the sales of sugar in Japan. Table XXXVIII below shows the standard amounts of sugar consigned to the Ryukyuan legation during the nineteenth century for the purpose of producing the silver for the China trade. As to the actual situation in a given year in the early nineteenth century, out of a

TABLE XXXIII. STANDARD SUGAR CONSIGNMENT
TO THE RYUKYUAN LEGATION⁸⁵

	<u>Barrels</u>	<u>kin</u>	<u>%</u>
1.	3,000	375,000	25
2.	1,200	150,000	10
3.	7,800	975,000	65
	<hr/>	<hr/>	<hr/>
	12,000	1,500,000	100

Notes:

Under item 1, 3,000 barrels with 375,000 kin were sold to the thirteen purveyors at bidding price with discount of 10 momme per 100 kin. The proceeds were used for the shinkō mission. In the intervening year of the sekkō mission, this amount was reduced to one-half.

Under item 2, 1,200 barrels with 150,000 kin were consigned to the three purveyors who acted as agents for the Ryukyuan legation in Kyoto and Osaka area to purchase goods for export to China. In the year of the sekkō mission, this amount was also reduced to one-half. The fees for these three purveyor-agents were 20 kan of silver for the shinkō mission and 10 kan of silver for the sekkō mission.

Under item 3, 7,800 barrels with 975,000 kin were used for other expenses such as stipends for the legation staff, the legation operating fund, the payment of Ryukyu government debts, etc.

total of 1,500,000 kin of sugar shipped to the Ryukyuan legation, 384,816 kin, 26%, and 153,926 kin, 10%, were earmarked respectively for the silver for the China trade and the purchase of export goods, and the remaining 961,258 kin, 64%, was set aside for government expenses.⁸⁶

As to the amount of silver specie yielded by such sales of sugar, a Ryukyuan legation account for one year from the sixth month of 1841 to the fifth month of 1842 shows that there was a total revenue of 1,722 kan of silver, of which 1,626 kan, or 94% of the total, was from the sale of 1,752,943 kin of sugar. Sugar sold to capitalize the China trade is summarized in Table XXXIV below. Table XXXIV shows that by sugar sales Ryukyu obtained from 349 kan to 468 kan of silver for the purpose of yielding capital for the China trade.

In accordance with Satsuma's ordinance of 1611 prohibiting commerce with China without permission from Satsuma, only Satsuma's official trade was supposed to have been permitted. But by mid-century, there appeared a practice called consigned silver (futaku-gin) or special order silver (oatsurae-gin). In 1665 the Ryukyuan legation in Kagoshima wrote to the home government in Shuri that Niuro Matazaemon and other Satsuma officials in charge of Ryukyuan affairs had consigned to them 7.7346 kan of silver to purchase certain Chinese goods for them, and that although such a practice was strictly forbidden, these persons were in a position to do good for Ryukyu and therefore they had secretly accepted their special order.⁸⁸ Quickly the practice spread and became an open secret, and more and more persons, not only officials but their relatives and friends came to impose upon the Ryukyuan till finally they began charging commissions for such special orders.⁸⁹

TABLE XXXIV. SUGAR SOLD TO PRODUCE THE SILVER
FOR THE CHINA TRADE⁸⁷

	<u>kin</u>	<u>Price</u>	<u>Total & Uses</u>
1.	360,000	90 <u>momme</u> per 100 <u>kin</u> to the purveyors	324 <u>kan</u> of silver for the trade capital
	144,000	100 <u>momme</u> per 100 <u>kin</u>	144 <u>kan</u> of silver for the export goods
	<hr/> 504,000 <u>kin</u>		<hr/> 468 <u>kan</u>
2.	360,000	65 <u>momme</u> per 100 <u>kin</u> to the purveyors	234 <u>kan</u> of silver for the trade capital
	144,000	80 <u>momme</u> per 100 <u>kin</u>	115 <u>kan</u> of silver for the export goods
	<hr/> 504,000		<hr/> 349 <u>kan</u>
3.	375,000	65 <u>momme</u> per 100 <u>kin</u> to the purveyors	244 <u>kan</u> of silver for the trade capital
	150,000	80 <u>momme</u> per 100 <u>kin</u>	120 <u>kan</u> of silver for the export goods
	<hr/> 525,000		<hr/> 364 <u>kan</u>

In 1666 a Satsuma directive was issued legalizing and regulating the practice, so that a samurai could place a private order for Chinese goods, the amount of which was graduated in accordance with his rank, on condition that the goods so purchased were to be for his personal

use only.⁹⁰ The total amount of the private orders was said to be 17.5 kan for shinkō mission and 8.75 kan for sekkō mission as decided on 1706.⁹¹ But it seems to have increased to 27 kan and 13.5 kan respectively in 1776.⁹²

Although no information is available as to whether the foregoing regulation was strictly enforced, there is a report of a case in which Satsuma officials who placed such special orders made extra profits at the expense of the Ryukyuan. The Ryukyuan legation had to exchange the poor grade Japanese silver received from them for the better silver acceptable in the Chinese market at the rate of 2 to 1. In 1776 the Ryukyuan legation complained to the Satsuma authorities that recently for the Satsuma officials' special orders the Ryukyuan legation was being paid at the rate of 1.5 to 1 only in silver currency, with 0.5% loss in currency exchange to the legation.⁹³

As to the specific uses of the trading capital, in 1713 Shimazu Ōkura, councillor of Satsuma, reported to the Tokugawa government that of 804 kan of capital silver, as much as 350 kan, or 43%, had to be set aside for gratuities to the Chinese officials and for taxes and other expenses, and as a result only the remaining 450 kan, or 57% of the total capital, was available for the purpose of buying pharmacopoeia, yarns, fabrics, etc., that were wanted in Ryukyu.⁹⁴ This report made it appear as though Satsuma had no part in the trade, and that it was promoted solely for the needs of Ryukyu and not for Satsuma's profit. This was clearly a misrepresentation of facts because as noted earlier Satsuma regularly invested 50% of the capital for its own profit. Now, the above report from Satsuma to Tokugawa on the Ryukyu-China trade

will be compared with Ryukyu's report to Satsuma on the Ryukyu-China trade capital breakdown.

TABLE XXXV. RYUKYU'S TRIBUTE⁹⁵ TRADE MISSION
CAPITAL BREAKDOWN FOR 1686-1716

	<u>kan</u>	<u>%</u>
1. Ship repair and other expenses at Foochow	6	1
2. Mission members rations and expenses	20	5
3. Gratuities to the Foochow officials	50	12
4. Gratuities to the Peking officials	30	8
5. Merchandise, inclusive of the private trade by the mission members and privileged officials at home	<u>296</u>	<u>74</u>
Total	402	100

Note: The capital was one-half of the above in the case of a sekkō mission with one ship. But the gratuities to the Foochow officials remained unchanged.

The gratuities to the Chinese officials and other expenses were called "expense silver" (tsukai-gin) and were to be supplied by Ryukyu as shown above, and Satsuma did not need to pay any of these expenses.⁹⁶ Thus, as far as Satsuma's 402 kan was concerned, the entire sum could be invested in profit earning merchandise. In Table XXXV, operational expenses ran up to 106 kan (items, 1, 2, 3, and 4) constituting 26% of 402 kan, but in terms of the total capital of 804 kan, it was only 13%, definitely not anywhere near 43% as reported by Satsuma to Tokugawa. Now, in the same Table, because the portion of the capital set aside for the procurement of merchandise failed to distinguish between the official government trade and the private trade of individuals, it is

impossible to determine how profitable it was for the government. But that is made clear in Table XXXVI, Ryukyu's Tribute Trade Mission Capital Breakdown after 1716.

Ryukyu's trade capital budget as outlined in Table XXXVI continued to be in effect into the nineteenth century. Another Ryukyuan legation document dated 1808 stated that the trade capital budget for the sekkō mission was 151 kan of silver, of which 70 kan was for various expenditures in China and the remaining 81 kan was for the purchase of gifts to Satsuma, royal treasury supplies, pharmacopoeia, and other items.⁹⁷

A striking feature of the capital breakdown in Table XXXVI when compared with that in Table XXXV, is that in spite of the reduction in capital from 402 kan to 302 kan, the gratuities to the Chinese officials remained the same, with the result that where it used to be only 20% of the total capital of 402 kan, it now took up 27% of 302 kan, and 33% of 151 kan. Another feature of Table XXXVI is that the profit producing portion of the capital, namely, item #5 in both shinkō and sekkō missions, constitutes only 25% and 15% respectively, of the total capital investment. In fact, they are much smaller than the gratuities, 37% and 33%, given to the Chinese officials. Pointing out that the profit earning portion was merely 25% of the total investment in the case of the shinkō mission, Nakahara Zenchū drew two conclusions regarding the Ryukyu-China tribute trade: (1) that it was extremely profitable for a few mission members and privileged officials at home who carried on private trade, but (2) that it was not so profitable for

TABLE XXXVI. RYUKYU'S TRIBUTE TRADE⁹⁸ MISSION
CAPITAL BREAKDOWN AFTER 1716

	<u>kan</u>	<u>%</u>
A. <u>Shinkō</u> mission: 302 <u>kan</u> of silver		
1. Ship repairs and miscellaneous expenses at Foochow	15	5
2. Satsuma officials' special orders	13.6	4
3. Mission members' and Ryukyuan officials' trade	70	23
4. Ryukyuan royal treasury supplies	47.7	16
5. Silk fabrics and other merchandise	57.7	25
6. Gratuities to Foochow officials	50	17
7. Gratuities to Peking officials	30	10
	—	—
Total	302	100
B. <u>Sekko</u> mission: 151 <u>kan</u> of silver		
1. Ship repairs and miscellaneous expenses at Foochow	6.5 ^a	4
2. Satsuma officials' special orders	6.8	5
3. Mission members' and Ryukyuan officials' trade	30	20
4. Ryukyuan royal treasury supplies	35 ^b	23
5. Silk fabrics and other merchandise	22.7	15
6. Gratuities to Foochow officials	50	33
	—	—
Total	151	100

Note: ^aIt should be 7.5 kan, one-half of the same item in the shinkō mission. Also it is given as 70.5 kan in RSSS, most likely a scribal error for 7.5 kan.

^bIt is given as 56.7 kan, probably a scribal error for 36.7 kan because of the extreme resemblance of "five" and "three" in cursive style Japanese. RSSS, II, 384-5.

the Ryukyuan government.⁹⁹

However, some basis for suspicion as to the veracity of the capital breakdown is found in the 1756 Ryukyuan legation document in which the capital breakdown given in Table XXXV appears. This document was transmitted to the Satsuma authorities for submission to the Tokugawa government at the latter's request for information. Past experience indicated that such inquiries from the Tokugawa government were always followed by more stringent control and budgetary curtailments. Ryukyu was apprehensive and became extremely evasive in describing the trade operation and refused to be definitive in the budgetary divisions of the trade capital, calling them tentative and subject to fluctuations.¹⁰⁰ Besides, if Satsuma had something to gain by concealing from Tokugawa the fact that she was trading with China, Ryukyu also gained from falsifying her report to Satsuma on her own trade.

The suspicion is confirmed when the reported capital breakdowns are checked against other unbiased sources. For instance, in Table XXXVI, 15 kan of silver was allotted for ship repair service in Foochow, but the fact is that this service was provided free of charge by the Chinese government.¹⁰¹ Most revealing, however, is Table XXXVII, China Trade Expenditure as Recorded in the Ryukyu Government's Financial Statement. There are discrepancies between what was reported to Satsuma, as given in Table XXXVI, and what was recorded in the Ryukyu government's own book. Operational expenses in Foochow and Peking were reported in the former to be 95 kan of silver or 32% of the investment, and in the latter 58.688 kan or 19.5%. Also, the Ryukyu government's supplies were said to have cost 47.7 kan in the former but only 15.169 kan in the latter. The budget for item 4, profit producing merchandise, is

given in the former as 75.725 kan, or 25%, but as 152.893 kan, or 50.6% in the latter.

The Ryukyu government's financial statement also recorded that average annual expenditures for the maintenance of the four China tribute trade ships at home was 3.194 kan and for the purchase of Japanese goods to be used in Foochow was 9.906 kan.¹⁰² Also under tax revenue and expenditure 513.526 koku of rice was earmarked for various expenditures related to the China tribute trade mission such as refinement of sulphur, ceremony for the naming of the China tribute trade ships, worship of Peking from afar, composition of various official documents to China, ceremonies connected with the departure and arrival of the ships,

TABLE XXXVII. CHINA TRADE EXPENDITURE¹⁰³ AS RECORDED IN THE RYUKYU GOVERNMENT'S FINANCIAL STATEMENT

	<u>ken</u>	<u>%</u>
1. Foochow expenses	43.688	14.5
Inclusive of those related to the Chinese officials, mission's return to Ryukyu, and those staying in Foochow		
2. Peking expenses	15	5
3. Ryukyuan government supplies	15.169	5
4. Merchandise:		
Yarn	... 108.118	
Miscellaneous	... + 44.775	
	<u>152.893</u>	50.6
5. Budgets for mission members and Ryukyuan officials, etc.	<u>75.250</u>	<u>24.9</u>
Total	302	100

mission members' defense drills, crew members' rations, emergency fund, etc.¹⁰⁴ As the price of rice was about 40 momme per koku,¹⁰⁵ 513.526 koku of rice was worth 20.541 kan of silver. Also in the same section 118.41678 koku of rice, equivalent to 4.737 kan in silver, was issued for the purchase in Ryukyu of things needed in China.¹⁰⁶ Therefore, in addition to 302 kan explicitly budgeted for trade purposes, there

TABLE XXXVIII. COMPARISON OF CHINA TRADE BUDGETS¹⁰⁷ AS REPORTED TO SATSUMA AND AS RECORDED IN RYUKYU'S OWN FINANCIAL STATEMENT

Items	Reported to Satsuma		Recorded in Ryukyu's own book	
	<u>kan</u>	<u>%</u>	<u>kan</u>	<u>%</u>
1. Foochow expenses	65	22	43.688	14.5
2. Peking expenses	30	10	15	5
3. Ryukyu government supplies	47.7	16	15.169	5
4. Merchandise	75.7	25	152.893	50.6
5. Private trade by privileged Ryukyuans	70	23	75.250	24.9
6. Satsuma's special order	13.6	4		
Total	302	100	302	100

were extra expenses, 3.194 kan for ships' maintenance at home, 9.904 kan for tribute goods purchased in Japan, and 25.278 kan worth of rice, totaling 38.378 kan of silver. These items, for which payments were made in Japan or in Ryukyu, were excluded from the official capital limit of 302 kan of silver.¹⁰⁸ These account for all the items related to the China trade in the Ryukyu government financial statement, but

the description of the uses of 513,526 koku of rice for the preparation of the tribute mission ended with the sentence, "tribute articles and the expenses at Peking and Foochow are not covered by the regulation and therefore are excluded."¹⁰⁹ The latter may be a reference to the expenditures in silver.

In a joint memorial presented in 1747 to the Ch'ien-lung emperor by the Governor-General of Fukien and Chekiang, the Governor of Fukien and the Manchu General-in-Chief at Foochow in charge of customs, it was stated that in spite of there being no Chinese restrictions upon their trade, the Ryukyans divided their capital and cargo into two categories, official and private, and that they also customarily underreported the size of their trade; for instance, in 1747 the envoy reported that the capital brought by the two ships was ten thousand taels but careful investigation by the Chinese officials disclosing that the actual amount was ten times larger.¹¹⁰ As 100 taels were equivalent to 1 kan,¹¹¹ Ryukyu's tribute mission of 1747 brought about 1,000 kan of silver.

The Chinese officials requested the king of Ryukyu to rectify the situation. King Shō Kei replied that it would be difficult to comply with the request because the capital for the trade was not fixed and the cargo exported was also flexible.¹¹² Apparently the matter was dropped there and the Ryukyans continued their customary inaccurate reporting.

According to the records of the Chinese customs at Foochow for the years 1803, 1805, 1806, and 1807, the Ryukyuan missions reported their capital funds to be about 50,000 taels when two ships arrived and about 20,000 to 25,000 taels when only one ship arrived.¹¹³ In terms of

Japanese silver, this meant 500 kan of silver for a shinkō mission and 200 to 250 kan of silver for a sekkō mission, well within the limits imposed by the Tokugawa government.

But the question is who made these capital investments. Although Satsuma and Ryukyu were supposed to provide equal amounts of trading capital, Satsuma's investment had sunk to 22 or 23 kan of silver. If so, Ryukyu was providing almost 95% of the trading capital. As to the accuracy of the Ryukyuan's report, one eye-witness reported that "to cover their extra exports" they brought in Japanese gold coins that were not supposed to be in their possession.¹¹⁴ Also in an undated document (probably early nineteenth century), Ryukyu asked Satsuma for permission to purchase cargoes aboard wrecked Chinese ships. Among the reasons given was that the Chinese officials knew well that year after year Ryukyu carried extra amounts of silver to purchase goods at Foochow, so that if Ryukyu refused to pay silver for the goods offered by the shipwrecked Chinese seamen, they might become angry and there was no telling what they might say to the officials upon their return home, and that if the officials should institute strict cargo inspection and discover a considerable amount of silver aboard, it might pose serious problems for future trade missions.¹¹⁵

As this document was addressed to the Satsuma authorities, it is presumed that Satsuma was aware of Ryukyu's carrying trading capital beyond the limit imposed by the Tokugawa government. There is also an undated Chinese source, probably written in the nineteenth century, which says that the biennial Ryukyuan tribute mission brought about 100,000 taels (about 1,000 kan of silver) and in the alternate years

about 50,000 to 60,000 taels (about 500 to 600 kan of silver) to purchase silk, satin and pharmacopoeia.¹¹⁶

3. Exports to China

Ryukyu's tribute in 1666 consisted of ten horses, 12,600 kin of refined sulphur, 3,000 pieces of seashells, ten black lacquered pearl plates with dragon designs, 600 kin of red copper, and 200 rolls of Ryukyuan hempen cloth. In 1684 it included 12,600 kin of refined sulphur, 3,000 pieces of seashells, and 3,000 kin of red copper. In 1692, however, it was decided by Satsuma that the tribute articles should be 12,600 kin of refined sulphur, 3,000 kin of red copper, and 1,000 kin of refined white tin. This became a permanent list thereafter.¹¹⁷

Special tribute missions on such occasions as expressing gratitude or congratulations required different sets of articles such as: a pair of gilt storks with silver stands, a set of armour, two swords with gold mounted scabbards, two swords with silver mounted scabbards, twenty swords with lacquered scabbards and gilded copper mountings, ten spears with lacquered sheaths and gilded copper mountings, ten long swords with lacquered scabbards and gilded copper mountings, one saddle lacquered and dusted with gold leaf including bridle, traces, stirrups and spatter-dashes, four gilded painted folding screens, 500 fans, 200 bundles of Ryukyuan floss silk, 200 rolls of abaca cloth with patterns, 100 rolls of Ryukyuan ramie, 500 kin of white tin, and 500 kin of red copper.¹¹⁸

In addition to the above articles for the Chinese emperor, there were gratuities and gifts for Chinese officials in Foochow and Peking. These gifts, which were not as rigidly stipulated as the tribute

articles, included abaca cloth, superior hempen cloth, white ramie, gold fans, silver fans, ordinary fans, writing brushes, small swords, tortoise shells, dried bonito, spirits, salted sea urchin, salted small fish, the China root (*Pachyma*), Judas ears, cowries, trumpet shells, dried octopus, dried banded seasnakes, salted pork, seaweed, sulphur, pearl shells, cotton, horse tail, copper, saddles, golden folding screens, etc.¹¹⁹

Copper was purchased in Osaka and tin in Satsuma while sulphur was collected as a tax in kind from Torishima in Ryukyu.¹²⁰ Other gifts listed above were mostly purchased in Kyoto, Osaka, Nagasaki, and Satsuma or in Ryukyu.¹²¹

During the seventeenth century, in Ryukyu's trade with China the main profit lay in importing Chinese goods into Japan. There was not much export to China except for the silver, copper, tin, and sulphur and miscellaneous items mentioned above. In 1680 Satsuma exported to China 300 kin of camphor and 300 kin of tin.¹²² Since such exports seem to have been discontinued, it probably was not profitable. Also probably as a result of Ikegushiku's suggestion in 1685, Satsuma gave permission in 1691 for the tribute mission members and ship crews to engage in private trade by taking along laminaria, shark fins, boiled clams, and soy sauce to exchange for Chinese goods.¹²³

On 1706, Satsuma suggested to Ryukyu that whatever Japanese products were marketable in Foochow should be taken along to compensate for the shortage in silver capital.¹²⁴ This proposal to export Japanese products to China does not seem to have been specifically approved by the Tokugawa government. In 1710 on the occasion of a visit to the

Satsuma domains by a Tokugawa inspector, the Satsuma authorities instructed local officials and village headmen that if he were to ask them what Ryukyu exported to China they were to say only copper and tin.¹²⁵ Also, in 1713 Satsuma reported to Tokugawa that Ryukyu offered tribute of tin, copper, and sulphur to the Chinese emperor, and added vaguely that some gifts to Chinese officials were taken along, such as silver and miscellaneous goods purchased in Osaka, Kyoto, Satsuma, and Ryukyu.¹²⁶

During the eighteenth century Satsuma seems to have kept exporting copper, tin, old gold, copper coins, beche-de-mer, shark fins, and abalone.¹²⁷ As for Ryukyu, when asked in 1756 by Satsuma what it exported, it made a guarded reply that the mission crews brought along only laminaria or dried bonito to use as gifts or to exchange for vegetables, and whatever remained at departure time would be exchanged for sappan wood, grains of Paradise, or alum and other gifts for home, and those goods that were popular to the Chinese at Nagasaki such as copper and camphor were not so much in demand at Foochow, and even the textiles that they brought home to Ryukyu were not good enough to be useful to the Lord of Satsuma.¹²⁸ But in 1778 in reply to a request from Satsuma, Ryukyu reported that formerly when there was plenty of old (good) silver, Ryukyu used to purchase mainly silk and textiles, but after the silver was debased, the rise of the purchase cost and of the silk price in Foochow made it unprofitable, and therefore recently Ryukyu was investing all of its capital in marine products that could be exchanged in China for miscellaneous goods and pharmacopoeia....¹²⁹

By the end of the eighteenth century, silver seems to have lost

some of its former importance because it was increasingly being replaced by marine products. Probably the fact that Satsuma was investing only about 22 or 23 kan of silver in the China trade in the 1800's should be interpreted not as an indication of Satsuma's decreased interest in the China trade but rather as an indication that Satsuma was exporting more marine products than silver.

An investment of 22 or 23 kan of silver was not necessarily trivial. At Nagasaki, in 1715 the Tokugawa government restricted silver payments to the Chinese to 4 kan per ship, with the balance due being paid in other items.¹³⁰ From 1709 to 1763, the total amount of silver flowing out at Nagasaki was 1,015.871 kan. or an average of about 23 kan a year, and after 1763 no silver was exported.¹³¹ In 1791 the number of Chinese ships was restricted to ten, with each being limited to 274 kan worth of business, payments being solely in copper and marine products and excluding silver.¹³²

Increased interest in the China trade was evinced by Satsuma in 1787 when it inquired about increasing the number of sekkō ships from one to two or building larger ships capable of carrying more cargo.¹³³ In 1795 even a rented Chinese ship on its way back to Foochow from Ryukyu was loaded with trade cargo consisting mainly of marine products such as beche-de-mer, abalone, shark fins, and laminaria, all of which were forbidden to be exported except through Nagasaki.¹³⁴ In 1805 according to the Foochow Custom ledgers, the Ryukyuan tribute mission that year brought 50,000 taels (or 500 kan) of silver and forbidden marine products such as beche-de-mer, etc., and the China root (*Pachyma*), yellow wax, etc., worth 64,978 taels (or about 650 kan).¹³⁵

Whose investments were these, Satsuma's or Ryukyu's? Although Satsuma and Ryukyu were to supply the China trade capital on a 50-50 basis, it is known that in the late eighteenth century, in spite of Ryukyu's urging, Satsuma was often unwilling or unable to provide its own share of the trade capital and in the beginning of the nineteenth century Satsuma's investment dropped to 22 or 23 kan of silver, with the remainder made up in marine products. Then, it must be assumed that the major portion of the trade capital was being invested by Ryukyu.

In 1805 Ryukyu's export of marine products was larger than that of silver. The marine products often gave rise to disputes among Satsuma officials and merchants and Ryukyuan officials. In 1795 and again in 1797 a Kagoshima merchant, Yokoyama Kisuke, sought a monopoly over sales of laminaria to Ryukyu by payment of a fee to the Satsuma government. The latter, being financially hard pressed, was willing but Ryukyu foresaw a rise in the price of laminaria if the monopoly were granted and opposed it, saying that such a price increase would lead to deterioration of the quality of Chinese goods purchased for Satsuma. The matter was thereupon dropped.¹³⁶

In 1825 Satsuma obtained from the Tokugawa government an official ceiling of 1,720 kan of silver a year for the sales at Nagasaki of Chinese merchandise.¹³⁷ 1,720 kan of silver in Japanese currency meant roughly 860 kan of purer trading silver. To make sales amounting to 860 kan of silver, Satsuma would have had to export about one-half, 430 kan, of capital, which is close to 500 kan of silver exported in 1805.

At Nagasaki where trade with China was conducted under the supervision of the Tokugawa government, after the export of silver was prohibited in 1668, copper became the leading export item. After the Genroku period (1688-1703), in order to lessen the outflow of copper the government urged that tawaramono and shoshiki be exported.¹³⁸ Tawaramono was a generic name for products packed in straw bags (tawara) such as beche-de-mer, shark fins, and abalone, and shoshiki referred to other miscellaneous products, the principal ones being laminaria, dried cuttle-fish, agar-agar, camphor, dried shrimp, ginseng, dried bonito, dried clams, the China root, etc.¹³⁹

In order to promote this policy of exporting goods instead of silver and copper, in 1749 the Tokugawa government granted to a group of authorized merchants (Tawara-mono itte ukekata) the monopoly right to purchase all the tawaramono and shoshiki in Japan (northern Japan, especially Ezo and Matsumae, led in their production) for the purpose of exporting them to China through Nagasaki.¹⁴⁰ Encouragement of the production of these marine foods and prohibition of their sales to anyone but the monopoly merchants were repeatedly issued in 1764, 1765, and 1778, but smuggling did not cease. In 1785 an Office for the Control of Marine Products (Tawaramono kaisho) was established at Nagasaki to stop smuggling. In 1794 and 1837 similar prohibitions of smuggling in the marine products were repeated. Warnings of severe punishments for the offenders were repeated in 1850 and 1865.¹⁴¹

However, according to Table XXXIX, Exports to China, appended at the end of this section, there were thirteen regular and eighteen irregular items exported from Ryukyu to China between 1821 and 1873. These

exports included all major items such as beche-de-mer, shark fins, abalone, laminaria, the China root, etc. Because these were the objects of strict monopoly by the Nagasaki Trading Agency (Nagasaki kaisho), which had absorbed the Office for the Control of Marine Products, in the eye of the Tokugawa monopoly law, the major part of the export from Ryukyu to China was illicit.

Also, according to Table XXXIX, of the thirteen regular export items, all the items excepting abalone showed a definite trend toward increase with the onset of the Tempō Reform in Satsuma in 1830. For instance, beche-de-mer increased by 125% in the 1830-38 period, though it declined in 1839-48. Shark fins increased by 111% in 1830-38, 148% in 1839-48 and 241% in 1849-73. Laminaria decreased by 7% in 1830-38 but increased by 128% in 1839-48, and 120% in 1849-73. Small dry fish increased by 308% in 1830-38, 457% in 1839-48, and 677% in 1849-73. Of the eighteen irregular export items recorded for the period from 1821 to 1844, twelve were new exports. The irregular exports increased by 476% during the period.

Probably because most of these exports were monopoly goods that were not shipped to the Osaka market, records of their prices have not survived except for a few. In 1842, beche-de-mer cost 3.4 momme of silver per kin, shark fins 2 momme per kin, abalone 2.9 momme per kin, laminaria .6 momme per kin at Nagasaki.¹⁴² At these prices, Ryukyu's average annual export in 1830-38 of 10,719 kin of beche-de-mer was worth 36.444 kan of silver, 4,460 kin of shark fins 8.92 kan, 9,590 kin of abalone 28.770 kan, and 123,777 kin of laminaria 74,266 kan, totaling 148.4 kan of silver. Assuming the prices remained the same, for the

next decade in 1839-48, the average annual exports of these four items totaled 129.398 kan of silver.

In 1747 the Ryukyuan were habitually underreporting their capital and cargo at one-tenth of the actual size and no corrective action was taken. As to the situation in the nineteenth century, it seems to have improved a little, for a third-party observer reported that "the Liu-ch'iu cargoes were not accurately reported to the Foochow customs; following 'old custom' the same imports would be reported year after year with but slight variation, so that less than half the cargo was really reported, most of it being smuggled by the brokers with the knowledge of the authorities."¹⁴³

For the purpose of export to China, no one but the Nagasaki Trading Agency was permitted to purchase tawaramono marine products. The Tokugawa government's notices on this had long been circulated all over Japan including Satsuma as noted duly in compilations of the laws and regulations of Satsuma in 1764, 1765, 1778, 1789, and 1798 and so on.¹⁴⁴ The Satsuma authorities promulgated these notices but did little to implement them, and sometimes they violated the law themselves.

The village of Nagashima in Satsuma was well known for its production of good beche-de-mer. Although the Tokugawa law required the villagers to sell to the Nagasaki Trading Agency all beche-de-mer that they produced, the Satsuma authorities limited such sale to about 300 kin a year and whatever was produced in excess of 300 kin was purchased by the han authorities, presumably for its own export to China through Ryukyu.¹⁴⁵

In 1806 the Tokugawa's Nagasaki Deputy (daikan) and his party were to visit the villages of Satsuma on an inspection tour of the marine products. They were preceded, however, by a circular from the Satsuma government to officials in the coastal villages of Izumi, Nagashima, Akune, and Shibushi, instructing them as to the false and evasive replies they should make to the Nagasaki Deputy in case he asked them about beche-de-mer production. For instance, in case the Deputy asked if any beche-de-mer and abalone were sent to Ryukyu, the answer should be that Ryukyu produced some itself and none of these were ever shipped there, and that only nagarame, similar to abalone, were shipped to Ryukyu, which seemed to be a loophole for the export of marine products to Ryukyu.¹⁴⁶

Thus, within its own domains the Satsuma government ignored the Tokugawa laws and withheld shipment of those marine products to Nagasaki. But even beyond its borders the Satsuma government was actively seeking those forbidden marine products by going to the sources of supplies. In a confidential document dated 1835, Ōkubo Kaganokami, Councillor of the Tokugawa government, noted that among other things, within the borders of Satsuma there was a great amount of illicit trade with China.¹⁴⁷ He forwarded it to Hijikata Izumonokami, Magistrate of Accounting (kanjō bugyō), for possible action. The latter, after consulting with Kuze Isenokami, Magistrate of Nagasaki, made a lengthy report back to the Councillor, from which some passages relevant to Satsuma's illicit exports are excerpted as follows:

Nagasaki's main exports, marine products of beche-de-mer, abalone, shark fins, and laminaria, are mostly purchased from Matsumae (present Hokkaidō in northern Japan). But the best of these products, according to the report from the authorized monopoly merchants, were being smuggled to Satsuma, who would dispatch its ships disguised as foreign ships to receive the illicit marine products. These are confirmed reports. Because Satsuma first secures the best grade products, Nagasaki Trading Agency gets only inferior products and its business has suffered considerably in recent years.¹⁴⁸

In his report to the Tokugawa government dated 1836, Ise Kuzenokami, Magistrate of Nagasaki, stated that Satsuma's illicit purchasing and exporting to China of the marine products continued unabated, although it had been told clearly and in turn had given firm promise that only textiles and others, and not marine products, were to be exported to China through Ryukyu.¹⁴⁹

Another most revealing evidence of Satsuma's illicit trade with China through Ryukyu and on how it affected the trade at Nagasaki is found in a document, dated 1825, submitted to the Tokugawa authorities at Nagasaki by Wang Yü-an and Yang Sze-ting, representing the Chinese traders at Nagasaki. First, they pointed out that the products Satsuma sold at Nagasaki at its Ryukyuan Products Agency were really purchased by the Ryukyuan at Foochow and shipped to Nagasaki through Satsuma, and these were not merely textiles and dry goods as publicly claimed. Second, the exports they shipped to Foochow were beche-de-mer, abalone, laminaria and other marine products. Thus, in both exports and imports, the Ryukyuan dealt in the exactly same goods as at Nagasaki. As they exported good but cheap marine products to China even before the Chinese traders at Nagasaki were able to get back, the latter were unable to compete with the Ryukyuan. Also, while the Chinese traders were

compelled to conduct their business under the Tokugawa's restrictions, the Ryukyans were not.¹⁵⁰

It seems that in the minds of the Tokugawa authorities there was not the least doubt of Satsuma's being actively engaged in illicit trade with China, directly violating the laws of the Tokugawa government, and adversely affecting the Nagasaki trade. Trade officials, two successive magistrates of Nagasaki, the magistrate of accounting, and Chinese traders, all presented evidence and argued in vain for the suspension of Satsuma's privilege of trading at Nagasaki which gave it cover for its illicit trading.¹⁵¹

TABLE XXXIX. EXPORTS TO CHINA¹⁵²

I. Regular Exports

	<u>1821-29</u>	<u>1830-38</u>	<u>1839-48</u>	<u>1849-73</u>	<u>Total</u>
(1) <u>Beche de mer</u>					
Total (kin)	77,300	96,470	28,150	139,000	340,920
Average a year	8,589	10,719	2,815	5,560	
Increase ratio	100	125	33	65	
(2) <u>Sharks' fins</u>					
Total (kin)	35,940	40,140	59,270	249,150	384,500
Average a year	3,993	4,460	5,927	9,966	
Increase ratio	100	111	148	241	
(3) <u>Abalone</u>				<u>1850</u>	
Total (kin)	102,989	86,310	14,400	4,000	207,699
Average a year	11,443	9,590	1,440		
Increase ratio	100	84	13		
(4) <u>Laminaria</u>					
Total (kir)	1,214,000	1,114,000	1,727,550	4,050,899	8,106,449
Average . year	134,889	123,777	172,755	162,036	
Increase ratio	100	93	128	120	
(5) <u>Small dried fish</u>					
Total (kin)	6,687	20,575	33,993	125,668	186,923
Average a year	743	2,286	3,399	5,027	
Increase ratio	100	308	457	677	
(6) <u>Soy sauce</u>					
Total (kin)	25,310	28,340	41,780	84,910	180,340
Average a year	2,812	3,149	4,178	3,396	
Increase ratio	100	111	149	121	
(7) <u>Tea oil</u>					
Total (kin)	5,750	6,383	10,380	18,120	40,633
Average a year	639	709	1,038	725	
Increase ratio	100	110	162	113	
(8) <u>Copper-ware</u>					
Total (kin)	445	474	1,604	4,156	6,679
Average a year	49	53	160	166	
Increase ratio	100	108	327	338	
(9) <u>Cotton paper</u>					
Total (kin)	420	749	5,624	6,455	13,248
Average a year	47	83	562	258	
Increase ratio	100	177	1,196	549	

TABLE XXXIX. (Continued) EXPORTS TO CHINA¹⁵²

I. Regular Exports

	<u>1821-29</u>	<u>1830-38</u>	<u>1839-48</u>	<u>1849-73</u>	<u>Total</u>
(10) <u>Grinding stone</u>					
Total (kin)	6,800	7,055	16,950	26,420	57,225
Average a year	756	784	1,695	1,057	
Increase ratio	100	104	224	140	
(11) <u>Gilt folding screen</u>					
Total (each)	8	10	16	35	69
Average a year	0.9	1.1	1.6	1.4	
Increase ratio	100	122	177	155	
(12) <u>Ryukyuan Wine</u>					
Total (jar)	520	679	974	1,865	4,038
Average a year	58	75	97	74	
Increase ratio	100	129	167	128	
(13) <u>White paper fan</u>					
Total (each)	4,800	4,500	9,400	25,800	44,500
Average a year	533	500	940	1,032	
Increase ratio	100	94	176	194	
Total	1,475,641	1,400,496	1,939,701	4,708,778	9,524,616 ^a

Note: ^aItems (11), (12), and (13) are excluded from the total because they are not counted by weight.

