

The Trade System of Port Cities in Mid-Nineteenth Century Taiwan

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Introduction

Abundant research has been made on Taiwan's external trade pattern in the nineteenth century. Topics ranging from development of ports, merchant organizations, merchandise, and business capital to trade operations have been well explored, thus offering a good understanding of the characteristics of that era. In particular, the intense impact of western powers in the mid-nineteenth century had forced Taiwan to turn coastal cities in treaty ports. The new trade pattern thus developed and its effects had drawn much attention. Consequently, plentiful research results on Taiwan's economic development were related to treaty ports.¹ Nevertheless, previous studies made mostly with reference to past maritime customs records of treaty ports focused mainly on the impact of the world market or China proper on Taiwan's trade development. Comparatively, little effort has been made on reviewing the growth of Taiwan's intricate and diverse trade patterns in the nineteenth century from the perspective of its own economic development. Apart from the treaty ports opened for foreign trade during that era, the challenges faced by other traditional ports and whether their trade patterns had undergone changes have rarely been discussed.

Under Qing rule (1683–1895) Taiwan evolved from a developing region into a developed one. Different districts on the island developed at different times and under different circumstances. Geographical relief separated the island into regions of varied sizes and with little communication. Remote areas with poor accessibility were left behind in economic growth. Jiayi 嘉義 of today marked the boundary between the subtropical northern part of the island and

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1 For discussion on related research, see Lin Manhong 1986; Lin Manhong 2005.

the tropic southern districts. Disparities in climate and environment existed between the north and the south. As a result, agricultural produces and products vary widely in different districts of the island. Whether such would lead to differences also in trade pattern is worth further exploration.

In his study on grain trade in Qing Taiwan, Yamamoto Susumu 山本進 pointed out that the official rice embargo imposed by the Qing court severed direct trade ties between Taiwan and both Jiangsu 江蘇 and Zhejiang 浙江. With Xiamen 廈門 of Fujian 福建 Province serving as a port of relay, an L-shaped trade network was thus formed. The beginning of nineteenth century saw a relaxation of the rice ban. Thus, the former direct trade relationship resumed and blossomed while business exchange between Taiwan and Fujian declined.² Yamamoto Susumu had attributed changes in trade development of Taiwan mainly to its relationship with China proper. Such perspective might have neglected the role played by regional differences in Taiwan's economic development and changes in port policy, which merit more in-depth investigation.

As mentioned above, radical changes took place beginning from the 1860s with the opening of treaty ports in Taiwan. Previous discussion has placed great emphasis on external navigation and trade in Taiwan being monopolized by western companies. Traditional guild merchants were thus marginalized and the once prosperous merchant organizations, known as *jiao* 郊 (guilds) declined and sank into oblivion.³ However, with examples from actual situation, Huang Fu-san, Lin Man-houng and Ye Chen-hui evidenced that the operation and expansion of western companies in Taiwan were not as smooth as they appeared to be. Rather, the path of development was paved with obstacles and difficulties, not to mention the fierce rivalry and keen competition from merchants of both China proper

2 Yamamoto Susumu 2002, 134-156.

3 This was the common perspective held by researchers such as Higashi Yoshio 東嘉生 from the Japanese colonial era to the post World War II years. However, Lin Man-houng [in the bibliographical notes in this article transcribed as "Lin Manhong"] 林滿紅 and Lin Yu-ju 林玉茹 had repudiated such claim, proving that the decline of merchant guilds in Taiwan had not occurred during the nineteenth century. For more details, see Lin Manhong 1994, 175-180; Lin Yu-ju 2000, ch. 5.

and Taiwan from the 1880s onwards.⁴ Nevertheless, foreign traders and domestic merchants, apart from being rivals and competitors at times, also collaborate in their business ventures. In particular, the cooperation between western companies and guild merchants has rarely been discussed. Moreover, fallacies abound due to generalizations made from prior research findings obtained mainly from maritime customs records of treaty ports. What happened in certain regions of Taiwan might not reflect the true situation all over the island. For example, some scholars claimed that Taiwan no longer exported rice from the 1870s and supported such assertion with the example of Taibei importing rice towards the end of Qing rule.⁵ However, could Taibei speak for all other areas on Taiwan? Did the situations in Taibei reflect those in other cities and ports?

In addition, prior research emphasized that guild merchants who had long dominated cross-strait navigation and trade were from China proper.⁶ Although this might have been the case in most major ports or before the end of the eighteenth century, the accumulation of local capital as a result of economic development in different parts of Taiwan has totally been neglected. In particular, the rise of the Taiwanese gentry and merchants towards the end of the nineteenth century and the role they played in foreign trade is worth further exploration.

In sum, Qing Taiwan was a diverse, rather than a homogeneous region. There existed distinct features in different areas, which accounted for their chronological sequence in economic development. Indeed, not only were there temporal differences in their growth, the trade patterns they adopted also varied and the economic systems thus developed differed in scale depending on the characteristics of the areas. The opening of treaty ports in 1860 marked a new page in Taiwan's economic development. Its impact further intensified the difference in trade patterns between international treaty ports and traditional trade ports. This paper traces the development of port cities to illustrate the economic diversity of mid-nineteenth century Taiwan. It further describes the trade operations both traditional trade ports and treaty ports opened for foreign trade to highlight Taiwan's multifaceted and intricate trade pattern in that era.

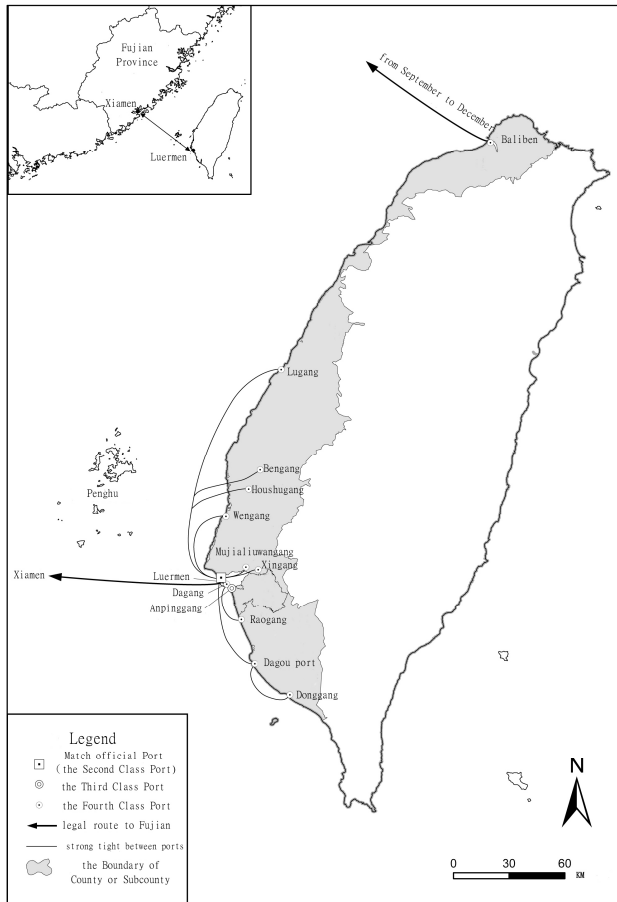
4 Huang Fusan 1984; Ye Zhenhui 1987; Lin Manhong 1994, 173-193.

5 Xie Mei'e 2006, 392-394.

6 Higashi Yoshio 1985, ch. 3; Lin Manhong 1993, 87, 90; Lin Renchuan 1999, 127.

From Match Official Ports to International Treaty Ports

Taiwan fell under Qing rule in 1683, and for ease of governance, the match official ports (*zhengkou* 正口) policy was implemented between Lu'ermen 鹿耳門 (hereafter Anping from 1830) of Tainan 臺南, the then capital city also known as Fucheng, and Xiamen in Fujian Province. That is to say, Lu'ermen became Taiwan's sole gateway for external trade and the only window to the outer business world (map 1). Goods imported into and exported from all coastal ports had to go through Lu'ermen. On the other hand, the match official ports policy helped establish trade between Taiwan and Fujian district.