	<u>Increase Ratio of the Total Exports to China</u>				
	<u>1821-29</u>	<u>1830-38</u>	<u>1839-48</u>	<u>1849-73</u>	<u>Total</u>
Average	1,475,641	1,400,496	1,939,701	4,708,778	9,524,616
Increase ratio	163,961	155,611	193,970	188,351	
	100	95	118	114	

TABLE XXXIX. (Continued) EXPORTS TO CHINA¹⁵²

II. Irregular Exports

	<u>1821-29</u>	<u>1830-44</u>	<u>Total</u>
(1) K'ai-tou beans		180	180 <u>kin</u>
(2) Tobacco		2,210	2,210
(3) Pharmacopoeia		437	437
(4) Porcelain		73	73
(5) Raw sugar		102,000	102,000
(6) False tuber	5,500		5,500
(7) Wheat soy	7,022	4,410	11,432
(8) Juda's ears	60	122	182
(9) Indigo spume	75	800	875
(10) Ramie		100	100
(11) Cotton		700	700
(12) Nail		65	65
(13) Paper		1,499	1,499
(14) Tea		740	740
(15) Pickled fish	3,660	16,140	19,800
(16) Umbrella		50	50 ^a each
(17) Hempen cloth		320	320 ^a rolls
(18) Coarse pongee		67	67 ^a rolls
	<hr/>		
Total	16,317	129,476	145,793
Average a year	1,813	8,631	
Increase ratio	100	476	

^aThese are excluded from the total because they are counted by piece and not by weight, kin, as the others.

4. Imports from China

From the very beginning the most important article that Satsuma imported from China through Ryukyu was raw silk.¹⁵³ But in the days before 1630 Satsuma's import list was characterized by many antique goods primarily for use by the Shimazu daimyo's households or for gifts to other daimyo or to the shogun. These were not imported to be sold for profit. One of the typical import lists was that of 1628 which included: antique hanging-scrolls, antique perfumes, antique metal flower vases and celadon, antique water pitchers, antique plates, antique writing brush rack, antique ink slabs, antique tea-bowls, antique picture scrolls, metal lion-head incense burners, antique tea kettles, and antique celadon bowls.¹⁵⁴

In 1630 Kawakami Tadamichi, Satsuma's first resident magistrate in Ryukyu, initiated changes in the nature of the imports with a view to profits that would augment the Satsuma government's revenue. Such changes were reflected in the import list of 1639 that contained: raw silk, woolen blankets, Chinese damask, fabrics such as crepes, white satin with lozenge patterns, etc., pharmacopoeia, books, bowls, trays, plates, tea cups, soup bowls, incense, jasmine tea, and Chinese fans.¹⁵⁵

Amounts of imports grew from a volume of about 100 kan of silver in the 1620's to about 1,000 kan of silver in the 1630's. In 1634, while Nagasaki imported 100,000 kin of raw silk, Ryukyu imported 70,000 kin.¹⁵⁶ In 1632, the Satsuma government announced that the intended head tax of 2 ryō would be reduced to 1 ryō and 5 bu because of the profit from the Ryukyu trade.¹⁵⁷ In 1637 the Satsuma government's debt was merely 181 kan of silver, as compared with the debt of 7,000 kan

of silver reported for 1631-32, and this decrease was attributed to the success of the Ryukyu trade.¹⁵⁸

In the middle of the seventeenth century, there occurred an important event that bestowed reconfirmation by Tokugawa of Satsuma's Ryukyu-China trade. The primary legal authority for Satsuma's Ryukyu-China trade was the permission in 1611 from Tokugawa Ieyasu, founder of the Tokugawa shogunate, which was often referred to as the "Divine lord's merciful and deliberate decision" ("shinkun no gojinryo").¹⁵⁹

Now, in the 1640's when war raged in China, Satsuma requested Tokugawa's decision as to what to do with Ryukyu's trade with China. In 1646, the Tokugawa government replied that Ryukyu should continue to trade with China as it had done in the past.¹⁶⁰ In 1655 some Satsuma councillors began to be worried when they were informed by Chinese merchants at Nagasaki that the Manchus had won in China. Satsuma's councillor, Shimazu Hisamichi, and others feared if the Manchus should decide to impose their ways, such as the shaving of heads, upon the Ryukyuan, it would be a blemish not only on the honor of Satsuma but on that of all Japan. They advocated that Ryukyu terminate its relation with the Ch'ing dynasty and that she be protected from the Ch'ing naval forces reported to be making preparations at Foochow for a Ryukyuan invasion. However, the Tokugawa authorities, Elder Councillor Sakai Tadakatsu and Councillor Matsudaira Nobutsuna, decided to preserve peace even at the cost of Ryukyu's being forced to adopt the Tartar customs and to prohibit Satsuma from sending forces to Ryukyu, for to abruptly terminate Ryukyu's relations with the Ch'ing dynasty might invite crisis to the entire nation.¹⁶¹

Although the fear of a Manchu invasion of Ryukyu was unfounded, the series of events in the 1640's and 1650's confirmed Satsuma's right to trade with China through Ryukyu. These events and Ieyasu's original decision to encourage Ryukyu to trade with China were to be cited again and again whenever Satsuma had to defend its right to trade against the encroachment of the later Tokugawa bureaucrats as for instance in 1685.¹⁶²

When Tokugawa's Jōkyō Trade Restriction Law of 1685 (Jōkyō 2) effectively curtailed Chinese imports at Nagasaki, Satsuma hoped that this would improve Satsuma's own trade at Foochow. But Tokugawa's eyes were not only upon Nagasaki but also upon Satsuma. Satsuma's Chinese imports had been growing since 1630 and in 1685 Tokugawa requested information from Satsuma on the latter's Chinese imports as "there have been reports of an excessive amount of woolen goods shipped from Satsuma to Kyoto and Osaka," to which Satsuma replied that from ancient time it has been shipping velvet goods (birōdo), carpets (mōsen), silk gauze (sha), damask (aya), crepe (chirimen), fine gauze (shusu), satin damask (donsu), and yard (ito), etc., but not broad woolen cloth (rasha), scarlet woolen cloth (shōjōhi), or other woolen goods (keorimono).¹⁶³ In the following year, Satsuma's export of silver, which paid for these imports, was limited to 840 kan in a shinkō mission year and 402 kan in a sekkō mission year.¹⁶⁴

There was another effect of Tokugawa's Jōkyō Trade Restriction Law upon Satsuma's imports. Although the law officially curtailed the imports at Nagasaki, it was immediately followed by a sharp increase in smuggling.¹⁶⁵ One of the measures taken to prevent illicit imports

required each licit import article to be stamped by the elders of the Nagasaki merchants authorized by Tokugawa. This caused the problem of what to do with the imports through Satsuma which were without such stamps. Finally, in 1689 Tokugawa approved Satsuma's appointment of the Naishibara Zenbē Store in Kyoto as its own authorized wholesale agent whose stamp would be required on all Chinese goods imported through Satsuma.¹⁶⁶

Until 1689, Satsuma was officially allowed to import whatever Chinese goods it wished for consumption within its borders only, but it was actually shipping the Chinese goods to Osaka, Kyoto, and even Nagasaki on sufferance of Tokugawa.¹⁶⁷ Now Satsuma obtained Tokugawa's official permission to ship the Chinese goods beyond its borders, which was a gain for Satsuma, but at the same time it was permitted to sell them only in Kyoto, and the items to be sold were now restricted to two items, raw silk and saya satin with lozenge patterns.¹⁶⁸

In the early eighteenth century, therefore, Satsuma gained the advantage of an official outlet in Kyoto but was otherwise placed under stricter control than before. It appeared as though Satsuma was cooperating with the Tokugawa policy against illicit trade because its books of law and regulations were replaced with elaborate procedures designed to control the illicit trade such as those promulgated in 1700, 1714, 1741, 1776, 1787, 1788, 1789, 1792, and so on.¹⁶⁹

But these elaborate procedures seem to have been merely gestures of law enforcement in compliance with Tokugawa policy. In 1718, Tokugawa told Satsuma that smuggling of the Chinese goods still did not cease and its efforts should not be relaxed.¹⁷⁰ Later in the same year

Tokugawa complained that the only smugglers arrested were those arrested by the Tokugawa officials and none by the officials of the daimyo on their own initiative.¹⁷¹ In the following year, 1719, Tokugawa stated that "in a certain western country [referring to Satsuma] officials in charge of the control of smuggling had pledges submitted or had oaths signed in blood or had the regulations read aloud to the people sometimes. But these are merely gestures of inspection without any substance and need not be repeated in future. What is important is to arrest the smugglers...."¹⁷²

In spite of these repeated warnings from the Tokugawa government, Satsuma failed to abide by the anti-smuggling regulations. One conspicuous example involved cinnabar, one of the illicit imports. It had long been a monopoly item granted to the cinnabar guild merchants (shuza) by the Tokugawa government. In 1734 Tokugawa issued a warning that in spite of the long standing monopoly of the cinnabar guild merchants, there seemed to be some illicit cinnabar in circulation. In 1759 Tokugawa issued another warning which asked if the previous warning of 1734 had been forgotten because there was illicit cinnabar on the market again. Similar warnings were repeated in 1777, 1782, 1787, and 1796.¹⁷³ In 1801 the arrest by Tokugawa officials of a merchant of Kyoto, Ōmiya Shinbē, charged with smuggling Chinese goods imported through Ryukyu, revealed that in Satsuma there was practically no inspection or control of smuggling.¹⁷⁴ It seems that the smuggling of Chinese goods including cinnabar continued unabated during the entire eighteenth century.

Satsuma had Tokugawa's permission to sell cinnabar to the authorized guild on the ground that it was a genuine Ryukyuan product.¹⁷⁵ As a matter of fact, cinnabar was not a Ryukyuan product. Satō Shigehiro in his treatise on the Ryukyuan products in 1792 pointed out that the cinnabar in Ryukyu was imported from Foochow, and contrary to popular belief Ryukyu did not produce cinnabar.¹⁷⁶ And at least in one instance in 1787 an unwitting admission was made when cinnabar was referred to as Chinese goods imported through Ryukyu. This was in a Satsuma government document cautioning its own officials on how to handle the cinnabar in view of recent Tokugawa regulations.¹⁷⁷

Although Satsuma was permitted to sell only silk and satin in Kyoto, its import manifest from China of 1787 included more than sixty varieties of articles, including tortoise shell, cassia bark, sapan wood, opium, grains of Paradise, ivory, mercury, rhubarb, costus roots, cinnabar, silk-worm gut, ginseng, ass's glue, Borneo camphor, wild chrysanthemum, licorice root, *Heteroxinilax japonica*, pepper, red ink, aloe-wood, rhinoceros horn, betel nut, crocodile hide, antelope horn, vermilion powder, musk, etc.¹⁷⁸ Some of these might have been consumed within Satsuma as they were supposed to be, but it is much more likely that most found their ultimate destination in urban centers such as Kyoto and Osaka.

There is no information available on the quantities of these articles. But in 1747 Ryukyu's tribute mission was found to be carrying about 1,000 kan of silver. In 1756 Tokugawa requested Satsuma to set a standard amount of silk and satin to be shipped to Kyoto every year. Satsuma in turn asked Ryukyu what would be the best amount to set

which would not interfere with future operations. Ryukyu refused to give a definite answer because of the great fluctuations.¹⁷⁹ But in China, after a temporary ban of silk exports in 1760, Ryukyu obtained a purchasing ceiling of about 8,000 kin of silk and satin goods a year in 1762.¹⁸⁰ Also 1787 happened to be the year when Satsuma attempted to either increase the number of ships to China or build larger ships to carry more cargo. It does not seem likely that Satsuma was trying to expand the trade, much of it illicit, merely for the purpose of consumption within its domains.

In 1800 and again in 1801 Ryukyu requested Satsuma's permission to import from China and to sell pharmacopoeia, utensils, and other items in Osaka because "in the past we were able to make ends meet by importing and selling silk and satin in Kyoto, but recently not only has their production decreased but their quality has deteriorated, and as a result sometimes we even lose money on them."¹⁸¹ Such requests were part of Satsuma's strategem, and Satsuma would relay Ryukyu's plea to Tokugawa, urging the latter to help lest the Ryukyans starve, for after all Ieyasu had allowed them to trade freely with Japan.¹⁸²

These were only attempts to legalize what Satsuma was already illicitly engaged in. Satsuma had been shipping Chinese goods to Osaka, and Tokugawa had chosen not to make an issue of it. But in the 1790's Satsuma's imported goods increased to such an extent that they began interfering with the sale of the Chinese goods, especially pharmacopoeia, imported through Nagasaki.¹⁸³ Tokugawa reacted to Satsuma's increased illicit imports by reconfirming past policy with a communication in 1789 from the Nagasaki Magistrate that Satsuma was not allowed to sell

any Chinese goods beyond its borders except silk and satin in Kyoto.¹⁸⁴

Satsuma countered by seizing an opportunity presented by the visit to Ryukyu of the Chinese investiture mission headed by Chao Wen-chieh in 1800. As was the custom, Chao's mission brought about 150,000 kin of cargo which was forced upon Ryukyu at a good profit.¹⁸⁵ In turn Ryukyu shipped the cargo to Satsuma for sale at Osaka. Satsuma presented the case to Tokugawa requesting permission to sell the pharmacopoeia and other articles brought by Chao's investiture mission. Although in form Satsuma was negotiating on behalf of Ryukyu, it was actually seeking its own benefit because it was Satsuma that funded the major portion of the expenses necessary for the investiture mission.¹⁸⁶ Tokugawa rejected Satsuma's request but granted a reparation of 10,000 ryō of gold for making it ship back all of the cargo, with the re-confirmation of the trade restriction policy.¹⁸⁷

In compliance with Tokugawa policy, Satsuma promulgated several anti-smuggling laws and regulations especially singling out pharmacopoeia in 1802, 1803, and 1805.¹⁸⁸ On the other hand, Satsuma persisted in petitioning Tokugawa for an increase in the number of approved Chinese import articles, purportedly to rescue Ryukyu from its financial difficulties. From 1804 to 1820, Satsuma submitted ten such requests to Tokugawa, proposing to have tortoise shell, sappan wood, and silk worm guts approved instead of the silk and satin, the sale of which were said to be in the red.¹⁸⁹

The Nagasaki Trading Agency opposed these moves by Satsuma. Its officials submitted several lengthy counter-petitions to the Tokugawa authorities in 1807 and 1808 contending in essence that any increase in

Satsuma's import trade would seriously jeopardize the business of the Nagasaki Trading Agency, which would furthermore result in decreased revenues for the Tokugawa government.¹⁹⁰

In this battle Satsuma was the final winner. In spite of the fairly strongly worded petitions from those concerned with Tokugawa finance, because it seemed that any more outright denial of Satsuma's request would mean increased difficulties for the higher Tokugawa authorities and because Satsuma promised stricter anti-smuggling measures if its request were granted, the Nagasaki Trading Agency was finally persuaded.¹⁹¹ In 1810 Satsuma was granted a temporary permission to import eight articles: thin paper, colored T'ang paper, nails, woolen textiles, carpets, damask, rouge, and indigo for a period of three years with the condition that it would be suspended at any time if it was proved to be injurious to the Nagasaki trade.¹⁹²

Even though the 1810 permission was supposed to be only for three years and on a trial basis to be suspended at any time, once the door was opened, there seemed nothing that could stop its opening ever wider and wider. Satsuma immediately filed another petition for the addition of silk worm guts, tortoise shells, and ginseng to the approved list on the ground that the approved eight articles brought little profit. Furthermore, in spite of the fact that in 1810 Satsuma itself pledged that the permission would in no way interfere with the Nagasaki trade because the sales would amount to no more than 30 or 40 kan of silver a year, Satsuma now insisted that sales amounting to at least about 1,000 kan of silver would have to be realized to rescue Ryukyu from its financial crisis. When its request to add these three articles was

rejected, Satsuma promptly filed another petition seeking approval of five other articles of pharmacopoeia.¹⁹³

In 1813 Satsuma's trade permit was renewed for another three years. In 1816 when a famine in Ryukyu killed 1,563 persons, Shimazu Shigehide seized this opportunity to stress, in a petition in 1817, the need for permitting more trade to rescue Ryukyu.¹⁹⁴ In 1818 Satsuma was allowed to import four more articles - silk-worm guts, natural borax, cassia twigs, and magnolia hypoeuca (hou p'e) for three years.¹⁹⁵

In 1820 Satsuma's import trade ceiling was 2,700 kan of silver and it was permitted to add lucrative tortoise shells and borneo camphor.¹⁹⁶ In 1825, in addition to the previously permitted eight articles, sixteen new articles were permitted for import, and in 1836 the period of the permit was extended for twenty years, or until 1855.¹⁹⁷

Protests from officials connected with the Nagasaki Trading Agency and the worsening financial situation of the Agency caused Tokugawa's councillor in charge of finance, Mizuno Echizennokami Tadakuni to notify Satsuma in 1837 that its trade permit at Nagasaki was to be suspended except for silk and satin as of 1839.¹⁹⁸ Satsuma immediately filed one petition after another reciting the history of the special relationship between Satsuma and Ryukyu and China that had been designed through the wisdom of the Founding Shogun, Ieyasu, and adding the possibility of a rupture in Sino-Ryukyu relationship and the need to win over the Ryukyans in view of impending foreign dangers in the waters adjacent to Ryukyu and Japan.¹⁹⁹

Tokugawa gave in and renewed the Nagasaki trade permit, although for only two years. In 1841 the permit was renewed for another two

years, and despite the Tokugawa prohibition on the sale of cargo brought in by the Chinese investiture mission, when Tokugawa's instruction was delivered by Satsuma to Tokugawa's Nagasaki magistrate, the wording in the instruction was changed to read that Tokugawa now agreed to the sale of such cargo.²⁰⁰ In 1846 Satsuma regained permission to sell the sixteen Chinese articles up to the total of 1,200 kan of silver a year for five years, and the total sales limit was now set at 1,720 kan of silver a year.²⁰¹ It was often found that Satsuma exceeded the limit and in such a case the excess amount was counted against the quota for the following year.²⁰²

In sum, the foregoing seems to indicate that Satsuma's import trade grew rapidly from 1810 to 1839; it was curtailed somewhat in the latter year but resumed its former state of activity in 1846 when it regained the permit for sixteen kinds of imports. However, a different impression can be gleaned from Table XL, Imports from China, at the end of this section. According to the Table, (1) there were twenty four articles that continued to be imported on a regular basis from 1821 to 1875; (2) of these twenty four regular imports, only four articles decreased in volume and the remaining twenty articles increased considerably; (3) four imports stopped completely after 1839; (4) seven new imports started about 1839; (5) five articles kept coming in sporadically after 1839; (6) twenty-one articles were being imported irregularly throughout the period (1821-1875) but their volume more than quadrupled after 1830.

Was the foregoing trade profitable for Satsuma, and if so how profitable? Practically all who treated Satsuma's Ryukyu-China trade

answered in definite affirmative to the first question, but they also remained vague or dismissed the second question by such general statement as it must have been great or enormous.²⁰³ Although Ebihara Yōsai (Kiyohiro), one of the chief aides to Zusho Shōzaemon, stated that it was not profitable for the Satsuma government he is believed to have

TABLE XLI. SATSUMA'S PROFITS FROM THE SALES OF PHARMACOPOEIA AT THE NAGASAKI TRADING AGENCY²⁰⁴

1847	...	15 pharmacopoeia at 43,172 <u>kin</u>		
		262,185 <u>kan</u> of copper	...	total sales
		<u>-163,685</u> "	...	total expenses
		98,500	...	net profit
			37.57% ...	profit rate
1848	...	14 pharmacopoeia at 40,188 <u>kin</u>		
		300,339 <u>kan</u> of copper	...	total sales
		<u>-184,472</u> "	...	total expenses
		115,867	...	net profit
			38.57% ...	profit rate
1849	...	15 pharmacopoeia at 62,634 <u>kin</u>		
		338,034 <u>kan</u> of copper	...	total sales
		<u>-206,611</u> "	...	total expenses
		131,423	...	net profit
			38.87% ...	profit rate
			38.34% ...	average profit rate for three years

Note: Expenses in the above accounts include 20% sales duties to the Nagasaki Trading Agency and about 5% gratuities to the officials.

made such a statement out of political considerations.²⁰⁵

Table XLI shows that pharmacopoeia yielded a net profit of about 38.34% of the gross income. From 1820 Satsuma's sales ceiling at the Nagasaki Trading Agency was 2,700 kan of silver. If this profit rate of 38.34% was applied to this ceiling, Satsuma's annual profit would be 1,035 kan of silver (or 17,253 ryō of gold) since 1820.

TABLE XLII. PHARMACOPOEIA IMPORTS AND SALES AT NAGASAKI²⁰⁶

	<u>Imported from Foochow</u>		<u>Sold at Nagasaki</u>		<u>Remainder (unaccounted)</u>
1847	134,264 <u>kin</u>	-	43,172 <u>kin</u>	=	91,092 <u>kin</u>
1848	49,960 "	-	40,188 "	=	9,772 "
1849	234,109 "	-	62,634 "	=	171,475 "
	<hr/>				
Total	418,333 "	-	145,994 "	=	272,339 "
Average	139,444 "		48,665 "		90,779 "
%	100		35		65

But if the amounts of pharmacopoeia sold at the Nagasaki Trading Agency for these three years are checked against the amounts of pharmacopoeia imported from Foochow, as shown in Table XLII, above, it will reveal that as an average the pharmacopoeia sold at Nagasaki was only 35% of the total import. If Satsuma adhered strictly to the Tokugawa law, it must be assumed that the remaining 65% of the imports were consumed within the borders of Satsuma. But it is of course an unrealistic assumption because of their large quantities. In view of Satsuma's past record of persistent violation of the anti-smuggling law,

it seems more reasonable to assume that these unaccounted portions, 65% of the total imports, were smuggled out of Satsuma and sold elsewhere.

How much did Satsuma make from the illicit sales of pharmacopoeia? Assuming that they were sold at the same price as at the Nagasaki Trading Agency, in 1847 91,092 kin of pharmacopoeia yielded 552,928 kan of copper (at 6.07 kan of copper @ kin), in 1847 9,772 kin yielded 72,997 kan of copper (at 7.47 kan of copper @ kin), and in 1849 171,475 kin yielded 925,965 kan of copper (at 5.4 kan of copper @ kin), in gross income. Their net profit rate would be 63.34% (38.34% plus 20% sales duties and 5% gratuities which were not paid). The profits were 350,225 kan of copper for 1847, 46,236 kan of copper for 1848, and 586,506 kan of copper for 1849. Thus, Satsuma's total net profits, both licit and illicit, from the pharmacopoeia imports averaged about 4,211 kan of silver a year, as shown in Table XLIII below.

TABLE XLIII. SATSUMA'S TOTAL NET PROFITS FROM PHARMACOPOEIA FOR THE PERIOD 1847-1849

	Legal	+ Illegal	= copper	Total silver
1847	98,500	350,225	448,725	4,262.888
1848	115,867	46,236	162,103	1,539.979
1849	131,423	586,506	717,929	6,829.326
Total	345,790	982,967	1,328,757	12,632.233
Average	115,263	327,656	442,919	4,210.744

Note: copper 1 kan =
silver 9.5 momme

TABLE XLIV. SATSUMA'S AVERAGE NET PROFITS FROM
PHARMACOPOEIA FOR 1821-1848

	<u>1821-29</u>	<u>1830-38</u>	<u>1839-48</u>
Average annual imports	103,138 <u>kin</u>	160,663 <u>kin</u>	36,649 <u>kin</u>
Gross sales (copper)	650,801 <u>kan</u>	1,013,884 <u>kan</u>	231,255 <u>kan</u>
Legal gross sales (35%)	227,780 <u>kan</u>	354,859 <u>kan</u>	80,939 <u>kan</u>
38.34% profit	87,331 <u>kan</u>	136,653 <u>kan</u>	31,032 <u>kan</u>
Illegal gross sales (65)	423,021 <u>kan</u>	659,025 <u>kan</u>	150,316 <u>kan</u>
63.34% profit	267,942 <u>kan</u>	417,426 <u>kan</u>	95,210 <u>kan</u>
Total profit copper	355,273 <u>kan</u>	554,079 <u>kan</u>	126,242 <u>kan</u>
silver	(3,364.094 <u>kan</u>)	(5,263.751 <u>kan</u>)	(1,199.299 <u>kan</u>)

Note: copper 1 kan =
silver 9.5 momme

Now, assuming that Satsuma always sold legally 35% of the total imports at the profit rate of 38.34% and sold illegally the remaining 65% at the profit rate of 63.34% and that the cost and sale prices remained constant, Satsuma's annual average profits from the pharmacopoeia imports for the period from 1821 to 1848 would be as shown in Table XLIV above.

In 1840, Satsuma sold 5,812 kin of cinnabar for 334.800 kan of silver (57.6 momme per kin) in Edo and Osaka.²⁰⁷ Assuming this 1840 price as the standard, it is possible to estimate the amount of the gross sales of cinnabar as shown in Table XLV.

TABLE XLV. SATSUMA'S AVERAGE GROSS SALES OF CINNABAR FOR 1821-1848

	<u>1821-29</u>	<u>1830-38</u>	<u>1839-48</u>
Annual average imports	5,166 <u>kin</u>	5,233 <u>kin</u>	6,770 <u>kin</u>
Gross sales	298.562 <u>kan</u>	301.421 <u>kan</u>	389.952 <u>kan</u>

If these gross sales of cinnabar are added to those of pharmacopoeia, the results are as follows:

TABLE XLVI. SATSUMA'S GROSS SALES OF CINNABAR AND PHARMACOPOEIA FOR 1821-1848

	<u>1821-29</u>	<u>1830-38</u>	<u>1839-48</u>
Average annual gross sales			
Pharmacopoeia	6,182.610	9,631.898	2,196.923
Cinnabar	298.562	301.421	389.952
Total	6,481.172	9,933.319	2,586.875

Pharmacopoeia and cinnabar were but two of the more than fifty articles that were imported by Satsuma in the nineteenth century. Therefore, without knowing whether the other imports made more or less profits than these, it is difficult to give any definite estimate as to Satsuma's profits from the trade as a whole. But there are certain points that seem beyond dispute. Tokugawa imposed a ceiling upon Satsuma's trade at Nagasaki of 2,700 kan of silver, after 1820, but as shown in Table XLVI, sales of pharmacopoeia and cinnabar alone exceeded the ceiling by 2.4 times in 1821-29 and by 3.6 times in 1830-38. And

although Satsuma was officially permitted to import only sixteen kinds of Chinese goods, as Table XL shows, after about 1830 Satsuma was importing more than fifty kinds of Chinese goods in large quantities. Theoretically it is possible to imagine that Satsuma continued to import these goods not because of any big profits but because of anticipated future profit and that actually Satsuma was continually in the red, but this does not seem likely in view of the reactions of the officials of the Nagasaki Trading Agency and the Tokugawa finance officials to Satsuma's trade. The vigorous opposition put up by these officials and Chinese merchants at Nagasaki indicate the considerable threat posed by Satsuma's trade. But the most convincing is an admission by Shimazu Nariakira himself made in 1853 that: "because trading at Nagasaki is supposed to be for the purpose of helping the various domains, all the profits should be so used, but according to the traditional way we have conducted the business, immense profits go to our bureau of products, and the aid to Ryukyu is merely a name without substance. This is regrettable to me. From now on, let Ryukyu receive one-third of the trade profits.²⁰⁸

Finally as an expression of the attitude of the Satsuma officials toward the Ryukyu-China trade, pertinent excerpts from a memorial dated 1840 from Ijichi Sueyasu, Satsuma's foremost historian and scholar, to his superiors in the Satsuma government, are given below:

It was in accordance with the wisdom of the Founding Shogun, Ieyasu, confirmed under the second and third shogun, Hidetada and Iemitsu, that the Chinese goods were freely imported [through Ryukyu] and sold everywhere. Yet from about the An'ei period (1772-80), restrictions became increasingly tighter until even the Chinese goods imported through Ryukyu were viewed in the same light as goods smuggled in by commercial ships....

It is extremely unpleasant. To call it illicit will not do

because if it were really prohibited Ryukyu could not maintain itself.... Furthermore, no matter how strict the Tokugawa orders may be, the trade will not stop simply because Chinese goods imported at Nagasaki such as pharmacopoeia, etc. are not in sufficient volume to meet the demand in Japan.

It is just like the prostitutes in Edo. Laws prohibit them except in the Yoshiwara district but because absolute demand for them persists, there are many "waitresses" in many road-side stations and towns who meet such demand. Chinese imports at Nagasaki are like the Yoshiwara prostitutes, and Ryukyu's Chinese imports are like "the waitresses" in the other places. It is illegal but there is nothing that can stop it. Above all, to limit the import of Chinese pharmacopoeia, so indispensable to human life, is rather unmerciful....

In Satsuma, either because of the custom of many centuries of handling [Chinese imports through Ryukyu], or because of the great profits involved, or because there is no other way to make a living here, even the men of low stations are still said to engage in illicit trade today, in spite of the fact that it has been prohibited for about 150 years, ever since the Genroku period (1688-1703), and that recently the measures are said to be very strictly enforced.

If the law enforcement ever becomes even more strict, then there will eventually be a time when it will all stop. But when that time comes,... Ryukyu will be forced to return to the old ways before our conquest of Ryukyu (1609) and to plan commerce with the Southern Barbarians as they used to do. No matter what may be said, it is far away over the ocean, about several hundred li to the southern islands of Ryukyu, and there is no knowing what kind of men might put themselves there. If Japan's trade continues to be restricted as it is now, it would be hard to say that there would be no such clandestine plots. There are many islands which may develop suitable harbors... for the black ships of Russia and England and others that have recently been known to frequent the area in hopes of finding an opening into Japan....

I cannot help wondering if the Tokugawa officials in charge of such matters prohibited the foreign trade because they are not sufficiently aware of the geography of the archipelago and of its history of having been dependent upon the commerce with the Barbarians before our conquest (in 1609).... For almost 150 years till today there has been no end [of the illicit trade]. If it ever comes to an end, there would immediately arise the possibility of fearful accidents as described above. [Clandestine plots of foreigners with Ryukyuan.] This is the dilemma we find ourselves today.²⁰⁹

From this confidential memorial, written by one who was most knowledgeable on the subject, it is clear that Satsuma regarded the Ryukyu-China trade as Satsuma's prerogative sanctioned not only by the first three shoguns but also by special historical development. It was one that nothing could stop, Ijichi said, and in view of the recent frequent attempts by Europeans to pry open the doors of Japan, it was even indispensable to allow Ryukyu the trading privilege with Europeans as a means of buying precious time. It is indeed the development of this line of reasoning that was later used by Satsuma as a powerful leverage to gain more and more advantage for herself on the arena of national politics on the eve of the Meiji Restoration.

TABLE XL. IMPORTS FROM CHINA²¹⁰

I. Regular Imports

	<u>1821-29</u>	<u>1830-38</u>	<u>1839-48</u>	<u>1849-75</u>	<u>Total</u>
(1) <u>Woolen blankets</u>					
Total (kin)	8,450	9,930	9,480	18,270	46,130
Average a year	939	1,130	948	676	
Increase ratio	100	120	101	72	
(2) <u>Thick wool</u>					
Total (rolls)	656	314	489	2,594	4,053
Average a year	73	35	49	96	
Increase ratio	100	48	67	131	
(3) <u>Silk (Chung-hua chou)</u>					
Total (rolls)	1,506	1,801	2,306	7,102	12,715
Average a year	167	200	231	266	
Increase ratio	100	120	138	159	
(4) <u>Crepe</u>					
Total (rolls)	1,047	1,359	1,504	2,514	6,424
Average a year	116	151	150	93	
Increase ratio	100	130	129	80	
(5) <u>Silk cloth (used)</u>					
Total (cases)	342	664	406	2,774	4,186
Average a year	38	74	41	103	
Increase ratio	100	195	108	271	
(6) <u>Cotton cloth (used)</u>					
Total (cases)	228	296	528	2,862	3,914
Average a year	25	33	53	106	
Increase ratio	100	132	212	424	
(7) <u>Ramie cloth</u>					
Total (rolls)	6,427	20,599	41,290	254,050	322,366
Average a year	714	2,289	4,129	9,409	
Increase ratio	100	320	578	1,317	
(8) <u>Ginseng</u>					
Total (kin)	26,100	33,700	8,500	25,050	93,350
Average a year	2,900	3,744	850	928	
Increase ratio	100	129	29	32	
(9) <u>Cinnabar</u>					
Total (kin)	26,500	47,100	67,700	44,400	205,700
Average a year	5,166	5,233	6,770	1,644	
Increase ratio	100	101	131	32	

TABLE XL. (Continued) IMPORTS FROM CHINA²¹⁰

	<u>1821-29</u>	<u>1830-38</u>	<u>1839-48</u>	<u>1849-75</u>	<u>Total</u>
(10) <u>Pharmacopoeia</u>					
Total (kin)	928,248	1,445,971	366,488	3,095,244	5,835,951
Average a year	103,138	160,663	36,649	114,639	
Increase ratio	100	156	36	111	
(11) <u>Mercury</u>					
Total (kin)	24,600	47,000	14,700	23,100	109,400
Average a year	2,733	5,222	1,470	855	
Increase ratio	100	191	54	31	
(12) <u>Tea</u>					
Total (kin)	265,000	366,740	235,040	327,566	1,194,346
Average a year	29,444	40,749	23,504	12,132	
Increase ratio	100	138	80	41	
(13) <u>Refined sugar</u>					
Total (kin)	85,514	192,232	231,810	640,990	1,168,546
Average a year	9,501	21,359	23,181	23,740	
Increase ratio	100	225	244	249	
(14) <u>Rouge</u>					
Total (piece)	136,000	200,000	280,000	846,000	1,462,000
Average a year	15,111	22,222	28,000	31,333	
Increase ratio	100	147	185	207	
(15) <u>Incense</u>					
Total (kin)	6,427	20,599	41,290	254,050	322,366
Average a year	714	2,289	4,129	9,409	
Increase ratio	100	321	578	1,317	
(16) <u>Porcelain</u>					
Total (kin)	228,371	267,619	280,979	393,245	1,170,214
Average a year	25,375	29,735	28,098	14,564	
Increase ratio	100	117	111	57	
(17) <u>Lacquered trays</u>					
Total (piece)	61,180	33,993	37,879	95,330	228,382
Average a year	6,798	3,777	3,788	3,531	
Increase ratio	100	55	56	52	
(18) <u>Combs, fine-toothed</u>					
Total (piece)	109,500	85,200	60,600	45,000	300,300
Average a year	12,166	9,467	6,060	1,667	
Increase ratio	100	78	50	14	

TABLE XL. (Continued) IMPORTS FROM CHINA²¹⁰

	<u>1821-29</u>	<u>1830-38</u>	<u>1839-48</u>	<u>1849-75</u>	<u>Total</u>
(19) <u>Nails</u>					
Total (piece)	540,000	790,000	380,000	940,000	2,650,000
Average a year	60,000	87,777	38,000	34,815	
Increase ratio	100	111	63	58	
(20) <u>Umbrellas</u>					
Total (piece)	36,690	48,167	48,980	248,509	382,346
Average a year	4,077	5,352	4,898	9,204	
Increase ratio	100	131	120	226	
(21) <u>Superior T'ang paper</u>					
Total (sheet)	1,726,500	637,300	682,900	4,208,300	7,255,000
Average a year	191,833	70,811	68,290	155,863	
Increase ratio	100	37	36	81	
(22) <u>Oil paper, large</u>					
Total (sheet)	22,800	26,830	16,340	94,900	170,870
Average a year	2,533	2,981	1,634	3,515	
Increase ratio	100	118	65	138	
(23) <u>Chia paper</u>					
Total (kin)	148,165	193,583	102,490	419,202	863,440
Average a year	16,463	21,509	10,249	15,526	
Increase ratio	100	130	62	94	
(24) <u>Oil paper fan</u>					
Total (piece)	123,600	132,050	139,700	152,050	547,400
Average a year	13,733	14,672	13,970	5,631	
Increase ratio	100	106	102	41	

TABLE XL. (Continued) IMPORTS FROM CHINA²¹⁰

II. Regular Imports Until About 1840

	<u>1821-29</u>	<u>1830-39</u>				<u>Total</u>
(1) <u>Grains of Paradise</u>						
Total (kin)	11,000	81,600				92,600
Average a year	1,222	7,418				
Increase ratio	100	607				
(2) <u>Sappan wood</u>						
Total (kin)	144,000	329,186				473,186
Average a year	16,000	29,927				
Increase ratio	100	187				
(3) <u>Cloves</u>	<u>1821-29</u>	<u>1830-38</u>	<u>1839-48</u>	<u>1849-58</u>		<u>Total</u>
Total (kin)	36,100	40,200	8,200	4,600		89,100
Average a year	4,011	4,467	820	460		
Increase ratio	100	111	20	11		
(4) <u>Saussurea lappa</u>	<u>1821-29</u>	<u>1830-39</u>				<u>Total</u>
Total (kin)	29,050	45,300				74,350
Average a year	3,228	4,530				
Increase ratio	100	140				
(5) <u>Aloes wood</u>	<u>1821-29</u>	<u>1830-38</u>	<u>1839-41</u>			<u>Total</u>
Total (kin)	32,300	41,800	4,700			78,800
Average a year	3,589	4,644	1,566			
Increase ratio	100	126	44			
(6) <u>Pewter articles</u>	<u>1821-29</u>	<u>1830-41</u>	<u>1843</u>	<u>1847</u>	<u>1849</u>	<u>Total</u>
Total (kin)	3,135	5,530	240	100	180	9,185
Average a year	348	461	240	100	180	
Increase ratio	100	132	68	29	52	
(7) <u>Tortoise-shell</u>	<u>1821-29</u>	<u>1830-39</u>	<u>1849</u>	<u>1863</u>		<u>Total</u>
Total (kin)	11,300	8,350	1,900	100		21,650
Average a year	1,255	835	1,900	100		
Increase ratio	100	66	151	8		
(8) <u>Silk-worm shell</u>	<u>1821-29</u>	<u>1830-39</u>				<u>Total</u>
Total (kin)	10,920	30,500				41,420
Average a year	1,213	3,050				
Increase ratio	100	251				
(9) <u>Small drums</u>	<u>1826-29</u>	<u>1830-41</u>	<u>1843</u>	<u>1847</u>	<u>1849</u>	<u>Total</u>
Total (piece)	197	379	37	15	35	663
Average a year	49	32	37	15	35	
Increase ratio	100	65	76	31	71	

TABLE XL. (Continued) IMPORTS FROM CHINA²¹⁰

III. Regular Imports After About 1840

(1) <u>Cotton threads</u>	<u>1839-48</u>	<u>1849-75</u>	<u>Total</u>
Total (kin)	38,300	204,086	242,386
Average a year	3,830	7,559	
Increase ratio	100	197	
(2) <u>Natural borax</u>	<u>1848</u>	<u>1849-65</u>	
Total (kin)	3,000	17,900	20,900
Average a year	3,000	1,053	
Increase ratio	100	35	
(3) <u>Serge</u>	<u>1837-48</u>	<u>1849-75</u>	
Total (10 feet)	28,935	16,560	45,495
Average a year	2,411	613	
Increase ratio	100	25	
(4) <u>Canequinne</u>	<u>1843-48</u>	<u>1849-75</u>	
Total (roll)	11,680	15,648	27,328
Average a year	1,647	579	
Increase ratio	100	35	
(5) <u>Broad wool</u>	<u>1844-48</u>	<u>1849-65</u>	
Total (10 feet)	3,785	5,442	9,227
Average a year	757	320	
Increase ratio	100	42	
(6) <u>Dutch camlets</u>	<u>1844-48</u>	<u>1849-65</u>	
Total (10 feet)	1,695	5,774	7,469
Average a year	339	337	
Increase ratio	100	99	
(7) <u>Pueraria cloth</u>	<u>1839-48</u>	<u>1849-75</u>	
Total (roll)	10,840	33,640	44,480
Average a year	1,084	1,246	
Increase ratio	100	115	

TABLE XL. (Continued) IMPORTS FROM CHINA²¹⁰

IV. Irregular Imports	<u>1821-29</u>	<u>1830-48</u>	<u>1849-75</u>	<u>Total</u>
(1) Ivory	400	40	4,850	5,290
(2) Cotton	-	111,200	1,000	112,200
(3) Chu'an-lien paper	4,560	-	-	4,560
(4) Indigo spume	40	-	-	40
(5) Coptis japonica	900	-	-	900
(6) Catechu	23,300	7,200	-	30,500
(7) Crystal sugar	-	2,950	-	2,950
(8) Copper ware	24	-	-	24
(9) Szechuan Fritillaria verticillata	2,400	300	-	2,700
(10) Ramie	1,103	1,242	-	2,345
(11) Nutmeg	3,600	-	-	3,600
(12) Borneo camphor	6,000	-	-	6,000
(13) Indigo blue	-	1,000	-	1,000
(14) Raw sugar	-	256,350	-	256,350
(15) Tea oil	-	43,000	-	43,000
(16) Ch'ing-ma ramie	-	-	4,600	4,600
(17) Safflower	-	-	18,600	18,600
(18) Anhui ink stick	495	640	840	1,975
(19) Musk deer hide	18	52	-	70 ^a
(20) Lacquered chest	658	76	-	734 ^a
(21) White paper fan	2,780	-	-	2,780 ^a
Total (<u>kin</u>)	42,822	423,922	29,890	496,634
Average a year	4,758	22,311	1,107	
Increase ratio	100	469	23	

^aThese are excluded because they are counted by piece and not by weight, kin, as the others.