Map1: The Trade Pattern of Taiwan Ports from 1683 to 1710

Cross-strait trade development could be characterized as a kind of complementary economic exchange. Taiwan was rich in agricultural produce but less advanced in manufactured goods. Hence, exports from Taiwan included mainly rice, sugar and peanut oil; while imports from China proper were handicrafts and daily essentials including textile, paper, construction materials and porcelain. Such trade exchange constituted division of labor between Taiwan and China, a developing district and a developed region, respectively.⁷ Nevertheless, China was not the only trade partner of Taiwan. Between the end of the seventeenth century and the early eighteenth century, Taiwan continued the practice of the Koxinga Era 鄭氏王朝 and maintained trade with Nagasaki 長崎, Japan, exporting mainly sugar and deer skin while importing silver, copper and marine products.⁸

In the early days of Qing rule, apart from the districts neighboring the capital Fucheng, most of Taiwan was still developing or even underdeveloped. Sugar and peanut oil were the major products for export.⁹ With the influx of Han immigrants from Fujian and Guangdong, much of the land in northern and central Taiwan was reclaimed and brought under rice cultivation. Towards the end of the eighteenth century, almost all flatlands were turned into farmland. Rice from paddies in northern and central Taiwan was exported directly to Fujian in exchange for handmade products, thus satisfying mutual market interests. Consequently, the match official ports policy with Lu'ermen as the only access for import and export could no longer meet the needs of regional economic development. In addition, coastal navigation in Taiwan was not only inconvenient but also dangerous. Direct smuggling of goods into Mainland China and bootlegging were rampant. At the same time, many Chinese merchant ships and fishing vessels headed straight to coastal cities in Taiwan for smuggled goods. For the sake of maintaining law and order and to facilitate economic development, the Qing court officially opened more ports between 1784 and 1788. Hence, direct navigation and trade were established between Lugang 鹿港 in cen-

7 Wang Yejian 1973, 8.

8 Zhu Delan 1988, 423-434; Zhu Delan 1988; Zheng Ruiming 2004.

9 Local gazetteer of Taiwan county had pointed out that sugar accounted for Taiwan's largest export, followed by peanut oil; *Xuxiu Taiwan xianzhi* 續修臺灣縣志, 52; *Taiwan zhilüe* 臺灣志略, 36.

tral Taiwan and Hanjiang 蚶江, Quanzhou 泉州, as well as between Palihun 八里坌 (Pali, hereafter Danshui from 1830) in northern Taiwan and Wuhumen 五虎門, Fuzhou (map 2).

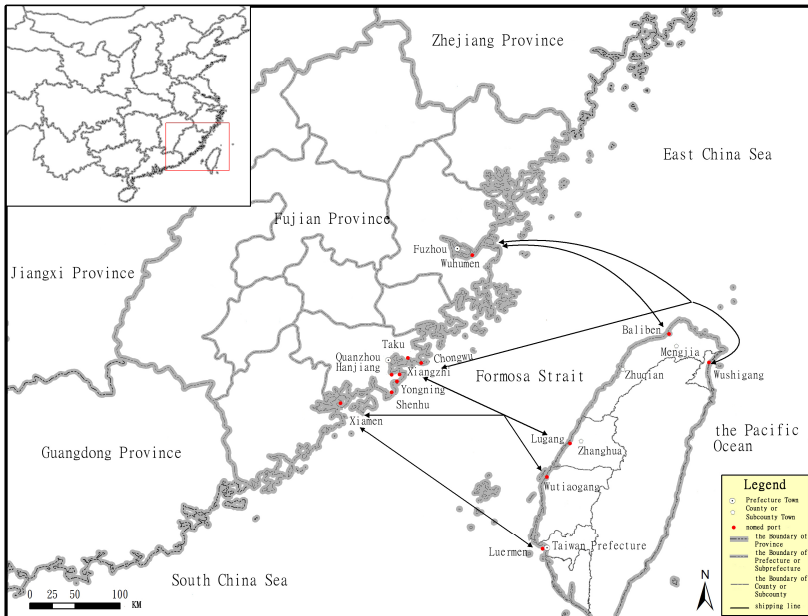


Map2: The Trade Pattern of Taiwan Ports from 1784 to 1830

Instead of Lu’ermen acting as the only port for external trade, there were three more match official ports engaged in direct trade with Fujian. Needless to say, the trade volume of Lu’ermen suffered severely. The decline of Lu’ermen was countered by the rise of two other ports and their commercial and trade centers in early nineteenth century. In chronological order of their development, these three port cities were Fucheng (Tainan), Lugang and Mengjia 艋舺 (Wanhua District,

Taibei).¹⁰ They were distributed respectively in southern, central and northern Taiwan.

With its land reclamation completed by 1826, Ilan 宜蘭 of east Taiwan became an independent economic system. Wushigang 烏石港 of Ilan became the fourth match official port with direct navigation access to Wuhumen, Fuzhou. On the other hand, economic growth in central Taiwan was so rapid that Lugang alone could no longer meet the need for trade exchange. As a result, Haifeng 海豐港, also known as Wutiaogang 五條港 (Mailiao, Yunlin County of today) was opened for external trade, making a total of five match official ports engaged in direct trade with Fujian (map 3).¹¹



Map3: The Network of Taiwan and Fujian by the Match Official Ports in mid-Qing Dynasty

Land reclamation and economic growth spread from the plains to the mountains where villages and towns mushroomed and district economic system took shape. Apart from the five major match official ports, minor ports (*xiaokou* 小口) of smaller handling capacity also emerged in

10 Lin Yu-ju 1995, ch. 6.

11 Lin Yu-ju 1995, 229-230, 238.

different districts. These ports included Zhuqian 竹塹, Zhongang 中港, Houlong 後壠, Daiangang 大安港, Beigang 北港, Yanshuigang 鹽水港, Dagou 打狗 (Kaohsiung of today) and Dongang 東港. As officially required, they had to import and export merchandise through the above-mentioned major ports in the nearest vicinity. However, they were also engaged in smuggling goods and clandestine trade dealings with merchant ships from China. Between 1830 and 1861, the local government gradually opened them as official ports for direct trade,¹² not only with Fujian but also with other coastal cities of China proper.

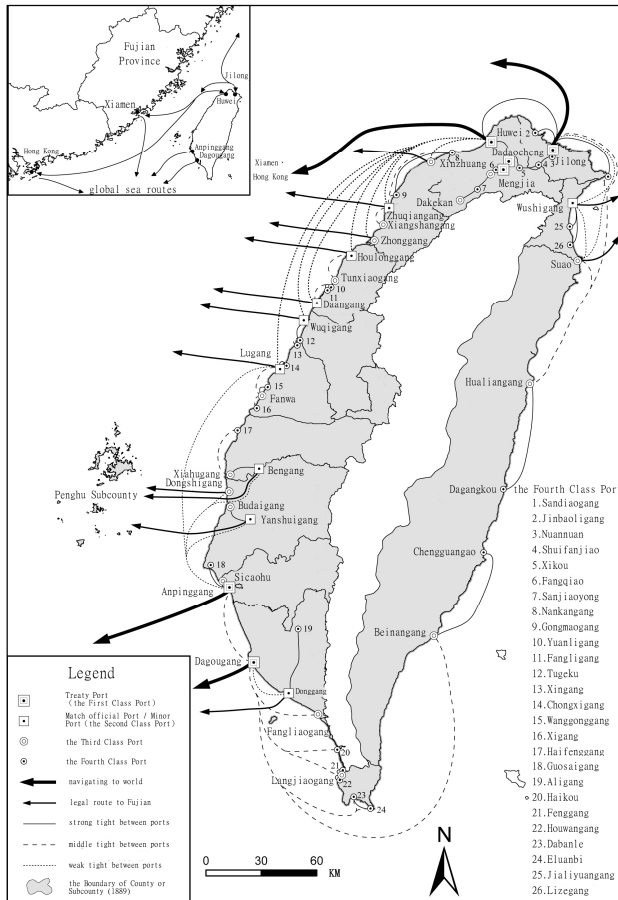
In the aftermath of the Anglo-Chinese Opium War, which broke out in 1840, five Chinese ports were opened to Britain and western vessels coming to China for trade were on the increase. Some of them stopped by Taiwan for supplies. Often they berthed at Keelung 基隆, an area with rich coal reserves at that time. In the mid-nineteenth century, western merchants and local officials of Taiwan negotiated in private an agreement allowing western companies to be illegally set up in Dagou, or to procure camphor from central and northern Taiwan.¹³ As a result of the Second Opium War, the Treaty of Tianjin 天津條約 was signed in 1858 and the Convention of Peking 北京條約 in 1860, the south and north former match official ports, Anping 安平 (Tainan) and Danshui 淡水 (Taibei) of Taiwan were opened as treaty ports, with Dagou and Keelung as secondary ports (*fukou* 附口) for foreign trade. International merchandise such as sugar from the south, camphor from the central and the north, as well as tea from the north were mainly exported from the treaty ports. On the other hand, traditional ports were also engaged in the import and export of the above-mentioned international merchandise while they at the same time maintained their former direct trade with coastal cities of China proper. That is to say, there existed in nineteenth-century Taiwan a three-level hierarchy of ports (map 4).

In terms of trading volume and degree of economic development, all ports of trade could be classified into three categories: international treaty ports, major match official ports and minor ports. Moreover, the merchandise imported and exported at these ports differed and the coverage of their trade networks also varied widely.

12 Lin Yu-ju 1995, 258-260.

13 Huang Jiamo 1961, 19-20; Huang Jiamo 1979, ch. 3; Lin Zihou 1976, 57.

In general, international treaty ports handled business with countries all over the world. On the other hand, trade networks of traditional ports though extending to Jinzhou 錦州, Tianjin 天津, Nongbo 寧波 and Shanghai in the north and to Hong Kong in the south, even occasionally to Japan or Southeast Asia, but concentrated mostly in the Fujian region. Traditional ports in northern Taiwan had trade mainly with Fuzhou and Quanzhou while those in central Taiwan had business exchange primarily with Quanzhou, and ports in the south chiefly with Xiamen and Shantou 汕頭.¹⁴



Map4: The trade Pattern of Taiwan Port Cities form 1870 to 1895

14 Dai Baocun 2000, 53-54; Lin Yu-ju 2000, 52-53.

In sum, Taiwan's port development was essentially guided by Qing's trade policy and local economic growth. From the early 18th to the early nineteenth century, local growth in different areas led to the establishment of independent economic systems. From the initial opening of one match official port, there were eventually five such ports engaged in direct navigation and trade with China proper. Along with these major ports of exchange, there were also other minor ports in different areas of Taiwan establishing direct business exchange with Chinese coastal cities. The opening of treaty ports in 1860 ushered Taiwan into the global economic system. Against such a background, Taiwan's external trade was operating under two trade systems. On the one hand, there were international treaty ports having business dealings with foreign countries; on the other hand, there were traditional match official ports and minor ports engaged in import and export of international merchandise through the treaty ports while maintaining direct trade exchange with cities of China proper. This dual trade system running in parallel at various ports was indeed a unique feature of Taiwan's trade development scene. In the following, I compare the two trade systems in terms of the merchants involved, the merchandise bought and sold, the trade network thus formed, the investment made as well as the flow of capital to illustrate this mid-nineteenth century dual trade system and the economic scene it constituted.

The Trade System of Traditional Ports

From the end of the seventeenth century to the nineteenth century, no less than 198 ports sprang up along the coast of Taiwan. These ports of different sizes and scales played different roles in the economic development of the island. Among them, official minor ports were trade posts of a certain district while major match official ports handled cross-strait trade exchange over a wider region. Frequently, the largest city of the area was where the match official port was located.¹⁵ Hence, traditional port cities of the nineteenth-century Taiwan were found in the vicinity of either one of the above. Their differences in scale of operation and trade pattern are discussed below with port cities Lugang and Zhuqian as key examples.

15 Lin Yu-ju 1995, ch. 3, 27.

Lugang was a typical match official port city. Years before it was officially opened for trade in 1784, there already existed merchant organizations, the Quan Guild (*Quan jiao* 泉郊). Guild members were mainly merchants engaged in import and export trade or in the same business. External trade before the opening of treaty ports in 1860 fell mostly under the control of the guilds. Generally speaking, the number of guilds established in a city was an index of its market size.¹⁶ Fucheng was the city where the first guild was formed and it was also the then capital city. Towards the end of Qing rule, there were at least twenty-two guilds in Fucheng. Lugang was the largest port city in central Taiwan. With growth in scale of commerce and trade, guilds formed also increased in both number and diversity. The then prosperous Lugang housed eight such merchant organizations, known as the Eight Guilds (*ba jiao* 八郊) of Lugang.¹⁷ As described by Zhou Xi 周璽 in “Zhanghua County Gazetteer” (*Zhanghua xianzhi* 彰化縣志, first published 1835),

Guild merchants were mostly the rich from China proper. Employees from firms funded by them were sent to trade in Lugang. Those who had business dealings in Hanjiang, Shenhu 深滬, Laiku 賴窟 and Sungwu 崇武 were members of the Quan Guild, while those trading in Xiamen belonged to the Xia Guild (廈郊). They exported sugar directly to Tianjin and Shanghai though the volume of export was not as much as that from the Bei (north) Guild (北郊) of Fucheng [...]. The majority of those who hoarded local rice and grains were the wealthy locals.¹⁸

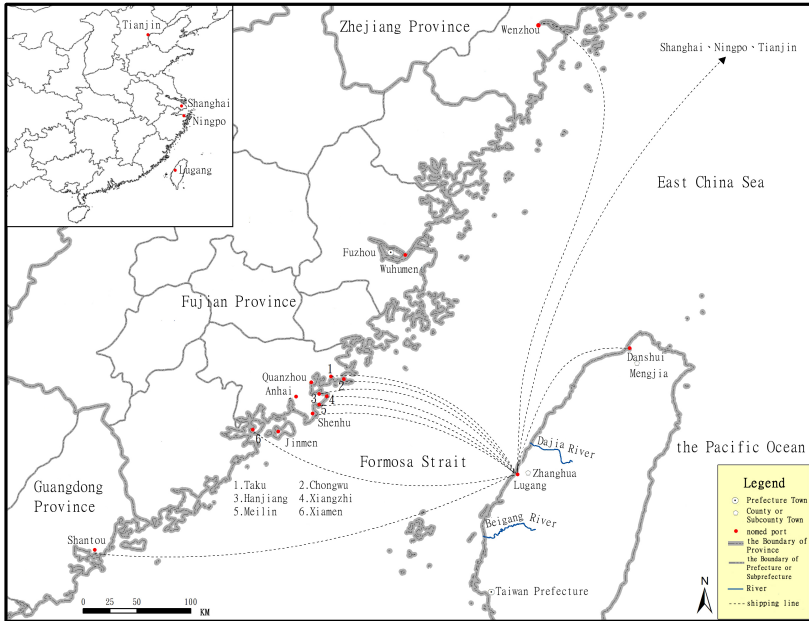
Hence, it can be seen that the chief exports of Lugang in the mid-nineteenth century were rice, sugar and peanut oil and the trade network, though concentrated in the ports of Quanzhou, extended as far as Tianjin and Shanghai (map 5). In comparison, the export of sugar from Lugang was surpassed by that from Fucheng where the relatively drier climate of the south was more favorable for sugar cane plantation. Instead, rice was the main export from Lugang located in central Taiwan which was dotted with rice paddies. Although merchants from

16 Wen Zhenhua 1978, 249.

17 The eight guilds were Quan[zhou] *jiao* 泉郊, Xia[men] *jiao* 廈郊, *bu* [cloth/textile] *jiao* 布郊, *tang* [sugar] *jiao* 糖郊, *Gan* [groceries] *jiao* 筴郊, and *you* [oil] *jiao* 油郊, *ran* [dye] *jiao* 染郊, and *nan* [southern] *jiao* 南郊. Lin Yu-ju 1995, 89.

18 *Zhanghua xianzhi*, 290.

Mainland China dominated most of the guilds, the export of rice from Lugang was mainly in the hands of the domestic merchants of Lugang.



Map5: The Trade Network of Lugang in nineteenth Century

Owing to comparatively less ideal harbor conditions, Lugang was not made a treaty port up through the end of the nineteenth century. Nevertheless, it remained the largest port city and trade hub in central Taiwan. With traditional junks as its chief means of transportation, Lugang continued to export rice, sugar, camphor and ramie. Rice accounted for the largest trade volume and still amounted to 75% of exports in the early Japanese colonial era.¹⁹ Lugang's trade with China proper concentrated mainly in Quanzhou and Xiamen though there were also direct trade activities with Shanghai and Ningbo. For example, the Qianhe firm 謙和號 established by the Quan guild merchants and its trading partners, imported peanut oil and textile from Shanghai, brought in tobacco from Xiamen, and purchased cloth, tobacco, timber, ceremonial paper money, foodstuff, kerosene and matches from the Quanzhou area.²⁰

19 *Keizai shiryō hōkoku*, 40-41.

20 Lin Yu-ju 2007, 74-75, 97.

Rice remained the most dominant trade item between Lugang and Quanzhou. Hence, rice merchants grew in both wealth and power. They purchased land and got involved in the import business through their rice trade. Further prosperity turned them into local guild merchants who later dominated cross-strait export and import trade. Towards the end of the nineteenth century, guilds in Lugang comprised merchants from both China and Lugang. For example, the Quan Guild's members were from Lugang and Quanzhou. Many large firms and merchants from Mainland China opened their head offices or branches in Lugang and Quanzhou, known as *liancai duihao* 聯財對號, operating businesses in both places under the same name and same owner. At that time, firms operated by local Lugang merchants were mainly of two types. One were those run by smaller guild merchants with less capital who brokered the purchase of local products and the sale of commodities from other ports and charged a commission of 2%, thus earning their name as "98 firms" (*jiuba hang* 九八行). The other were those operated by larger guild merchants with abundant capital, even having their own junks. These firms were thus called shipping firms (*chuantou hang* 船頭行) and engaged in direct business exchange across the Strait.²¹

In addition, Lugang as a match official port with a large hinterland covering most of central Taiwan, handled a substantial trade volume. This gave rise to the cooperative commissioning system between firms in Lugang and Quanzhou. In other words, firms in these two places entered into partnerships to sell and purchase goods for each other, striving for mutual benefits and the greatest profits. The basic building blocks of cooperative commissioning system were relationships established upon joint ventures and mutual investments, hometown affiliation, and family ties. These building blocks were essential to reduce credit risk associated with the junk trade. Within the business blocs or networks established, there were also interflow of market information and business capital. Hence, goods imported into Lugang from Shanghai and Xiamen were brokered through Quanzhou-based firms.²² Such a cooperative commissioning system was also found in Fucheng, where firms related to Xiamen and Nongbo served as brokers, and in Taipei,

21 Lin Yu-ju 2007, 64, 81.

22 Lin Yu-ju 2007, 94-96.

where sales agents were working in partnerships with firms from Fuzhou and Zhenjiang.²³

In order to maintain their control of rice exports, guild merchants in Lugang procured and reclaimed arable land for ensuring a constant supply of rice. This is contrary to previous research that Chinese merchants' procurement of land was for wealth preservation, which hindered business expansion. In fact, Taiwanese merchants were wise in diversifying their investments. On the one hand, they loaned out their surplus capital to earn high interests; on the other hand, they expanded from rice export to import business and invested widely in other firms. Of note is that their investment partners were not confined to local firms or merchants of Lugang. In addition to being business partners and serving as mutual trade agents, they also made joint investments in each other's business and even other firms.²⁴ The close business relationship and joint investment trade pattern between merchants of Lugang and Quanzhou was rarely seen in other minor port cities.