CHAPTER VI

CONCLUSION -- RYUKYU IN SATSUMA'S TEMPO REFORM

1. Summary of Findings

Ryukyu's official productivity assessment remained at 94,230 koku in the early eighteenth century, but its actual production continued to grow to about 300,000 koku in the mid-nineteenth century. This growth in actual production was accompanied by a population increase from about 100,000 at the beginning of the seventeenth century to about 280,000 in the mid-nineteenth century. In terms of population density, officially Ryukyu was seriously overpopulated with 1,488 persons per 1,000 koku, but the actual density was 942 persons per 1,000 koku, below the norm of 1,000 persons per 1,000 koku. Thus, with good government Ryukyu needed not suffer at all. In fact, Ryukyu achieved some measure of prosperity from about the mid-seventeenth century to the end of the eighteenth century, when the government was directed by such able statesmen as Shō Shōken (1617-1675) and Sai On (1682-1761).¹

While Ryukyu's production continued to grow, its tribute-tax to Satsuma lagged behind and became stationary from the early eighteenth century because it was computed upon the basis of the official productivity assessment. The result was that Ryukyu's tribute-tax to Satsuma, about 14,200 koku, inclusive of transportation charge, earlier represented about 15% of the total production but in the mid-nineteenth century it came to represent only about 4.5% of the total production.

On the eve of Satsuma's Tempō Reform, the net tribute-tax, about 8,784 koku, excluding transportation charge, was due the Satsuma

government. Of this sum, 7,462 koku was shipped to Satsuma, and the remaining 1,322 koku was paid in fine textiles at an exchange rate of two to sixteen times in favor of the Satsuma government. With the start of the Tempō Reform, 2,300 koku out of 7,462 koku was ordered to be paid in sugar. Thus, during the Tempō Reform, the Satsuma government received as tribute-tax 3,662 koku of rice, plus textiles and sugar in exchange for 5,122 koku.

Textiles paid in lieu of 1,322 koku of tribute-tax were acquired at about one-tenth of the market value -- therefore, actually roughly equivalent to 13,220 koku. 750,000 kin of sugar, paid in lieu of 2,800 koku, brought for 881.250 kan of silver, equivalent to 16,692 koku of rice at 52.8 momme per koku. Therefore, during the Tempō Reform Satsuma received from Ryukyu tribute-tax about 33,574 koku (3,662 + 13,220 + 16,692) every year, or about 10% of the total actual production.

The turmeric monopoly brought for Satsuma an annual profit of 405 kan of silver, equal to about 7,670 koku at 52.8 momme per koku. There were other miscellaneous Ryukyuan products, sales of which were monopolized by Satsuma, but profits of which have not been determined. Therefore, counting only the tribute-tax rice, textile, sugar and turmeric, Satsuma's annual revenue amounted to a conservatively estimated equivalent of 41,244 koku of rice or 2,177.683 kan of silver during the Tempō Reform years, or about 14% of the total production.

Ryukyu's China trade was a joint venture in which both Satsuma and Ryukyu were supposed to invest silver on a 50-50 basis. By the early nineteenth century, Satsuma seems to have replaced silver investment

with marine product export while Ryukyu continued to supply silver specie obtained by the sale of sugar. With the onset of the Tempō Reform the trade seems to have been taken over almost completely by Satsuma, and Ryukyu's share was reduced to a nominal amount and definitely well below one-third of the entire sum.

In the early Tokugawa period, Chinese goods imported into Japan generally brought twice the original cost in China, allowing a gross profit of about 100 percent. In the mid-nineteenth century, if pharmacopoeia is taken as the example, average net profit rate when sold legally with taxes paid was about 38.34%, but about 65% of the total import was sold illegally at the net profit of about 63%, making the overall net profit rate somewhere near 50%.

During the eighteenth century, Ryukyu was exporting over 1,000 kan of silver to China, despite the official Tokugawa restriction of silver export to 604 kan. In the early nineteenth century, the same practice continued. For instance, in 1805 the Ryukyuan tribute mission brought 500 kan of silver and marine products worth 650 kan of silver, totaling 1,150 kan. 1,150 kan of trade silver was equal to about 2,300 kan of silver currency in Japan. Chinese imports worth 2,300 kan would be sold for 4,600 kan in Japan, and 50% profit would be 2,300 kan. This was the approximate normal profit from trade prior to 1830, but it is known that with the start of the Tempō Reform in 1830 Satsuma's import rose sharply.

Satsuma's gross sale of cinnabar and pharmacopoeia alone amounted to 6,481 kan in 1821-29, 9,933 kan in 1830-38, and 2,587 kan in 1839-48. Applying the overall net profit rate of 50%, Satsuma's profit would be

3,240 kan, 4,967 kan and 1,293 kan respectively for these periods. But there were more than fifty import articles of considerable volume that have not been accounted for. Therefore, the above figures should be considered the minimum rather than the average profit for Satsuma.

Satsuma's trade ceiling at Nagasaki was 2,700 kan of silver. 38.34% profit of 2,700 kan would be 1,035 kan, the net income for Satsuma. Actually, however, whatever sold legally for 2,700 kan of silver at Nagasaki was only 35% of the total import. The remaining 65% in the amount of 5,014 kan of silver was sold illegally at the net profit rate of 63.34%, producing 3,166 kan of silver. Therefore, the total gross income would be about 7,714 kan of silver, and the total net profit would be 4,191 kan of silver (1,035 + 3,166).

In brief, the total annual revenue that Satsuma derived from all sources connected with Ryukyu would be as follows:

TABLE XLVII. SATSUMA'S REVENUE FROM
RYUKYUAN SOURCES AFTER 1830

1. Annual tribute-tax: 8,784 koku
 - a. 3,662 koku of rice
 - b. 1,322 koku, paid in textiles increasing about ten-fold in value, to about 13,220 koku
 - c. 2,800 koku, paid in sugar, bringing about 881 kan of silver, equivalent to 16,692 koku

Therefore, the total value Satsuma received was equal to about 33,574 koku, or 1,773 kan.

2. Turmeric monopoly produced for Satsuma a net profit of 405 kan of silver, equal to about 7,670 koku.
3. Ryukyu-China trade produced for Satsuma a net profit of about 4,191 kan of silver.

Total: 1,773 + 405 + 4,191 = 6,369 kan of silver.

As some of the above figures, especially the monopoly profits, were clearly a conservative estimate, excluding several items for which no data were available, it may not be unreasonable to round off the last figure, 6,369 kan, upward to perhaps 6,500 kan of silver.

As to Satsuma exploitation of Ryukyu, it may be safe to say that far from the popular notion of entire Ryukyu having been transformed into slavery in 1609 to serve selfish Satsuma masters, Satsuma's policy toward Ryukyu was relatively moderate throughout most of the Tokugawa period. Satsuma did take advantage of Ryukyu but the extent to which Satsuma did so has been exaggerated far out of proportion.² With the beginning of the Tempō period in 1830, however, Satsuma's financial reform became the supreme goal, for which everything had to be sacrificed. It is only from 1830 and thereafter that Satsuma may justly be accused of exploiting Ryukyu.³ It is the opinion of the present writer that the causes of the apparent economic exhaustion of Ryukyu from the mid-nineteenth to the early twentieth centuries were traceable to the beginning of Satsuma's Tempō financial reform in 1830, and not to Satsuma's conquest of Ryukyu in 1609. At the same time, it must be stated in fairness to Satsuma that Ryukyu's own ruling class was far from blameless, as they were guilty of exploiting the peasants no less than their Satsuma overlord.⁴ And finally, it is not quite accurate to say that Satsuma exploited Ryukyu. It was rather that the ruling class exploited the ruled class, whether in Satsuma or in Ryukyu. Satsuma's peasants were just as much exploited as their counterparts in Ryukyu.⁵ When Satsuma's ruling class made demands on Ryukyu's ruling class, the latter simply passed on the burden to the peasants.

2. Satsuma's Finances and Tempō Reform

Satsuma's official productivity assessment, fixed at 729,563 koku in 1634, remained unchanged.⁶ But its actual production was 899,671 koku in 1826 and 888,990 koku in 1847.⁷ As has been discussed in Chapter I, however, these figures of Satsuma's production were in terms of unhulled rice, and would be reduced to about one-half to be comparable to the figures of the other han, which were in terms of hulled rice. This total koku-daka was divided into revenue for the Lord's Treasury (kuraire-daka) and revenue for the Vassals' Stipends (kyūchi-daka). It is with the income from the former that the han government was to be managed. In 1639 the Lord's Treasury was 195,671 koku,⁸ but since the Survey of 1722 it grew to and fluctuated at about 300,000 koku.⁹ The Satsuma government income from this land would be about 120,000 koku at the tax rate of 4 to (.4 koku) per koku.¹⁰

But not all of this rice could be shipped to the market in Osaka. Some was consumed in Satsuma, some was shipped to the Satsuma official quarters in Edo and Osaka, and some was used as the officials' emoluments. What remained after these were shipped to the Osaka market, averaging about 17,200 koku a year for the Bunsei period (1818-1829) and about 12,500 koku a year for the first ten years of the Tempō period (1830-1839). These rice shipments yielded about 900 kan of silver (about 14,000 ryō of gold) for the Bunsei years and about 1,150 kan of silver (about 18,000 ryō of gold) for the Tempō years.¹¹

There were also other miscellaneous revenues such as poll tax (ninbetsu-gin), household tax (kamado-gin), cattle tax (gyūba-gin), shipping tax (ho-gin), franchise fees (tokkyo-gin), temporary

contributions (goyō-gin), etc., collected from peasants and townsmen, and amounting to about 1,500 kan of silver a year.¹² There were also extra impositions (de-mai or de-gin) collected from vassals in accordance with their stipends, amounting to about 50,000 koku in the nineteenth century.¹³

In addition, there was the special product revenue (sanbutsu-ryō), consisting of income from such han monopoly products as sugar, wax, rape seeds, turmeric, etc. Including rice, it amounted to about 7,000 kan of silver (about 120,000 ryō of gold) in 1801, and about 140,000 ryō of gold in 1815.¹⁴ The following is a rough outline of the Satsuma government finances as of 1801 showing an annual deficit of 7,650 kan of silver.

TABLE XLVIII. SATSUMA'S FINANCES IN 1801¹⁵

<u>Expenditure</u>	<u>In silver</u>
Lord's average annual expense either in Edo or in Kagoshima	6,700 <u>kan</u>
Alternate attendance expense	850
Debts in Edo, Kyoto, and Osaka totaling 72,600 <u>kan</u> of silver. Its interest at about 8.4%.	6,100
Ordinary expenses at Kyoto and Osaka	1,000
	Total 14,650
<u>Revenue</u>	
Sales of various products such as rice, sugar, wax, etc.	7,000
	Total 7,000 <u>kan</u>
Annual deficit	7,650 <u>kan</u>

When consulted about the financial reform of Satsuma in 1830, Economist Satō Nobuhiro said that Satsuma's products brought at best about 183,000 ryō of gold at Osaka according to the way they were being handled, but the same products could produce up to about 400,000 ryō of gold by reforming the methods of production and transaction.¹⁶

The outline of the growth of Satsuma's revenue, as presented in the following table, shows that Satō's prediction of future increase in the products sales seemed to have been a little too optimistic.

TABLE XLIX. SATSUMA'S REVENUE STRUCTURE AND GROWTH¹⁷

<u>Items</u>	<u>Year</u>	<u>Amount</u> (Annual Average)	<u>In gold</u> (Annual Average)
<u>Ordinary</u>			
Tax rice	after 1730	120,000 <u>koku</u>	120,000 <u>ryō</u>
<u>Extraordinary</u>			
Misc. taxes	after 1730	1,500 <u>kan</u> of silver	25,000
Extra impositions	Under Narioki (1809-1851)	50,000 <u>koku</u> of rice	50,000
Various products (excluding rice)	1801	6,000 <u>kan</u> of silver	100,000
	1815	8,400 <u>kan</u>	140,000
	1829	10,200 <u>kan</u>	170,000
	1843	15,600 <u>kan</u>	260,000

From the preceding description and Table XLIX, it seems clear that the most striking feature of Satsuma's revenue structure was that, in contrast to that of most other han, the weight of the tax rice, the traditionally most important form of feudal tax in kind, was far from being preponderant as in the other han, and that the special revenue

derived by the monopolistic control and sales of the special local products increased in proportionate weight as the years progressed in the nineteenth century.

TABLE L. FIVE MOST IMPORTANT EXPORTS¹⁸ FROM SATSUMA TO OSAKA MARKET DURING THE TEMPŌ PERIOD (1830-1939)

Items	Amount (annual average)	Price
Sugar	12,000,000 <u>kin</u>	235,000 <u>ryō</u> of gold
Rice	12,500 <u>koku</u>	18,400 "
Wax	264,000 <u>kin</u>	15,000 "
Turmeric	30,000 <u>kin</u>	7,500 "
Rape seeds	4,000 <u>koku</u>	1,500 "

Table L makes clear that it was the sugar export that brought in the most cash for the han during the Tempō period, followed by rice, wax, turmeric, and rape seeds, all of which were under the monopoly control of the Satsuma government. If these five exports are divided into two categories of staple food product (rice) and commercial products (sugar, wax, turmeric, and rape seeds), the former yielded 18,400 ryō of gold, or 7%, and the latter yielded 259,000 ryō of gold, or 93%. In contrast, during the same period, 91% of the export of Akita-han in northern Japan to the Osaka market was rice and other food grains (rice 84%).¹⁹ This relative importance of the revenue from non-staple food and commercial products, was the characteristic and the strength of the Satsuma revenue structure that enabled Satsuma to succeed in financial reform when others failed.²⁰

Satsuma was, however, by no means well off from the beginning. In the second half of the sixteenth century, Shimazu forces conquered almost half of Kyushu only to be turned back into its old domains by the overwhelming forces of Toyotomi Hideyoshi in 1587. The two expeditions to Korea, in 1592 and 1597, were extremely costly to Satsuma. At the Battle of Sekigahara between Toyotomi and Tokugawa in 1600, Satsuma was on the losing side. In all of these campaigns there were no territorial or other gains to compensate for the tremendous expenses Satsuma incurred.²¹ What helped Satsuma financially was its expedition to Ryukyu in 1609 which gained for Satsuma annual tribute-tax, Amami-Oshima with about 30,000 koku, control of Ryukyu-China trade, and the discovery of Nagano gold mine in 1640 that operated till 1643.²²

These gains, however, had only temporary effects. The basic Tokugawa policy of control over the daimyo was quite effective in keeping them perennially impoverished by the requirements of the sankin kōtai alternate attendance at the shogun's court in Edo, of the double life in Edo and in their own domains, and of frequent extra impositions of contributions and public undertakings.²³ Such a Tokugawa policy helped the urban commerce and consumption economy to flourish with the constantly rising level of daimyo urban expenditure. For instance, in 1719 Satsuma's annual standard expenditure for Edo and Kyoto and Osaka quarters totalled 4,400 kan of silver (about 70,000 ryō of gold), but it rose to 6,700 kan (about 110,000 ryō of gold) in 1801, and in 1815 the Edo expenditure alone rose to 70,000 ryō of gold.²⁴ Also the annual trips to and from Edo for alternate attendance cost Satsuma about 850 kan of silver in 1801, especially heavy for Satsuma because of its

being located at the farthest western end of Japan.²⁵

These factors, in addition to the extravagant life style and policies of several Shimazu daimyo, especially Shigehide (1745-1833), accelerated the deterioration of Satsuma's finance as shown in the following Table LI.²⁶

TABLE LI. SATSUMA'S DEBT²⁷

<u>Year</u>	<u>In silver</u>	<u>In gold</u>
1616	1,000 <u>kan</u>	20,000 <u>ryō</u>
1632	7,000	140,000
1640	21,000	345,000
1749	34,000	560,000
1754	40,000	660,000
1801	72,600	1,170,000
1807	76,128	1,260,000
1827	320,000	5,000,000

Thus, on the eve of the Tempō Reform, Satsuma's debt was a staggering 5,000,000 ryō of gold. As the interest rate was 12%, the annual interest alone would be 600,000 ryō of gold,²⁸ but Satsuma's ordinary revenue was merely 120,000 ryō of gold and the extraordinary revenue was about 183,000 ryō of gold. It was clear that the total revenue of Satsuma was not enough to pay even the interest. Further loans could not be obtained because Satsuma had not kept previous promises to pay up the interest.²⁹

It was this extremely impoverished state of han finance that compelled Satsuma to embark upon the Tempō financial reform. Although retired in 1787, Shimazu Shigehide remained the actual center of power in Satsuma as the official guardian and father of Shimazu Narioki, the Lord of Satsuma. It was Shigehide who empowered Zusho Shōzaemon Hirosato to undertake the gigantic task of financial reform in the winter of 1827. After careful initial study of methods of reform and of market conditions, the financial reform was started in 1830 (1st year of Tempō).³⁰

The specific objectives of the reform according to Shigehide's instructions to Zusho in 1830 were: (1) to establish a fund of 500,000 ryō of gold in ten years, (2) to establish a special emergency reserve fund in addition to the above, and (3) to have all debts cleared.³¹

To begin with the last item, in 1836 and 1837 Zusho carried out a practical forfeiture of the entire debt of 5,000,000 ryō of gold. He tricked the debtors in Kyoto, Osaka, and Edo into surrendering the original loan contracts, which were then simply burned to ashes. He then told them his unilateral decision to pay, instead of the 12% interest plus the principal, 0.4% of the principal only in annual installments over the next 250 years. Such an arbitrary action, if followed by the other daimyo, would have meant certain bankruptcy for many Osaka merchants. As it was reported that the plan had been suggested by Hamamura Magobei, a merchant of Osaka and consultant to Zusho, Atobe Yamashiro-no-kami, Magistrate of Osaka, arrested and punished Hamamura by expulsion from Osaka. But nothing was done to either the House of Shimazu or Zusho, and even Hamamura was soon seen

back in Osaka working again for Zusho.³² Those debts incurred in Satsuma were cancelled in exchange for the granting by the han of special privileges such as promotion to samurai status.³³

As to the establishment of the reserve and special funds, instead of resorting to traditional retrenchment only, Zusho inaugurated several policies intended to increase han income. In general these policies were marked by emphasis on rationalization and market manipulation, and specifically directed to: (1) raising agricultural productivity by improvement of technology, (2) securing enough agricultural labor (prevention of peasant desertion), (3) tightening agricultural supervision, (4) establishing a standardized tax system (jōmen) in place of annual crop inspection (jōken), and (5) strengthening the monopoly system.³⁴

Subsequently, the price of Satsuma rice in Osaka rose from 52.8 momme of silver per koku to 96.4 momme of silver per koku during the Tempō period, but some portion of the rise is said to have been due to the nation-wide famine after 1833. Thus, in spite of the near two-fold price rise, Satsuma's rice income failed to increase as much. Compared to the pre-Tempō average shipment of 17,211 koku producing 909 kan of silver, Satsuma's rice shipment to Osaka decreased to an annual average of 12,524 koku producing 1,207 kan of silver during the Tempō period.³⁵

However, Zusho's financial reform treated individual symptoms but not the basic causes of the illness.³⁶ He sought to subsidize and build up Satsuma's own fleet which would be more easily controlled than commercial shipping from outside Satsuma.³⁷ He also manipulated the market by withholding or even purchasing sugar in the Osaka market in

order to raise the price.³⁸

But he left untouched sensitive areas where social repercussions tended to be great. Such a task as a reform of the agricultural administration seems to have been one of the last agenda on his mind.³⁹ The standardized tax system (jōmen) that he instituted helped the han finance to some extent but only at the further sacrifice of the peasants. No attempt was made to raise the basic productivity to any significant degree probably because such an attempt might also involve changes in the systems of tojō (outer castles) and kadowari (land distribution) which were among the mainstay of the Satsuma-han structure.⁴⁰ Without any improvement in their life, peasant desertions continued even though Zusho took such passive measures as providing farm implements and cattle free of charge.⁴¹ In a report dated 1856, Saigō Takamori, who had been a clerk in an agricultural office, summed up the reform program as a failure stating that in the 1840's there were still thousands of peasants who fled to other domains to escape the harsh exploitations of Satsuma.⁴²

While Zusho's agricultural reform resulted in only mediocre success, according to Yamamoto, Zusho did achieve a better record with the sugar monopoly in Amami-Oshima.⁴³ The Satsuma government's first attempt to monopolize Amami-Oshima's sugar in 1777-1787 ended in failure but the attempt during the Tempō Reform was instituted with thorough attention to details, backed up with severe penalties for violations. The Satsuma government ordered a total of 2,400 chō of land in Amami-Oshima, 1,080 chō in Tokunoshima, and 800 chō in Kikai to be planted in sugar cane, and the entire process from sugar cane planting, sugar manufacture, and packaging was brought under strict government supervision.⁴⁴ Any one

who produced inferior grade sugar was punished with extra corvee labor and with neck or foot shackles. Any attempt to smuggle sugar out was punishable with death. Even one who licked sugar on his finger was whipped.⁴⁵

At the same time, all Kagoshima merchants were excluded from the islands, no islander was allowed to engage in business, all debts incurred by any one were cancelled, and finally even the use of currency was stopped.⁴⁶ Whatever an islander needed had to be ordered from the Satsuma government, and the item was charged against the individual sugar producer. When he accumulated credit for the sugar he produced, he was issued a note (hagaki) showing the amount of his credit with the government.⁴⁷ In a word, the Amami-Oshima archipelago was reduced to a primitive moneyless exchange economy. As the sole connection with the outside world, the government of course reaped profit. For instance, according to Sasamori Gisuke's investigation, in 1830 a peasant in Amami-Oshima had to pay 25 kin of sugar to obtain a bundle of paper, which was obtainable in Sasamori's home province, Aomori, for less than 3 kin of sugar. Sasamori was indignant to find that the Satsuma government's price was more than eight times higher than in Aomori, which being on the farthest northern end of Japan was entirely dependent for these supplies on imports from Edo, Kyoto, and Osaka areas.⁴⁸

TABLE LII. AMAMI-OSHIMA'S⁴⁹ SUGAR PRODUCTION

<u>Year</u>	<u>Annual Average</u>
1805-1817	6,704,310 <u>kin</u>
1818-1829	6,921,890 <u>kin</u>
1830-1843	6,110,445 <u>kin</u>
1844-1850	6,739,313 <u>kin</u>

The above table shows the curious phenomenon of decreased production after 1830 in spite of the ruthless coercion of the government. Even more remarkable is the annual fluctuation in the sugar output as shown in Chart 3, Annual Sugar Production in Amami-Oshima, below. The range of fluctuation became much greater and more unstable after the start of the Tempō Reform in 1830. This was no doubt caused largely by an unusual series of natural disasters like the typhoon that struck the Amami-Oshima archipelago during the Tempō period (1830-1843).⁵⁰ But Yamamoto believes that at least a part of the instability in production indicated the chaotic and confused influence exerted upon the peasants by the Tempō Reform and government coercion.⁵¹

In spite of these negative factors, Zusho was able to reap substantial profit from the sugar monopoly by improving the quality and the method of transportation, for instance, by shipping the sugar to northern Japan and bypassing the wholesalers in Osaka.⁵² The average sugar price in the Bunsei period (1819-29) was .683 momme of silver per kin but it rose to 1.175 momme during the first ten years of the Tempō period (1830-39), or a rise of about 1.8 times.⁵³ According to Zusho, the gross income from the sugar monopoly increased as follows:

CHART 3. ANNUAL SUGAR PRODUCTION
IN AMAMI-OSHIMA

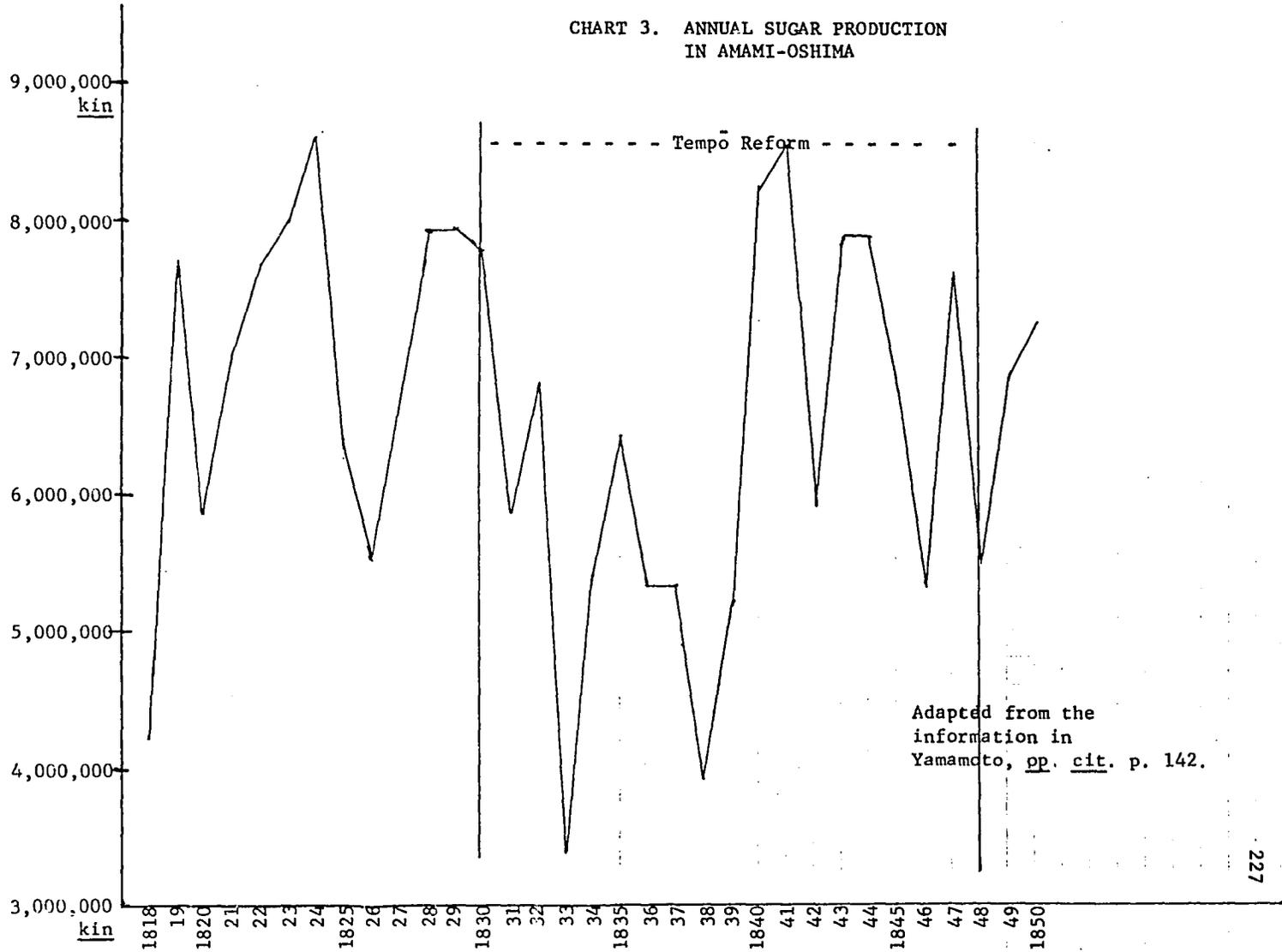


TABLE LIII. GROSS INCOME FROM SUGAR⁵⁴

	<u>Amount</u>	<u>In silver</u>	<u>In gold</u>
1819-29	120,000,000 <u>kin</u>	81,960 <u>kan</u>	1,366,000 <u>ryō</u>
1830-39	"	141,000	2,350,000
Difference		+59,040	+984,000

Thus, the Satsuma government's gross income from sugar increased by 59,040 kan of silver over ten years or 5,904 kan a year after 1830. One kin of sugar in Osaka was equal to 1 shō 2 gō of rice which was about four times the rice paid by the Satsuma government to the peasants in Amami-Oshima for their sugar. Thus, the Satsuma government's gross profit from the sugar monopoly would be about 300%.⁵⁵ However, such an 'improvement by coercion' could not be kept up for long because it was made possible not by giving any incentives to the peasants but by reducing them to a slave-like condition and the point of diminishing return was rather easily reached.

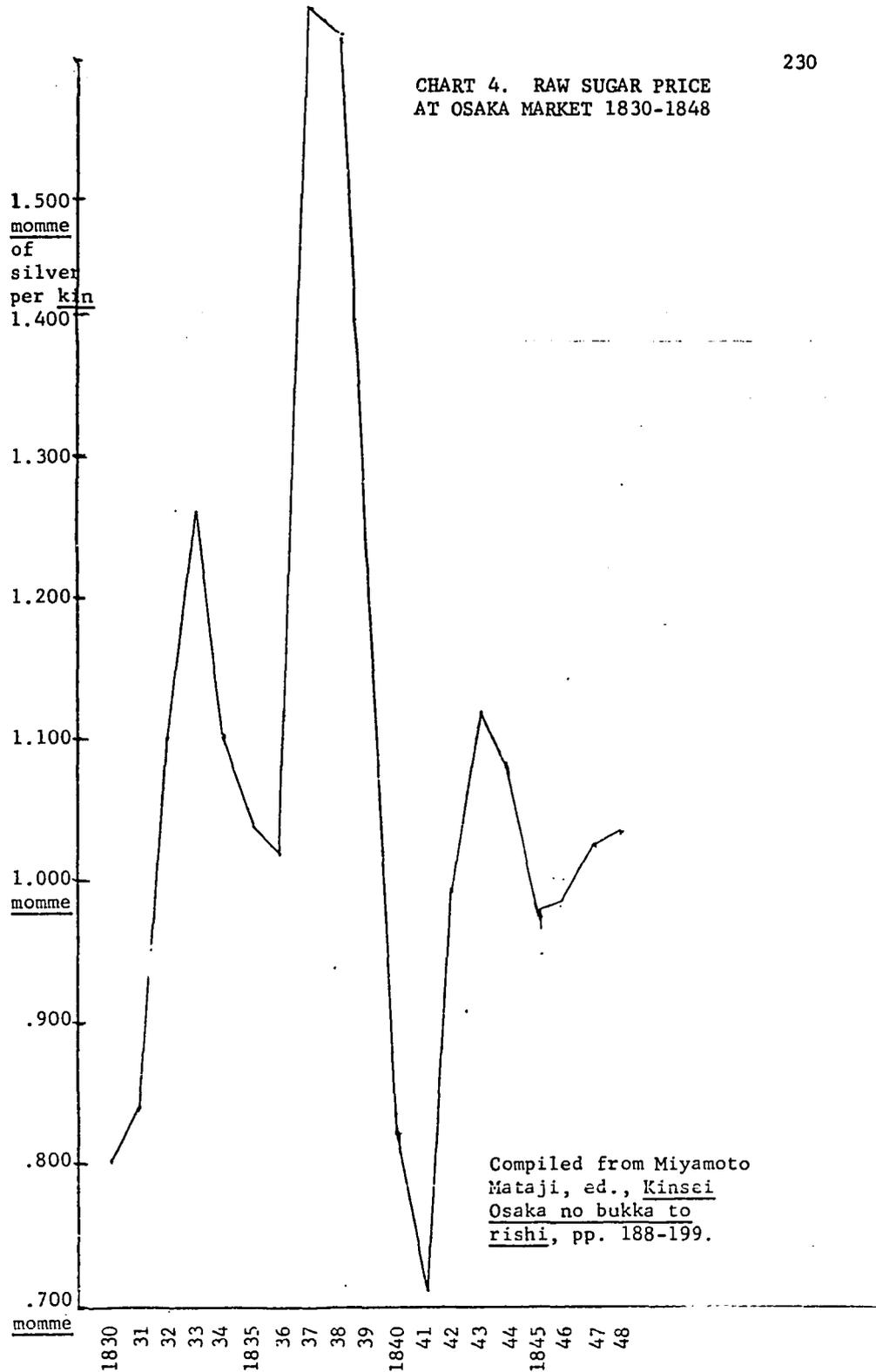
Moreover, thanks largely to the efforts of the Tokugawa government which encouraged sugar cane culture and sugar manufacture as a means to prevent sugar import through Nagasaki (from the Chinese and Dutch) and outflow of precious metals from Japan, by the end of the eighteenth century, sugar cane growing and sugar manufacture had spread to many provinces in Kyushu, Shikoku and even central Japan near Edo.⁵⁶ But as the sugar production increased to the point of satiating the demand, the sugar price began to be unstable and besides the over-production of sugar caused an undesirable side-effect for the Tokugawa government. That is, the satiated sugar market choked the revenue of the Nagasaki Trading Agency because sugar import through the Chinese and Dutch

merchants was one of the important sources of revenue.⁵⁷

Thus, to maintain market stability and to rescue the operation of the Nagasaki Trading Agency, the Tokugawa government at the beginning of the nineteenth century made a complete reversal of its sugar policy. In 1818 it issued the first edict to prohibit further spread of sugar cane, but the lure of profit from sugar was too great for many financially distressed han, and sugar manufacture kept increasing. Similar anti-sugar cane dissemination edicts were repeated in 1834 and 1840.⁵⁸

A glance at Table LIV below, shows that about 50% of the total sugar supply in Japan was Satsuma's raw sugar, which thus seemed to be in a position to dictate its price. But the fact was that the more expensive and lucrative refined sugar was produced entirely outside of Satsuma, mostly in Shikoku, supplemented by imports from overseas through the Chinese and Dutch merchants at Nagasaki. Moreover, the demand for refined sugar was gradually replacing the market for Satsuma's raw sugar.⁵⁹

CHART 4. RAW SUGAR PRICE
AT OSAKA MARKET 1830-1848



Compiled from Miyamoto
Mataji, ed., Kinsei
Osaka no bukka to
rishi, pp. 188-199.