Despite the prosperous external trade, guild merchants of Lugang were operating only small- and medium-sized firms. Their cross-strait trade volume was small in comparison with the business exchange of international merchandise conducted at treaty ports. Trade payments were made either in cash or goods, with a large part of the accounts between firms being settled via offsetting or an exchange of goods of equal value between two firms by the use of accounting books and credit (*jiaohu jisuan* 交互計算), and remittances through internal channels of the branches. Hence, in Lugang, financial institutions such as native banks (*qianzhuang* 錢莊) and remittance banks (*piaohao* 票號) never became as popular as they were in China proper.

Compared with that of match official ports, the trade pattern of minor ports was much simpler. Take Zhuqiangang (known also as "old port") for example, it had all along remained the sole trading port for the Zhuqian area. Before it was officially made a minor port in the 1830s, Zhuqian was a coastal trade post engaged mainly in import and export through the match official ports in its nearest vicinity. In other words, it had close business ties with Luermen prior to the end of the eighteenth century and with Palihun thereafter.²⁵ As

23 *Taiwan shihō furoku sankōsho*, vol. 3, 158-169.

24 Lin Yu-ju 2007, 68-70.

25 Lin Yu-ju 2000, 45-52.

described in Zheng Yongxi's 鄭用錫 draft of the "Danshui Sub-prefecture Gazetteer" (*Danshui tingzhi gao* 淡水廳志稿 1834), the agricultural produce of the Zhuqian area differed from that of Lugang. Hence, exports from Danshui sub-prefecture in the early nineteenth century included mainly peanut oil, rice, hemp, beans, sugar and indigo. Its trade network spanned from Zhapu 乍浦 and Ningbo in the north to Macau in the south.²⁶ In 1855, western merchants were already engaged in the smuggling of opium and silver to the auxiliary ports of Zhuqian and shipping out camphor and rice to Hong Kong.²⁷ With the opening of Danshui as a treaty port, trade of Zhuqian was conducted mainly through Danshui though it continued to maintain direct trade with other coastal cities of China.

At the end of the nineteenth century, commodities exported from Zhuqian were mainly rice, sugar, camphor, ramie, and tea. Its trade network had extended north to Tianjin and south to Hong Kong, even occasionally to Singapore.²⁸ Nevertheless, trade was conducted most intensively with Quanzhou and Fuzhou; in particular, Laiku and Toubai 頭北 of Huian County 惠安縣 as well as Xiangzhi 祥芝, Yongning 永寧 and Shenhu of Jinjiang County in Quanzhou, and Lianhe 蓮荷 of Maxiang Subprefecture 馬巷廳 in Fuzhou (map 6).²⁹ Obviously, trade of traditional minor port cities of central and northern Taiwan concentrated mainly in Fujian, especially the Quanzhou district.

In the early nineteenth century, a guild named Zhuqian was formed mainly by local merchants and became the first Qian guild (*Qian jiao* 塹郊) in the area. Most of the Qian guild merchants were Chinese immigrants settled in Zhuqian towards the end of the eighteenth century and had become influential guild members. Unlike those of Lugang, not many Chinese merchants in Zhuqian were directly engaged in cross-strait trade, which was dominated mainly by local Taiwanese merchants. In the beginning, guild merchants of Zhuqian ran their business independently and were engaged in trading of local produce with other coastal cities of Taiwan or Chinese merchant ships. As a result of land reclamation, agricultural produce for exports increased. To meet the rising trade volume, they took the

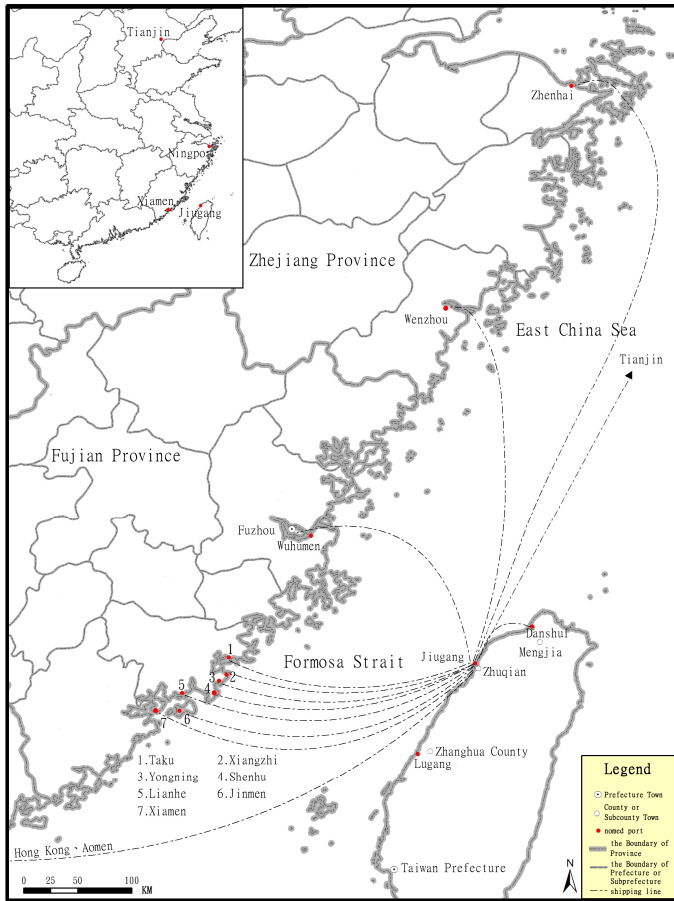
26 *Danshui tingzhi gao*, 106.

27 Huang Jiamo 1979, 93-104.

28 Lin Yu-ju 2000, 56, 71; *Taiwan Political and Economic Reports, 1861-1875*, 114.

29 *Taiwan Political and Economic Reports, 1861-1875*, 50-52.

initiative to form merchant organizations and collaborated with one another in sharing shipping facilities and shouldering local administrative work. As mentioned above, guilds formed in regional port cities like Lugang, Fucheng and Mengjia were large both in number and variety. However, for a long time, the Qian guild was the one and only one such merchant organization in the Zhuqian area. It was only at the end of the nineteenth century that a *naojiao* 腦郊 (camphor guild) was formed due to the booming camphor trade.³⁰



Map 6: The Trade Network of Zhuqian in nineteenth Century

30 *Taiwan Political and Economic Reports, 1861–1875*, ch. 5.

Having few or sometimes only one guild was the common characteristic of minor port cities. Another feature was that most guild merchants of minor port cities operated “98 firms” (*jiuba hang*) and there were few shipping firms (*chuantou hang*). Hence, they either joined to hire vessels for trade with coastal cities of China or waited at the ports for incoming Chinese ships or fishing boats to have business exchange. Frequently, it was the supercargo (*chubai* 出海, similar to the boat captain of today), an officer on the merchant ship, who had charge of the cargo and its sale and purchase. Such trade pattern in minor port cities was in great contrast to the cooperative commissioning system established in Lugang,³¹ which was never seen in Zhuqian.

As a matter of fact, the relationship between local guild merchants and Chinese merchants in Zhuqian was quite distant and never as close as that found in Lugang. There was neither cooperative commissioning system developed, nor joint venture/investment formed between cross-strait firms or merchants. The operation mode of Zisheng firm 資生號 founded in the 1860s by guild merchants of the Beigang area served to illustrate the trade and investment relationship between guild merchants of minor port cities. Like the Qianhe firm of Lugang, the Zisheng firm was trading agricultural produce from the land procured, which was turned into sugar cane plantation. Besides trading sugar, it also commissioned agents to procure agricultural produce such as ramie and rice from Jiayi 嘉義 and Douliu 斗六 and engaged in business exchange with firms of other guilds. Zisheng firm was a ‘98 firm’ which commissioned vessels for trade at ports of Taiwan and China proper. On the other hand, it also served as a cotton trade agent for guild firms of China, and helped the British company Wright & Co 味記洋行 to procure merchandise such as sugar and sesame.³² Obviously, there was trade a cooperation between Taiwanese guild merchants and western companies. Hence, they were collaborators rather than solely rivals or competitors, as previous research has portrayed. With the opening of treaty ports, foreign merchants flocked to Taiwan for trade and local guild merchants sometimes played the role as agents for local produce.

Exports from the Zisheng firm at the end of nineteenth century included sugar, rice, sesame, opium, pea bean, oil dregs from pressed pea-

31 *Taiwan keizai jijō shisatsu fukumeisho*, 41.

32 Shen Yuting 2007, 102-110.

nut and sesame oil. In 1895, opium, the commodity that generated the greatest revenue for the firm, was mainly shipped to Tianjian.³³ The engagement of Taiwanese merchants in opium trade was indicative of their profit-seeking inclination. In response to the increasing demand in China, south Taiwan quickly joined in the cultivation and export of opium.

In contrast to the guild merchants of Lugang, the Zisheng firm did not develop trade partnerships or investment relationships with Chinese merchants. It invested mainly in local firms or businesses such as shipping firms, pawn shops, sugar and oil processing in Beigang; sugar firms, textile stores and shops selling foreign daily commodities in Jiayi, as well as textile stores in Fucheng.³⁴ Apparently, guild merchants of Beigang utilized their business capital fully and diversified their investment in pursuit of the greatest profits. Nevertheless, unlike the guild merchants of Lugang who engaged extensively in cross-strait trade, their scope of business exchange was more confined within the regional market sphere.

In sum, the scope of trade exchange in traditional ports was generally not large, with most guild merchants engaged in small- and medium-sized businesses. On the contrary, guilds found at major official ports were more diverse and greater in number. Their members comprised both Chinese merchants and local ones, who formed business partnerships and developed a cooperative commissioning system. However, minor port cities had few or sometimes only one guild formed mainly by Taiwanese merchants. Most trade exchange was handled by the supercargo. Rarely was there a joint venture or an investment, and the relationship between Taiwanese and Chinese merchants was anything but close. Although trade network of traditional ports extended to North China and south to Guangdong, business exchange still concentrated in the Fujian area owing to its easy accessibility and the merchants' affinity for their hometowns. Towards the end of the nineteenth century, import and export trade at traditional port cities was still controlled by guilds and new guilds continued to be formed in response to market needs. This evidenced that guilds in Taiwan, especially at traditional port never suffered a decline despite of the impact and competition from western companies.

33 Shen Yuting 2007, 113-114.

34 Shen Yuting 2007, 119-122.

Trade System of Treaty Ports

With the opening of treaty ports in 1860, Danshui-Keelung in the north and Anping-Dagou in the south formed the two dual-hub international treaty ports. The island of Taiwan was thus divided into two large market spheres with Lugang as the demarcation. External trade of Taiwan had expanded from the coast of China to the whole world, thus ushering it into the global economic system.³⁵ Commodities exported from Taiwan for international trade included mainly tea, sugar, camphor and coal. These exports were first gathered at the treaty ports and then shipped to Xiamen and Hong Kong, from where they finally were transported to countries around the world.³⁶ Most exports from Taiwan were distributed through entrepôts and seldom directly to other countries. Among the international trade commodities, 90% of tea was exported to America and 5% to Britain. As can be seen, towards the end of the nineteenth century, America had already become an important export country of Taiwan. Besides the China market, sugar was also exported to Japan, Australia, Europe and America. After the 1880s, Japan and China were the dominant importers of Taiwan's sugar. Camphor from Taiwan was exported to Germany, France, Britain, America and India.³⁷ On the other hand, Taiwan's imports included mainly opium, textile, metal and household supplies. Opium accounted for the majority of imports, occupying a share of 80%.³⁸ These goods were imported through the two treaty ports from where they were distributed to other important ports along the coast. Take the 1891 coastal trade in the north for example, foreign goods imported through Danshui-Keelung were transported to traditional port cities such as Lugang, Wuqi 梧棲, Dajia 大甲, Tunxiao 吞霄, Houlong, Zhuqian, Nankan 南崁, Sandiao 三貂 and Ilan for sale.³⁹

35 Lin Yu-ju 1995, 261, 315-317.

36 Take tea for example. It was mainly produced in north Taiwan, especially in Taibei Basin, and exported mostly from Danshui. However, Danshui was not a well-equipped port. There were no telecommunication or export facilities. Hence, tea was first exported to Xiamen and then re-shipped to America and England. Around 90% of the Oolong tea from Taiwan was exported to America and England via the entrepot Xiamen. Wen Zhenhua 1978, 261; Lin Manhong 1997, 21-22.

37 Lin Manhong 1998, 1067-1068.

38 Dai Baocun 1984, 172-173.

39 Huang Fusan, Lin Manhong and Weng Jiayin, vol. 2, 352.

With Taiwan becoming part of the global economic system, cross-strait trade with coastal cities of China also underwent significant changes. The limitation in distance traveled by traditional junks was overcome by the use of ships and steamers as means of transportation. Hence, the original trade sphere of match official port could expand beyond Fujian. As a result, trade activities with Central and North China as well as Guangdong in the south intensified. With regular steamer traffic, business exchange between China and the two treaty ports increased further. In the era of traditional junk trade, Danshui traded mainly with Fuzhou and Quanzhou. When it was opened as a treaty port, Shanghai became its main port for imports, followed by Xiamen, Shantou, Niuzhuang 牛莊, Fuzhou, Dagou, Yantai 煙臺, and Ningbo, while the majority of Danshui's exports went to Xiamen, followed by Hong Kong, Shanghai, Shantou, Fuzhou, Tianjin, Ningbo and Dagou.⁴⁰

Opportunities and challenges brought by the opening of treaty ports paved the way for further development of the two port cities. In particular, the prosperity of tea trade in the 1870s led to the rise of Dadaocheng 大稻埕 as the commercial center of Danshui port. In this way, Dadaocheng can be viewed as a new city that developed under foreign impact. In less than a decade, Dadaocheng evolved from a small settlement prior to 1869 into the second largest city of Taiwan by 1895, next in importance only to Tainan. On the one hand, the anti-foreign attitude prevalent in Mengjia, the original commercial center of Danshui port, hindered further growth in overseas trade. On the other hand, Dadaocheng was where tea was processed for export, thus contributing to its emergence as the new commercial center of northern Taiwan.⁴¹

The trade operations in Dadaocheng were quite different from those in traditional port cities. First, it was only in 1869 that Taiwan's tea was traded in the international market. By 1872, there were five western companies established in Dadaocheng for tea trade.⁴² Western companies in Taiwan were often agents of foreign banks or navigation companies, and most were only branches with headquarters in Xiamen or

40 Dai Baocun 1984, 173.

41 Wen Zhenhua 1978, 245.

42 These five western companies were Dodd & Co, Tait & Co, Elles & Co, Brown & Co, and Boyd & Co. Cf. Davidson 1903, 203-204.

Hong Kong. Their existence indicated inflow of both foreign capital and technology into Taiwan. These firms first obtained loans from foreign bank. With the loan, they provided capital for Taiwan's local tea firms either directly or through the "merchant" (*mazhen guan* 媽振館).⁴³ With the borrowed capital, local tea firms made advanced payment to tea vendors or farmers to ensure a constant supply of tea. Nevertheless, tea was mainly grown in the northern districts including Taibei, Taoyuan, Hsinchu, Ilan and Miaoli 苗栗, with the Taibei Basin being the most important tea-producing area.⁴⁴ Hence, influence of western companies focused mainly in Taibei; the further the distance from Taibei, the weaker their influence.

For the development of the tea industry in northern Taiwan, western companies had indeed played an important role in providing both capital and skill. However, after 1875, their importance was gradually overshadowed by firms of Chinese and local capital, which had almost complete control of Taiwan's tea trade.⁴⁵ A similar trend of development could also be found at treaty ports of south Taiwan. Western companies were first established in Dagou and Tainan. They were engaged in the trade of sugar, which was the most important international trade commodity at that time. In fact, as early as the Dutch colonial era, sugar was already an important export commodity of Taiwan. External trade in south Taiwan had long been controlled by guild merchants. With no breakthrough in sugar processing technology, it would be difficult for western companies to play a dominant role in this industry as they did in the tea industry of the north. In the 1860s, some Western companies closed down as investment was pulled out from Taiwan.⁴⁶ As mentioned earlier, sugar was exported mainly to Japan and North China after the 1880s. This further undermined the influence of western companies in the south. Worse still, western companies had to face competition from the Shunhe firm 順和行, the largest sugar merchant in Dagou, and dealt with the trade restrictions it imposed on sugar purchase. In the same way, in-

43 *Merchant* is a financial institution established by Xiamen-based western companies with branches in Taiwan. It is also involved in processing of tea for export. Lin Manhong 1997, 105-107.