TABLE LIV. SUGAR SHIPMENT TO OSAKA MARKET
DURING THE TEMPO PERIOD⁶⁰

Raw Sugar

12,000,000	<u>kin</u>	from Satsuma
400,000		from Tosa, Hyūga, Higo & other provinces

Refined Sugar

6,000,000		Mostly Shikoku, then other provinces, exclusive of Satsuma
1,000,000		Chinese & Dutch through Nagasaki

Refined but inferior grade

850,000		Various provinces, exclusive of Satsuma
---------	--	-----------	---

Honey

3,700,000		Various provinces, exclusive of Satsuma
-----------	--	-----------	---

24,550,000			Total
------------	--	--	-------

In order to keep the sugar price up, Zusho resorted to several measures. One was to keep the knowledge of sugar cane culture and sugar manufacture from spreading. When Ōkura Nagatsune, an agricultural technologist, tried to have his "Kansho taisei" ["Treatise on Sugar Cane"] published, Zusho had the key Tokugawa authorities bribed to prevent its publication.⁶¹ Yet, sugar cane culture and sugar manufacturing were spreading so rapidly in Kyushu and Shikoku that Zusho stated that the day would soon come when the sugar would no longer be of any financial help to the government, and he would have to start thinking of other ways of making profit.⁶²

In summary, Zusho's Tempō Reform achieved merely mediocre success in agriculture. In the sugar monopoly he was clearly successful but after about 1840 it became more and more difficult to sustain that success at the previous level. These results were mainly because his emphasis was placed in the peripheral areas of market manipulation and rationalization of transaction at the cost of further exploitation of peasants, and the central issue of raising the basic productivity with the willing cooperation of the peasants remained neglected. And in the Ryukyu-China trade, in spite of Ebihara's statement to the contrary, it was shown to be quite profitable as discussed in the last chapter.

At any event, in the first month of 1841 Zusho reported to Lord Narioki that all three objectives of the financial reform set in 1830 had been accomplished. Five million ryō of debts had been nearly wiped out, posing no more threat to han finance, a special reserve fund of 500,000 ryō of gold and an emergency fund of 2,000,000 ryō of gold had been established.⁶³ But the future prospect of the han finance was not necessarily bright. In addition to the increased instability of the sugar price from about 1838 and 1839, there were such unforeseen events as the death of Shigehide in 1833 and the forced contributions to the Tokugawa government amounting to 200,000 ryō of gold in 1836 and 1838 on the one hand and the increased expenditures for military reforms necessitated by the accelerated changes in the national political and military scenes on the other hand. Besides, the apparent success of the financial reform undermined the efforts at retrenchment, causing an increase in general expenditures. Zusho closed his report with a warning that if the situation was allowed to go unchecked, before long

the financial situation would be even more difficult than before the reform, and urged continued retrenchment.⁶⁴

In the second month of 1843, Lord Narioki himself issued a lengthy memorandum to the han councillors, in which he warned them against slipping back to the old situation before the reform, requested curtailment in ordinary expenditures both in Kagoshima and in Edo, general retrenchment, and further diligence in increasing production.⁶⁵ But the general expenditure kept increasing, and especially after 1844 most of the extraordinary expenses had to be met by raising new debts in Osaka. To keep the situation under control, it was decided in 1846 that expenditures had to be kept within the limits of the amount of the product sales at Osaka.⁶⁶ And in the meantime, the Tempō financial reform, which had been extended till 1846, was extended again till 1849, and again till 1851.⁶⁷ The goal of the extended reform was set as the complete clearance of the current debts, and accumulation of another 500,000 ryō of gold, in addition to some special funds.⁶⁸ But in the last month of 1848 Zusho was forced to commit suicide at the age of 73, reportedly assuming responsibility for the illegal Ryukyu-China trade.⁶⁹ Although many policies that he started were continued even after his death, the reform soon came under the leadership of Lord Nariakira. Nariakira, whose policies were opposed to those of Zusho and Narioki, made significant changes in the direction and the objectives of the reform. Therefore, it seems reasonable to assume the Tempō financial reform that Zusho had started almost 20 years before came to an end with his death in 1848.⁷⁰ At his death Zusho is said to have left about 1,000,000 ryō of gold in the han treasury.⁷¹

3. Significance Evaluated

Professor Sydney Crawcour takes the position that the Ryukyu-China trade was insignificant and could have done little for the finances of Satsuma.⁷² As he seems to be the only one who has advanced a negative judgment on this matter, perhaps it is in order first to examine his argument to see if his points are valid.

First, he cites Satsuma's Ryukyu-China trade of 1625 in which Satsuma paid more for the silk imported from China through Ryukyu than the current market price in Japan and concluded that "nor could this tribute trade have done much for the finances of Satsuma."⁷³

Second, "from the early eighteenth century, this tribute trade was officially limited to about 450 kamme a year. At that time, the income of the Satsuma fief was the equivalent of 8,000 to 10,000 kamme. Even if Satsuma made a profit of 100 per cent on this trade, it would hardly amount to more than a useful addition to revenue. More likely, responsibility for the Ryukyu tribute trade involved a financial burden."⁷⁴

Third, "in the period 1612-34, perhaps twenty Ryukyu ships visited China, [but] in the same period, ... some six hundred Chinese vessels came to the Japanese mainland."⁷⁵ Also, in the 1640's, Chinese goods imported through Nagasaki were valued "at some 10-15,000 kamme of silver a year. In the 1630's and 1640's, imports of raw silk through Nagasaki were about 300,000 kin a year, and in the 1660's reached a peak of over 400,000 kin. Compared with this, the one or two thousand kin resulting from a Ryukyu tribute mission is not very much."⁷⁶ Therefore, he concludes that "the amount of the Ryukyu-China tribute-trade is hardly

significant in comparison with the regular Nagasaki trade."⁷⁷

As to his first point, he assumes that the year 1625 was a typical year, and he draws his conclusion from the trade of that year that Ryukyu's tribute trade did little for the finances of Satsuma. But actually, as discussed in Chapter V, Section 2, Satsuma's policy in regard to the Ryukyu-China trade was still in a formative stage in 1625 and Satsuma did not embark seriously upon the China trade as a means to augment the han income until after 1630-31. Also, from the standpoint of the Ryukyans, the year 1625 was still so soon after Ryukyu's defeat in 1609 that most likely they either took advantage of Satsuma's unfamiliarity with the Ryukyu-China tribute trade and sabotaged Satsuma's efforts to make profits at the cost of the Ryukyans, or they were so demoralized by their recent defeat that they were being outwitted by the Chinese ya-hang semi-official monopoly traders. In either case, Ryukyu's China trade in the years between 1611 and 1630 was not normal, and therefore, granted that Satsuma lost in Ryukyu-China trade in 1625, it hardly serves to indicate how the trade situation was for the rest of the Tokugawa period.

His second point is that Ryukyu's trade amounted to only about 450 kan a year which was hardly more than a useful addition to the total annual revenue of Satsuma. Again as has been shown in Chapter V, officially Ryukyu's trade decreased from about 1,000 kan in the 1630's to about 840 kan in 1686, and further down to about 604 kan in 1714 and thereafter, but there is enough evidence that unofficially it was kept at the level of about 1,000 kan throughout the eighteenth and nineteenth centuries. Besides, this 1,000 kan was in the so-called silver for the

China trade, valued at about twice the silver currency in Japan. Therefore, 1,000 kan of silver for the China trade was equal to about 2,000 kan of silver currency, and if it made a profit of 100 per cent, as Professor Crawcour suggests, it would amount to about 1/4 or 1/5 of the total han revenue, which by any standard must be judged to be a significant addition in view of the serious financial distress that Satsuma was experiencing in those days.

Exact figures of profit may be subject to dispute as it must have varied according to the time, but it seems reasonable to believe that it was sufficiently profitable to Satsuma because to assume otherwise would be illogical with Satsuma's persistent efforts to carry on and expand the trade in the face of continued Tokugawa obstruction.

His third point is that in comparison with the Nagasaki trade, the amount of the Ryukyu-China trade is hardly significant. But hardly significant for what? If he meant it was hardly significant for the national economy of Japan, probably he is more right than not. But the real question is whether it was significant for the finances of Satsuma. If a comparison is to be made, it ought to be made not simply on the basis of the number of ships, for the ships varied in size, nor on the basis of the trade volume alone, for larger volume does not always reflect a correspondingly larger profit.⁷⁸ A more valid comparison should be made on the basis of the respective roles that they played, namely, the role which the Nagasaki trade played in the finances of the Tokugawa government and the role which the Ryukyu-China trade played in the finances of the Satsuma government.

The Nagasaki Trading Agency (Nagasaki kaisho) was a guild organized at Nagasaki by merchants for the purpose of importing foreign goods, Chinese and Dutch, but later it came to hold an additional responsibility as an organ for self-government of Nagasaki. With the monopoly right over foreign imports, the Agency at its own risk purchased and distributed all foreign goods among the member merchants.⁷⁹ Profits from the trade operation belonged to the Agency. First, the Agency paid monopoly fees (unjōkin) to the Tokugawa government, set aside some for the privileged townsmen and for the Agency's operational fund, and then the rest was distributed to the town officials and the townsmen.⁸⁰

During most of the seventeenth century, the Tokugawa government controlled the Nagasaki trade but did not seek any profit for itself. It was in 1698 that the Tokugawa government reorganized the Trade Apportioning Agency (Wappu kaisho) into the Nagasaki Trading Agency (Nagasaki kaisho) now placed under the supervision of Tokugawa's Nagasaki Magistrate, and in the following year started collecting the monopoly fee called unjōkin.

In general, the Agency made profits and was able to pay monopoly fees ranging from about 30,000 to 50,000 ryō of gold a year to the Tokugawa government, but it was not always profitable.⁸¹ For instance, after 1736 the Agency was operating at a loss and was not only exempted from payment of the monopoly fees but was granted government subsidies to continue the operation till 1747. Payment of the fees did not resume until 1762.⁸² In the nineteenth century the Agency's financial situation did not improve very much. In 1836 the Agency owed the Copper Mint (dōza) some 15,935 kan of copper with accrued interest of 9,780

kan.⁸³ Also the Agency exported marine products and copper at a loss which was made up by the government subsidy, as an example in 1840, when it received 230 kan of silver as a subsidy for the export of marine products in the amount of 2,301 kan of silver.⁸⁴

At any event, the Nagasaki Trading Agency paid the monopoly fees to the Tokugawa government, and its total for a period of 84 years from 1762 to 1846 amounted to 2,073,417 ryō of gold, averaging 24,683 ryō (1,481 kan of silver) a year.⁸⁵ As to its role in the finances of the Tokugawa government, it is made clear in Table LV, below.

TABLE LV. TOKUGAWA GOVERNMENT'S REVENUE IN 1842⁸⁶

<u>Items</u>	<u>Ryō in gold</u>	<u>%</u>
1. Taxes	553,577	37.8
2. Currency debasement profits	557,322	38.0
3. Contributions	46,360	3.0
4. Loans repaid	76,686	5.2
5. Nagasaki Trading Agency monopoly fees	<u>22,792</u> (<u>1,368 kan</u> <u>in silver</u>)	<u>2.0</u>
6. Miscellaneous	207,411	14.0
	Total	100.0
	1,464,148 ^a	

^aTotal given in the origin 1 is 1,512,148, but there is no way to determine where an error was made. If 1,512,148 is the correct total, the percentage for 22,792 ryō income from the Nagasaki Trading Agency would further be reduced to about 1.5% of the total revenue.

According to Table LV above, by far the most important income of the Tokugawa government was derived from currency debasement, followed closely by regular taxation. Together they constituted about 76% of the total revenue. The monopoly fee from the Nagasaki Trading Agency amounted to only 2% of the total revenue. The 22,792 ryō for 1842 was a little less than the annual average of 24,683 ryō for the same period, but whichever it may be, if the government subsidies and the Agency's accumulated debts were taken into consideration, it is more likely that the Nagasaki trade involved a financial burden for the Tokugawa government. Several attempts, including one so-called the Tempō Reform of Tokugawa, were made to reform the monopoly organization in order to increase the benefits for the Tokugawa government, but all such attempts by the Edo officials, unaware of the manifold complexities of trading, failed in the face of the strenuous resistance by the local officials and townsmen of Nagasaki.⁸⁷

In contrast, in Satsuma's operation of the Ryukyu-China trade, the Satsuma government realized its potentials for profit from the earlier period and kept the controlling power. During most of the Tokugawa period, instead of receiving a set fee from the merchant operators, Satsuma was an active partner in trade, investing on a 50-50 basis with Ryukyu. While Ryukyu was mainly in charge of the Chinese end of the operation, Satsuma took charge of the Japanese end, negotiating with the obstructionist Tokugawa bureaucrats.⁸⁸ Under such circumstances, Satsuma's position in the trade vis-a-vis Ryukyu was much stronger than Tokugawa's vis-a-vis the Nagasaki traders. It was also strategically easier for Satsuma to control the Ryukyu-China trade than for Tokugawa

to control the Nagasaki trade. It was probably for these reasons of experience and advantages that Satsuma was able to take over the trade and to function to maximize profits for herself. As shown in Table XLVII, after 1830, the Ryukyu-China trade produced for Satsuma a net profit of about 4,191 kan of silver (69,850 ryō of gold) a year. It was about three times as much as the Nagasaki trade produced for the Tokugawa government, and was equal to about 60% of the normal Satsuma government revenue of 7,000 kan, while Tokugawa's monopoly fee from Nagasaki was only 1 to 2% of its total revenue. Apparently the Ryukyu-China trade was far more significant for Satsuma than the Nagasaki trade ever was for Tokugawa in terms of profit.

Zusho's drastic financial action reduced 5,000,000 ryō of debt to an annual payment of a mere 20,000 ryō, 0.4% of the principal in installments for 250 years. Thus this debt ceased to be a threat for han finances but still no income was generated. Yet, after all the ordinary and extraordinary expenses were paid, Zusho managed to save about 2,500,000 ryō of gold in ten years, in addition to a considerable amount of reserve rice. In order for him to accomplish what he did, in rough estimate, he had to set aside more than 250,000 ryō of gold (15,000 kan of silver) a year.

Yet his agricultural reform was only a modest success,⁸⁹ and his sugar monopoly, though successful, was already facing serious problems in and out of Satsuma-han, and its future was not bright. Satsuma's normal revenue (mainly from regular taxation), which Satō Nobuhiro predicted might grow to about 400,000 ryō a year, actually grew to only about 260,000 ryō of gold (15,600 kan of silver) in 1843 after constant

efforts by Zusho. This was the result of the limit of the rationalization, manipulation, and coercion of peasants that Zusho depended upon in his agricultural reform. It was probably inevitable because of the extremely narrow revenue basis derivable from the backward economy of Satsuma.⁹⁰

In turn, these unfavorable conditions for economic reform at home tended to point to the sugar and trade potentials of Ryukyu as the only way out of the difficulties that Satsuma found herself in. Moreover, it also happened to be the way that was, according to Ijichi Sueyasu in 1840, strongly supported by the unique historical and geographical factors of Satsuma.

Table LVI below shows the ordinary revenue of the Tokugawa government analyzed on the basis of sources. Of the three kinds of incomes, those derived from the samurai and peasants, constituting about 96%, were near

TABLE LVI. TOKUGAWA'S ORDINARY⁹¹ REVENUE ACCORDING TO THE SOURCES

		<u>Ryō of gold</u>	<u>%</u>
1. Those derived from the samurai class		77,198	12
2. Those derived from the peasant class		550,374	84
3. Those derived from the townsmen class		25,994	4
a. River shipping fees	3,202		
b. Nagasaki Trading Agency fees	<u>22,792</u>		
	25,792	—————	—————
		653,566	100

the taxable limit and could not be increased to any significant degree without inciting riots or causing undue privation. The last source, the townsmen, represented a rich, still largely untapped tax revenue basis. But partly because of the Confucian bias against taxing commerce and partly because of the samurai officials' ignorance of the complexities of commerce, the Tokugawa government, while controlling the nation's richest cities, failed to tap this rich tax revenue basis of commerce.

One measure that the Tokugawa government resorted to frequently was currency debasement. During the Tempō period, the Tokugawa government was barely able to make ends meet by repeatedly debasing the currency. Annual profits from the currency debasement ranged from 394,200 ryō to 1,155,000 ryō, constituting about 24% to 51% of her total revenue.⁹² Currency debasement operation was effective for the time being to tide over the financial troubles but was not a lasting solution. It inevitably created more difficult problems than it solved. It caused economic confusion, oppressed production, reduced the tax paying capacity of the people, and at the same time caused inflation which would further increase government expenditure.⁹³

In contrast, Satsuma was able to tap the vast revenue basis of commerce by direct participation. For this reason Satsuma is sometimes cited as a case of successful transformation of daimyo into merchant.⁹⁴ The implication is that Satsuma recovered its financial health but Tokugawa failed because the former successfully transformed itself into a merchant capitalist while the latter remained wedded to the stationary agricultural basis.

It is correct to cite Satsuma as a case of successful transformation of daimyo into merchant in so far as the Satsuma government eliminated

the middlemen and participated officially in commerce with the special local products and Chinese imports. It is also remarkable that Satsuma was able to overcome the deep-rooted anti-commerce tradition and to take the first step in mercantilism.⁹⁵ But it should also be noted that Satsuma cleared her debts by the use of naked feudal power, that the products she sold were obtained not by fair purchase but by coercion, and furthermore that the profits so obtained were not re-cycled into making more profits but were used to prop up and strengthen the feudal power. Its purpose and means were designed to strengthen the feudal character of the Satsuma domain. These were not really beyond the framework of the feudal tradition because in essence what Satsuma did was to strengthen and extend the traditional tax rice monopoly to the monopolies of the other products by feudal coercion.⁹⁶

Tōyama Shigeki said that in the Meiji Restoration there were two elements which backed up and decided the importance of each domain's voice in the national political arena; one was its modern military power, supported by ample finance, and the other was possession of able spokesmen.⁹⁷ Ryukyu's role, it seems, was to contribute significantly to the build-up of the ample finances that supported Satsuma's modern military power and political activities culminating in the Meiji Restoration. A further significance is that Ryukyu was a major part of the purely feudalistic elements that aided Satsuma-han to lead "a spectacular program for modernization... [and] that the feudalistic control was to serve the nationalistic cause was a lesson of significance for the emergent leaders of modern Japan."⁹⁸

FOOTNOTES

CHAPTER I

¹Tsuda Hideo, "Tempō no kaikaku" ["Reforms of Tempō], in Rekishigaku kenkyūkai and Nihonshi kenkyūkai, comp., Nihon rekishi kōza [Japanese History Series] (Tokyo, 1959), IV, 113-21. T. C. Smith, Agrarian Origins of Modern Japan (Stanford, 1959), Chapters 6 and 7, "Growth of the Market," and "Agricultural Technology."

²Tsuchiya Takao, Hōken shakai hōkai katei no kenkyū [Study of the Process of the Disintegration of the Feudal Society] (Tokyo, 1927), p. 21. Hereafter cited as Hōken shakai.

³Cited by Toyoda Takeshi, A History of Pre-Meiji Commerce in Japan (Tokyo, 1969), p. 91.

⁴Haraguchi Torao, Bakumatsu no Satsuma [Satsuma during the Bakumatsu Period] (Tokyo, 1966), p. 66. Hereafter cited as Bakumatsu.

⁵Hōken shakai, pp. 17-25.

⁶Hani Gorō, Meiji ishin-shi kenkyū [Study of the History of the Meiji Restoration] (Tokyo, 1956), pp. 262-66. Toyama Shigeki, Meiji ishin [Meiji Restoration] (Tokyo, 1951), pp. 27-28.

⁷Tetsuo Najita, "Ōshio Heihachirō" in A. M. Craig and D. H. Shively, ed., Personality in Japanese History (Berkeley, 1970), pp. 155-79. Tokutomi Ichirō, Kinsei Nihon kokumin shi [Recent History of the Japanese People] (Tokyo, 1935), XXIV, 117-364. Hereafter cited as Kokumin shi.

⁸Itō Tasaburō, Kokugakusha no michi [Way of a Nationalist Scholar] (Tokyo, 1944), pp. 323-33.

⁹Aihara Ryōichi, Tempō hachinen Beisen Morison-gō torai no kenkyū [A Study of the Visit of an American Vessel, the Morrison, in 1837] (Tokyo, 1954).

¹⁰For the increasing contacts with the West, see G. Sansom, The Western World and Japan, (N. Y., 1958), pp. 243-8. As to the impact of the Opium War upon the Japanese leaders, Shimazu Nariakira, Lord of Satsuma, himself wrote a 51-leaf manuscript record on the Opium War, tentatively titled, "Nariakira jihitsu Ahen sensōki" ["Record of the Opium War, written by Nariakira"], undated.

¹¹Meiji ishin, pp. 21-22.

¹²Inoue Kiyoshi, Nihon no rekishi [History of Japan] (Tokyo, 1965), II, 67-78.

- ¹³Meiji ishin, pp. 25-37. Tsuda, op. cit., pp. 117-21.
- ¹⁴Horie Yasuzō, Kokusan shōrei to kokusan senbai [Encouragement and Monopoly of the Special Local Products] (Tokyo, 1963), chapters 2 and 3.
- ¹⁵Sakata Yoshio, "Meiji ishin to Tempō kaikaku" ["Meiji Restoration and Tempō Reform"], Jinbun gaku (Journal of Humanistic Science), II (March, 1952), pp. 9-11, passim. G. T. Tsukahira, Feudal Control in Tokugawa Japan: The Sankin Kōtai System, (Cambridge, Mass., 1966).
- ¹⁶Horie Yasuzō, Kinsei Nihon no keizai seisaku [Economic Policy of Recent Modern Japan] (Tokyo, 1963), p. 116. Also, Horie, Kokusan shōrei ..., p. 17.
- ¹⁷Conrad, D. Totman, Politics in the Tokugawa bakufu (Cambridge, Mass., 1967), pp. 83-84. Hereafter cited as Tokugawa bakufu.
- ¹⁸Horie, Kokusan shōrei..., pp. 190-95.
- ¹⁹Ibid., pp. 111-19.
- ²⁰Meiji ishin, pp. 21-22.
- ²¹To cite only the major works, Ebihara Yōsai, Sappan Tempō-do igo zaisei kaikaku tenmatsusho [Report of the Financial Reform of Tempō Period in Satsuma] (1884), in Kinsei shakai keizai sōsho [Social Economic Sources for the Recent Period], comp. Honjō Eijirō (Tokyo, 1926), IV, 1-130. Kokumin shi, XXVI, 141-83. Hōken shakai, pp. 389-480. Yamamoto Hirobumi, "Sappan Tempō kaikaku no zentei" ["Premises for the Tempō Reform in Satsuma"], "Satsuma no Tempō kaikaku" ["Tempō Reform in Satsuma"], and "Tempō kaikaku-go no Sappan no seijō" ["Post-Tempō Reform Political Situation in Satsuma"], respectively in Keizai shirin (Economic Review), XXII; 4 (Oct., 1954), XXIV; 3 (July, 1956), and XXVI; 1 (Jan., 1958). Bakumatsu.
- ²²"The Satsuma-Ryukyu Trade and the Tokugawa Seclusion Policy," J.A.S., XXIII; 3 (May 1964), p. 402.
- ²³For instance, Maeda Kazuo, "Sakoku-ka no Sappan bōeki" ["Satsuma's Trade under the Seclusion Policy"], Keizaigaku zasshi, XIII, 5, 107-23; Mōri Toshihiko, Meiji ishin seijishi josetsu [Preliminary Study of the Political History of the Meiji Restoration] (Tokyo, 1967), p. 46.
- ²⁴Kokumin shi, XXVI, 169.
- ²⁵A History of Japan, 1615-1867 (Stanford, 1963), p. 221.

²⁶To mention but a few, Iha Fuyū, Okinawa rekishi monogatari [Historical Tales of Okinawa] (Tokyo, 1946), p. 126; Majikina Ankō, Okinawa issennen shi [Thousand-year History of Okinawa] (1913), 4th ed., (Fukuoka, 1952), pp. 433-4, 442. Hereafter cited as Issennen shi; Higa Shunchō, Okinawa no rekishi [History of Okinawa] (Naha, 1959), pp. 304-5; Meiji ishin, p. 36; Mō , Meiji ishin seijishi josetsu, p. 46; Takeno Yōko, "Satsuma-han no Ryukyu bōeki to bōeki-shō Ishimoto-ke no kankei" ["Relationship between Satsuma's Ryukyu Trade and the Trader, the Ishimoto Family"] (1956), in Satsuma-han no kiso-kōzō [Basic Structure of the Satsuma-han], ed. by Hidemura Senzō (Tokyo, 1970), p. 490; Tamamuro Taijō, Saigō Takamori (Tokyo, 1960), pp. 15-16; Hōken shakai, pp. 410-5; M. B. Jansen, Sakamoto Ryōma and the Meiji Restoration (Princeton, 1961), p. 187.

²⁷Nihon rekishigakkai, comp., Chihōshi kenkyū no genjō [Current Situation of the Study of Local History] (Tokyo, 1969), III on Okinawa, pp. 250-1.

²⁸Chōshū, p. 11, 13. Underlining added. Jansen also says that "the Satsuma daimyo's income was second largest among Japan's feudal lords," Sakamoto Ryōma..., p. 187.

²⁹Iwakata Iso'o and T. Yamada, "Kagoshima-ken nōgyōshi" ["Agricultural History of Kagoshima"], in Nihon nōgyō hattatsu shi [History of the Agricultural Development in Japan], ed. Tōbata Seiichi (Tokyo, 1954), II, 471-82. T. Haraguchi, "Kagoshima-han gaisetsu" ["Outline of Kagoshima-han"], in Hanpōshū; Kagoshima-han [Collected Institutes of the Han; Kagoshima-han] compiled by Hanpōshū kenkyūkai, (Tokyo, 1969), VIII-1, 9-10.

³⁰For the Ryukyu-Satsuma relationship leading to 1609 and the post-war development, see R. K. Sakai, "The Ryukyu Islands as a Fief of Satsuma," in J. K. Fairbank, ed., The Chinese World Order (Cambridge, Mass., 1968), pp. 115-29.

³¹Okinawa rekishi monogatari, pp. 118-27.

³²For the evaluation of Iha's influence, see Nakahara Zenchū, Nakahara Zenchū senshū [Selected Works of Nakahara Zenchū] (Naha, 1969), I, 243. Hereafter cited as NZS.

³³Shunzo Sakamaki, "Ryukyu and Southeast Asia," J.A.S., 23:3 (May 1964), p. 385.

³⁴Ibid., pp. 388-9.

³⁵Kerr, Okinawa: the History of an Island People (Tokyo and Rutland, 1958), pp. 168-9, 179. Hereafter cited as Okinawa.

³⁶During the Keichō period (1596-1614) Shimazu dispatched eight ships which constituted about 59% of trading ships dispatched by the daimyo. After that, the daimyo stopped sending ships, but the merchants continued to do so. Iwao Seiichi, Shuinsen bōekishi no kenkyū [Study of the History of the Red Seal Trading Ships] (Tokyo, 1958), pp. 184, 189-90. As to the Chinese ships that came to Satsuma in 1609, see Kimiya Yasuhiko, Nikka bunka kōryūshi [History of the Cultural Intercourse between Japan and China] (Tokyo, 1955), pp. 633-34. Also, as late as 1620, the Spaniards in the Philippines were having their ships built in Satsuma for their trans-Pacific voyages to Nova Ispania. "Letter from Fajardo to Felipe III" August 15, 1620, Blair, H. E. and J. A. Robertson, ed., The Philippine Islands; 1593-1888, (Cleveland, Ohio, 1891-1898), XIV, 118.

³⁷One of the very first acts of Satsuma after the 1609 invasion was to have Ryukyu mediate between China and Japan to re-open the trade. Kagoshima-ken, comp., Kagoshima kenshi [History of Kagoshima Prefecture] (Kagoshima, 1939-43), II, 631-2. For other motives, see Nakahara, "Shimazu shinyū no rekishiteki igi to hyōka" ["Evaluation and Historical Significance of Shimazu's Advance into Ryukyu"] and "Jūroku seiki-matsu ni okeru Satsu-Ryu kan no kinchō o megutte" ["Reflections on the tensions between Satsuma and Ryukyu at the end of the 16th Century"], in NZS., I, 238-75. Also see Toguchi Shinsei, "Jūnanaseiki Satsuma no shinkō" ["Invasion of Satsuma in the 17th Century"], Okinawa rekishi kenkyū, #2 (May 1966), 19-35.

³⁸In 1608 Tokugawa Ieyasu ordered Shimazu Iehisa to arrange the Ryukyuan's visit to him and, if they refused, to threaten with conquest. Tokyo daigaku shiryō hansenjo, comp., Dai Nippon komonjo [Old Documents of Great Japan] (Tokyo, 1953), XVI-2, pp. 328-9. For other communications showing Tokugawa's interests in Ryukyu, ibid., 329-38. Also, in 1613 upon orders from Tokugawa Ieyasu, Satsuma made Ryukyu to threaten China with a massive military expedition if the latter refused to re-open trade with Japan. Nanpo Bunshi, Nanpo bunshū [Writings of Nanpo], Edo, 1625, II, no pagination.

³⁹Kobata Atsushi, "Kinsei shoki no Ryū-Min kankei" ["Ryukyu-Ming Relations during the Early Modern Period"], (1942), appended to Chusei Nantō tsūkō bōekishi no kenkyū, (Tokyo, 1968 edition), p. 50. Also see Section 2, Chapter 5 of this dissertation.

⁴⁰R. K. Sakai, "The Ryukyu Islands as a Fief of Satsuma," in The Chinese World Order, ed. by J. K. Fairbank. (Cambridge, Mass., 1968), p. 134. Officially Satsuma chastised Ryukyu at the order of Tokugawa and it was Tokugawa that gave Ryukyu to Satsuma. For Ieyasu's letter of grant of Ryukyu to Satsuma, see Hayashi Kō, comp., Tsūkō ichiran [Survey of Foreign Relations] (1853), ed., Hayakawa Junzaburō, (Tokyo, 1912-13), I, 21. Also see Kagoshima kenshi, II, 679.

⁴¹Ta-tuan Ch'en, "Investiture of Liu-ch'iu Kings in the Ch'ing Period," The Chinese World Order, p. 137.

⁴²Kagoshima kenshi, II, 643, 652-3. Toguchi, "Sakoku to Ryukyu" ["Japan's Seclusion and Ryukyu"], Okinawa bunka, 7:1 (Aug., 1969), pp. 21-22.

⁴³Okinawa no rekishi, p. 179, 194, 303, and 310.

⁴⁴Toguchi, "Sakoku to Ryukyu," p. 23.

⁴⁵Kobata, "Kinsei shoki no Ryu-Min kankei," p. 85, fn 1.

⁴⁶Kagoshima kenshi, II, 557 ff., 676-78. Sakai, "The Ryukyu Islands as a Fief of Satsuma," pp. 122-27.

⁴⁷Tokugawa dictated the amount of silver export, the kinds of imports, and where the imports might be sold. See Chapter 5 on Ryukyu-China trade.

⁴⁸Sakamaki, "Ryukyu and...", p. 307.

⁴⁹Higaonna, Reimeiki no kaigai kōtsū shi [History of Overseas Contacts at the Dawn of a New Age] (Tokyo, 1941), pp. 299-300.

⁵⁰Mitsugu Matsuda, "The Government of the Kingdom of Ryukyu, 1609-1872," unpublished Ph.D. diss., University of Hawaii, 1967, p. 28.

⁵¹Ibid., pp. 28-33.

⁵²For the detailed account of Satsuma's system of control of Ryukyu, see Sakai, "The Ryukyu Islands...", pp. 118-23. Also see Higaonna, Ryukyu no rekishi [History of Ryukyu] (Tokyo, 1957), p. 85.

⁵³Matsuda, op. cit., pp. 32-33.

⁵⁴Satsuma confiscated Amami-Oshima Islands immediately after 1609 conquest, but Tokugawa exercised its power to curtail, transfer, or abolish a daimyo much more frequently. See Kitajima Masamoto, Edo jidai [Edo Period] (Tokyo, 1970), p. 35.

⁵⁵Okinawa rekishi monogatari, pp. 120-23.

⁵⁶"Sappan reiki zasshū" ["Miscellaneous Regulations of Satsuma"], XXV, folio 78a-83, *passim*.

⁵⁷Shō Shōken, "Kōjō oboe" ["Memorandum"] of 1673, in Kōchū Haneji shioki [Annotated Haneji's Administration], ed. Higaonna Kanjun (Tokyo, 1952), p. 34. Sai On, "Hitori monogatari" ["Soliloquy"], 1750, in Sai On senshū [Selected Works of Sai On], compiled by Okinawa rekishi kenkyūkai (Naha, 1967), p. 73.

⁵⁸The fact that Ryukyu was practically unarmed made Satsuma's military power all the more formidable, but the theories that King Shō Shin (1477-1526) or Shimazu after 1609 confiscated the arms are groundless. Ryukyu's ruling class was unarmed mainly because they were basically aristocrats comparable to the aristocratic ruling class of Nara and Heian periods (710-1185) than to the warrior ruling class of Kamakura and Tokugawa periods (1185-1867). Shimazu prohibited arms export to Ryukyu in 1639 only in consequence of the Tokugawa embargo of arms in 1634. For more details, see Nakahara, "Ryukyu ōgoku no seikaku to buki" ["Nature of the Ryukyu kingdom and Arms"], in Okinawa to Ogasawara, #4 (Feb., 1958), 38-43, reprinted in NZS, I, 585-94.

⁵⁹Sakamaki, "Ryukyu and...", pp. 388-89.

⁶⁰See Chapter 5, Section 2, on the silver for the China trade.

⁶¹Kagoshima kenshi, II, 676-78. Sakai, "The Ryukyu Islands as a Fief of Satsuma," pp. 122-27.

⁶²Horie, Kokusan shōrei..., pp. 30-31, also Kinsei Nihon..., pp. 122-23. Craig, Chōshū..., p. 74. Mōri, Meiji ishin..., p. 56.

⁶³For the han prohibition of the currency outflow, see Kagoshima kenshi, II, 581, and also Haraguchi Torao, ed., Shimazu-ke retchō seido [Successive Institutions of the House of Shimazu], in Hanppōshū, VIII-2, 979, 989. Hereafter cited as SRS. In the case of Ryukyu, fear of the revelation of the Ryukyu-Satsuma relationship to the Chinese strengthened the restriction, SRS, VIII-1, 397-400.

⁶⁴Shortly before 1750 about 400,000 to 500,000 kanmon of copper cash were officially imported from Satsuma. Sai On senshū, p. 77. Also in 1766 "a considerable amount of cash" was sent to Ryukyu, SRS, VIII-1, 399. In 1656 and 1862 Satsuma reaped profits by minting Ryukyu coins but these were isolated events without any discernible effects upon the Tempō Reform of Satsuma. For these events, see Higaonna, Nantō tsukashi no kenkyū [Study of the Currency in the Southern Islands] in Takushoku daigaku ronshū [Takushoku University Essays] (Tokyo, 1955-56), I, 490-94, 500-03.

⁶⁵Sai On senshū, p. 73.

FOOTNOTES

CHAPTER II

¹Tei Heitetsu and others, Kyūyō (1745-1876), ed. Miyasato Eiki (Naha, 1934), I, 17-18.

²Ijichi Sueyasu, Seihan densokō [On Land Taxation in the Satsuma-han] (1837), in Nihon keizai sōsho (Bibliotheca Japonica Oeconomiae), ed. Takimoto Seichi (Tokyo, 1916), XXVI, 494.

³Okinawa-ken, comp., Kyū-Ryukyu-han sozeihō [System of Taxation in the Old Ryukyu] (Naha, 1879), p. 2. A slightly different version is given in Japanese Government, comp., Ryukyu-han zakki [Miscellaneous Notes on the Ryukyu-han], (1873), in Okinawa kenshi [History of Okinawa Prefecture], comp. Ryukyu government (Naha, 1965), XIV-4, 49.