44 Lin Yu-ju 2000, 69-71.

45 Lin Manhong 1997, 107-109.

46 Ye Zhenhui 1987, 42-43.

tense rivalry from the sugar guild in Tainan posed problems to trade operations of western companies.⁴⁷ As can be seen, Western companies enjoyed a more competitive advantage and played a more dominant role in trade of Taiwan's exports to markets in Europe, America and their colonies. However, their influence was comparatively much weaker in business exchange with the Asian markets.

Apart from western companies and "merchant", other financial institutions such as native banks and remittance banks (*huidui guan* 匯兌館, or *huidan guan* 匯單館) were first found in Taipei area. Native banks could be regarded as traditional Chinese banks. Remittance banks, similar to the *piaobao* of China proper, were of a smaller scale and specialized in handling money orders or bills of exchange. The flourishing tea trade in Taipei involved huge flows of capital and a large number of traders. The practice of settling trade payments in cash or via offset accounts, which was adopted in traditional ports, proved to be infeasible and fell short of meeting the needs. To make up for this, native banks and remittance banks were introduced to Taipei. Though popular in mainland China, these financial institutions were not found in traditional ports. In particular, remittance banks came into being mainly because of the enormous tea trade. Even in Tainan, there were only two native banks but no remittance banks.⁴⁸ In 1895, there were around ten remittance banks in Dadaocheng.⁴⁹ Remittance banks usually set up agencies or branches in Hong Kong, Xiamen, Shanghai and Fuzhou to engage in bilateral money flow. Because of the comparatively large capital required, most remittance banks were joint ventures with shares held by merchants from both China and Taiwan. They were mainly managed by local Taiwanese merchants and the capital ranged from 10,000 Yuan to 100,000 Yuan.⁵⁰

The establishment of remittance banks and native banks indicated the inflow of Chinese investment and, in particular, the rise of local Taiwanese merchants and their accumulation of capital. As mentioned above,

47 Lin Manhong 1997, 118-122.

48 Sawamura Konan 1899.

49 The more famous ones included Jianxiang firm 建祥號, Qianyu firm 謙裕號, Yiyue firm 怡悅號, Liancheng firm 聯成號, Hongji firm 鴻記號, Faji firm 法記號, Yichang firm 益昌號 and Zhenji firm 珍記號. Among them, the former four are also native banks.

50 *Taiwan shihō furoku sankōsho*, vol. 3, 318-320.

they operated remittance banks. Among the 22 native banks in Xiamen, five were owned or had shares held by the Lin Family of Banqiao 板橋 林本源家.⁵¹ International trade of Taiwan's tea, camphor and sugar in the late nineteenth century enabled rapid accumulation of wealth and capital by local merchants.⁵² Perceptive big guild merchants took the initiative to gain a foothold in international trade and amassed enormous profits. For example, Xinchu 新竹 guild merchants such as Lin Hengmao 林恆茂, Zheng Hengli 鄭恆利, Huang Zhenxiang 黃珍香 and Wu Zhenli 吳振利 ventured deep into the mountains for camphor to reap exorbitant profits.⁵³ The Lin family of Wufeng, central Taiwan collaborated with Buttler & Co 公泰洋行, a German company in the export of camphor and accumulated huge wealth.⁵⁴ In 1895, among the five most famous firms of Tainan's sugar guild, three were opened by local merchants, one belonged to a merchant from Guangdong, and one was owned by a Quanzhou businessman.⁵⁵ Apparently, the wealth and power of local guild merchants surpassed that of merchants from China.

Sugar trade in south Taiwan contributed to the rise of Chen Fuqian 陳福謙 (1834–1882) who owned the Shunhe firm, and whose family joined with Chen Zhonghe 陳中和 (1853–1930) to set up the Hexing Company 和興公司. Tracing the founding and development of the Shunhe firm and the Hexing Company can shed light on how Taiwanese merchants attempted to participate directly in international trade and reveal the emergence of powerful Taiwanese merchants whose status and influence far exceeded that of Chinese merchants.

Chen Fu-qian rose to dominate Taiwan's sugar trade in the 1860s. He began his career first as a comprador of a foreign firm in Dagou and became one of the two most well-known compradors of Taiwan; with his counterpart in the north being Li Chunsheng 李春生. Chen Fu-qian's insight in business dealings had earned him great wealth, and in 1862–

51 The five banks were Yueji Qianzhan 裕記謙棧, Huiyuan 匯源, Jianxiang 建祥, Qianji and Qianmao 謙茂. Cf. Sawamura Konan 1899, 117.

52 As Robert Gardella said: "In retrospect, Formosa tea offered an initial demonstration of Taiwan's subsequent capacity to realize rapid gains from international trade." Cf. Gardella 1999, 175.

53 Lin Yu-ju 2000, 127, 243.

54 *Taiwan nichinichi shinpō* 20.11.1898, 5.

55 *Taiwan zongdufu dang'an Zhongyi ben*, vol. 3, 87.

1863 he started his own firm, the Shunhe firm in Qihou 旗後 (Qijin 旗津 of Kaohsiung today). He not only traded sugar but also operated sugar processing factories 糖廠. Through loans made to plantation operators as advanced payment, he gained control over the majority of sugar produced in the Dagou area. Most of the sugar was exported to Japan. In 1864, a sister firm of the Shunhe firm was established in Yokohama. It was one the three largest foreign companies there and the first of such founded by a Taiwanese merchant. Branches of the Shunhe firm were further opened in Nagasaki and Kobe, Japan, as well as Tainan, Donggang and Yanshuigang, Taiwan. Besides sugar, rice, opium, textiles, salt, marine products, groceries, coffins and a wide variety of commodities were also traded. The trading network of the Shunhe firm spanned from the East to the West, with trading posts in Hong Kong, Shanghai, Japan, Southeast Asia and many western countries. To reduce transportation cost and increase profits, the Shunhe firm was the first in Taiwan to export sugar directly to Yokohama using traditional junks. To break away from the control of western companies, it was also the first to hire vessels to transport sugar directly to the west.⁵⁶

In 1887, the sons of Chen Fu-qian joined with Chen Zhonghe and started the Hexing Company with a huge capital of 110,000 Yuan.⁵⁷ Unlike the Shunhe firm, the Hexing Company had the articles of association drafted, which showed that Taiwanese merchants had begun to adopt western corporate management practices. Not only did they follow the westerners in calling their business “company/Co”, instead of “firm”, they also drew up the company’s constitutions. Same as foreign business corporations, those who provided capital were called ‘shareholders’ and were allocated “shares” and the company was run by a management board. It comprised the Chief Manager, Chen Zhonghe, and deputies like Chen Zhusan 陳祝三. Paid executives held no shares of the company but were entitled to bonus. Full details of profit-sharing were also included in the company’s constitution.⁵⁸ These management approaches were never seen in traditional firms set up by local merchants with shared capital. Hence, the Hexing Company marked Taiwan’s transformation in its trade mechanism and commercial operations towards the end of the nineteenth century. Wang Xuenong 王雪農, a staff of the

56 Yang Yuzi 1988; Zhao Youzhi 2000; Dai Baocun 2008, 87-88.

57 Chen Zhonghe was chief manager of Shunhe firm.

58 *Taiwan sifa shangshi bian*, 132-135; *Taiwan nichinichi shinpō* 01.01.1907, 37.

Hexing Company, eventually not only became an influential sugar businessman in Tainan, but also the first Taiwanese to promote the establishment of modern banks in the early Japanese colonial period.⁵⁹

In sum, with the opening of treaty ports, steamers replaced traditional junks as the main means of transportation and western companies flocked to gain a stronghold in trade with Taiwan. Along with these western companies came also the inflow of capital and the transfer of technology, both contributing to the expansion of Taiwan's external trade network. From the Chinese coastal trade sphere highly concentrated in Fujian, Taiwan's trading network expanded to countries around the world, and business activities with North and Central China as well as Guangdong in the south further intensified. The emergence of remittance banks and native banks at treaty ports witnessed the growing importance of both Chinese and local capital in trade development. In particular, the rise of local merchants as well as their direct involvement in international trade and their adoption of western corporate management approaches were rarely seen in traditional ports.

Conclusion

Qing Taiwan was not a homogenous region, neither from the perspective of time nor that of space. The island was diverse and marked with wide differences. Economic development in local areas gave rise to trade spheres different in both size and scale. The first half of the nineteenth century saw the gradual transformation of Taiwan from a developing district into a developed one. Taiwan and coastal cities of China proper during this era were complementary economies, and thus trade exchange blossomed. Direct navigation and business exchange were established between several match official ports, which turned into regional economic spheres comprising of port cities as the district commercial hub and minor ports as secondary trade posts. Commodities traded, merchant organizations, trading networks and systems varied widely in these economic spheres owing to their difference in geography, accessibility, market size and trade volume. At match official ports, cross-strait merchants and firms operated under the cooperative commissioning system and maintained close business ties with mutual investments. On

59 *Taiwan nichinichi shinpō* 14.08.1903, 2.

the contrary, commercial investments at minor ports were restricted to local businesses and trade exchange was mainly handled by supercargo responsible for the sale and purchase of merchandise transported by junks.

The opening of treaty ports certainly marked a turning point in Taiwan's trade development. With Lugang as the demarcation, the island was divided into two market spheres, one in the north and one in the south, each with an international port handling external global trade. There existed wide differences in trade operations between traditional ports and international treaty ports. Traditional ports served as subsidiaries to treaty ports and imported international merchandise and foreign goods through them. Towards the end of the nineteenth century, traditional ports continued to maintain direct trade with coastal cities of China focusing on the Fujian district. Hence, they had all along been dependent on the China market and were not much exposed to the western impact. With traditional junks replaced by steamers as the main means of transportation, international merchandise including tea, sugar and camphor were gathered at treaty ports for exports to other countries in the East and West. Western companies and financial institutions sprang up bringing in new technologies and novel capital flow mechanisms. The former trade network also expanded from the Fujian hub to the entire world, ushering Taiwan into the global economic system. Increase in international trade volume implied huge flow of money and capital, and traditional approaches to settling payments by cash or offsetting were no longer practicable and fell short of meeting the needs for global business exchange. Native banks and remittance banks, long popular in China proper, first appeared in Taipei.

It is worthy to note that Taiwanese merchants with local competitive advantages gradually gained control over the production and export of international merchandise. Their rapid accumulation of wealth put them on equal par with western companies, enabling them to be engaged directly in international trade. They set up western-style companies and ran their business with western corporate management practices. The rise of these local merchants with power and influence surpassing that of Chinese and foreign ones reflected the growth of Taiwan's own economic strength.

To sum up, the mid-nineteenth century saw the formation of dual trade system in Taiwan. In other words, two trade systems, one in tra-

ditional ports and the other in international treaty ports, were operating in parallel during that time. With relatively less impact from western influence, traditional ports maintained more or less their long-established trade system. On the other hand, treaty ports opened for international trade were more affected by the global economic conditions. In response, new mechanisms for business exchange developed resulting in a trade system different from that practiced at traditional ports. In addition, treaty ports offered a platform for local Taiwanese merchants to gain a foothold in the global economic arena.

Glossary

Anping 安平	Ilan 宜蘭	Qijin 旗津
Beigang 北港	jiaohu jisuan 交互計算	Quan jiao 泉郊
Bei Guild 北郊	jiao 郊	Sandiao 三貂
Buttler & Co. 公泰洋行	jiubahang 九八行	Shenhu 深滬
Chen Fuqian 陳福謙	Laiku 獺窟	Shunhe firm 順和行
Chen Zhonghe 陳中和	Lianhe 蓮荷	Sungwu 崇武
Chen Zhusan 陳祝三	Li Chunsheng 李春生	Toubei 頭北
chuantouhang 船頭行	Lin Family of Banqiao 板橋林	Tunxiao 吞霄
chuhai 出海	本源家	Wright & Co. 唛記洋行
Dadaocheng 大稻埕	Lin Hengmao 林恆茂	Wuqi 梧棲
Daingang 大安港	Luermen 鹿耳門	Wushigang 烏石港
Dagou 打狗	Lugang 鹿港	Wutiaogang 五條港
Dajia 大甲	Maxiang Subprefecture 馬巷廳	Xia Guild 廈郊
Dongang 東港	Mengjia 魴舨	Xiangzhi 祥芝
Douliu 斗六	Miaoli 苗栗	Yamamoto Susumu 山本進
Fucheng 府城	Nankan 南坎	Yanshuigang 鹽水港
Haifong 海豐港	nao jiao 腦郊	Yongning 永寧
Hanjiang 蚶江	Niuzhuang 牛莊	Zhapu 乍浦
Hexing Company 和興公司	Palihun 八里坌	Zheng Hengli 鄭恆利
Houlong 後壠	piaohao 票號	zhengkou 正口
Huang Zhenxiang 黃珍香	Qianhe firm 謙和號	Zheng Yongxi 鄭用錫
Hui'an County 惠安縣	Qian jiao 塹郊	Zhongang 中港
huidanguan 匯單館	qianzhuang 錢莊	Zhuqian 竹塹
huiduiguan 匯兌館	Qihou 旗後	Zisheng firm 資生號

References

- Chinese Imperial Maritime Customs / DaQing Huangjia haiguan zongshui wusishu 大清皇家海關總稅務司署 (ed.), *China Maritime Customs publications / Zhongguo haiguan chubanshin* 中國海關出版物. Washington, DC: Association for Research Libraries, Center for Chinese Research Materials, 1970 (microfilm copy).
- Chu Yiguan 儲一貫 (ed.), *Taiwan shi yanjiu ji shiliao fajue yantaohui lunwenji* 台灣史研究暨史料發掘研討會論文集. Gaoxiong: Zhonghua Minguo Taiwan shiji yanjiu zhongxin, 1987.
- Dai Baocun 戴寶村, *Qingji Danshui kaigang zhi yanjiu* 清季淡水開港之研究. *Lishi yanjiusuo zhuankan* 歷史研究所專刊, 11. Taipei: Guoli Taiwan shifan daxue, 1984.
- _____, *Jindai Taiwan haiyun fazhan: Rongke chuan dao changrong jubo* 近代臺灣海運發展：戎克船到長榮巨舶. Taipei: Yushanshe, 2000.
- _____, *Chen Zhonghe jiazhi shi: Cong tangye maoyi dao zhengjing shijie* 陳中和家族史：從糖業貿易到政經世界. Taipei: Yushanshe, 2008.
- Danshui tingzhi gao* 淡水廳志稿, by Zheng Yongxi 鄭用錫, ed. by Zhan Yaneng 詹雅能. *Taiwan shiliao* 臺灣史料集成, Qingdai Taiwan fangzhi huikan 清代台灣方志彙刊, 23. Taipei: Wenjianhui, 2006 (first published 1834).
- Davidson, James Wheeler, *The Island of Formosa, Past and Present: History, People, Resources, and Commercial Prospects; Tea, Camphor, Sugar, Gold, Coal, Sulphur, Economical Plants, and Other Productions*. London and New York: Macmillan; Yokohama: Kelly & Walsh, 1903.
- Fengjia daxue 逢甲大學 (ed.), *Taiwan guwenshu yu lishi yanjiu xueshu yantaohui lunwenji* 臺灣古文書與歷史研究學術研討會論文集 *Proceedings of the Conference on Taiwan's Historical Documents: Methods and Perspectives of Historical Research*. Taizhong: Fengjia daxue, 2007.
- Fudan Daxue, *Lishi dili yanjiu zhongxin* 復旦大學歷史地理研究中心 (ed.), *Gangkou: Fudi he Zhongguo xiandaihua jincheng* 港口：腹地和中國近代化進程. Shandong: Qilu, 2005.
- Gardella, Robert, "From Treaty Ports to Provincial Status, 1860-1894", in Rubinstein (1999), 163-200.
- Hao Yanping 郝延平 and Wei Xiumei 魏秀梅 (eds.), *Jinshi Zhongguo zhi chuantong yu tuibian: Liu Guangjing yuanshi qishiwu sui zhushou lunwenji* 近世中國之傳統與蛻變：劉廣京院士七十五歲祝壽論文集 *Tra-*

- dition and Metamorphosis in Modern China: Symposium in Commemoration of Prof. Liu Kwang-ching's 75th Birthday*. Taipei: Zhongyang yanjiuyuan, Jindai shi yanjiusuo, 1998.
- Higashi Yoshio 東嘉生, *Taiwan jingji shi gaishuo* 臺灣經濟史概說, translated by Zhou Xian-wen 周憲文. Taipei: Pami'er, 1985.
- Huang Jiamo 黃嘉謨, *Jiawu zhanqian zhi Taiwan meiwu* 甲午戰前之臺灣煤務. Taipei: Zhongyang yanjiuyuan, Jindai shi yanjiusuo, 1961.
- _____, *Meiguo yu Taiwan: 1784 zhi 1895* 美國與臺灣—1784至1895. Taipei: Zhongyang yanjiuyuan, Jindai shi yanjiusuo, 1979.
- Huang Fusan 黃富三, “Qingji Taiwan waishang de jingying wenti: yi Meilishi yanghang weili” 清季臺灣外商的經營問題：以美利士洋行為例, in Zhang Yanxian (1984), 249-270.
- _____, Lin Manhong 林滿紅 and Weng Jiayin 翁佳音 (eds.), *Qingmo Taiwan haiguan linian ziliao* 清末台灣海關歷年資料 *Maritime Customs Annual Returns and Reports of Taiwan, 1867-1895*, Vol. 2: 1882-1895]. Taipei: Zhongyang yanjiuyuan, Taiwan shi yanjiusuo choubichu, 1997 (2 vols.).
- _____, and Weng Jiayin 翁佳音 (eds.), *Taiwan shangye chuantong lunwenji* 臺灣商業傳統論文集. Taipei: Zhongyang yanjiuyuan, Taiwan shi yanjiusuo choubichu, 1999.
- Keizai shiryō hōkoku* 經濟資料報告, ed. by Rinji Taiwan kyūkan chōsakai 臨時台灣旧慣調査會. Taiwan Sōtokufu 臺灣總督府, 1905.
- Lin Manhong [=Lin, Man-houng] 林滿紅, “Kou'an maoyi yu jindai Zhongguo: Taiwan zuijin youguan yanjiu zhi huigu” 口岸貿易與近代中國：臺灣最近有關研究之回顧, in Zhang Yufa (1986), 869-915.
- _____, “Taiwan ziben yu liangan jingmao guanxi, 1895-1945” 臺灣資本與兩岸經貿關係, in Song Guang-yu (1993), 67-139.
- _____, “Qingmo dalu lai Tai jiaoshang de xingshuai: Taiwan shi, shijie shi, zhongguo shi zhi yi jiehe sikao” 清末大陸來臺郊商的興衰：臺灣史、世界史、中國史之一結合思考, *Guojia kexue weiyuanhui yanjiu huikan* 國家科學委員會研究彙刊, 4.2 (July 1994), 173-193.
- _____, *Cha, tang, zhangnaoye yu Taiwan zhi shehui jingji bianqian 1860-1895* 茶、糖、樟腦業與臺灣之社會經濟變遷. Taipei: Lianjing, 1997.
- _____, “Economic Ties between Taiwan and Mainland China, 1860-1896: Strengthening or Weakening?”, in Hao Yanping and Wei Xiumei (1998), 1067-1089.