⁴Millet was deemed equal in value to rice but other cereals were computed at one-half the value of rice. Ijichi Sueyasu, "Nanpei kikō" ["Accounts of Southern Islands"], MS., 1832. III, folio 20a. Higaonna Kanjun, Nantō fudoki [Accounts of the Natural Features of the Southern Islands] (Tokyo, 1950), p. 21.

⁵Seihan densokō, p. 496. Kawaminami Kōen, Sozei mondō [Questions and Answers on Taxation] (1874), in Kinsei jikata keizai shiryō [Historical Materials on Early Modern Local Economy], comp. by Ono Takeo (Tokyo, 1958), II, 541. Also, it should be noted that 89,086 - 6,041 = 83,045, not 83,085 as given in the original.

⁶Seihan densokō, p. 497.

⁷"Sappan reiki zasshū," XXV, folio 28.

⁸Ibid., folio 27a-29a.

⁹Kagoshima kenshi, II, 65.

¹⁰Itō Tasaburō, Bakuhan taisei [The Baku-han Structure] (Tokyo, 1956), p. 17. Ijichi Suemichi, comp., Satsu-gū-jitsu denpu zatchō [Miscellany on Taxation in Satsuma, Osumi, and Hyūga], in Kinsei jikata keizai shiryō, I, 381.

¹¹Tokugawa bakufu, p. 35.

¹²In almost every case, in the late Tokugawa period at least, the actual productivity did not conform to the official listings. Craig, Chōshū, p. 11.

Many han whose actual productivity exceeded official listing belonged to tozama outsider status and a few whose productivity fell below official

listing were fudai or shimpan status, hereditary vassals or relatives of the Tokugawa House. Most shimpan or fudai han were placed at the central and strategic location around Edo or the Kyoto-Osaka urban center where there was little room to increase productivity either because of space limit or of technological ceiling, but most tozama han were located in more remote and generally underdeveloped areas, less subject to the rigid control by Tokugawa than those closer to the seat of power, where there was great potential for later development. It is interesting to note that both Satsuma and Ryukyu belonged to the category of the tozama outsiders. Tokugawa bakufu, p. 62. Chōshū, p. 11.

¹³Kōchū Haneji shioki, pp. 34-35.

¹⁴NZS, I, 495.

¹⁵Issennen shi, p. 466. Nakayoshi Chōsuke, Ryukyu sangyō seido shiryō [Materials on the Industrial Systems of Ryukyu], in Vols. IX and X of Kinsei jikata keizai shiryō, IX, 38-39. Hereafter cited as RSSS. Iwai Tatsumi, Okinawa-ken kyūkan sozei seido [The Traditional Taxation System of Okinawa], (1895), in Naha-shi shi [History of Naha City], comp. Naha City (Naha, 1968), I-1, 183. Hereafter cited as Kyūkan sozei.

¹⁶Sai On senshū, p. 77.

¹⁷NZS, I, 495-96. Higa Shunchō, "Okinawa no sangyō" ["Industries in Okinawa"], in Nihon sangyō-shi taikei [Outline of the Industrial History of Japan], comp. Chihōshi kenkyūkyōgikai (Tokyo, 1960), VII, 314.

¹⁸In the rest of Japan, the land tax reform was carried out in 1873 but in Okinawa it was not completed until 1903. Therefore, the results of this survey are essentially the continuation of the Tokugawa system. Okinawa-ken, comp., Okinawa-ken tochi seiri kiyō [Bulletin on Land Adjustments in Okinawa Prefecture] (n.p., 1903), p. 66.

¹⁹Perry, Narrative of the Expedition of an American Squadron to the China Seas and Japan (Washington, D.C., 1856), II, 36.

²⁰Ichiki Kitokurō, Ichiki shokikan torishirabe sho [Secretary Ichiki's Investigation Report] ([Tokyo], 1894), reprinted in Okinawa kenshi [History of Okinawa Prefecture], comp. Ryukyu Government (Naha, 1965), XIV-4, 552-53. Hereafter cited as Torishirabesho.

²¹Matsuda Michiyuki, Ryukyu shobun [Disposition of Ryukyu] (Tokyo, 1879), II, 712. Majikina Ankō, Okinawa gendaishi [Modern History of Okinawa] (Naha, 1967), p. 59.

²²Torishirabesho, p. 561.

²³Nishimura Sutezō, Nantō kiji gaihen [Supplement to the Accounts of the Southern Islands] (Tokyo, 1886), II, 18, 20a.

²⁴Sasamori Gisuke, Nantō tanken [Exploration of the Southern Islands] (Tokyo, 1894), p. 403.

²⁵Iwakata, "Kagoshima-ken nōgyō-shi," pp. 471-72.

²⁶Seihan densokō, pp. 300, 303, 305, 334. SRS, VIII-1, 880-81.

²⁷Seihan densokō, pp. 309-376.

²⁸Toguchi Shinsei, "Kongō-daka" ["Mixed Assessment"], Kenkyū yoteki [Extra Dews of Studies], #79 (October 14, 1969), p. 1.

²⁹Ibid., pp. 1-2. Also see Toguchi, "Mokuroku-daka to jōnō" ["Official Productivity Assessment and Tribute-tax"], Okinawa rekishi kenkyū [Journal of Okinawan History], #4 (July 1967), pp. 21-55.

³⁰As to the difference between the minimum and maximum estimates, it is caused by different methods of approaches with different factors such as land area and population under consideration. See also Chart 1, "Ryukyu's Production Growth during the Tokugawa Period," in Chapter II below.

³¹Kagoshima kenshi, II, 634. Seihan densōkō, p. 495. Also, "Nanpei kikō," III, folio 15a.

³²Published in 1882. Chūan II, folio 24.

³³Liu-ch'iu-kuo chih-lüeh [Brief Gazetteer of the Liu-ch'iu Country] (1756), (Edo, 1831 edition), Chūan 14.

³⁴As to the efforts of the Satsuma and Ryukyu authorities to conceal the true relationship between them from the members of Chinese investiture mission, see "Shina sappōshi rai-ryū shoki" ["Records on the Chinese Investiture Mission in Ryukyu"], MSS., 1886. II, folio 2-17.

³⁵D. S. Green, "Report made to Commodore Perry on the Medical Topography and Agriculture of the Island of Great Lew Chew," in Perry, Narrative..., II, 24-25.

³⁶D. S. Green, ibid., p. 36.

³⁷J. Morrow, "Report made to Commodore Perry on the Agriculture of Lew Chew," in M. C. Perry, Narrative.... II: 16.

³⁸D. S. Green, op. cit., p. 32.

³⁹Loc. cit.

⁴⁰J. Morrow, op. cit., p. 15.

- ⁴¹Green, op. cit., p. 23.
- ⁴²Ibid., p. 29.
- ⁴³Ibid., p. 36.
- ⁴⁴Ijichi Sadaka, Okinawa shi [Okinawa Gazetteer] (Tokyo, 1877), II, 24b.
- ⁴⁵Morrow, op. cit., p. 19. Underline added.
- ⁴⁶Green, op. cit., p. 36.
- ⁴⁷Ijichi, Okinawa shi, II, 24a.
- ⁴⁸Morrow, op. cit., pp. 16-17. Green, op. cit., p. 32.
- ⁴⁹RSSS, IX, 163.
- ⁵⁰Morrow, op. cit., p. 16.
- ⁵¹Ijichi, Okinawa shi, II, 24a.
- ⁵²Green, op. cit., pp. 34-35.
- ⁵³Ibid., p. 26.
- ⁵⁴Loc. cit.
- ⁵⁵Ibid., pp. 34-45.
- ⁵⁶Ibid., pp. 26-27.
- ⁵⁷Morrow, op. cit., p. 19. Underline added.
- ⁵⁸George Jones, "Report made to Commodore Perry of a Geological Exploration, Etc., of the Island of Grew Lew Chew," in Perry, Narrative ..., II, 54.
- ⁵⁹Higa Jusuke, Ryukyu minwashū [Collection of Folk Tales of Ryukyu] (Naha, 1963), p. 193, 122-25. Yokoyama Shigeru, and others, ed., Ryukyu shiryō sōsho [Ryukyu Historical Materials Series] (Tokyo, 1940-42), IV, 34-40, 54. Kyūyō, I, 31, 51.
- ⁶⁰Sai On senshū, p. 84.
- ⁶¹Based on "Ryukyu-han zakki," section 3.
- ⁶²Sekiyama Naotaro, Kinsei Nihon jinkō no kenkyū [Study of the Population in the Early Modern Japan] (Tokyo, 1948), p. 55.

⁶³Sekiyama Naotarō, Kinsei Nihon no jinkō kōzō [Population Structure in the Early Modern Japan] (Tokyo, 1969), p. 67.

⁶⁴Sai On senshū, p. 82.

⁶⁵Sources for Table IV, Population of Ryukyu:

Column 1, 1632-1721, "Sappan reiki zasshū" XXV, folio 10a-12a.

1761, Ryukyu-kan monjo [Documents of the Ryukyuan Legation], cited in NZS, I, 432.

1772, 1800, 1826, Kagoshima kenshi, II, 16-17.

1873, Matsuda, Ryukyu shobun, III, 124-25.

1876, Ijichi, Okinawa shi, I, 19-19a.

Column 2, pre-1609 and 1750, Sai On senshū, p. 82.

1854, Perry, Narrative..., II, 36.

1870, Ōtsuki Fumihiko, Ryukyu shinshi [New Gazetteer of Ryukyu] (Tokyo, 1873), II, 17a.

1879, 1880, Ōta Chōfu, Okinawa kensei gojūnen [Fifty Years of Okinawa's Prefectural Administration] (Tokyo, 1932), pp. 55-56.

Okinawa-ken, comp., Okinawa kenchi yōran [Outline of Okinawan Prefectural Administration] (Tokyo, 1916), p. 14.

1883, Nishimura, Nantō kiji gaihen, II, folio 23.

1885, Okinawa shihan gakkō, comp., Okinawa-ken chishi ryaku [Brief Topography of Okinawa Prefecture] (n.p., 1885), p. 1.

1890, Okinawa-ken, comp., Meiji 23nen Okinawa-ken tōkeishō [Statistics of Okinawa Prefecture for 1890] (n.p., 1892), p. 47.

Column 3, 1854, estimate made by the present writer.

⁶⁶Higaonna, Nantō fudoki, p. 39.

⁶⁷Okinawa-ken tokeishō for 1890, pp. 59-60.

⁶⁸NZS, I, 490.

⁶⁹Higa, Okinawa no rekishi, p. 249.

⁷⁰Sekiyama, Kinsei Nihon no jinkō kōzō, pp. 72-74.

⁷¹For 1706, 1772, 1800, and 1826, see Kagoshima kenshi, II, 9-17. For 1873, Matsuda, Ryukyu shobun, III, 124-125. For 1876, Ijichi, Okinawa-shi, I, 19-19a.

⁷²For 1654, 1690, Sakihama Shūmei, ed., Okinawa kyū-hōsei-shiryō shūsei [Collection of Materials for the Legal History of Old Okinawa] (Tokyo, 1966), III, 39-40. For 1706-1873, Minamoto, "Kinsei Okinawa jinkō-shi no mondaiten" ["Problems in the History of Population in the Early Modern Okinawa"]. Ryukyu shimpō, Jan-Feb 1964, #5. For 1880, Ōta, op. cit., p. 56. For 1883, Nishimura, op. cit., II, 23. For 1885, Okinawa-ken chishi ryaku, folio 3-6. For 1890, Meiji 23nen Okinawa-ken tōkeishō, pp. 43-47.

⁷³For 1815, Ginowan Chōkon, "Ryukyu ikkenchō" ["Dossier on Ryukyu"], MS, 1820. Folio 36a. For 1873, Ryukyu shobun, III, 125. For 1883, Nishimura, op. cit., p. 23. For 1885, Okinawa-ken chishi ryaku, folio 30.

⁷⁴Keyomura Kōjin, Miyako shiden [History of Miyako] (Hirara, 1927), p. 225.

⁷⁵For 1675, 1680, 1684, 1750, and 1771, Kishaba Eijun, Yaeyama rekishi [History of Yaeyama] (Ishigaki, 1954), pp. 143-45. For 1815, Ginowan, op. cit., 36a. For 1873, Matsuda, op. cit., III, 125. For 1883, Nishimura, op. cit., folio 23. For 1890, Meiji 23nen Okinawa-ken tōkeisho (Naha, 1892), p. 47. For 1892, Okinawa-ken Yaeyama-tō yakusho, comp., Okinawa-ken Yaeyama-tō tōkei ichiran ryakuhyō [Brief Statistical Table for Yaeyama Island, Okinawa Prefecture] (Ishigaki, 1894).

⁷⁶Cited by Iha, Okinawa rekishi monogatari, p. 119.

⁷⁷Higaonna, Nantō fudoki, p. 42.

⁷⁸Kishaba, Yaeyama rekishi, p. 122.

⁷⁹Iwasaki Takuji, Hirugi no hitoha [A Mangrove Leaf] (Ishigaki, 1920), pp. 5-7. Kishaba, ibid., pp. 264-74. Inamura Kenpu, Miyako-tō shominshi [History of the People of Miyako] (Naha, 1957), pp. 352-53.

⁸⁰For 1706-1873, Minamoto, "Kinsei Okinawa..." #5. For 1815, Ginowan, op. cit., folio 9. For 1885, Okinawa-ken chishi ryaku, passim. For 1890, Meiji 23nen Okinawa-ken tōkeisho, pp. 43-47.

⁸¹Minamoto, loc. cit.

⁸²Sekiyama, Kinsei Nihon no jinkō kōzō, pp. 188-89.

⁸³Okinawa-ken, comp., Okinawa kyūkan chihō seido [Traditional Local Government Systems of Okinawa] ([Naha], 1895), p. 148. Higa, Okinawa no rekishi, pp. 264-68.

⁸⁴Tsuchiya Takao, Kinsei Nihon nōson keizai shiron [Economic History of Rural Japan in the Early Modern Period] (Tokyo, 1947), pp. 101-05.

⁸⁵Sekiyama, Kinsei Nihon no jinkō kōzō, pp. 136-151.

⁸⁶Sasamori, op. cit., pp. 405-406.

⁸⁷Iha, Ryukyu kokon-ki [Record of Ryukyu, Past and Present] (Tokyo, 1926), pp. 409-47. Sasamori, Nantō tanken, p. 466.

⁸⁸Sasamori, ibid., p. 562.

⁸⁹Ibid., p. 550.

- ⁹⁰Sai On senshū, p. 74.
- ⁹¹Minamoto Takeo, Ryukyu rekishi yawa [Night Tales on the History of Ryukyu] (Naha, 1965), p. 191
- ⁹²Majikina, Okinawa gendaishi, p. 17.
- ⁹³Perry, Narrative..., II, 23-37.
- ⁹⁴For 1883, Nishimura, Nantō kiji gaihen, pp. 22-23. For 1885, Okinawa-ken chishi ryaku, pp. 3-33. For 1890, Meiji 23nen Okinawa-ken tōkeisho, pp. 43-47.
- ⁹⁵Minamoto, "Kinsei Okinawa...." #8.
- ⁹⁶Sekiyama, Kinsei Nihon jinkō no kenkyū, pp. 100-04.
- ⁹⁷The traditional census of 1873, Ryukyu-han zakki, reprinted in Okinawa kenshi, XIV-4, 19-22.
- ⁹⁸Higaonna, Nantō fudoki, p. 39.
- ⁹⁹Okinawa kenshi, XIV-4, 120.
- ¹⁰⁰Ibid., XIV-4, 3-4. For the students to China, see M. Matsuda, "The Ryukyuan Government Scholarship Students to China, 1392-1868," Monumenta Nipponica, XXI:3-4, 273-304.
- ¹⁰¹Higa, Okinawa no rekishi, p. 271.
- ¹⁰²Kyūyō, (Miyazato edition of 1934), I, 85.
- ¹⁰³Higaonna, ed., Kōchū Haneji shioki, p. 28 and p. 81.
- ¹⁰⁴Higa, Okinawa no rekishi, p. 264.
- ¹⁰⁵"Kyūmei hōjō" ["Investigative Law"], comp. Ryukyu Government, MS., 1745. No pagination. Ie Chōkei and Kōchi Ryōtoku, comp., Ryukyu karitsu [Ryukyu Code], 1775-86, ed. Miyagi Eishō (Tokyo, 1965), p. 81 and p. 219. Also, Okuno Hikorokurō, Okinawa no jinji hōsei shi to genkō jinjihō kaisei kanken [History of Personal Laws and Institutions in Okinawa and Private Opinion on the Revision of the Existing Law], XIV:3 of the Shihō kenkyū [Studies in Judicial Administration] (Tokyo, 1931), pp. 502-29.
- ¹⁰⁶On the businesses at Naha, see Higa, Okinawa no rekishi, p. 273. Also, see Tsūkō ichiran, I, 249.
- ¹⁰⁷Okinawa kankō kyōkai, comp., Shin Okinawa annai [New Guide to Okinawa] (Naha, 1956), p. 1.
- ¹⁰⁸Sekiyama, Kinsei Nihon jinkō no kenkyū, p. 96.

¹⁰⁹Sekiyama, ibid., pp. 97-98.

¹¹⁰Ibid., pp. 105-106.

¹¹¹Ibid., p. 103.

FOOTNOTES

CHAPTER III

- ¹Kagoshima-kenshi, II, 87-88.
- ²Ibid., II, 86.
- ³Ibid., II, 679.
- ⁴Ibid., II, 87.
- ⁵RSSS., X, 288.
- ⁶Okinawa, p. 159.
- ⁷Okinawa no rekishi, p. 158.
- ⁸"Okinawa no sangyō," p. 60.
- ⁹Higa, Shimota, and Shinzato, Okinawa (Tokyo, 1963), p. 79.
- ¹⁰Ryukyu no rekishi, p. 95.
- ¹¹Ryukyu rekishi yawa, 1965, p. 9.
- ¹²Ryukyu rekishi monogatari [Tales of Ryukyuan History] (Naha, 1965), p. 170.
- ¹³Okinawa, p. 159.
- ¹⁴"Ryukyu ōgoku-ron" ["On Ryukyu Kingdom"], Nihon rekishi [Japanese History], #176 (January, 1963), 25-27.
- ¹⁵"Ryukyu ōgoku no koku-daka to Satsuma eno kōsodaka" ["On the Production Assessment of Ryukyu Kingdom and the Amount of the Tax to Satsuma"], Okinawa to Ogasawara [Okinawa and Ogasawara], #16 (March 1961), 64.
- ¹⁶"Ryukyu nashonarizumu no zassetsu" ["Collapse of Ryukyuan Nationalism"], Ryukyu shimpō, June 4, 1968, p. 8.
- ¹⁷"Okinawa," Iwanami kōza: Nihon rekishi gendai [Iwanami Lectures: History of Japan, Modern Period] (Tokyo, 1962), III, 318-19.
- ¹⁸MSS., Kōhen, LXVI, folio 106a-107.
- ¹⁹Seihan densokō, p. 495.
- ²⁰Ginowan Chōkon, MS., (1820), folio 17a-18.

²¹(1874), in Kinsei jikata keizai shiryō, II, 540-41.

²²An unskilled corvee laborer's wage as 1 kanmon of copper a day in Naha at the time. Also for the exchange rate between copper and silver and for the price of rice, see Higaonna, Nantō tsūkashi..., Part I, 510.

²³Kagoshima kenshi, II, 679. RSSS, X, 288.

²⁴Kagoshima kenshi, II, 681. As to the price of rice in 1613 and 1625, see Higaonna, Nantō tsūkashi no kenkyū, Part I, p. 511 and p. 513.

²⁵Higaonna, Nantō tsūkashi..., Part 1, p. 510.

²⁶Chihōshi kenkyūkyōgikai, comp., Chihōshi kenkyū hikkei [Manual for the Study of Local History] (Tokyo, 1962), p. 157.

²⁷Higaonna, Kōtsūshi, pp. 306-7.

²⁸Kagoshima kenshi, II, 679-80.

²⁹Ryukyu's koku-daka was listed as 123,700 koku inclusive of Amami-Oshima Islands because the latter's cession to Satsuma was unofficial and was kept confidential from Tokugawa. Ijichi, "Nanpei kikō," III, folio 41a-42. Kawaminami, Sozei mondō, pp. 543-44. Momozone Keishin and Y. Gomi, ed., Sappan seiyōroku [Satsuma Administrative Manual] (1828 and 1851), (Kagoshima, 1960), p. 5.

³⁰SRS., VIII-2, 843.

³¹RSSS., X, 288.

³²Loc. cit., Kagoshima kenshi, II, 682. "Gozaisei," folio 2.

³³RSSS., IX, 288, 309.

³⁴In his "Shinobose no enkaku to haikai" ["Origin and Background of the Tribute-Tax"], Okinawa rekishi kenkyū, #3 (Nov., 1966), p. 54, Toguchi said that the corvee tax started in 1629 (Kan'ei 6), citing RSSS, X, 292. But the cited original document gives the year as Hōei 6 (1709) and not Kan'ei 6 (1629) and not when it began but when the amount became fixed. Also see Kagoshima kenshi, II, 683.

³⁵RSSS, X, 289, 293.

³⁶RSSS, X, 309, 310, 344.

³⁷Cf. Takehara Pēchin Keitaku, "Gotōkoku ontaka narabi shojōnō ritsumoriki" ["Records of Ryukyu's koku-daka and Various Taxes and Mileages"], [1749-1780's], MS., folio 66-66a. Ginowa, "Ryukyu ikkenchō," folio 11a-18a. To these three taxes, Shinzato added another one, Tax for the Magistrates (zaiban demai), in the amount of 61 koku, "Ryukyu ōgoku no...", p. 60. He mistook zaiban to mean the Satsuma's Resident Magistrates in Ryukyu (Ryukyu zaiban or zaiban bugyō). Actually it referred to those dispatched from Shuri to the local governments. See RSSS, X, 293. Also see Kyūyō under the columns for 1713 and 1731, for the identity of zaiban.

³⁸Ginowan, "Ryukyu ikkenchō," folio 11a.

³⁹RSSS, X, 289-90.

⁴⁰Higa, Okinawa no rekishi, p. 178.

⁴¹Kagoshima kenshi, II, 676.

⁴²As to the prevalent rate in Japan, Toyotomi Hideyoshi decreed in 1586 a tax rate of 2/3 of the product for all Japan. Tokekoshi Yosaburō, Nihon keizaishi [Economic History of Japan] (Tokyo, 1920), III, 165-66. But the uniformity was not achieved, and the tax rate varied generally within the range of 30 to 60% of the product during the Tokugawa period. Chūōshi kenkyū hikkei, p. 151.

⁴³Matsuda, "The Government of the Kingdom of Ryukyu...." pp. 7-8.

⁴⁴Kyūkan sozei, p. 177. "Gozaisei," folio 4 and 15. Okinawa hōseishi, p. 36. Kyū Ryukyu-han sozeihō, p. 3.

⁴⁵Okinawa hōseishi, p. 37.

⁴⁶RSSS, X, 287.

⁴⁷Ginowan, "Ryukyu ikkenchō," folio 18-18a. Kagoshima kenshi, II, 683.

⁴⁸RSSS, X, 309. Ginowan, loc. cit. Although the latter gives the tax rate of 0.01995 koku, it must be a scribal error for 0.01495 koku.

⁴⁹RSSS, X, 292-3. Kyūkan sozei, p. 178.

⁵⁰RSSS, X, 292. Kyūkan sozei, p. 178.

⁵¹Kyūkan sozei, p. 179.

⁵²RSSS, X, 289, 293, 309, 310, 344. On p. 293, the amount is said to be 4.5504 kan, but it is a miscalculation. The correct amount is 4.597 kan as shown on p. 289.

⁵³RSSS, X, 293.

⁵⁴RSSS, X, 293. Takehara, "Gotokoku...", folio 53, 59a. Kyūkan sozei, p. 181. Tamura Hiroshi, Ryukyu kyōsan sonraku no kenkyū [Study of Communal Villages in Ryukyu] (Tokyo, 1927), pp. 369-72.

⁵⁵RSSS, X, 293, 311-12. Kyūkan sozei, p. 181

⁵⁶68,835 koku was the total assessment minus the Miyako, Yaeyama, and Kerama islands which paid no land tax. RSSS, X, 279-80, 293-94. Kyūkan sozei, pp. 180-1.

⁵⁷Kyūkan sozei, p. 184. Okinawa no rekishi, p. 244.

⁵⁸Kyū Ryukyu-han sozeihō, p. 4.

⁵⁹Issennen shi, p. 465. Kyūkan sozei, p. 182. Okinawa hōsei shi, p. 22.

⁶⁰Kyūkan sozei, p. 82. Nakayoshi Chōsuke, "Ryukyu no jiwari seido" ["Land Allotment System in Ryukyu"], Shigaku zasshi, 39 (1928), MS, 1939, pp. 21-54.

⁶¹Higa, Okinawa no rekishi, p. 245. Kyūkan sozei, p. 184.

⁶²RSSS, X, 312. Kyūkan sozei, p. 182. Okinawa hōsei shi, pp. 22-23.

⁶³RSSS, X, 294-95. Issennen shi, pp. 465-56. Kyūkan sozei, p. 182.

⁶⁴Kyū Ryukyu-han sozeihō, pp. 6-8.

⁶⁵RSSS, X, 295.

⁶⁶RSSS, X, 296.

⁶⁷RSSS, X, 295.

⁶⁸Kyū Ryukyu-han sozeihō, pp. 4-6. Kyūkan sozei, pp. 182-83.

⁶⁹Kyūkan sozei, p. 184. Okinawa no rekishi, pp. 244-45. Uchida Ginzō, Nihon keizaishi no kenkyū [Studies of the Economic History of Japan] (Tokyo, 1924 edition), p. 186.

⁷⁰RSSS, X, 277, 304-5. Sai On's correspondence to Satsuma, dated 1722, cited in full by Nishimura, Nantō kiji gaihen, folio 8-11. Also, "Sappan reiki zasshū," XXV, folio 27a-29a.

⁷¹148,057, Okinawa's dry field figure for 1750, differs from 148,087, given for the same in Table XIV for 1750. Kyūkan sozei, p. 184.

⁷²Kyūkan sozei, pp. 184-85.

⁷³Kyūkan sozei, pp. 184-85.

⁷⁴Nantō tanken, p. 364 and p. 468. There was also gen'ya (public field), portions of uncultivated forest land, belonging by custom to some adjoining community. Gen'ya was valuable as a source of firewoods and cattle fodders, etc. for the villagers.

⁷⁵Kyūkan sozei, pp. 177-8. RSSS, X, 284.

⁷⁶RSSS, X, 280-1.

⁷⁷RSSS, X, 285.

⁷⁸Kyūkan sozei, pp. 196-7, 201. Miyako's koku-daka was composed of millet even though some rice was produced. Kyū Ryukyu-han sozeihō, p. 9.

⁷⁹Kyūkan sozei, pp. 196-7, 201.

⁸⁰Iwai, Okinawa-ken kyūkan sozei seido sanshō [Reference to the Traditional Taxation System of Okinawa] (1895), in Okinawa kenshi (Naha, 1968), XXI-11, 363.

⁸¹Kyūkan sozei, pp. 197-8.

⁸²RSSS, X, 280-1, 285.

⁸³Kyū Ryukyu-han sozeihō, p. 9.

⁸⁴Kyūkan sozei, pp. 201-2.

⁸⁵Loc. cit.

⁸⁶Kyūkan sozei sanshō, p. 410.

⁸⁷Nihon keizaishi jiten, I, 554. Most prevalent rate during the Muromachi period (1338-1573) was 40%, it increased to 66% in 1585 under Toyotomi Hideyoshi, but it was decreased to the standard of 50% under Tokugawa after 1600. Yet it was never strictly enforced, and many local variation continued to exist.

⁸⁸For the method of computing individual tax quotas, see Kishaba Eijun, Ishigaki chōshi [Ishigaki Township Gazetteer] (Naha, 1935), pp. 116-9.

⁸⁹Nantō tanken, p. 533.

⁹⁰Murakoshi Masataka, "Okinawa-ken zeisei kaisei no kyūmu naru riyū" ["Reasons for the Urgent Need for Tax Reform in Okinawa"] (1897), Okinawa kenshi, XXI-11, 573. Also, Nantō tanken, pp. 492-3.

- ⁹¹Murakoshi, ibid., p. 573.
- ⁹²Torishirabesho, p. 568. Nantō tanken, p. 541.
- ⁹³Torishirabesho, p. 582.
- ⁹⁴Loc. cit.
- ⁹⁵Torishirabesho, p. 568, 582. Nantō tanken, p. 493.
- ⁹⁶Torishirabesho, p. 568. Nantō tanken, p. 527.
- ⁹⁷Torishirabesho, p. 587.
- ⁹⁸Ibid., p. 572.
- ⁹⁹Torishirabesho, p. 577.
- ¹⁰⁰Ibid., p. 576. Nantō tanken, p. 482.
- ¹⁰¹Kyūkan sozei, pp. 205-6.
- ¹⁰²Ibid., pp. 190-91. RSSS, X, 297-9.
- ¹⁰³Okinawa no rekishi, p. 258. Slightly different figures for 1734 are given in RSSS, X, 297-8.
- ¹⁰⁴Kyū Ryūkyū-han sozeihō, p. 32. Also, see RSSS, X, 298.
- ¹⁰⁵Ibid., p. 33.
- ¹⁰⁶Ibid., pp. 33-34. Higa, Okinawa no rekishi, pp. 258-9.
- ¹⁰⁷Kyūkan sozei, p. 191.
- ¹⁰⁸Higa, op. cit., pp. 258-9. Iwai, Kyū Ryūkyū-han kaheikō [On the Currency in the Old Ryūkyū] (1895), Okinawa kenshi, XXI-2, 351-62.
- ¹⁰⁹Issennen shi, p. 477. RSSS, X, 293.
- ¹¹⁰RSSS, X, 294. Kyūkan sozei, pp. 191-2.
- ¹¹¹Kyūkan sozei, p. 192.
- ¹¹²RSSS, X, 181. Sai On senshū, p. 75, 77.
- ¹¹³RSSS, X, 180-1.
- ¹¹⁴Kyūkan sozei, p. 207.
- ¹¹⁵RSSS, X, 180-2.

116 RSSS, X, 177-80.

117 Hōseishi, pp. 40-41.

118 Primarily based on "Gotōkoku ontaka narabi ni shojōnō ritsumoriki," manual on taxation by Takehara Pēchin Keitaku, Magistrate of Finance, Ryukyu government, folio 64-66a. Also used to complement the above were the documents on Ryukyu's finance for the same period in RSSS, X, 278-80.

119 According to Yamamoto Hirobumi, the distribution in Ryukyu was 50% to the tiller, 25% to the government and vassals, and 25% to Satsuma. But the Ryukyu government's revenue that he used included only the principal tax, and the tribute-tax included only the motodemai and bumai taxes. For these reasons he himself admitted his production distribution percentages were extremely rough approximations only. Besides, he followed Shinzato's hypothesis and assumed Ryukyu's production assessment was in terms of unhulled rice. "Satsuma eno kōnō maondai ni tsuite" ["On the tribute-tax to Satsuma"], Rekishi hyōron, #163 (1964), p. 60.

120 Takehara, op. cit., a. 44a-45, 59-59a; b. loc. cit.; c. 58a-59a; d. loc. cit.; e. 59-59a; f. loc. cit.; g. 51a, 59a; h. 48, 59a; i. 56, 59a; j. 53, 59a; k. 54a, 59a; l. 57, 59a; m. 81; n. 81; o. 81; p. 50a; q. 68; r. 68a; s. 69; t. 81a-82; u. 82-82a; v. loc. cit.; w. 70a; x. loc. cit.

FOOTNOTES

CHAPTER IV

¹Higuchi Hiromu, Honpō tōgyōshi [History of the Sugar Industry in Japan] (Tokyo, 1943), pp. 1-2.

²Higuchi, ibid., pp. 4-5. Nihon keizaishi jiten, I, 646.

³Higuchi, ibid., pp. 7-8.

⁴Iha and Majikina, Ryukyu no go ijin [Five Great Men of Ryukyu] (Naha, 1916), p. 320. Nihon keizaishi jiten, I, 646.

⁵Nakamura Kōya, Tokugawa Ieyasu monjo no kenkyū [Study of the Documents of Tokugawa Ieyasu] (Tokyo, 1960), II-1, 441, 462, and 555.

⁶King Shō Gen of Ryukyu sent Shimazu Takahisa gifts of Chinese and South Seas products in 1559, including sugar. Ijichi, Okinawa shi, IV, folio 11-12. Also Priest Tai Chū stated that Ryukyu imported sugar from China, "Ryukyu orai" ["Correspondence from Ryukyu"] (1607), cited by Nakahara, NZS, I, 284.

⁷Shih L'iu-ch'iu lu [Report of a Mission to L'iu-ch'iu], MS., n.p., 1534, folio 31.

⁸Ryukyu-koku yuraiki [Ryukyu Country Records of Origins], comp. by order of King Shō Kei, 1713, in Ryukyu shiryō sōsho, I, 106-107. Tei and others, comp., Kyūyō, the 3rd year of King Shō Hō. Tei Heitetsu, comp., Ryukyu-koku kyūki [Old Records of the Country of Ryukyu], 1731, in Ryukyu shiryō sōsho, III, 81.

⁹Osaka satōshō kumiai, comp., Nihon satō shōgyō enkakushi [History of the Sugar Enterprise in Japan], 1901, p. 3. Iha and Majikina, Ryukyu no go ijin, pp. 316-17. Majikina, Issennen shi, p. 497. Tsuchiya, Hōken shakai, p. 447. Takahashi Kamekichi, Tokugawa hōkenkeizai no kenkyū [Study of the Feudal Economy during the Tokugawa Period] (Tokyo, 1933), p. 413. Hamamura Shōsaborō, "Ishin zengo no tōgyō" ["Sugar Business before and after the Meiji Restoration"], Keizaishi kenkyū [Journal of Economic History], 20:1 (July 1938), p. 2. Higuchi, Tōgyōshi, p. 58. Higa, Okinawa no rekishi, pp. 170-1. Haraguchi, Satsuma no satō [Sugar in Satsuma] in Nihon sangyō taikei [Outline of the Industrial History of Japan], comp. Chihōshi kenkyūkyōgikai (Tokyo, 1960), VIII, 76-7. Nakahara, "Satō no raireki" ["History of Sugar"] (1963), in NZS, I, 277. Minamoto, Ryukyu rekishi yawa, p. 143. Miyagi Eisho, Okinawa no rekishi [History of Okinawa] (Tokyo, 1968), p. 98.

¹⁰Naze shishi hensan iinkai, comp., Naze shishi [History of Naze City] (Naze, 1968), pp. 348-357. Tokorozaki Hei, "Tōgyō sōshi Keichō nenkan setsu eno gimon" ["Questions on the Theory of the Beginning of

the Sugar Industry during the Keichō Period"], Amami kyōdo kenkyūkai, #8 (October, 1966), pp. 1-33.

¹¹Ryūkyū-koku yuraiki, pp. 106-107. Ryūkyū-koku kyūki, p. 81. Kyūyō, 3rd year of King Shō Hō. For another version of the first introduction of the knowledge of sugar manufacture into Ryūkyū, see Iha and Majikina, Ryūkyū no go ijin, pp. 319-320. This version alleges that Nagamine Ryōsei introduced sugar manufacture from China in 1450-1456, but apparently it was not transmitted to later generations and had no effect on the sugar industry during the Tokugawa period.

¹²Higuchi, Tōgyōshi, p. 60.

¹³Loc. cit. Nakahara, "Satō no raireki," p. 279.

¹⁴Kyūyō, 16th year of King Shō Shitsu.

¹⁵Iha and Majikina, op. cit., pp. 315-16.

¹⁶Higuchi, op. cit., p. 62.

¹⁷Osaka satōshō kumiai, Nihon satō shōgyō..., pp. 1-2.

¹⁸RSSS, X, 353.

¹⁹Kyūyō, 3rd year of King Shō Tei.

²⁰Higuchi, Tōgyōshi, p. 61. Iha and Majikina, Ryūkyū no go ijin, p. 315.

²¹"Satō no raireki," p. 383.

²²Morrow, "The Agriculture of Lew Chew," in Perry's Narrative..., II, 20. Green, "Medical Topography and Agriculture of the Island of Great Lew Chew," also in Perry's Narrative..., II, 30.

²³Green, loc. cit.

²⁴See the correspondence between Tokugawa and Shimazu on Sino-Ryūkyū relations, dated 1646 and 1655, in Shimazu-ke, comp., "Ryūkyū kankei monjo" ["Documents relating to Ryūkyū"], MS., I, folio 18-28, and XV, folio 7-21. Also, Ishihara Michihiro, Min-matsu Shin-sho Nihon kōshi no kenkyū [Study of the Request for Japanese Expedition to China in the Middle-17th Century] (Tokyo, 1945).

²⁵Ryūkyū's 1638 tributary mission lost 1,200 kan of silver. From 1653 the Fukien coast was declared dangerous for Ryūkyūan tributary ships because of the local pirates, who were not reported somewhat pacified until ten years later, in 1663. Tei Heitetsu and others, Chūzan seifu fukan [Supplement to the Genealogy of Chūzan], (1731-1876), in Ryūkyū shiryō sōsho, V, pp. 11, 20-21.

²⁶In 1645 and 1646, Fu Wang and T'ang Wang, both Ming pretenders, sent such missions to Ryukyu. In the latter year, Ryukyu dispatched seven missions to Satsuma, one of which pleaded that the royal treasury had been depleted. Ibid., pp. 14-17. For another similar mission headed by Ch'en Tsai, a Ming general, in 1650, see Tsūkō ichiran, I, 254.

²⁷Ibid., p. 17.

²⁸Arakaki Pēchin and others, "Naha yuraiki" ["History of Naha"], MS. (1709). Ryudai copy made in 1876, folio 29-30. Sugar was not mentioned as sold by Toma and Kohagura perhaps because it was handled through the regular tax collection channels.

²⁹Iha and Majikina, Ryukyu no go ijin, pp. 311 and 325. Ashitomi, "Kyū Ryukyu-han no tōgyō seisaku" ["Policy on the Sugar Industry in the Old Ryukyu"], MS., 1919, Chapter 4, Section 2.

³⁰Majikina, Issennen shi, pp. 493-4, 498. Tsuchiya, Hōken shakai, p. 499. Kagoshima kenshi, II, 683-4. Higuchi, Tōgyōshi, p. 66. Nakahara, Ryukyu no rekishi [History of Ryukyu] (Naha, 1952), I, 108. Higa, Okinawa no rekishi, pp. 250-1. Yamazato, Ryukyu rekishi monogatari, pp. 187-9. Shinyashiki Kōhan, Shinkō Okinawa issennen shi [New One-Thousand Year History of Okinawa] (Naha, 1967), I, 559-60. Miyagi, Okinawa no rekishi, pp. 97-8. Minamoto, Ryukyu rekishi yawa, pp. 151-2, 157, 167, gives a slightly different version that it started after 1650 but agrees that it was a double monopoly by both Ryukyu and Satsuma starting at the same time. Toguchi tends to agree with Minamoto saying it probably started in 1652, "Shinobose...", pp. 65-6.

³¹pp. 250-1.

³²Miyagi, Okinawa no rekishi, p. 97.

³³Majikina, Issennen shi, p. 498.

³⁴Minamoto, op. cit., pp. 148-9. Yamazato, op. cit., p. 189.

³⁵The original copy is now at the University of the Ryukyus Library. A microfilm copy is at the University of Hawaii. It has been divided into four parts, and the first three parts were published in photostat by the Okinawa rekishi kenkyukai, (Naha, 1969-1970).

³⁶Ryukyu-kan monjo, I, folio 12-13. NZS, I, 307.

³⁷Ryukyu-kan monjo, I, folio 30a-32a. NZS, I, 309-11.

³⁸Ryukyu-kan monjo, II, folio 24-26a. NZS, I, 326-7.

³⁹RSSS, X, 8-9. NZS, I, 360-1. Underline added.

⁴⁰folio 11.

⁴¹Nakahara, "Satō no raireki hoi" ["Supplement to the History of Sugar"], NZS, I, 389-90. Matsuda, Ryukyu shōbun, I, 254-6. Underline added.

However, the figures in these quotations seems to be rounded figures only. According to another document, dated 1864, from the Three Ministers to the Finance Magistrate, and in the file of the Sugar Bureau of the Ryukyu government, Satsuma ordered sugar payments increased by 442,660 kin but later reduced it roughly by half to 226,660 kin. RSSS, X, 116.

⁴²Higa, Okinawa rekishi, p. 251.

⁴³Higa, loc. cit. Majikina, Issennen shi, p. 503. Higuchi, Tōgyōshi, pp. 64-65.

⁴⁴Kyūkan sozei, p. 188. Ichiki, Torishirabesho, p. 550.

⁴⁵Ichiki, ibid., pp. 550-1. Higuchi, ibid., p. 68, but he erred in stating that the leakage sugar became the income for the peasants.

⁴⁶Ichiki, ibid., p. 551. Higa, op. cit., p. 252. Higuchi, ibid., p. 67. NZS, I, 447.

⁴⁷Higa, ibid., p. 252.

⁴⁸Okinawa-ken tōgyōron [Treatise on the Sugar Industry in Okinawa], 1907, p. 9, cited in NZS, I, 296-7.

⁴⁹Iha and Majikina, Ryukyu no go ijin, pp. 312-3. Higa, Okinawa no rekishi, p. 253. Miyagi, Okinawa no rekishi, p. 97. Higa, et al., Okinawa, pp. 101-2. Minamoto, Ryukyu rekishi yawa, p. 158.

⁵⁰"Gozaisei," p. 84.

⁵¹"Sappan reiki zasshū," XXV, folio 12a.

⁵²Sai On senshū, p. 82.

⁵³NZS, I, 296-300, and 424-32, 441.

⁵⁴NZS, I, 301-2, 433.

⁵⁵NZS, I, 348.

⁵⁶NZS, I, 348.

⁵⁷Nihon satō shōgyō enkaku shi, p. 3.

⁵⁸Ibid., p. 91.

⁵⁹Loc. cit.

⁶⁰"Gozaisei" lists the total income of 252 kan of silver from 721,090 kin of sugar, including some earmarked for the privileged officials. Ibid., pp. 85-88.

⁶¹Ryukyu-kan monjo, I, 60.

⁶²RSSS, X, 358, 402.

⁶³Shimazu-ke, comp., Sappan kaigunshi [Maritime History of the Satsuma-han] (Tokyo, 1928), I, 52.

⁶⁴Fujimoto Takashi and Matsushita Shirō, "Bakumatsu ni okeru Satsuma-han no kaiun ni tsuite" ["On the Maritime Transportation of the Satsuma-han during the Bakumatsu Period"], in Satsuma-han no kiso-kōzō, p. 425.

⁶⁵On Satsuma finance, cf. Ebihara, Sappan Tenpō-do igo zaisei kaikaku tenmatsusho. Kagoshima kenshi, II, 252-4. Haraguchi, Bakumatsu, pp. 66-71. On Ryukyu finance, cf. Ryukyu-kan monjo, I, folio 31-32a. NZS, I, 329, 338-9, 342-3. Higa, Okinawa no rekishi, pp. 266-8. Kyūyō, columns for 1804, 1806, 1808, 1811, 1812, 1814, 1817, 1820-22, 1825, 1827, and 1829 reveal exhausted conditions of the villages and districts of Ryukyu at the time.

⁶⁶Ryukyu-kan monjo, III, folio 59-62. NZS, I, 334-7.

⁶⁷See the 1666 case of Chatan wēkata and Ezo wēkata, both high ranking Ryukyuan officials, summarily beheaded by the Ryukyu government at the mere expression of displeasure from Satsuma toward them for the crimes committed by their subordinates. Higa, Okinawa no rekishi, pp. 183-86.

⁶⁸For the extraordinary perquisites of the office of the Satsuma's resident magistrate to Ryukyu, see Higaonna Kanjun, Okinawa konjaku [Okinawa, Now and in the Past] (Tokyo, 1958), pp. 26-28. Iha, Okinawa rekishi monogatari, pp. 146-47.

⁶⁹Haraguchi, Bakumatsu, describes the Tempō Reform in Satsuma with emphasis on Zushō Shōzaemon.

⁷⁰Ebihara, op. cit., pp. 38 and 126. Kagoshima kenshi, II, 409.

⁷¹Higa Shunchō, "Kansho saibai seigen ni kansuru ichi shiryō" ["A Source Material concerning the Restriction of the Sugar cane Culture"], cited by Ikehara Shinichi, Okinawa tōgyōron [Treatise on the Sugar Industry in Okinawa] (Naha, 1969), pp. 15-16.

⁷²Chūzan seifu fukan, column for 1835, in Ryukyu shiryō sōsho, V, 100.

⁷³Matsuda, Ryukyu shobun, I, 255-6.

⁷⁴Actually 750,000 kin was a rounded figure, and the exact figures were 2,800 koku of rice for 746,637 kin of sugar at the rate of .375 koku per 100 kin. "Ryukyu ontakaki" ["Stipends in Ryukyu"], date estimated to be 1838, in RSSS, X, 386.

⁷⁵SRS., VIII-2, 1002-5.

⁷⁶Kagoshima kenshi, II, 366.

⁷⁷Ibid., II, 302-3. Ebihara, Tempō-do igo..., p. 44.

⁷⁸Kagoshima kenshi, II, 411. Ebihara, ibid., p. 39.

⁷⁹Minamoto, Ryukyu rekishi yawa, pp. 164-7.

⁸⁰Terajima Ryōan, Wakan sansai zue [Illustrated Encyclopedia of Japan and China] (1712), (Tokyo, 1929 edition), II, 1295.

⁸¹Arakaki Pēchin, "Naha yuraiki" folio 29-30.

⁸²Nakahara, "Ukon ōrai" ["Correspondence on Turmeric"] (1959), in NZS, I, 291.

⁸³Terajima, op. cit., II, 1295-6.

⁸⁴NZS, I, 612.

⁸⁵"Gozaisei," folio 86, 91.

⁸⁶NZS, I, 614.

⁸⁷Satō Shigehiro, "Sasshū sanbutsuroku" ["Record of Satsuma's Products"], MS., 1792, folio 5.

⁸⁸Ryukyu-kan monjo, III, folio 25a-26. NZS, I, 616-7. Corsican weed, kaininsō or makuri in Japanese, was a popular anthelmintic long used in Japan and grown in the waters of Ryukyu. Terajima, op. cit., II, 1396.

⁸⁹Ryukyu-kan monjo, III, folio 220-22. RSSS, II, 438.

⁹⁰NZS, I, 618. RSSS, X, 438.

⁹¹NZS, I, 619-20.

⁹²NZS, I, 619-20.

⁹³NZS, I, 621-2.

⁹⁴RSSS, X, 267.

⁹⁵Ebihara, Tempō-do igo..., pp. 54-55.

⁹⁶Ebihara, ibid., p. 55. "Jōshiki nobosedaka" ["Standard Goods Shipped to Satsuma"] (1834); RSSS, X, 267.

⁹⁷NZS, I, 627.

⁹⁸NZS, I, 625. Higa, et al., Okinawa, pp. 101-2.

⁹⁹Terajima, Wakan sansai zue, II, 1396.

¹⁰⁰RSSS, X, 267.

¹⁰¹Loc. cit.

¹⁰²Loc. cit.

¹⁰³Ginowan, "Ryukyu ikkenchō," folio 30-34. Also Ginowan, "Ryukyu zakki" ["Miscellanies on Ryukyu"], 1820, MS, pp. 134-44.

¹⁰⁴Ichiki, Torishirabesho, p. 572.

¹⁰⁵For the case of 1794, Ryukyu-kan monjo, II, 69a-70, and for that of 1799, ibid., II, 32a-33a.

¹⁰⁶Ryukyu-kan monjo, II, folio 63-65a.

¹⁰⁷MS., folio 2-5.

FOOTNOTES

CHAPTER V

¹Higaonna, Kaigai kōtsūshi, p. 286. For the earlier relations with Ming, see Sakai, "The Satsuma-Ryukyu Trade...", pp. 392-93. Majikina cited a source that says the Ch'ing dynasty first granted the permission for Ryukyu's tributary trade in 1670, Issennen shi, p. 95. But it seems unlikely in view of the events described above.

²Kagoshima kenshi, II, pp. 635-6. Sakai, "Satsuma-Ryukyu Trade...", p. 391.

³Momozono Keishin, ed., Shokushō kigen [Origins of Posts] in Kagoshima-ken shiryōshū [Historical Materials of Kagoshima] (Kagoshima, 1966), VI, 42-43. Kagoshima kenshi, II, 673.

⁴For the best summary of Satsuma's control measures of the Ryukyu trade with China, see Sakai, "The Ryukyu Islands as a Fief of Satsuma," pp. 132-34. Also, Kagoshima kenshi, II, 674-5.

⁵Bakumatsu, p. 180.

⁶Sakai, "Satsuma-Ryukyu Trade...", pp. 399-400. Kagoshima kenshi, II, 739-40.

⁷Sakai, ibid., p. 399. Kagoshima kenshi, II, 741.

⁸Matsuda, "The Government of the Kingdom of Ryukyu,..." pp. 163-4, 168.

⁹"Ryukyu zaiban bugyō kakugo no jōjō" ["Instructions for the resident magistrate in Ryukyu"], 1693, in "Sappan reiki zasshū" folio 69-73a.

¹⁰Shokushō kigen, p. 51. For the duties of monogashira, see Kagoshima kenshi, II, 111-2.

¹¹Sakai, "The Ryukyu Islands as a Fief of Satsuma," p. 132. "Ryukyu zaiban bugyō...", folio 69-73a. "Shimazuke Ryukyu-koku shoryō junkenshi ōtō" ["Replies to Questions on Ryukyu from the Bakufu Inspector"], 1789, in "Ryukyu kankei monjo" IV, folio 10a.

¹²Akazaki Teikan, "Ryukyaku danki" ["Account of the Conversations of Ryukyuan Guests"], 1797, MS., folio 1-1a. Ch'en Ta-tuan, "Sino-Liu-ch'uan Relations in the Nineteenth Century," unpublished Ph.D. dissertation, Indiana University, 1963, pp. 54-55. Hereafter cited as "SL relations."

¹³Akazaki, loc. cit. Earlier in the 17th century, it used to leave in the winter but the time of departure became later and later till by the beginning of the 19th century it was scheduled for spring. Ryukyu-kan monjo, III, folio 171.

¹⁴Akazaki, ibid., folio 2. Ch'en, "SL relations," pp. 77-82.

¹⁵Akazaki, ibid., folio 2a-3a. Ijichi, Okinawa shi, II, folio 17a.

¹⁶Accounts of the tribute articles and imperial gifts are given in the following: Majikina, Issennen shi, p. 89; Kagoshima kenshi, II, 719-23; Higaonna, Kaigai kōtsūshi, pp. 309-14; Ch'en, "SL relations," pp. 69-73.

¹⁷Akazaki, op. cit., folio 6-7a. Ch'en, ibid., pp. 65-75.

¹⁸Sinclair, cited by Fairbank and Teng, Ch'ing Administration; Three Studies (Cambridge, Mass., 1961), p. 172, n. 85b.

¹⁹Majikina, op. cit., p. 96. Ch'en, op. cit., p. 53.

²⁰RSSS, II, 374. Kagoshima kenshi, II, 739-40. For a detailed procedure upon return of a China trade ship, see "To-Tōsen kihan no setsu kakugo oboe" ["Instructions on the Return of a Ship from China"], 1693, in "Sappan reiki zasshū," folio 73a-77a.

²¹Fairbank and Teng, Ch'ing Administration..., pp. 171-2.

²²Ryukyu-kan monjo, I, folio 33a-34, 45a-46. Kobata, Kaigai kōtsūshi, p. 321. For the names of these brokers, see Fu I-ling, et al., Fu-chien tui-wei mao-i shih yen-chiu [Study of the History of Foreign Trade in Fu-chien] (Fuchien, 1948), p. 60.

²³Fairbank and Teng, op. cit., p. 172.

²⁴Sakai, "Satsuma-Ryukyu Trade...", p. 393.

²⁵Ch'en, "SL relations," pp. 60-61.

²⁶Chūzan seifu, X, in Ryukyu shiryō sōsho, VI, pp. 191-289.

²⁷Ch'en, "SL relations," p. 61

²⁸Ibid., p. 104.

²⁹Ibid., p. 110.

³⁰Ibid., pp. 62-64.

³¹Tobe Yoshiteru, Ōshima hikki [Ōshima Notes], 1762, in Miyamoto Tsuneichi, et al., ed., Nihon shōmin seikatsu shiryō shūsei [Materials on the History of the Life of the Common People in Japan] (Tokyo, 1968), X, 371.

³²Compiled from the following: Chou I-hsiang, "Tao-kuang i-hou Chung-Liu mao-i-ti t'ung-chi" ["Sino-Liu-ch'iu Trade Statistics after 1821"], Chung-kuo chin-tai ching-chi shih yen-chiu [Journal of the Modern Economic History of China], I:1 (Nov., 1932), pp. 27-28; Fairbank and Teng, Ch'ing Administration..., pp. 168-69; Kagoshima kenshi, II, 778-80.

³³Majikina, Issennen shi, pp. 441-42.

³⁴Kanazawa Kanemitsu, Wakan sen'yōshū [Encyclopedia of Maritime Affairs], 1766, in Kaiji shiryō sōsho [Materials of Maritime Affairs], ed. Sumida Shōichi (Tokyo, 1930), II, 141.

³⁵Matsuda, Ryukyu shobun, III, 125-6.

³⁶Issennen shi, p. 442. Tsūkō ichiran, I, 247.

³⁷Fujimoto and Matsushita, "Bakumatsu ni okeru...", p. 427.

³⁸Ibid., p. 431.

³⁹Perry, Narrative of An Expedition..., I, 222.

⁴⁰Iwao, Shuinsen bōekishi no kenkyū, p. 121.

⁴¹Issennen shi, p. 442.

⁴²Kagoshima kenshi. II, 689-95.

⁴³Ibid., II, 690.

⁴⁴Ichida Kageyu, "Ryukyu shisha sanpu no koto" ["On the Ryukyuan Envoy's Visit to Edo"], MS., folio 63a.

⁴⁵Ibid., folio 78, 81-81a.

⁴⁶Ichida, ibid., folio 66.

⁴⁷Kagoshima kenshi, II, 727-9. Ijichi Sueyasu, "Sasshū tōbutsu raiyūkō" ["On the Import of the Chinese Goods into Satsuma"], MS., 1840. Folio 50-50a.

⁴⁸Kagoshima kenshi, II, 279-30. Ichida, "Ryukyu shisha...", folio 63, 82. SRS, VIII-1, 654-5.

⁴⁹Ichida, "Ryukyu shisha...", folio 74a-76a. Ijichi, "Sasshū tōbutsu...", folio 51a-52. SRS, VIII-1, 660.

⁵⁰SRS, I, 662.

⁵¹Kagoshima kenshi, II, 689-90.

⁵²Ibid., II, 695.

⁵³Higaonna, Reimeiki..., p. 297.

⁵⁴Ibid., p. 299.

⁵⁵Kagoshima kenshi, II, 690.

⁵⁶Ibid., II, 696.

⁵⁷Ibid., II, 693, 696.

⁵⁸Ch'en, "SL relations," p. 95.

⁵⁹Kagoshima kenshi, II, 690-1, 696.

⁶⁰Ibid., II, 730

⁶¹Miyamoto Mataji, "Nagasaki bōeki ni okeru tawaramono yakusho no shōchō" ["Vicissitudes of the Marine Product Office in Nagasaki Trade"], in Kyushu keizai-shi ronshū [Essays on the Economic History of Kyushu] (Fukuoka, 1958), III, 4. Kagoshima kenshi, II, 726. Iwao Seiichi, "Kinsei Nisshi bōeki ni kansuru sūryōteki kōsatsu" ["A Quantitative Study of the Sino-Japanese Trade in the 17th Century"], Shigaku zasshi (Historical Journal of Japan), LXII;11 (Nov., 1953), p. 996.

⁶²Miyamoto Mataji, comp., Kinsei Osaka no bukka to rishi [Commodity Prices and Interests in the Recent Osaka] (Osaka, 1963), p. 389. Kagoshima kenshi, II, 730. SRS., I, 984.

⁶³Kagoshima kenshi, II, 731.

⁶⁴Ibid., II; 743.

⁶⁵There is little consensus among scholars as to the amount of the silver for the China trade. See Majikina, Issennen shi, p. 94; Higa, Okinawa no rekishi, p. 205; and NZS., I, 340-1. Actually both Satsuma and Ryukyu provided one-half of the capital, e.g., in 1686 the total was 804 kan with both of them putting up 402 kan each, and in 1716 it became 604 kan with both of them putting up 302 kan each. Momozono and Gomi, ed., Sappan seiyōroku (1828 version), p. 124.

⁶⁶Honjō Eijirō, comp., Nihon keizaishi jiten [Dictionary of the Economic History of Japan] (Tokyo, 1940), p. 263.

⁶⁷Kagoshima kenshi, II, 733.

⁶⁸Until 1688, only shinkō missions were exempt from customs duties. Fairbank and Teng, p. 141. Ch'en, "SL relations...", p. 55. Kinjō, Okinawa hōseishi, p. 68.

- ⁶⁹SRS., I, 660. Tsūkō ichiran, I, 242, 247, 263-4.
- ⁷⁰Ryukyu-kan monjo, I, folio 77-78.
- ⁷¹Ibid., folio 7a-8. Kagoshima kenshi, II, 733.
- ⁷²Ryukyu-kan monjo, I, folio 7a-8, 43a-44. SRS, II, 993-4. RSSS, II, 359-60.
- ⁷³Ryukyu-kan monjo, I, folio 51a-53.
- ⁷⁴Kagoshima kenshi, II, 217-229.
- ⁷⁵Ibid., II, 230-237.
- ⁷⁶Kagoshima kenshi, II, 735.
- ⁷⁷Ryukyu-kan monjo, I, folio 1a-2a.
- ⁷⁸Ibid., folio 1.
- ⁷⁹Ibid., folio 34.
- ⁸⁰Ibid., folio 28-29.
- ⁸¹Ibid., folio 7a-8.
- ⁸²Ibid., folio 28-29.
- ⁸³NZS., I, 340.
- ⁸⁴Ginowan, "Ryukyu ikkenchō," folio 35. Ginowan, "Ryukyu zakki," folio 49-49a.
- ⁸⁵RSSS, II, 350, 380.
- ⁸⁶RSSS, II, 266. Estimated date 1834.
- ⁸⁷Ibid., II, 272-277, 402, estimated date either 1819 or 1831, and 401-402, estimated date either 1822 or 1834.
- ⁸⁸Higaonna, Nantō tsūkashi..., II, 12.
- ⁸⁹Loc. cit. Also Higaonna, Reimeiki, pp. 298-300.
- ⁹⁰Kagoshima kenshi, II, 734.
- ⁹¹Ibid., II, 734-5.
- ⁹²Ryukyu-kan monjo, I, folio 43a-44. Original figures given were 13.5 and 6.75 kan in fine silver and were multiplied by two to be comparable with the earlier figures.

- 93 Loc. cit.
- 94 SRS, I, 660.
- 95 RSSS, II, 385.
- 96 Kagoshima kenshi, II, 736.
- 97 NZS, I, 340.
- 98 Ryukyu-kan monjo, I, folio 5a-9. RSSS, II, 384-5.
- 99 NZS, I, 341-2.
- 100 Ryukyu-kan monjo, I, folio 5a-6.
- 101 Ch'en, "SL relations...", pp. 61-62.
- 102 "Gozaisei," folio 48.
- 103 Compiled from the Silver Budget Section (oginbu) of "Gozaisei" ["Fiscal Policy"], MS., (1725), folio 42a-48a. Item 5, budgets for mission members and Ryukyuan officials, being private funds, were explicitly excluded in the original, but estimates were entered here for the sake of comparison.
- 104 Ibid., folio 34-34a.
- 105 Ibid., folio 46.
- 106 Ibid., folio 29a-30.
- 107 Adapted from Tables XXXVI and XXXVII.
- 108 SRS, I, 659.
- 109 "Gozaisei," folio 34a.
- 110 Ch'en, "SL relations...", p. 94.
- 111 Ibid., p. 85. Kobata, Chūsei nantō..., Appendix, p. 49.
- 112 Ch'en, ibid., p. 94.
- 113 Ch'en Ta-tuan, Yung-Ch'en-Hsia shih-tai-ti Chung-Liu kuan-chi [Sino-Liu-ch'iuwan Relations during the Eras of Emperors Yung-cheng, Ch'en-kan, and Hsia-ch'ing] (Taipei, 1956), p. 86.
- 114 Sinclair, British Consular Archives of 1851, cited by Fairbank and Teng, Three Studies..., p. 172. Underline added.

¹¹⁵RSSS, II, 369-70. Underline added.

¹¹⁶"Ryukyu kankei monjo," XII, folio 136a-137. Also a considerable amount of the Kan'ei tsūhō copper cash was brought to Foochow for the purpose of private trade by the mission members and seamen. Fu I-ling, Fu-chien tui-wei mao-i shih yen-chiu, p. 60.

¹¹⁷Kagoshima kenshi, II, 718-20. Issennen shi, p. 89. RSSS, II, 360-1.

¹¹⁸These swords and spears were deliberately made without steel in order to bypass the Tokugawa ban on the export of arms. Issennen shi, pp. 107-8. Kagoshima kenshi, II, 721-23.

¹¹⁹Kagoshima kenshi, II, 697.

¹²⁰Ryukyu-kan monjo, II, folio 149a-152. RSSS, II, 298, 360-1, 445-7.

¹²¹Kagoshima kenshi, II, 723. RSSS, II, 361.

¹²²Kagoshima kenshi, II, 738.

¹²³Kagoshima kenshi, II, 739.

¹²⁴Ibid., II, 731-2.

¹²⁵SRS., I, 383.

¹²⁶SRS., I, 659.

¹²⁷Mutō Chōhei, Seinan bun'un shiron [Historical Essays on Cultural Developments in the Southwest] (Tokyo, 1926), p. 412. Shidehara Tan, Nantō enkaku shiron [Treatise on the History of the Southern Islands] (Tokyo, 1899), p. 121.

¹²⁸Ryukyu-kan monjo, I, folio 8-8a.

¹²⁹Ibid., I, folio 45a-46.

¹³⁰Miyamoto, "Nagasaki bōeki...", p. 21.

¹³¹Yamawaki Teijirō, Nagasaki no tōjin bōeki [Trade with the Chinese at Nagasaki] (Tokyo, 1964), p. 214.

¹³²Miyamoto, op. cit., p. 21.

¹³³Ryukyu-kan monjo, II, folio 89a-91a.

¹³⁴Ch'en, "Yung-Ch'ien-Hsia...", p. 84.

¹³⁵Ibid., p. 85.

- 136 Ryukyu-kan monjo, III, folio 173-4.
- 137 Yamawaki, Nagasaki..., p. 268.
- 138 Toyoda, Pre-Meiji Commerce, p. 64. Miyamoto, "Nagasaki bōeki...", p. 6. But the silver export was again permitted with severe restriction in 1669. Yamawaki, ibid., p. 315.
- 139 Miyamoto, ibid., p. 8.
- 140 Miyamoto, ibid., p. 13.
- 141 Japanese Government, comp., Tokugawa rizai kaiyō (Encyclopedic Handbook of the Finance and Economy of the Tokugawa Shogunate), in Nihon keizai sōsho, ed. Takimoto, XXXVI, 443-445.
- 142 Miyamoto, "Nagasaki bōeki...", pp. 55-58.
- 143 Sinclair, British Consular Archives of 1851, cited by Fairbank and Teng, Three Studies..., p. 172. Underline added.
- 144 SRS, VIII-1, 293-4, 295-6, 297.
- 145 Ibid., VIII-1, 294, 297-99.
- 146 SRS, VIII-1, 295.
- 147 Yanai Kenji, ed., Tsūkō ichiran zokushū [Supplement to the Survey of Foreign Relations] (Osaka, 1968), X, 162-64.
- 148 Tsūkō ichiran zokushū, X, 164-69.
- 149 "Ryukyu sanbutsu kaisho sashitome ikken monjo" ["Dossier on the Case of the Suspension of the Ryukyuan Products Agency"], (1837-38), MS., folio 19. Also, Tsūkō ichiran zokushū, X, 324.
- 150 "Tō-shō Wang Yü-an ra negaisho" ["Petition from the Chinese Merchants, Wang Yü-an and others"], in "Ryukyu sanbutsu kaisho sashitome...", folio 32a-36. Also, Tsūkō ichiran zokushū, Y 332-4.
- 151 "Nagasaki kaisho jōshinsho" ["Nagasaki Trading Agency's Report to the Bakufu"], dated 1837 (Tempō 8/5/2), requesting suspension of the Ryukyuan Products Agency on account of its interference with the Nagasaki trade. Correspondence from Kuze Isenokami, Nagasaki Magistrate, to his successor, Togawa Harimanokami, dated 1837 (Tempō 8/6/22), relaying the government order to suspend the Ryukyuan Products Agency. The Bakufu's order, from the Councillor, Mizuno Echizenokami, to the Nagasaki Magistrate, dated 1837 (Tempō 8/6), on the case of the suspension of the Ryukyuan Products Agency as of 1839. In addition, twelve other documents of similar nature, accusing Satsuma of illicit trade, are in "Ryukyu sanbutsu kaisho sashitome...."

152Compiled from the Foochow Customs Reports in Chou I-hsiang, "Tao-kuang i-hou Chung-Liu mao-i-ti t'ung-chi" ["Sino-Liu-ch'iu Trade Statistics after 1821"], Chung-kuo chin-tai ching-chi shih yen-chiu (November, 1932), I:1, pp. 8-10.

153Kagoshima kenshi, II, 689.

154Ibid., II, 699-70. For similar lists of imports for 1626 and 1627, see ibid., II, 697-8.

155Ibid., II, 697.

156Iwao Seiichi, "Kinsei Nisshi bōeki ni kansuru sūryōteki kōsatsu" ("A Study on the Chinese Trade with Japan in the XVIIth Century - chiefly on their volume and quantity"), Shigaku-zasshi (Historical Journal of Japan), LXII:11 (Nov., 1953), 990.

157Ijichi, comp., Satsu-gū-jitsu denpu zatchō, pp. 400-1.

158Kagoshima kenshi, II, 189.

159Ieyasu granted Ryukyu to Satsuma in his letter of 1609 (Keichō 14/7/7) to Shimazu Iehia. In 1610 when Ieyasu received King Shō Nei of Ryukyu at Sunpu, he told Shō Nei that because Ryukyu now belonged to Satsuma, free traffic should be granted to the merchant ships carrying both the native Ryukyuan and Chinese products. In another letter, dated 1611 (Keichō 16/5/26) written for him by Yamaguchi Suruganokami Naotomo, he told Shimazu Iehisa to do everything possible to ensure Ryukyu's continued trade with China. "Ryukyu kankei monjo," I, folio 14a-15a. Ijichi Sueyasu, "Sasshū tōbutsu raiyukō," MS., 1840, folio 29a-30. Tsūkō ichiran, I, 246.

160"Ryukyu kankei monjo," I, folio 16a-17. Ijichi, ibid., folio 42a-43.

161"Ryukyu kankei monjo," I, folio 18-28. Kagoshima kenshi, II, 707-8. Sappan kaigunshi, I, 199-201. Ijichi, ibid., folio 43-44a.

162Sappan kaigunshi, I, 202. Ijichi, ibid., folio 46.

163SRS, VIII-1, 651.

164SRS, VIII-2, 984. Kagoshima kenshi, II, 730.

165Yamawaki Teijirō, Nagasaki no tōjin bōeki [Chinese Trade at Nagasaki] (Tokyo, 1964), pp. 71-2, 84-5.

166SRS., VIII-1, 655-6. Kagoshima kenshi, II, 727.

167SRS, VIII-1, 656. Kagoshima kenshi, II, 747.

168SRS, VIII-1, 278.

- 169" Sappan reiki zasshū," XXV, folio 32a. SRS, VIII-1, 276, 278, 286-7, 280-2, 284-5. Kagoshima kenshi, II, 747-8.
- 170SRS, VIII-1, 276-7.
- 171SRS., VIII-1, 277.
- 172Loc. cit.
- 173SRS., VIII-1, 282, 285. Ōkurashō, comp., Nihon zaisei keizai shiryō [Materials for the Financial and Economic History of Japan] (Tokyo, 1922-3), III, 441-2.
- 174Yamawaki Teijirō, Nukeni [Smuggling] (Tokyo, 1965), p. 97.
- 175SRS., VIII-1, 287. Nihon zaisei keizai shiryō, III, 436. Sappan kaigunshi, I, 243, 247.
- 176" Ryukyu sanbutsuroku," folio 6a.
- 177SRS., VIII-1, 281-2.
- 178SRS., VIII-1, 281. Kagoshima kenshi, II, 743.
- 179Ryukyu-kan monjo, I, folio 7.
- 180Chūzan seifu, in Ryukyu shiryō sōsho, IV, 152.
- 181Ryukyu-kan monjo, III, folio 234a. Higaonna Kanjun, Shō Tai kō jitsuroku [Authentic Record of Marquis Shō Tai] (Tokyo, 1924), pp. 10-11.
- 182Higaonna, loc. cit.
- 183Fukuchi Gen'ichirō, Nagasaki sanbyakunenkan [Three Hundred Years of Nagasaki] (Tokyo, 1902), pp. 123-4.
- 184SRS., VIII-1, 282. Kagoshima kenshi, II, 747.
- 185Higaonna Kanjun, "Shokujōroku," in Okinawa bunka sōron [General Treatises on Okinawan Culture] (Tokyo, 1970), pp. 43-4.
- 186For instance, Hanagushiku Seiyū, who was in charge of the cargo brought by Chang Hsüeh-li's mission in 1663, shipped the cargo to Nagasaki and reaped huge profits and was highly commended by the Satsuma government. Higaonna, ibid., p. 45.
- 187Fukuchi, Nagasaki..., pp. 124-5. Tsūkō ichiran, I, 249. SRS., VIII-1, 283. Chūzan seifu, in Ryukyu shiryō sōsho, V, 83.
- 188SRS., VIII-1, 282-3, 292-3.
- 189Kagoshima kenshi, II, 748-9.

¹⁹⁰Tsūkō ichiran zukushū, I, 327-32.

¹⁹¹Correspondence dated 1835 (Tempō 6/4) from Hijikata Izumonokami to Ōkubo Kaganokami, Tokugawa councillor. Ibid., I, 166-7. "Difficulties for the higher Tokugawa authorities" is most likely a reference to Shimazu Shigehide's influence as the father-in-law of Shogun Ienari (1786-1837). For further Shimazu-Tokugawa relationship, see fn 85, Chapter VI.

¹⁹²Yamawaki, Nagasaki no tōjin bōeki, p. 268.

¹⁹³Tsūkō ichiran zokushū, I, 322. Kagoshima kenshi, II, 749.

¹⁹⁴Ijichi, "Saschū tōbutsu raiyukō," folio 73-73a. Kagoshima kenshi, II, 749.

¹⁹⁵Ijichi, ibid., folio 74-77a. Kagoshima kenshi, II, 749.

¹⁹⁶Ijichi, ibid., folio 79.

¹⁹⁷Kagoshima kenshi, II, 750.

¹⁹⁸Tsūkō ichiran zokushū, I, 322-3. Yamawaki, Nukeni, p. 99.

¹⁹⁹"Ryukyu sanbutsu kaisho sashitome ikken monjo" contains "Sappan Edo rusui Handa Saiten gansho" ["Petition from Handa Saiten, Satsuma's Edo Representative"], dated 1838 (Tempō 9/3), folio 44a-50, and three others, dated respectively 1838 (Tempō 9/3), folio 50a-53a, and 1838 (Tempō 9/4), folio 54-54a, and 1838 (Tempō 9/4/10), folio 60a-61. Also Yamawaki, Nukeni, pp. 102-3.

After the turn of the century, Ryukyu was frequently visited by European ships such as in 1816, 1821, 1822, 1823, 1827, 1831, 1832, 1837, 1840, 1843, 1844, and so on. Kagoshima kenshi, II, Chapter Nine.

²⁰⁰Yamawaki, Nukeni, p. 103.

²⁰¹Kagoshima kenshi, II, 750, 757.

²⁰²Tsūkō ichiran zokushū, I, 324.

²⁰³G. Sanson, History of Japan, III, 221. Numata Jirō, "Edo jidai no bōeki to taigai kankei" ["Trade and Foreign Relations during the Edo Period"], Iwanami kōza; Nihon rekishi (Tokyo, 1964 edition), XIII, 75. Higa, Okinawa no rekishi, p. 312. Iha, Okinawa rekishi monogatari, p. 126. Tōyama Shigeki, "Tempō-ki -- kaikō chokuzen" ["Tempō period -- Immediately before the Opening of the Country"], in Rekishigaku kenkyūkai, comp., Meiji ishinshi kenkyū kōza [Studies of the History of the Meiji Restoration] (Tokyo, 1958), II, 8. Kerr estimated the trade profit at more than 100,000 koku but this was caused by a mistranslation in Asakawa's Documents of Iriki which said "income from Ryukyu" when it was actually referring to the gross production assessment and not the income. Okinawa, p. 179, 479.