- _____, “Kou’an maoyi yu fudi bianqian: Jindai Zhongguo de jingyan (1860 niandai zhi 1930 niandai)” 口岸貿易與腹地變遷：近代中國的經驗 (1860 年代至 1930 年代), in *Fudan Daxue* (2005), 14-26.
- Lin Renchuan 林仁川, “WanQing Min-Tai de shangye maoyi wanglai 1860-1894” 晚清閩臺的商業貿易往來, in Huang Fusan and Weng Jiayin (1999), 107-132.
- Lin Yu-ju 林玉茹, *Qingdai Taiwan gangkou de kongjian jigou* 清代臺灣港口的空間結構. Taibei: Zhishufan, 1995.
- _____, *Qingdai zhuqian diqu de zaidi shangren jiqi huodong wangluo* 清代竹塹地區的在地商人及其活動網絡. Taibei: Lianjing, 2000.
- _____, “Shangye wangluo yu weituo maoyi zhidu de xingcheng: shiji mo shiji mo Lugang Quanjiao shangren yu Zhongguo neidi de fanchuan maoyi” 商業網絡與委託貿易制度的形成：十九世紀末鹿港泉郊商人與中國內地的帆船貿易, *Xin shixue* 新史學 18.2 (June 2007), 61-103.
- Lin Zihou 林子侯, “Qingdai kaigang hou duiwai maoyi de fazhan” 清代開港後對外貿易的發展, *Taiwan wenxian* 臺灣文獻 27.4 (Dec. 1976), 53-63.
- Rubinstein Murray A. (ed.), *Taiwan: A New History*. Armonk, NY: Sharpe, 1999.
- Sawamura Konan 澤村小南, “Amoi kinyū jijou” 廈門金融事情, *Taiwan Kyōkai kaibō* 臺灣協會會報 13 (1899), 116-117.
- Shanghai Chinese Maritime Customs, “Trade Reports and Returns: Tamsui, 1891”, in *Chinese Imperial Maritime Customs* (1970).
- Shen Yuting 沈昱廷, “Qingdai jiaohang yanjiu: Yi Beigang zisheng hao wei li” 清代郊行研究：以北港資生號為例, in *Fengjia daxue* (2007), 95-136.
- Song Guang-yu 宋光宇 (ed.), *Taiwan jingyan: Lishi jingji pian* 臺灣經驗：歷史經濟篇. Taibei: Dongda, 1993.
- Taiwan keizai jijō shisatsu fukumeisho* 臺灣經濟事情視察復命書, ed. by Ōkurashō lisaikyoku 大藏省理財局. Tōkyō: Chūaisha, 1899.
- Taiwan nichinichi shinpō* 臺灣日日新報. Taibei, 1898-1944.
- Taiwan Political and Economic Reports, 1861-1875*, ed. by Robert L. Jarman. Taiwan political and economic reports, 1861-1960, Vol. 1. Slough: Archive Editions, 1997.
- Taiwan shihō furoku sankōsho* 台湾私法附錄參考書, ed. by Rinji Taiwan kyūkan chōsakai 臨時台湾旧慣調査会. 3 vols. Taibei: Taiwan Sōtokufu 臺灣總督府, 1910-1911.

- Taiwan sifa shangshi bian* 臺灣私法商事編, orig. ed. by Rinji Taiwan kyūkan chōsakai 臨時台灣旧慣調査会. Taiwan wenxian congkan 臺灣文獻叢刊, 91. Taipei: Taiwan yinhang, 1961.
- Taiwan zhilüe* 臺灣志略, by Li Yuan-chun 李元春. Taiwan wenxian congkan 臺灣文獻叢刊, 18. Taipei: Taiwan yinhang, 1958 (first published 1835).
- Taiwan zongdufu dang'an Zhongyi ben: Riju shiqi Taiwan zongdufu gongwen leizuan* 台灣總督府檔案中譯本: 日據時期臺灣總督府公文類纂, transl. from the Japanese and ed. by Chen Wentian 陳文添. Nantou: Taiwan sheng wenxian weiyuanhui, 1992.
- Wang Yejian 王業鍵, "Qingdai jingji chulun" 清代經濟芻論. *Shihuo yuekan* 食貨月刊 2.11 (Feb. 1973), 541-550.
- Wen Zhenhua 溫振華, "Danshui kaigang yu dadaocheng zhongxin de xingcheng" 淡水開港與大稻埕中心的形成, *Guoli Taiwan shifan daxue lishi xuebao* 國立臺灣師範大學歷史學報 6 (May 1978), 245-270.
- Xie Mei'e 謝美娥, *Qingdai Taiwan mijia yanjiu* 清代臺灣米價研究. Taipei: Guoli bianyiguan, 2006.
- Xuxiu Taiwan xianzhi* 續修臺灣縣志, by Xie Jin-luan 謝金鑾. Taiwan wenxian congkan 臺灣文獻叢刊, 140. Taipei: Taiwan yinhang, 1962 (first published 1807).
- Yamamoto Susumu 山本進, *Shindai no shijō kōzō to keisai seisaku* 清代的市場構造と經濟政策. Nagoya: Nagoya Daigaku, 2002.
- Yang Yuezi 楊玉姿, "Qingdai Dagou Chen Fuqian jiazhu de fazhan" 清代打狗陳福謙家族的發展, *Gaoxiong wenxian* 高雄文獻 1.2 (Sept. 1988), 1-19.
- Ye Zhenhui 葉振輝, "Tianlihang shishikao" 天利行史事考, *Taiwan wenxian* 臺灣文獻 38.3 (September 1987), 41-45.
- Zhanghua xianzhi* 彰化縣志, by Zhou Xi 周璽. Taiwan wenxian congkan 臺灣文獻叢刊, 156. Taipei: Taiwan yinhang, 1962 (first published 1835).
- Zhang Yanxian 張炎憲 (ed.), *Zhongguo haiyang fazhanshi lunwenji* 中國海洋發展史論文集, Vol. 1. Taipei: Zhongyang yanjiuyuan, Sanmin zhuyi yanjiusuo 中央研究院三民主義研究所, 1984.
- Zhang Yufa 張玉法 et al. (eds.), *Jindai Zhongguo quyu shi huiyi lunwen ji* 近代中國區域史研討會論文集. Taipei: Zhongyang yanjiuyuan, Jindai shi yanjiusuo, 1986.

- Zhao Youzhi 趙祐志, "Shunhezhan zai Hengbin (1864-1914)" 「順和棧」在橫濱, *Sanchong gaozhong xuebao* 三重高中學報 3 (June 2000), 193-210.
- Zheng Ruiming 鄭瑞明, "Qingling chuqi de Tai-Ri maoyi guanxi (1684-1722)" 清領初期的臺日貿易關係, *Guoli Taiwan shifan daxue lishi xuebao* 國立臺灣師範大學歷史學報 32 (June 2004), 43-87.
- Zhu Delan 朱德蘭, "Qing Kangxi Yongzheng nianjian Taiwan chuanhang Ri maoyi zhi yanjiu" 清康熙雍正年間臺灣船航日貿易之研究, in *Chu Yiguan* (1987), 421-451.
- _____, "Qing Kangxi Yongzheng nianjian Taiwan-Changqi maoyi yu guonei shangpin liutong guanxi" 清康熙年間臺灣長崎貿易與國內商品流通關係, *Donghai xuebao* 東海學報 29 (June 1988), 129-148.