204 Ryukyu sanbutsu-hō, comp., "Ryukyu sanbutsu Nagasaki ni oite haraitate narabi ni motodeshina rijun sōchō" ["Profit Ledger for the Sales of Ryukyuan Products at Nagasaki"], MS., 1851. Kagoshima kenshi, II, 755-757. Maeda, "Sakokuka no Sappan bōeki," p. 116.

205 Kagoshima kenshi, II, 757-8. Also Sydney Crawcour believes it was not profitable for Satsuma, "Notes on Shipping and Trade in Japan and the Ryukyus," JAS, XXIII; 3 (May 1964), 377-9. His views will be treated later in the Chapter VI.

206 Compiled from Chou I-hsiang, "Tao-kuang...", p. 11 and the Table.

207 Ebihara, "Sappan Tempō igo...", p. 56.

208 Cited by Ikeda Toshihiko, "Zusho Hiroeato no zaisei kaikaku to Satō Nobuhiro no Sappan keiiki" ["Zusho Hiroeato's Tempō Financial Reform and Satō Nobuhiro's Sappan keiiki"], Kagoshima shirin [Historical Journal of Kagoshima] (June 1938), I, 32. Underline added.

209 Ijichi, "Sasshū tōbutsu raiyukō," folio 61a-66a. Sappan kaigunshi, I, 175-9. Underline added.

210 Compiled from the Foochow Customs Reports in Chou I-hsiang, "Tao-kuang i-hou...", pp. 11-20.

FOOTNOTES

CHAPTER VI

¹About a century and a half from the mid-17th to the end of the 18th century is said to be the period when the Ryukyuan culture reached its maturity. For various public undertakings and the signs of prosperity, see Tsukada Seisaku, Ryukyu-koku himonki no teihon sakusei no kenkyū [A Study of the Making of the Authentic Copy of the Ryukyuan Epigraphs] (Tokyo, 1970), I, 29-36. Also, see Higa, Okinawa no rekishi, pp. 199-201, 274 ff.

²It was so popular and convincing to the Ryukyuan that even in an official government document it was seriously stated that since 1609 under the yoke of Satsuma, Okinawans were exploited of their production, were robbed of their trade profits, groaned under the oppression for more than 400 years, and lived only to serve Satsuma,... and so on. Okinawa-ken, comp., Okinawa-ken shinkō jigyō setsumei sho [Proposal for the Promotion of Industries in Okinawa Prefecture] (Naha, 1932), p. 1.

³Governor Nishimura of Okinawa Prefecture said in 1886 that the current economic exhaustion of Okinawa was entirely due to the recent domestic and international emergencies which required extraordinary expenditures. Nantō kiji gaihen, II, folio 18.

⁴For the corruption of the Ryukyu's ruling class and their exploitation of the peasants, see Chapter III, Section 3 of this dissertation, and also for actual cases in 1861, see NZS, I, 466-68.

⁵For the abject living conditions of the Satsuma peasants, see the following: Ijichi Suemichi, "Nōka suijō-ron" ["On the Enervation of the Agricultural Households"], MS., undated [the mid-19th cent.]; Kubo Heinaizaemon, Shogō eirō shirabe [Report on the Decline of the Various Districts] (1805), in Ono Takeo, comp., Nihon nōmin shiryō shūsui [Materials on the History of Peasants in Japan] (Tokyo, 1944), IX, 49-66; Furukawa Koshōken, Saiyū zakki [Travel to the West] (1783), and in Honjō Eijirō, et al., comp., Kinsei shakai keizai sōsho, IX, 76.

⁶Kagoshima kenshi, II, 4-6. Seiyōroku, pp. 5-7.

⁷Kagoshima kenshi, II, 65. This decrease in the actual production suggests that the success of Tempō Reform in Satsuma owed less to whatever was achieved in the agricultural sector.

⁸Ibid., II, 68.

⁹Ibid., II, 72.

¹⁰Ibid., II, 75.

¹¹Tsuchiya remarked that considering her total koku-daka, Satsuma's rice shipment to the Osaka market was extremely small. Hōken shakai, p. 356. Of course, such a question would not arise if it is realized that Satsuma's total koku-daka was expressed in terms of unhulled rice and her rice shipment to Osaka was in hulled rice.

¹²Ibid., pp. 357-8.

¹³Ibid., p. 357. Fujitani Toshio, "Satsuma-han no shakai soshiki to senbai seido" ["Satsuma's Social System and Monopoly System"], Nihon-shi kenkyū [Journal of Japanese History], #6 (1947), 105.

¹⁴Hōken shakai, p. 357.

¹⁵Kagoshima kenshi, II, 240-1.

¹⁶Sappan keiki [Particulars of Satsuma], 1830, in Satō Nobuhiro kagaku zenshū [Collected Works of Satō Nobuhiro], ed. Takimoto Seiichi (Tokyo, 1926), II, 702.

¹⁷Fujitani, op. cit., p. 106.

¹⁸Yamada Tatsuo, Meiji zettai shugi no kiso katei [Development of Feudalism for the Meiji Absolutism] (Tokyo, 1962), p. 94.

¹⁹Horie Eiichi, "Hōken shakai ni okeru shihon no sonzai keitai" ["Morphology of Capital in a Feudal Society"], in Shakai kōseishi taikai [Outline of the History of the Social Structure], chief ed. Watanabe Yoshimichi (Tokyo, 1949), VIII, 44-47.

²⁰Hōken shakai, p. 358. Fujitani, op. cit., p. 106.

²¹Kagoshima kenshi, I, 709-801.

²²Hōken shakai, pp. 360-1, 369-71. Nagano gold mine was shut down by the Tokugawa order in 1643.

²³For instance, Satsuma was ordered to help in the rebuilding of Edo Castle in 1605, in the building of Ueno Kan'eiji Temple in 1697, and in the Kiso River embankment project in 1754, which was especially costly. For details, see Kagoshima kenshi, II, 175-6, 199, 217-8.

²⁴Hōken shakai, p. 383.

²⁵Ibid., p. 385.

²⁶There were also such natural disasters as the eruption of Sakurajima in 1779 causing heavy damages and the destruction by at least five fires of the han quarters in Edo and Kyoto in the late 18th- and 19th centuries. Bakumatsu, p. 71. For the life and government of Shigehide, see Bakumatsu, pp. 33-42.

- ²⁷Yamamoto, "Satsuma-han no Tempō kaikaku," p. 123.
- ²⁸Bakumatsu, p. 66.
- ²⁹Ebihara, Tempō-do igo..., pp. 10-11.
- ³⁰Important consultants included Hamamura Magobei and other Osaka merchants, and Satō Nobuhiro, an economist, whose advice is contained in his Sappan keiki, 1830. See Bakumatsu, 72-76.
- ³¹Yamamoto, "Satsuma-han no Tempō kaikaku," p. 133.
- ³²Bakumatsu, p. 88.
- ³³Yamamoto, op. cit., p. 135. Ebihara, op. cit., p. 58, 62.
- ³⁴Yamamoto, ibid., pp. 136-46. Yamada Tatsuo, in his definition of Satsuma's Tempō Reform, included the enterprises of the Kaibutsukan and Shūseikan industrial and military works and the counterfeiting of the Ryukyu Tsūhō coins, Meiji zettai shugi..., p. 155. But these were all started after Zusho's death and by Nariakira who was opposed to Zusho and therefore should not be included in the Tempō Reform. See Mōri, Meiji ishin seijishi..., p. 51.
- ³⁵Kagoshima kenshi, II, 302-3.
- ³⁶Bakumatsu, p. 129.
- ³⁷Ibid., pp. 100-1. Fujimoto and Matsushita, "Bakumatsu ni okeru Satsuma-han no kaiun ni tsuite," pp. 413-5.
- ³⁸Bakumatsu, p. 127.
- ³⁹Ibid., pp. 129-42.
- ⁴⁰Yamamoto, op. cit., p. 138. For the oppressing effect of the systems of tojō and kadowari upon the local economy and peasants, see Sakai, "Feudal Society and...", pp. 370-72, Yamada and Iwakata, Kagoshima-ken nōgyōshi, p. 481 and 506, and also Honpu Yasushirō, Satsuma kenbunki [Observation on Satsuma] (1898), reprinted in Kagoshima, 1962, pp. 48-49.
- ⁴¹Yamamoto, ibid., p. 139.
- ⁴²Okawa Nobuyoshi, ed. Dai Saigō zenshū [Collected Works of Saigō Takamori] (Tokyo, 1926), I, 44-45. Kagoshima kenshi, II, 303-4.
- ⁴³Yamamoto, op. cit., pp. 136-46.
- ⁴⁴Naze shi-shi, pp. 363-5. Yamamoto, op. cit., p. 140.

⁴⁵Tonari Ueyoshi, Amami shidan [Historical Tales of Amami] (1903), ed., Haraguchi Torao (Naze, Kagoshima, 1964), pp. 38-39. Sakaguchi Tokutarō confirms these as facts, Amami-Oshima shi [History of Amami-Oshima] (Kagoshima, 1921), p. 312.

⁴⁶Amami-Oshima shi, p. 319.

⁴⁷Ibid., pp. 319-23. Kagoshima kenshi, II, 402-7.

⁴⁸Sasamori, Nantō tanken (1893), in Nippon shomin seikatsu shiryō shūsei, I, pp. 576-7.

⁴⁹Yamamoto, "Satsuma-han no Tempō kaikaku," p. 141.

⁵⁰There were natural disasters in 1830, 1832, especially severe one in 1833, 1834, 1835, 1836, and 1838. Naze-shi shi, pp. 716-19. Kagoshima kenshi, II, 437-41. Kagoshima kenshi nenpyō, pp. 130-32.

⁵¹Yamamoto, op. cit., p. 141.

⁵²Bakumatsu, p. 127.

⁵³Kagoshima kenshi, II, 411.

⁵⁴Ibid., II, 412. Yamamoto, op. cit., p. 143.

⁵⁵Kagoshima kenshi, II, 412. Yamamoto, loc. cit., Haraguchi, Satsuma no satō, p. 86.

⁵⁶For the sugar cultivation projects, see Honpō tōgyōshi, pp. 78-119. For the edicts encouraging sugar cultivation in 1786, 1788, 1800, and 1803, see Tokugawa rizai kaiyō, pp. 429-30.

⁵⁷Yamawaki, Nukeni, p. 107.

⁵⁸Tokugawa rizai kaiyō, pp. 430-1.

⁵⁹Honpō tōgyōshi, p. 406.

⁶⁰Ibid., p. 405.

⁶¹Kagoshima kenshi, II, pp. 412-3.

⁶²Ebihara, op. cit., p. 123. Probable direction of his thinking may be indicated by the fact that he himself took over the post of Ryukyuan legation supervisor in 1838 just when the sugar monopoly began running into difficulties.

⁶³Kagoshima kenshi, II, 259. Hōken shakai, pp. 443-4.

⁶⁴Ebihara, Tenpō-do igo..., pp. 82-83. Kagoshima kenshi, II, 263. Mori, Meiji ishin..., pp. 52-53.

- 65"Kyūki zatsuroku," Vol. 163, folio 85-90. Kagoshima kenshi, II, 263.
- 66Kagoshima kenshi, II, 264.
- 67Ebihara, Tempō-do igo..., p. 33. Kagoshima kenshi, II, 264.
- 68Hōken shakai, p. 402.
- 69Kagoshima kenshi, II, 273. Sakai, "Shimazu Nariakira and...", p. 226.
- 70For the relationship between Lord Nariakira and Zusho, see Sakai, "Shimazu Nariakira and...", pp. 222-26. For comments on the end of the Tempō Reform, see Mōri, Meiji ishin seijishi josetsu, pp. 52-53.
- 71Hōken shakai, p. 444.
- 72"Notes on Shipping and Trade in Japan and the Ryukyus," JAS, XXIII; 3 (May 1964), 377-81.
- 73Ibid., pp. 378-9.
- 74Ibid., p. 379.
- 75Ibid., p. 378.
- 76Loc. cit.
- 77Loc. cit.
- 78While the number of Ryukyu's tribute ships to China was limited, in the late 18th century Satsuma was trying to increase the ships' cargo capacity, and the mere number of the Chinese ships visiting Nagasaki was no indicator of the value of the trade at all, for these varied greatly from time to time. For instance, in 1681 total of nine Chinese ships visiting Nagasaki completed the trade amounting to only 1,477 kan of silver, averaging 164 kan each. For more details and information, see Iwao, "Kinsei Nisshi bōeki...", pp. 989-1000.
- 79Honjō Eijirō, comp., Nihon keizaishi jiten [Dictionary of the Economic History of Japan] (Tokyo, 1940), 1218-19.
- 80Tsuchiya Takao, Nihon keizaishi gaiyō [Brief Economic History of Japan] (Tokyo, 1934), p. 240.
- 81Its operation became difficult from about 1731. See Nihon zaisei keizai shiryō, VII, 1065-6.
- 82Yamawaki, Nagasaki no Tōjin bōeki, p. 282.

⁸³Ibid., pp. 172-5.

⁸⁴Ibid., pp. 226-7.

⁸⁵Ibid., p. 288.

⁸⁶Nomura Kanetarō, Nihon keizaishi [Economic History of Japan] (Tokyo, 1953), pp. 299-300. Honjō Eijirō, Nihon zaiseishi [Financial History of Japan] (Tokyo, 1926), pp. 219-20.

⁸⁷That the Tokugawa government derived little profit from the Nagasaki trade seems to be a fact but it does not necessarily mean that the Nagasaki trade was always a losing proposition. More likely Nagasaki merchants manipulated the trade and padded their expenses at the cost of the Tokugawa government finances. Town elders of Nagasaki (machi doshiyori) who controlled the trade were said to have lived a life more luxurious than a daimyo of 100,000 koku. See Fukuchi, Nagasaki sanbyakunenkan, pp. 211-13. For actual cases and figures, see Takekoshi, Nihon keizaishi, IV, 345 ff.

⁸⁸Shimazu Shigehide's third daughter was the wife of Shogun Ienari (reign, 1786-1837) and his three sons became the daimyo of Nakatsu-han, Fukuoka-han, and Hachinoe-han. Also Shimazu Nariakira's adopted daughter was the wife of Shogun Iesada (reign, 1853-58). See Shimazu genealogy, Kagoshima kenshi, supplementary volume, 57-8. It was probably this connection between the Shimazu daimyo and the Tokugawa shogun that gave Shimazu a powerful leverage in boosting its trade at Nagasaki despite the local officials' opposition and that gave Shimazu immunity in illegal trade and in practical forfeiture of debts in Osaka, Kyoto, and Edo.

⁸⁹Satsuma's total production, mainly of agricultural products, showed a decrease of 10,681 koku between 1826 and 1847, Kagoshima kenshi, II, 65. Yamamoto also concluded that whatever was done in agriculture was limited to reforms in minor and superficial aspects and did not extend to the basic production process, and thus failed to raise the agricultural production to any significant degree. "Satsuma-han no Tempō kaikaku," pp. 137-38.

⁹⁰For such features of the Satsuma society as the outer-castle system (tojō seido) and the rural warrior system (gōshi seido) that so dominated and stifled its economy, see Sakai, "Feudal Society...", pp. 366, 370-73. Also, one of Yamamoto's conclusions in his study of Satsuma's Tempō reform was the extremely low agricultural productivity which failed to produce enough to meet the government demand in spite of ruthless exploitation, ibid., p. 113.

⁹¹Honjō, Nihon zaiseishi, p. 223.

⁹²Nihon keizaishi jiten, p. 228.

⁹³Ibid., p. 264.

⁹⁴Hōken shakai, p. 445. Haraguchi, Satsuma no satō, p. 85.

⁹⁵In Satsuma traditional Confucian anti-commerce bias was represented by such men as Kabayama Chikara, Chichibu Sueyasu and their friends and followers who were known as the Kinshirokutō, or Kinshiroku Party after the Kinshiroku (Chin-ssu-lu in Chinese), a Confucian text they were devoted to. In 1807-08 they tried to reform the han finance and government according to the Confucian ideals. They incurred the wrath of Shigehide who ordered 13 leaders to commit suicide and punished about 100 others. Kagoshima kenshi, II, 242-48, 894-98. Bakumatsu, pp. 23-24, 43-50.

⁹⁶Sakata Yoshio, "Meiji ishin-shi to kaikyū shikan" ["History of Meiji Restoration and the Class Theory of History"], Jinbun gakuho, I (December 1950), p. 55. Sansom, A History of Japan, 1615-1867, p. 221.

⁹⁷Meiji ishin, pp. 35-37.

⁹⁸Sakai, "Feudal Society and...", p. 375.

BIBLIOGRAPHY

A. Ryukyuan and Japanese Materials

I. Primary and Official Sources (listed alphabetically by title)

Chūzan seifu fukan 中山世譜附卷
[Supplement to the Genealogy of Chuzan]. Compiled by Tei Heitetsu and others 鄭素哲及其他
1731-1876. In V of Ryukyu shiryō sōsho [Ryukyu Historical Materials Series], edited by Iha Fuyū and others. 5 vols. Tokyo, 1940-1942.

Dai Nippon kahei shi 大日本貨幣史
[History of the Currency in Japan]. Compiled by Ōkurashō 大藏省 . 8 vols. Tokyo, 1925-1926.

Dai Nippon kahei shi sankō 大日本貨幣史参考
[References for the History of the Currency in Japan]. Compiled by Ōkurashō 大藏省 . 3 vols. Tokyo, 1877-1883.

Dai Nippon komonjo 大日本古文書
[Old Documents of Japan]. Compiled by Tokyo daigaku shiryō hensanjo 東京大学史料編纂所 . Vol. XVI-2. Tokyo, 1953.

Dai Nippon sozei shi 大日本租税史
[Gazetteer of the Taxation in Japan]. Compiled by Ōkurashō 大藏省 . 3 vols. Tokyo, 1926.

Dai Saigō zenshū 大西郷全集
[Complete Works of the Great Saigō]. Compiled by Ōkawa Nobuyoshi 大河信義 . 3 vols. Tokyo, 1926.

Gotōkoku ontaka narabi shōjōnō ritsumoriki 御当国御高並
諸上納里積記 [Records of Ryukyu's Production Assessment and Various Taxes and Mileages]. Compiled by Takehara Pēchin Keitaku 篤原親雲上景宅
1749-1780's. MS.

Gozaisei 御賤制 [Fiscal Policy]. Compiled by Ryukyu Government 琉球王府 1715. MS.

Hanpōshū: Kagoshima-han 落法集 鹿兒島藩
[Collected Institutes of the Han: Kagoshima-han]. Compiled by Hanpōshū kenkyūkai 落法研究会 . VIII-1 and -2, Tokyo, 1969.

Ichiki shokikan torishirabe sho 一本書記官取調書
[Secretary Ichiki's Investigation Report]. Compiled by Ichiki Kitokurō 一本喜徳郎 . [Tokyo], 1894.
Reprinted in XIV-4 of Okinawa kenshi [History of Okinawa Prefecture]. Compiled by Ryukyu Government. Naha, 1965.

Kagoshima-han sogaku jiken 鹿児島藩租額事件
 [Dossier on the Taxation in Satsuma]. Edited by Tsuchiya
 Takao and Ohara Yutaka 土屋喬雄 小原豊 .
 In IV of Kinsei shakai keizai sosho [Social Economic Series for
 the Recent Period]. Compiled by Honjō Eijirō. Tokyo, 1926.

Kaiji shiryō sōsho 海事資料叢書
 [Materials for Maritime Affairs]. Edited by Sumida Shōichi
 住田正一 . 20 vol.s Tokyo, 1929-1931.

Kinsei jikata keizai shiryō 近世地方經濟史料
 [Historical Materials on Early Modern Local Economy]. Compiled
 by Ono Takeo 小野武夫 . 10 vols. Tokyo, 1932.
 A new edition, 1958.

Kinsei shakai keizai sōsho 近世社会經濟叢書
 [Social Economic Series for the Recent Period]. Compiled by
 Honjō Eijirō 本庄榮治郎 . 12 vols. Tokyo, 1926-1927.

Kōchū Haneji shioki 校注羽地仕置 [Annotated
 Haneji's Administration]. Edited by Higaonna Kanjun
 東恩納寛惇 . Tokyo, 1952.

Kyūki zatsuroku 旧記雜録 [Old Chronicle of
 Satsuma]. Compiled by Ijichi Sueyasu and Ijichi Seumichi
 伊地知季安 伊地知季通 . c1819-1897. 362 vols. MSS.

Kyūmei hōjō 糾明法条 [Investigative Law]. Compiled
 by Ryukyu government. 1745. MS.

Kyū Ryukyu-han kaheikō 旧琉球藩貨幣考
 [On the Currency in the Old Ryukyu]. Compiled by Iwai Tatsumi
 祝辰己 . 1895. In XXI-11 of Okinawa kenshi
 [History of Okinawa Prefecture]. Compiled by Ryukyu government.
 Naha, 1968.

Kyū Ryukyu-han sozeihō 旧琉球藩租税法
 [System of Taxation in the Old Ryukyu]. Compiled by Okinawa-ken
 沖縄縣 . Naha, 1879.

Kyūyō 球陽 [Ryukyu]. Compiled by Tei Heitetsu and
 others 鄭秉哲及其他 . 1745-1876. Edited by Miyazato
 Eiki 宮里榮輝 . 3 vols. Naha, 1929. Japanese
 translation by Kuwae Kokuei 桑江克英 . 1 vol.
 Naha, 1969.

Naha yuraiki 那霸由来記 [History of Naha].
 Arakaki Pēchin and others 新垣親雲上及其他 . 1709.
 Manuscript copy of 1876.

- Nanpo bunshū 南浦文集 [Writings of Nanpo]. 3 vols.
Bunshi Genshō 文之玄昌 . 1606-c1612. Edo, 1625.
 Woodblock print.
- Nanpei kikō 南聘紀考 [Accounts of Southern Missions].
Ijichi Sueyasu 伊地知季安 . 3 vols. 1832. MS.
- Nantō tanken 南島探驗 [Exploration of the Southern
 Islands]. Sasamori Gisuke 笹森儀助 . Tokyo, 1894.
 In I of Nihon shomin seikatsu shiryō shūsei [Materials for the
 History of the Common People in Japan]. Edited by Miyamoto
 Tsuneichi and others. Tokyo, 1968.
- Nariakira jihitsu Ahen sensō ki 斉彬白筆阿片戦争記
 [Record of the Opium War, written by Nariakira]. undated. MS.
- Nihon keizai sōsho 日本經濟叢書 (Bibliotheca
 Japonica Oeconomiae Politicae). Edited by Takimoto Seiichi
瀧本誠一 . 36 vols. Tokyo, 1914-1919.
- Nihon nōmin shiryō shūsui 日本農民史料聚粹
 [Materials on the History of the Peasants in Japan]. Compiled
 by Ono Takeo 小野武夫 . 12 vols. Tokyo, 1941-1944.
- Nihon sangyō shiryō taikai 日本産業資料大系
 [Materials on the Outline of the Industries in Japan]. Compiled
 by Takimoto Seiichi and Mukai Shikamatsu 瀧本誠一 向井鹿松 .
 12 vols. Tokyo, 1926.
- Nihon shomin seikatsu shiryō shūsei 日本庶民生活史料集成
 [Materials on the History of the Life of the Common People in
 Japan]. Compiled by Miyamoto Tsuneichi and others
宮本常一及其他 . 10 vols. Tokyo, 1968.
- Nihon zaisei keizai shiryō 日本財政經濟資料
 [Materials for the Financial and Economic History of Japan].
 Compiled by Ōkurashō 大藏省 . Tokyo, 1922-
 1923.
- Nōka suijōron: 農家衰情論 [On the Enervation of the
 Agricultural Families]. Ijichi Suemichi 伊地知季通 .
MS., undated.
- Ogoshihai shidai chō 大御支配次第帳 [Record of
 the Land Survey of Satsumaj]. Enomoto Shinbei 榎本新兵衛 .
 1728. MS., 1860 copy.
- Okinawa hōsei shi 沖縄法制史 [Okinawa Legal
 History]. Mori Kengo 森賢吾 . 1903. Edited by Kinjō
Chōei 金城朝永 . Tokyo, 1953.

Okinawa-ken kyūkan sozei seido 沖繩縣旧慣租稅制度
[The Traditional Taxation System of Okinawa]. Iwai Tatsumi
祝辰己 . 1895. In Naha-shi shi [History of
Naha City], compiled by Naha-shi, Naha, 1968, and in XXI-11 of
Okinawa kenshi [History of Okinawa Prefecture], Compiled by
Ryukyu government, Naha, 1968.

Okinawa-ken kyūkan sozei seido sanshō 沖繩縣旧慣租稅制度参照
[References for the Traditional Taxation System of Okinawa].
Iwai Tatsumi . 1895. In XXI-11 of
Okinawa kenshi [History of Okinawa Prefecture]. Compiled by
Ryukyu government. Naha, 1968.

Okinawa kenshi 沖繩縣史 [History of Okinawa
Prefecture]. Compiled by Ryukyu government. 21 vols. Naha,
1965.

Okinawa-ken shinkō jigyō setsumei sho 沖繩縣振興事業說明書
[Proposal for the Promotion of Industries in Okinawa Prefecture].
Compiled by Okinawa-ken 沖繩縣 . Naha, 1932.

Okinawa-ken tochi seiri kiyō 沖繩縣土地整理紀要
[Bulletin on Land Adjustments in Okinawa Prefecture]. Compiled
by Okinawa-ken 沖繩縣 . N.p., 1903.

Okinawa-ken tōkeisho: Meiji nijūsannen 沖繩縣統計書
明治二十三年 [Statistics of Okinawa Prefecture for 1890].
Compiled by Okinawa-ken 沖繩縣 . Naha, 1892.

Okinawa-ken Yaeyama-tō tōkei ichiran ryakuhyō 沖繩縣八重山島
統計一覽略表 [Brief Statistical Table for Yaeyama
Islands, Okinawa Prefecture]. Compiled by Okinawa-ken
沖繩縣 . Ishigaki, Okinawa, 1894.

Okinawa-ken zeisei kaisei no kyūmu naru riyū 沖繩縣稅制改正の
急務なる理由 [Reasons for the Urgent Need for Tax
Reform in Okinawa Prefecture]. Murakoshi Masataka
村越正高 . 1897. In XXI-11 of Okinawa kenshi [History of
Okinawa Prefecture]. Compiled by Ryukyu government. Naha, 1968.

Okinawa kenchi yōran 沖繩縣治要覽 [Outline of
Okinawa Prefectural Administration]. Compiled by Okinawa-ken
沖繩縣 . Tokyo, 1916.

Okinawa kyū-hōsei shiryō shūsei 沖繩旧法制史料集成
[Collection of Materials for the Legal History of Old Okinawa].
Compiled by Sakihama Shūmei 崎浜秀明 .
3 vols. Tokyo, 1966.

Okinawa kyūkan chihō seido 沖縄旧慣地方制度
[Traditional Local Government Systems of Okinawa]. Compiled by
Okinawa-ken 沖縄縣 . [Naha], 1895.

Ōshima hikki 大島筆記 [Ōshima Notes]. Tobe Yoshiteru
戸部良熙 . MS., 1761. Also in X of Nihon shomin
seikatsu shiryō shūsei [Materials on the History of the Life of
the Common People in Japan]. Compiled by Miyamoto Tsuneichi and
others. Tokyo, 1968.

Ryūkyaku danki 琉客談記 [Account of the Conversations
of Ryukyuan Guests]. Akazaki Teikan 赤崎貞幹 .
1797. MS., and woodblock print.

Ryukyu-han zakki 琉球藩雜記 [Miscellaneous Notes
on the Ryukyu-han]. Compiled by Okurashō 大蔵省 .
1873. In XIV-4 of Okinawa kenshi [History of Okinawa
Prefecture]. Compiled by Ryukyu government. Naha, 1965.

Ryukyu ikkenchō 琉球一件帳 [Dossier on Ryukyu]. Compiled
by Ginowan Chōkon 宜野湾朝昆 . MS., 1820.

Ryukyu-kan monjo 琉球館文書 [Documents of the
Ryukyuan Legation]. 1751-1813. 4 vols. MSS. The first 3
vols. published in photostat by Okinawa rekishi kenkyukai.
Naha, 1969-1970. The last volume in microfilm at the University
of Hawaii Library.

Ryukyu kankei monjo 琉球関係文書 [Documents relating
to Ryukyu]. Compiled by Shimazu-ke 島津家 . 18
vols. MSS.

Ryukyu karitsu 琉球科律 [Ryukyu Code]. Compiled by
Ie Chōkei and Kōchi Ryōtoku 伊江朝慶 寺地良篤 .
1775-1786. Edited by Miyagi Eisho 宮城榮昌 .
Tokyo, 1965.

Ryukyu-koku himonki no teihon sakusei no kenkyū 琉球国碑文記
定本作成の研究 [A Study of the Making of the
Authentic Copy of the Ryukyuan Epigraphs]. Compiled by Tsukada
Seisaku 塚田清策 . 4 vols. Tokyo, 1970.

Ryukyu-koku kyūki 琉球国旧記 [Old Records of the
Country of Ryukyu]. Compiled by Tei Heitetsu 鄭兼哲 .
1731. In III of Ryukyu shiryō sōsho [Ryukyu Historical Material
Series]. Compiled by Iha Fuyū and others. Tokyo, 1940-1942.

Ryukyu minwashū 琉球民話集 [Collection of Folk Tales
of Ryukyu]. Compiled by Higa Jusuke 比嘉寿助 . Naha,
1963.

Ryukyu sanbutsu kaisho sashitome ikken monjo 琉球產物会所
差止一件文書 [Dossier on the Closure of the
Ryukyuan Products Agency]. Compiled by Shimazu-ke
島津家 . c1839. MS.

Ryukyu sangyō seido shiryō 琉球產業制度資料
[Materials on the Industrial Systems of Ryukyu]. Compiled by
Nakayoshi Chōsuke 仲吉朝助 . In IX and X of
Kinsei jikata keizai shiryō [Materials relating to Early-modern
Local Economy]. Edited by Ono Takeo. Tokyo, 1958 edition.

Ryukyu sanbutsu Nakasaki ni oite haraitate narabi motode shina
rijun sōchō 琉球產物於長崎拂立並本手品利潤總帳
[Ledger of the Profits from the Sales of the Ryukyuan Products
at Nagasaki]. Compiled by Ryukyu sanbutsu-hō 琉球產物方 .
1847-1849. MS.

Ryukyu shiryō sōsho 琉球史料叢書 [Ryukyu Historical
Material Series]. Edited by Iha Fuyu, Yokoyama Shigeru, and
Higaonna Kanjun 伊波普猷 横山重 東恩納寛悳 .
5 vols. Tokyo, 1940-1942.

Ryukyu shisha sanpu no koto 琉球使者参府之事
[On the Matter of the Visits of Ryukyuan Envoys]. Compiled by
Ichida Kageyu 市田勘解由 . c1806. MS.

Ryukyu shobun 琉球処分 [The Disposition of Ryukyu].
Compiled by Matsuda Michiyuki 松田道之 . 3 vols.
Tokyo, 1879.

Ryukyu zakki 琉球雜記 [Miscellany on Ryukyu].
Compiled by Ginowan Chokon 宜野灣朝昆 . 1820. MS.

Sai On senshū 蔡溫選集 [Selected Works of Sai On].
Compiled by Okinawa rekishi kenkyūkai 沖縄歴史研究会
Naha, 1967.

Saiyū zakki 西遊雜記 [Record of the Travel to the
West]. Furukawa Koshōken 古河古松軒 . 1783. In
IX of Kinsei shakai keizai sōsho [Social Economic Series for
the Recent Period]. Compiled by Honjō Eijirō and others.
Tokyo, 1927.

Sappan keiki 薩藩經緯記 [Particulars of Satsuma]. Satō
Nobuhiro 佐藤信淵 . 1830. In II of Satō Nobuhiro
Kagaku zenshū [Complete Works of Satō Nobuhiro]. Compiled by
Takimoto Seiichi. Tokyo, 1926.

Sappan reiki zasshū 薩藩例規雜集 [Miscellaneous
Regulations of Satsuma]. MS., undated.

Sappan seiyōroku 薩藩政要錄 [Satsuma Administrative Manual]. Two versions compiled in 1828 and 1851. Edited by Momozono Keishin and Gomi Yoshio 桃園惠真 五味克夫 Kagoshima, 1960.

Sappan Tempō-do igo zaisei kaikaku tenmatsusho 薩藩天保度以後財政顛末書 [Report of the Financial Reform of Tempō Period in Satsuma]. Compiled by Ebihara Yōsai 海老原雄著. 1884. In IV of Kinsei shakai keizai sōsho [Social Economic Series for the Recent Period]. Compiled by Honjō Eijirō and others. Tokyo, 1962.

Sasshū sanbutsuroku 薩州產物錄 [Record of Satsuma's Products]. Satō Shigehiro 佐藤成裕 MS., 1792.

Sasshū tōbutsu raiyukō 薩州唐物來由考 [On the Import of Chinese Things into Satsuma]. Ijichi Sueyasu 伊地知孝安. MS., 1840.

Satsu-gū-jitsu denpu zatchō 薩隅日田賦雜徵 [Miscellany on Taxation in Satsuma, Osumi, and Hyūga]. Compiled by Ijichi Suemichi 伊地知孝通. c1885. In I of Kinsei jikata keizai shiryō [Historical Materials on Early Modern Local Economy]. Compiled by Ono Takeo. Tokyo, 1958.

Satō Nobuhiro kagaku zenshū 佐藤信洲家學全集 [Complete Works of Satō Nobuhiro]. Compiled by Takimoto Seiichi 瀧本誠一. 3 vols. Tokyo, 1926.

Satsuma kenbunki 薩摩見聞記 [Observations on Satsuma]. Honpu Yasushirō 本宮安四郎. 1898. Reprinted in Kagoshima, 1962.

Seihan densokō 西藩田租考 [On Land Taxation in the Satsuma-han]. Ijichi Sueyasu 伊地知孝安. 1837. In XXVI of Nihon keizai sōsho (Bibliotheca Japonica Oeconomiae Politicae). Edited by Takimoto Seiichi. Tokyo, 1916.

Shimazu-ke retchō seido 島津家列朝制度 [Successive Institutions of the House of Shimaze]. 59 vols. c 1819-c 1824. Edited by Haraguchi Torao 原口虎雄. In VIII-1 and VIII-2 of Hanpōshū [Collected Institutes of the Han]. Compiled by Ishii Ryōsuke. Tokyo, 1969.

Shimazu-ke Ryukyu-koku shoryō junkenshi ōtō 島津家琉球國所領巡見使答 [Replies to Questions on Ryukyu from the Bakufu Inspector]. 1789. In IV of Ryukyu kankei monjo. MSS.

Shina sappōshi rairyū shoki 支那册封使来琉諸記
 [Records of the Chinese Investiture Mission in Ryukyu].
 Compiled by Ryukyu government. 2 vols. MS., 1886.

Shogō eirō shirabe 諸郷榮勞調 [Report on the
 Decline of the Various Districts]. Kubo Heinaizaemon
 久保平内左衛門 . 1805. In IX of Nihon nōmin shiryō shūsui
 [Materials on the History of the Peasants in Japan]. Compiled
 by Ono Takeo. Tokyo, 1944.

Shokushō kigen 職掌紀原 [Origins of Posts].
 After 1790. Edited by Momozono Keishin 桃園惠真
 In VI of Kagoshima-ken shiryōshū [Historical Materials of
 Kagoshima]. Kagoshima, 1966.

Sozei mondō 租稅問答 [Questions and Answers on
 Taxation]. Kawaminami Kōen 汾陽光遠 . 1874.
 In II of Kinsei jikata keizai shiryō [Historical Materials on
 Early Modern Local Economy]. Compiled by Ono Takeo. Tokyo,
 1958.

Tokugawa Ieyasu monjo no kenkyū 徳川家康文書之研究
 [Study of the Documents of Tokugawa Ieyasu]. Nakamura Koya
 中村孝也 . 3 vols. Tokyo, 1960.

Tokugawa rizai kaiyō 徳川理財会要 [Financial
 Institutions of Tokugawa Government]. In XXXV and XXXVI of
Nihon keizai sōsho (Bibliotheca Japonica Oeconomiae Politicae).
 Edited by Takimoto Seichi. Tokyo, 1917.

To-Tōsen kihan no setsu kakugo oboe 渡唐船帰帆之節
 覚悟覚 [Instructions on the Return of Trade
 Ships from China]. 1693. In XIV of Sappan reiki zesshū. MS.

Tsūkō ichiran 通航一覽 [Survey of Foreign
 Relations]. Compiled by Hayashi Kō 林 光輝 . 1853.
 Edited by Hayakawa Junzaburō 早川 純三郎 . 8 vols.
 Tokyo, 1912-1913.

Tsūkō ichiran zokushū 通航一覽続輯
 [Supplement to the Survey of Foreign Relations]. Edited by
 Yanai Kenji 箭内健次 . 5 vols. Osaka, 1968.

II. Books

- Aihara Ryōichi 相原良一 . Tempō hachinen Beisen Morison-gō torai no kenkyū 天保八年米船モリス号渡来の研究 [A Study of the Visit of an American Vessel, the Morrison, in 1837]. Tokyo, 1954.
- Asabushi Shishio 朝武士 柳士雄 . Tōgyō yori mitaru Okinawa 糖業より見たる沖縄 [Okinawa as seen from the Sugar Industry]. Osaka, 1916.
- Ashitomi Matsuzō 安次富松蔵 . Kyū Ryukyu-han ni okeru tōgyō seisaku 旧琉球藩に於ける糖業政策 [Policy on the Sugar Industry in the Old Ryukyu]. Mimeograph, 1919.
- Chihōshi kenkyū kyōgikai, comp. 地方史研究協議会 Chihōshi kenkyū hikkei 地方史研究必携 [Manual for the Study of Local History]. Tokyo, 1952.
- _____, comp. Nihon sangyō-shi taikei 日本産業史大系 [Outline of the Industrial History of Japan]. 8 vols. Tokyo, 1960.
- Fukuchi Gen'ichirō 福地源一郎 . Nagasaki sanbyakunenkan 長崎三百年間 [Three Hundred Years of Nagasaki]. Tokyo, 1902.
- Furushima Toshio 古島敏雄 . Kinsei ni okeru shōgyōteki nōgyō no tenkai 近世に於ける商業的農業の展開 [Development of the Commercial Agriculture in the Recent Modern Period]. In XXII of Shakai kōseishi taikei [Outline of the History of Social Structure]. Edited by Watanabe Michiyoshi. Tokyo, 1950.
- Hani Gorō 羽仁五郎 . Meiji ishinshi kenkyū 明治維新史研究 [Study of the History of the Meiji Restoration]. Tokyo, 1956.
- Haraguchi Torao, ed. 原口虎雄 . Naze-shi shi 名瀬市史 [History of Naze City]. Naze, Kagoshima, 1968.
- _____. Bakumatsu no Satsuma 幕末の薩摩 [Satsuma during the Bakumatsu Period]. Tokyo, 1966.
- Hidemura Sensō, ed. 秀村選三 . Satsuma-han no kiso-kōzō 薩摩藩の基礎構造 [Basic Structure of the Satsuma-han]. Tokyo, 1970.
- Higa Shunchō 比嘉春潮 . Okinawa no rekishi 沖縄の歴史 [History of Okinawa]. Naha, 1959.

- Higa Shunchō, Shimota Masaji, and Shinzato Keiji 比嘉春潮
 霜田正次 新里恵二 · Okinawa. Tokyo, 1963.
- Higaonna Kanjun 東恩納寛惇 · Nantō fudoki
 南島風土記 [Accounts of the Natural Features of the Southern
 Islands]. Tokyo, 1950.
- _____. Ryukyu no rekishi 琉球の歴史
 [History of Ryukyu]. Tokyo, 1957.
- _____. Reimeiki no kaigai kōtsū shi 黎明期の
 海外交通史 [History of Overseas Contacts at the Dawn
 of a New Age]. Tokyo, 1941.
- _____. Okinawa konjaku 沖縄今昔
 [Okinawa, Now and in the Past]. Tokyo, 1958.
- _____. Shō Tai kō Jitsuroku 尚泰候実録
 [Authentic Record of Marquis Shō Tai]. Tokyo, 1924.
- Higuchi Hiromu 樋口 弘 · Honpō tōgyōshi 本邦糖業史
 [History of the Sugar Industry in Japan]. Tokyo, 1943.
- Honjō Eijirō 本庄榮治郎 · Nihon zaiseishi
 日本財政史 [Financial History of Japan]. Tokyo, 1926.
- Horie Eiichi 堀江英一 · Hōken shakai ni okeru shihon
 no sonzai keitai 封建社会に於ける資本の存在形態
 [Morphology of the Capital in a Feudal Society]. In VII of
Shakai kōseishi taikei [Outline of the History of the Social
 Structure]. Chief ed. Watanabe Yoshimichi. Tokyo, 1949.
- Horie Yasuzō 堀江安蔵 · Kinsei Nihon no keizai seissku
 近世日本の経済政策 [Economic Policy of Recent
 Modern Japan]. Tokyo, 1942.
- _____. Kokusan shōrei to kokusan senbai 国産奨励と
 国産専賣 [Encouragement and Monopoly of the
 Special Local Products]. Tokyo, 1963.
- Iha Fuyū 伊波普猷 · Ko Ryukyu 古琉球 [Old Ryukyu].
 4th ed. Tokyo, 1942.
- _____. Okinawa rekishi monogatari 沖縄歴史物語
 [Historic Tales of Okinawa]. Tokyo, 1946.
- _____. Ryukyu kokon ki 琉球古今記 [Record of
 Ryukyu, Past and Present]. Tokyo, 1936.

- _____ and Majikina Ankō 眞境名安興 . Ryukyu no go ijin 琉球の五偉人 [Five Great Men of Ryukyu]. Naha, 1916.
- Ijichi Sadaka 伊地知貞馨 . Okinawa shi 沖縄志 [Okinawa Gazetteer]. 5 vols. Tokyo, 1877.
- Ikehara Shinichi 池原真一 . Okinawa tōgyōron 沖縄糖業論 [Treatise on the Sugar Industry in Okinawa]. Naha, 1969.
- Inamura Kenpu 稲村賢敷 . Miyako-tō shomin shi 宮古島庶民史 [History of the People of Miyako Island]. Naha, 1957.
- Inoue Kiyoshi 井上清 . Nihon no rekishi 日本の歴史 [History of Japan]. 3 vols. Tokyo, 1965.
- Ishihara Michihiro 石原道博 . Min-matsu Shin-sho Nihon kōshi no kenkyū 明末清初日本乞師之研究 [Study of the Chinese Request for Japanese Expedition to China in the Middle-Seventeenth Century]. Tokyo, 1945.
- Ishii Takashi 石井孝 . Gakusetsu hihan Meiji ishin ron 学説批判明治維新論 [Critique of the Theories of the Meiji Restoration]. Tokyo, 1961.
- Itō Tasaburō 伊東多三郎 . Bakuhan taisei 幕藩体制 [The Baku-han Structure]. Tokyo, 1956.
- _____ . Kokugakusha no michi 国学者の道 [Way of a Nationalist Scholar]. Tokyo, 1944.
- Iwanami shoten, comp. 岩波書店 . Iwanami kōza: Nihon rekishi 岩波講座 日本歴史 [Iwanami Lectures: History of Japan]. 23 vols. Tokyo, 1962.
- Iwao Seiichi 岩生成一 . Shuinsen bōekishi no kenkyū 朱印船貿易史の研究 [Study of the History of the Red-Seal Trading Ships]. Tokyo, 1958.
- Iwasaki Takuji 岩崎卓爾 . Hirugi no hitoha ひるぎの一葉 [A Mangrove Leaf]. Ishigaki, Okinawa, 1920.
- Kagoshima-ken, comp. 鹿児島県 . Kagoshima kenshi 鹿児島県史 [History of Kagoshima Prefecture]. 5 vols. Kagoshima, 1939-1943.
- Keyomura Kōjin 慶世村公任 . Miyako shiden 宮古史傳 [History of Miyako]. Hirara, Okinawa, 1927.

Kimiya Yasuhiko 木宮泰彦 . Nisshi kōtsū shi
日支交通史 [History of the Intercourse Between
Japan and China]. 2 vols. Tokyo, 1927.

_____. Nikka bunka kōryū shi 日華文化交流史
[History of the Cultural Intercourse Between Japan and China].
2 vols. Tokyo, 1955.

Kishaba Eijun 喜舎場永珣 . Yaeyama rekishi 八重山
歴史 [History of Yaeyama]. Ishigaki, Okinawa, 1954.

_____. Ishigaki chōshi 石垣町誌
[Ishigaki Township Gazetteer]. Naha, 1935.

Kitajima Masamoto 北島正元 . Edo jidai 江戸時代
[Edo Period]. Tokyo, 1970.

Kobata Atsushi 小葉田淳 . Chūsei nantō tsūkō bōekishi
no kenkyū 中世南島通交貿易史の研究
[Study of Overseas Contacts and Trade of the Southern Islands in
the Middle Ages]. 1939. Tokyo, 1968 edition.

Majikina Ankō 眞境名安興 . Okinawa gendai shi
沖縄現代史 [Modern History of Okinawa]. Naha,
1967.

_____. Okinawa issennen shi 沖縄一千年史
[Thousand-year History of Okinawa]. 1913. 4th edition,
Fukuoka, 1952.

Minamoto Takeo 源武雄 . Ryukyu rekishi yawa
琉球歴史夜話 [Night Tales on the History of Ryukyu].
Naha, 1965.

Miyagi Eishō 宮城榮昌 . Okinawa no rekishi
沖縄の歴史 [History of Okinawa]. Tokyo, 1968.

Miyamoto Mataji, ed. 宮本又次 . Kyūshū keizaishi
ronshū 九州経済史論集 [Essays on the Economic
History of Kyushū]. Fukuoka, 1956.

Mōri Toshihiko 毛利敏彦 . Meiji ishin seijishi
josetsu 明治維新政治史序説 [Preliminary Study of
the Political History of the Meiji Restoration]. Tokyo, 1967.

Mutō Chōhei 武藤長平 . Seinan bun'un shiron
西南文運史論 [Historical Essays on Cultural Developments
in the Southwest]. Tokyo, 1926.

Naha-shi, comp. 那覇市 . Naha-shi shi 那覇市史
[History of Naha City]. Naha, 1968-.

Nakahara Zenchū 仲原善忠 . Ryukyu no rekishi
琉球の歴史 [History of Ryukyu]. 2 vols. Naha, 1952.

_____. Nakahara Zenchū senshū 仲原善忠選集
[Selected Works of Nakahara Zenchū]. 3 vols. Naha,
1969.

Naze-shi shi hensan iinkai, comp. 名瀬市史編纂委員会
Naze-shi shi 名瀬市史 [History of Naze City]. Naze,
Kagoshima, 1968.

Nihon rekishigakkai, comp. 日本歴史学会
Chihōshi kenkyū no genjō 地方史研究の現状 [Current
Situation of the Study of Local History]. 3 vols. Tokyo, 1969.

Nishimura Sutezō 西村捨三 . Nantō kiji gaihen
南島記事外篇 [Supplement to the Accounts of the Southern
Islands]. 2 vols. Tokyo, 1886.

Nomura Kanetarō 野村兼太郎 . Nihon keizai shi
日本経済史 [Economic History of Japan]. Tokyo, 1953.

Okinawa bunka kyōkai, comp. 沖縄文化協会 Okinawa
bunka sōron 沖縄文化総論 [General Treatises on
Okinawa Culture]. Tokyo, 1970.

Okinawa kankō kyōkai, comp. 沖縄観光協会 . Shin
Okinawa annai 新沖縄案内 [New Guide to Okinawa]. Naha,
1956.

Okinawa shihan gakkō, comp. 沖縄師範学校 . Okinawa-
ken chishi ryaku 沖縄縣地誌畧 [Brief Topography
of Okinawa Prefecture]. N.p., 1885.

Okuno Hikorokurō 奥野彦太郎 . Okinawa no jinji
hōsei shi to genkō jinjihō kaisei kanken 沖縄の人事法制史
と現行人事法改正管見 [History of Personal Laws
and Institutions and Private Opinion on the Revision of the
Existing Law in Okinawa], in XIV:3 of Shihō kenkyū [Studies
in Judicial Administration]. Tokyo, 1931.

Osaka satōshō kumiai, comp. 大阪砂糖商組合
Nihon satō shōgyō enkaku shi 日本砂糖商業沿革史 [History of
the Sugar Enterprise in Japan]. 1901. Appendix to Tōgyō yori
mitaru Okinawa [Okinawa as seen from the Sugar Industry].
Asabushi Shishio. Osaka, 1916.

Ota Chōfu 太田朝敷 . Okinawa kensei gojūnen
沖縄縣政五十年 [Fifty Years of Okinawa's Prefectural
Administration]. Tokyo, 1932.

- Ōtsuki Fumihiko 大槻 文彦 . Ryukyu shinshi
 琉球新誌 [New Gazetteer of Ryukyu]. Tokyo,
 1873.
- Rekishigaku kenkyūkai, comp. 歴史学研究会
Meiji ishinshi kenkyū kōza 明治維新史研究講座
 [Lectures on the History of the Meiji Restoration]. 6 vols.
 Tokyo, 1958-1959.
- _____ and Nihonshi kenkyūkai, comp.
日本史研究会 . Nihon rekishi kōza 日本歴史講座
 [Lectures on Japanese History]. 8 vols. Tokyo,
 1961-1963.
- Sekiyama Naotarō 関山 直太郎 . Kinsei Nihon jinkō no
kenkyū 近世日本人口の研究 [A Study of the
 Population in the Early Modern Japan]. Tokyo, 1948.
- _____ . Kinsei Nihon no jinkō kōzō 近世日本の
人口構造 [Population Structure in the Early Modern
 Japan]. Tokyo, 1969.
- Shidehara Tan 謝原 坦 . Nantō enkaku shiron
南島沿革史論 [Treatise on the History of the
 Southern Islands]. Tokyo, 1899.
- Shimazu-ke, comp. 島津家 . Sappan kaigun shi
薩藩海軍史 [Maritime History of the Satsuma-han]. 3
 vols. Tokyo, 1928.
- Shin'yashiki Kōhan 新屋敷 幸繁 . Shinkō Okinawa
issennen shi 新譜沖繩一千年史 [New One-Thousand Year
 History of Okinawa]. 2 vols. Naha, 1967.
- Takahashi Kamekichi 高橋 龜吉 . Tokugawa hōken keizai
no kenkyū 徳川封建経済の研究 [Study of the
 Feudal Economy during the Tokugawa Period]. Tokyo, 1933.
- Takekoshi Yosaburō 竹越 與三郎 . Nihon keizai shi
日本経済史 [Economic History of Japan]. 8 vols.
 Tokyo, 1920.
- Tamamuro Taijō 圭室 諦成 . Saigō Takamori 西郷隆盛.
 Tokyo, 1960.
- Tamura Hiroshi 田村 浩 . Ryukyu kyōsan sonraku no
kenkyū 琉球共産村落の研究 [Study of
 Communal Villages in Ryukyu]. Tokyo, 1927.
- Tōbata Seiichi, comp. 東畑 精一 . Nihon nōgyō
hattatsu shi 日本農業発達史 [History of the
 Agricultural Development in Japan]. 12 vols. Tokyo, 1953-1959.

Tokutomi Iichirō 徳富 猪一郎 . Kinsei Nihon kokumin shi 近世日本国民史 [Recent History of the Japanese People]. 100 vols. Tokyo, 1918-1962.

Tōyama Shigeki 遠山 茂樹 . Meiji ishin 明治維新 [Meiji Restoration]. Tokyo, 1951.

Tsuchiya Takao 土屋 喬雄 . Hōken shakai hōkai katei no kenkyū 封建社会崩壊過程の研究 [Study of the Process of the Disintegration of the Feudal Society]. Tokyo, 1927.

_____ . Kinsei Nihon nōson keizai shiron 近世日本農村經濟史論 [Economic History of Rural Japan in the Early Modern Period]. Tokyo, 1947.

_____ . Nihon keizaishi gaiyō 日本經濟史概要 [Brief Economic History of Japan]. Tokyo, 1934.

Uchida Ginzō 内田 銀蔵 . Nihon keizaishi no kenkyū 日本經濟史の研究 [Studies of the Economic History of Japan]. Tokyo, 1924.

Yamada Tatsuo 山田 龍雄 . Meiji zettai shugi no kiso katei 明治絶対主義の基礎過程 [Development of the Meiji Absolutism]. Tokyo, 1962.

Yamawaki Teijirō 山脇 禎次郎 . Nagasaki no Tōjin bōeki 長崎の唐人貿易 [Chinese Trade at Nagasaki]. Tokyo, 1964.

_____ . Nukeni 抜荷 [Smuggling]. Tokyo, 1965.

Yamazato Eikichi 山里 永吉 . Ryukyu rekishi monogatari 琉球歴史物語 [Tales of Ryukyuan History]. Naha, 1965.

Watanabe Yoshimichi, chief ed. 渡辺 義通 . Shakai kōseishi taikai 社会構成史大系 [Outline of the History of the Social Structure]. 7 vols. Tokyo, 1949.

III. Dictionaries and Encyclopedias

Honjō Eijirō, comp. 本庄 榮治郎 . Nihon keizaishi jiten 日本經濟史辞典 [Dictionary of the Economic History of Japan]. 3 vols. Tokyo, 1940.

Kanazawa Kanemitsu, comp. 金沢 兼光 . Wakan sen'yōshū 和漢船用集 [Encyclopedia of Maritime Affairs]. (1766) In II of Kaiji shiryō soshō [Materials for Maritime Affairs]. Compiled by Sumida Shōichi 住田 正一 . Tokyo, 1930.

Terajima Ryōan, comp. 寺島 良安 . Wakan sansai zue 倭漢三才圖會 [Illustrated Encyclopedia of Japan and China] (1712). 2 vols. Tokyo, 1929.

IV. Articles and Periodicals

Amami kyōdo kenkyūkaihō 奄美郷土研究会報 [Bulletin of the Association for the Study of Amami Islands]. Naze, Kagoshima.

Fujimoto Takashi 藤本 隆士 and Matsushita Shirō 松下 志朗 . "Bakumatsu ni okeru Satsuma-han no kaiun ni tsuite" 幕末に於ける薩摩藩の海運について ["On the Maritime Transportation of the Satsuma-han during the Rakumatsu Period"], in Satsuma-han no kiso-kōzō, compiled by Hidemura Senzō. Tokyo, 1970. pp. 413-464.

Fujitani Toshio 藤谷 俊雄 . "Satsuma-han no shakai soshiki to senbai seido" 薩摩藩の社会組織と専賣制度 ["Satsuma's Social System and Monopoly System"], Nihon-shi kenkyū [Journal of Japanese History]. VI (1947), 98-117.

Hamamura Shōsaburō 浜村 正三郎 . "Ishin zengo no tōgyō" 維新前後の糖業 ["Sugar Business before and after the Meiji Restoration"], Keizaishi kenkyū [Journal of Economic History]. XX:1 (July 1938), 1-25.

Haraguchi Torao 原口 虎雄 . "Kagoshima-han gaiseisu" 鹿児島藩概説 ["Outline of the Kagoshima-han"], in VIII-1 of Hanpōshū: Kagoshima-han [Collected Institutes of the Han: Kagoshima-han], compiled by Hanpōshū kenkyūkai. Tokyo, 1969. pp. 9-19.

_____ . "Satsuma no satō" 薩摩の砂糖 ["Sugar in Satsuma"], in Nihon sangyōshi taikei [Outline of the Industrial History of Japan], comp. Chihōshi kenkyū kyōgikai. (Tokyo, 1960), VIII, 74-105.

- Higa Shunchō 比嘉春潮 . "Okinawa no sangyō"
 沖縄の産業 ["Industries in Okinawa"], in Nihon
sangyōshi taikai [Outline of the Industrial History of Japan],
 comp. Chihōshi kenkyū kyōgikai. (Tokyo, 1960), VIII, 309-327.
- Higaonna Kanjun 東恩納寛惇 . "Nantō tsūkashi no
 kenkyū" 南島通貨史の研究 ["Study of the
 Currency in the Southern Islands"], Takushoku daigaku ronshū
 [Takushoku University Essays] (Tokyo, 1955-56), IX, 440-517,
 X, 1-85.
- Inoue Kiyoshi 井上清 . "Okinawa" 沖縄
 ["Okinawa"], Iwanami koza: Nihon rekishi [Iwanami Lectures:
 History of Japan]. XVI-3 (Tokyo, 1962), 315-335.
- Ishii Takashi 石井孝 . "Bakumatsu ichi seisō no
 keitai" 幕末一政争の型態 ["A Form of a Political
 Struggle in the Bakumatsu Period"], I,1 (November 1933), 38-45.
- Iwakata Iso'o 岩片磯雄 and Yamada Tatsuo 山田龍雄
 "Kagoshima-ken nogyoshi" 鹿児島県農業史
 ["Agricultural History of Kagoshima"], in Nihon nōgyō hattatsu
shi [History of the Agricultural Development in Japan], comp.
 Tōbata Seiichi. II (Tokyo, 1954), 469-527.
- Iwao Seiichi 岩生成一 . "Kinsei Nisshi bōeki ni
 kansuru sūryōteki kōsatsu" 近世日支貿易に関する数量的考察
 ("A Study on the Chinese Trade with Japan in the XVIIth Century -
 Chiefly on their Volume and Quantity"), Shigaku zasshi
 (Historical Journal of Japan), LXII:11 (November 1953), 1-40.
- Jinbun gakuho 人文学報 (Journal of Humanistic
 Science). Kyoto University.
- Keizaigaku zasshi 経済学雑誌 [Journal of Economic
 Science]. Tokyo.
- Keizaishi kenkyū 経済史研究 [Journal of Economic
 History]. Tokyo.
- Keizai shirin 経済志林 (Economic Review).
 Hōsei University, Tokyo.
- Kenkyū yoteki 研究余滴 [Extra Dews of Studies].
 Naha, Okinawa.

Kobata Atsushi 小葉田 淳 . "Kinsei shoki no Ryū-Min kankei" 近世初期の琉明関係 ["Ryukyu-Ming Relations during the Early Recent Period"], in Taihoku teikoku daigaku shigakuka kenkyūshitsu nenpō [Annual Bulletin of the History Department of Taihoku Imperial University], VII (June 1942). Reprinted in Chūsei nantō tsūkō bōekishi no kenkyū [Study of Overseas Contacts and Trade of the Southern Islands in the Middle Ages]. Tokyo, 1968 edition. Appendix pp. 1-86.

Maeda Kazuo 前田 和雄 . "Sakokuka no Sappan bōeki" 鎖国下の薩藩貿易 ["Satsuma's Trade under the Seclusion Policy"], Keizaigaku zasshi [Journal of Economic Science], XIII:5, 107-123.

Minamoto Takeo 源 武雄 . "Kinsei Okinawa jinkō-shi no mondaiten" 近世沖縄人口史の問題点 ["Problems in the History of Population in the Early Modern Okinawa"], in Ryukyu shimpō. January to February, 1964.

Nakahara Zenchū 仲原 善忠 . "Jūroku seiki-matsu ni okeru Satsu-Ryū kan no kinchō o megutte" 十六世紀末に於ける薩琉間の緊張をめぐって ["Reflections on the Tensions between Satsuma and Ryukyu at the end of the 16th century"], in Okinawa to Ogasawara [Okinawa and Bonin], XII (1960), 34-40. Reprinted in Nakahara Zenchū senshū [Selected Works of Nakahara Zenchū]. I (Naha, 1969), 629-641.

_____. "Satō no raireki" 砂糖の来歴 ["History of Sugar"], in Okinawa Times, April 10 to May 25, 1963. Reprinted in Nakahara Zenchū senshū [Selected Works of Nakahara Zenchū]. I (Naha, 1969), 276-373.

_____. "Shimazu shin'nyū no rekishiteki igi to hyōka" 島津進入の歴史的意義と評価 ["Evaluation and Historical Significance of Shimazu's Advance into Ryukyu"], in Nakahara Zenchū senshū [Selected Works of Nakahara Zenchū]. I (Naha, 1969), 238-275.

_____. "Ukon ōrai" 鬱金往来 ["Correspondence on Turmeric"], in Ryukyu shimpō, September 1959. Reprinted in Nakahara Zenchū senshū [Selected Works of Nakahara Zenchū]. I (Naha, 1969), 610-628.

Nakamura, Hidemitsu 仲村 秀光 . "Ryukyu nashonarizumu no zasetsu" 琉球ナショナリズムの挫折 ["Collapse of Ryukyuan Nationalism"], in Ryukyu shimpō, June 4, 1968.

Nakayoshi Chōsuke 仲吉 朝助 . "Ryukyu no jiwari seido" 琉球の地割制度 ["Land Allotment System in Ryukyu"], Shigaku zasshi [Historical Journal of Japan], IXL (1928), 441-466, 578-602, 797-838. Also a manuscript copy, 1938.

Nihon rekishi 日本歴史 [Japanese History]. Tokyo.

Nihon-shi kenkyū 日本史研究 [Journal of Japanese History]. Tokyo.

Okinawa bunka 沖縄文化 (The Quarterly Bulletin for the Okinawan Studies). Naha and Tokyo.

Okinawa rekishi kenkyū 沖縄歴史研究 [Journal of Okinawan History]. Naha.

Okinawa Times 沖縄タイムス . Naha.

Okinawa to Ogasawara 沖縄と小笠原 [Okinawa and Bonin]. Tokyo. From XXI (June 1962) the title changed to Minami to Kita 南と北 [South and North].

Rekishi hyōron 歴史評論 [Critiques on History]. Tokyo.

Rekishigaku kenkyū 歴史学研究 [Journal of Historical Studies]. Tokyo.

Ryukyu shimpō 琉球新報 . Naha.

Sakata Yoshio 坂田 吉雄 . "Meiji ishin to Tempō kaikaku" 明治維新と天保改革 ["Meiji Restoration and Tempō Reform"], Jinbun gakuho (Journal of Humanistic Science), II (March 1952), 1-26.

_____. "Meiji ishinshi to kaikyū shikan" 明治維新史と階級史観 ["History of the Meiji Restoration and the View of History as Class Struggle"], Jinbun gakuho (Journal of Humanistic Science), I (1950), 43-60.

Shigaku zasshi 史学雑誌 (Historical Journal of Japan). Tokyo.

Shimomura Fujio 下村 富士男 . "Ryukyu ōgoku ron" 琉球王国論 ["On Ryukyu Kingdom"], Nihon rekishi [Japanese History], #176 (January 1963), 24-43.

Shinzato Keiji 新里 恵二 . "Ryukyu ōgoku no kokudaka to Satsuma eno kōsodaka" 琉球王国の石高と薩摩への貢租高 ["Ryukyu's Productivity and its Tribute-tax to Satsuma"], Okinawa to Ogasawara [Okinawa and Bonin], XVI (April 1961), 56-66. Reprinted in Okinawa-shi o kangaeru [Okinawan History Re-evaluated] (Tokyo, 1970), pp. 289-309.

Shirin 史林 [Journal of History]. Kyoto.

Takeo Yōko 竹野 要子 . "Satsuma-han no Ryukyu
bōeki to bōekishō Ishimoto-ke no kankei" 薩摩藩の琉球貿易と
貿易商石本家の関係 ["Relationship between
Satsuma's Ryukyu Trade and the Trader, the Ishimoto Family"],
in Kyushu keizaishi ronshū [Essays on the Economic History of
Kyushu], edited by Miyamoto Mataji. Fukuoka, 1956. Reprinted
in Satsuma-han no kiso-kōzō [Basic Structure of the Satsuma-han],
ed. Hidemura Senzō. Tokyo, 1970. pp. 465-491.

Takushoku daigaku ronshū 拓植大學論集 [Takushoku
University Essays]. Tokyo

Toguchi Shinsei 渡口 眞清 . "Jitōji-
hyakushōji" 地頭地一百姓地 ["Steward's Land and Peasant's Land"],
Okinawa rekishi kenkyū [Journal of Okinawan History], I (October
1965), 3-22.

_____ . "Jūnanaseiki Satsuma no shinkō"
十七世紀薩摩の侵攻 ["Invasion of Satsuma in the 17th
Century"], Okinawa rekishi kenkyū [Journal of Okinawan History],
II (May 1966), 19-35.

_____ . "Kongō-daka" 混合高 ["Mixed
Assessment"], Kenkyū yoteki [Extra Dews of Studies], #79
(October 14, 1969), 1-2.

_____ . "Mokuroku-daka to jōnō" 目録高と上納
["Official Productivity Assessment and Tribute-tax"], Okinawa
rekishi kenkyū [Journal of Okinawan History], IV (July 1967),
21-56.

_____ . "Sakoku to Ryukyu" 鎖国と琉球
["Japan's Seclusion Policy and Ryukyu"], Okinawa bunka (The
Quarterly Bulletin for the Okinawan Studies), VII:1 (August
1969), 16-26.

_____ . "Shinobose ro enkaku to haikai"
仕上世の沿革と背景 ["Origin and Background of the Tribute-
tax"], Okinawa rekishi kenkyū [Journal of Okinawan History], III
(November 1966), 52-72.

Tokorozaki Hei 所崎 平 . "Tōgyō sōshi keichō nenkan
setsu eno gimon" 糖業創始慶長年間説への疑問
["Questions on the Theory of the Beginning of the Sugar
Industry during the Keichō Period"], Amami kyōdo kenkyū-kaihō
[Bulletin of the Association for the Study of Amami Islands],
VIII (October 1966), 1-33.

Tōyama Shigeki 遠山茂樹 . "Tempō-ki -- kaikō chokuzen" 天保期一開口直前 ["Tempō Period -- Immediately before the Opening of the Country"], Meiji ishinshi kenkyū kōza [Studies of the History of the Meiji Restoration], compiled by Rekishigaku kenkyūkai. Tokyo, 1958. II, 58-59.

Tsuda Hideo 津田秀夫 . "Tempō no kaikaku" 天保の改革 ["Reform of Tempō"], Nihon rekishi kōza [Japanese History Series], compiled by Rekishigaku kenkyūkai and Nihonshi kenkyūkai. Tokyo, 1959. VI, 107-136.

Yamamoto Hirobumi 山本弘文 . "Sappan Tempō kaikaku no zentei" 薩藩天保改革の前提 ["Premises for the Tempō Reform in Satsuma"], Keizai shirin (Economic Review), XXII:4 (October 1954), 112-156.

_____. "Satsuma eno kōnō mondai ni tuite" 薩摩への貢納問題について ["On the Tribute-tax to Satsuma"], Rekishi hyōron [Critiques on History], #163 (March 1964), 58-65.

_____. "Satsuma-han no Tempō kaikaku" 薩摩藩の天保改革 ["Tempō Reform in Satsuma"], Keizai shirin (Economic Review), XXIV:3 (July 1956), 112-150.

_____. "Tempō kaikaku-go no Sappan no seijō" 天保改革後の薩藩の政情 ["Post-Tempō Reform Political Situation in Satsuma"], Keizai shirin (Economic Review), XXVI:1 (January 1958), 84-112.

Yonekura Jirō 米倉二郎 . "Fukushū no Ryukyu-kan" 福州の琉球館 ("The Liu-ch'iu-an Hostel at Foochow"), Shirin [Journal of History]. XXII:1 (January 1937), 187-193.

B. Chinese Works (Primary and Secondary Sources)

- Chao Hsin 趙新 . Hsü Liu-ch'iu-kuo chih-lüeh
琉球國志略 [Supplement to a Brief Gazetteer of
the Liu-ch'iu Country]. 1882. 2 chüan in 4 vols.
- Ch'en Kan 陳侃 . Shih Liu-ch'iu lu 使琉球錄
[Report of a Mission to Liu-ch'iu]. 1534. Manuscript copy. 1 vol.
- Ch'en Ta-tuan 陳大端 . Yung Ch'ien Chia shih-tai ti
Chung-Liu kuan-shi 雍乾時代的中琉關係
(A History of China-Liu-ch'iu Relations during the Reigns of
Emperors Yung-cheng, Ch'ien-lung and Chia-ch'ing, 1723-1820).
Taipei, 1956.
- Chou Huang 周煌 . Liu-ch'iu-kuo chih-lüeh
琉球國志略 [Brief Gazetteer of Liu-ch'iu]. 16 chüan in 6 vols.
Woodblock print. Peking, 1757.
- Chou I-hsiang 周益湘 . "Tao-kuang i-hou Chung-Liu mao-i-ti
t'ung-chi" 道光以後中琉貿易的統計
["Sino-Liu-ch'iu Trade Statistics after 1821"], Chung-kuo chin-tai
ching-chi shih yen-chiu, I:1 (November 1932). pp. 38-48.
- Chung-kuo chin-tai ching-chi shih yen-chiu
中國近代經濟史研究 [Journal of the Modern Economic
History of China]. Peking.
- Fu I-ling 傅衣凌 , Sa Shih-wu 薩士武 , and Hu Chi-
ching 胡寄馨 . Fu-chien tui-wei mao-i shih yen-chiu
福建對外貿易史研究 [Study of the History of Foreign
Trade at Fukien]. Fukien, 1948.
- Hsia Tzu-yang 夏子陽 and Wang Shih-cheng 王士禎
Shih Liu-ch'iu lu 使琉球錄 [Report of a Mission to
Liu-ch'iu]. 1606. Taipei, 1969.

C. English Materials

I. Books

- Blair, Emma H. and J. A. Robertson, ed. The Philippine
Islands; 1593-1888. 55 vols. Cleveland, Ohio, 1891-1898.
- Craig, Albert M. Chōshū in the Meiji Restoration. Cambridge,
Mass., 1961.
- Craig, A. M. and D. H. Shively, ed. Personality in Japanese
History. Berkeley, 1970.

Fairbank, John K. ed. The Chinese World Order. Cambridge, Mass., 1968.

_____, and S. Y. Teng. Ch'ing Administration: Three Studies. Cambridge, Mass., 1961.

Jansen, Marius B. Sakamoto Ryoma and the Meiji Restoration. Princeton, 196.

Kerr, George H. Okinawa: the History of an Island People. Tokyo and Rutland, 1958.

Perry, Mathew C. Narrative of the Expedition of an American Squadron to the China Seas and Japan. 3 vols. Washington, D. C., 1856.

Sakamaki, Shunzo. Ryukyu: A Bibliographical Guide to Okinawan Studies. Honolulu, 1963.

Sansom, George. A History of Japan, 1615-1867. Stanford, 1963.

_____. The Western World and Japan. New York, 1958.

Smith, Thomas C. Agrarian Origins of Modern Japan. Stanford, 1959.

Totman, Conrad D. Politics in the Tokugawa bakufu, 1600-1843. Cambridge, Mass., 1967.

Toyoda Takeshi. A History of Pre-Meiji Commerce in Japan. Tokyo, 1969.

Tsukahira, George T. Feudal Control in Tokugawa Japan: The Sankin Kōtai System. Cambridge, Mass., 1966.

II. Dissertations

Ch'en Ta-tuan. "Sino-Liu-ch'iu Relations in the Nineteenth Century," unpublished Ph.D. dissertation. Indiana University, 1963.

Matsuda Mitsugu. "The Government of the Kingdom of Ryukyu, 1604-1872," unpublished Ph.D. dissertation. University of Hawaii, 1967.

III. Articles and Journals

Ch'en Ta-tuan. "Investiture of Liu-ch'iu Kings in the Ch'ing Period," in The Chinese World Order, edited by J. K. Fairbank. Cambridge, Mass., 1968. pp. 135-164.

Crawcour, Sydney. "Notes on Shipping and Trade in Japan and the Ryukyus," Journal of Asian Studies, XXIII:3 (May 1964), 377-381.

Green, D. S. "Report made to Commodore Perry on the Medical Topography and Agriculture of the Island of Great Lew Chew," in Narrative of the Expedition of an American Squadron to the China Seas and Japan. M. C. Perry. II (Washington, D.C., 1856), 23-40.

Jones, George. "Report made to Commodore Perry of a Geological Exploration, Etc., of the Island of Great Lew Chew," in Narrative of the Expedition of an American Squadron to the China Seas and Japan. M. C. Perry. II (Washington, D.C., 1856), 53-58.

Journal of Asian Studies. Ann Arbor, Michigan.

Matsuda, Mitsugu. "The Ryukyuan Government Scholarship Students to China, 1392-1868," Monumenta Nipponica, XXI:3-4, 273-304.

Morrow, James. "Report made to Commodore Perry on the Agriculture of Lew Chew," in Narrative of the Expedition of an American Squadron to the China Seas and Japan. M. C. Perry. II (Washington, D.C., 1956), 15-22.

Najita Tetsuo, "Ōshio Heihachirō," in Personality in Japanese History, edited by A. M. Craig and D. H. Shively. Berkeley, 1970, pp. 155-179.

Sakai, Robert K., "Feudal Society and Modern Leadership in Satsuma-han," Journal of Asian Studies, XVI:3 (1957), 365-376.

_____, "The Satsuma-Ryukyu Trade and the Tokugawa Seclusion Policy," Journal of Asian Studies, XXIII:3 (May 1964), 391-403.

_____, "Shimazu Nariakira and the Emergency of National Leadership in Satsuma," in Personality in Japanese History, edited by A. M. Craig and D. H. Shively. Berkeley, 1970, pp. 209-233.

_____, "The Ryukyu Islands as a Fief of Satsuma," in The Chinese World Order, edited by J. K. Fairbank. Cambridge, Mass., 1968. pp. 112-134.

Sakamaki, Shunzo, "Ryukyu and Southeast Asia," Journal of Asian Studies, XXIII:3 (May 1964), 383-389.