

Feature of Imperfect Competition of the Ming-Ch'ing Salt Market

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Introduction

Salt was a key commodity intimately related to politics and economic structure in traditional societies and the salt monopoly had a long history and in China since 119 B.C.¹ Salt tax was one of the major items of government's revenue in the Ming (1368-1643) and Ch'ing (1644-1911) periods. According to a study of Hsu Hung 徐泓, in 1522-1566 the share of salt tax was 20-30% of the total revenue; in 1573-1619 there were increases of salt tax and at the end of that period, the share of salt tax was one half of 4 million taels of silver collected in the Treasury of the Board of Revenue; and in 1620-1643, the expected salt tax was 3 million taels which was almost equal to the amount of silver collected in the Treasury.² According to estimates of Wang Yeh-chien 王業鍵, in 1753 salt tax was about 8.8 million taels and accounted for 11.9% of the total Ch'ing government's revenue and in 1908, the amount of salt tax was 45 million taels and accounted for 15.4% of the total revenue.³ These estimates indicated that salt was significantly related to the government's revenue. Moreover, salt was one of staple commodities of domestic trade in this period. According to estimates of Wu Ch'eng-ming 吳承明 and his collaborators, prior to the Opium War (1839-1842), the value of salt trade was 53.5 million taels which accounted for 15.3% of the total value of trade on domestic market (349.6 million taels), next only to that of grain (138.8 million taels, 39.7%) and cotton cloth (94.6 million taels, 27.0%).⁴ According to Adshead, the value of salt trade around 1901 was 100 million

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¹ For a rather comprehensive study on the salt monopoly in Chinese history, see Ho Wei-ning 何維凝, 1966. For a concise discussion on Chinese salt administration in a comparative perspective, see S. A. M. Adshead, 1970.

² Hsu Hung, 1982, pp. 562-568. Moreover, Ray Huang estimated that in 1570-1600 the silver of the Board of Revenue was about 2.6 million taels among which salt tax was 1 million taels, see Ray Huang, 1969, p. 104.

³ Yeh-chien Wang, 1973, p. 71, p. 74, p. 80.

⁴ Wu Ch'eng-ming and Hsu Ti-hsin 許滌新 eds., 1987, p. 375. The estimates in Wu Ch'eng-ming,

taels which was about equal to the value of rice traded inter-regionally and was only 30 million taels less than the value of native opium traded at that time and 69 million taels less than the total value of China's export.⁵ These estimates in turn revealed that salt was closely related to people's livelihood. In short, salt played an important role in economic life of the Ming-Ch'ing times.

Just because salt was so important, there were voluminous historical documents and many scholars had devoted to study this subject.⁶ Generally speaking, detailed studies on various aspects related to salt during the Ming period had been done by Hsu Hung and in the Ch'ing period by Chiang Tao-chang 姜道章, although the two scholars have different points of focus.⁷ Studies related to Liang-huai 兩淮 salt region had been done by Saeki Tomi 佐伯富 and Hsu Hung in great details of many aspects, and by Thomas Metzger from the aspect of government organization capability.⁸ As for the study on other salt regions, Ssu-ch'uan 四川 has attracted more attention than the rest.⁹ There are also more studies on activities of major salt merchant groups.¹⁰ Moreover, there was a study on the modernization of salt administration in the early twentieth century.¹¹

Obviously, this paper cannot be attempted to discuss all aspects related to salt during the Ming and Ch'ing periods, instead the focus will be on imperfect competition¹² of the salt market. The approach is to investigate the operation of this imperfect competitive market through institutional changes and viewpoints of the Ming-Ch'ing contemporaries. If this paper can clarify phenomena related to the operation of official salt market, it might be helpful for our understanding of the market economy in Ming-Ch'ing times.

1983, p. 99 had been adjusted in the 1987 study.

⁵ S. A. M. Adshead, 1970, p. 13.

⁶ See Ho Wei-ning, 1951, for a comprehensive bibliography of historical documents.

⁷ See References for works of the two scholars. Chiang Tao-chang has another article on salt consumption (Nanyang University Journal, VIII-IX, 1974-75) and a doctoral dissertation on salt industry (University of Hawaii, 1975), but I am not able to consult these two works for the time being.

⁸ Saeki Tomi, 1956; Hsu Hung, 1972; Thomas Metzger, 1972.

⁹ See Chen Tsu-yu 陳慈玉, 1976, p. 611 for a brief list of studies on the Ssu-ch'uan salt region; also see Madeleine Zelin, 1988. Studies on other regions, see works of Wang Hsiao-ho 王小荷, 1986; Liu Chun 劉雋, 1933b; Liu Su-fen 劉素芬, 1987; Kung Yueh-hung 龔月紅, 1987; Wu Cheng-ming and Hsu Ti-hsin, 1987, sections 5 and 6 of are related to Ssu-ch'uan, Ho-tung, and Liang-huai. It is notable that a new journal (*Yen-yeh-shih yen-chiu* 鹽業史研究) specialized on history and technology of salt industry was published in 1986 in Szechwan.

¹⁰ See works of Fujii Hirosh 藤井宏, 1953-54; Ping-ti Ho, 1954; and Terada Takanobu 寺田隆信, 1972.

¹¹ See Adshead, 1970.

¹² Adopted from Joan Robinson, 1933. Huang Jen-yu 黃仁宇 said that before the nineteenth century China's economy was "non-competitive" which was not the meaning referred here, see 1982, p. 492. It should be noted that by adopting the term "imperfect competition", I do not mean to apply Robinson's models vigorously in this paper, but just to show that the salt market was not "highly competitive" as other commodity markets described by some papers in this conference.

The salt market in Ming-Ch'ing times was different from other commodity markets just as pointed out by Wang Ch'ing-yun 王慶雲 (1798-1862):

Those who trade are all known as merchants. However, it is only in the salt trade that there is restriction of volume so that it cannot be more or less; there is specification of area of distribution so that it cannot be north or south; and there are officials who inspect at one spot after the other.¹³

Although Wang was saying these words concerning situation of merchants, he actually pointed out features of imperfect competition of the salt market. Imperfect competition of the salt market in Ming-Ch'ing times was manifested in the following facets:

(1) The areas of distribution were officially confined and it was not allowed to distribute beyond the boundary. There were eleven salt distribution regions in Ming-Ch'ing times (see Maps 1 and 2), namely, Liang-huai, Liang-che 兩浙, Ch'ang-lu 長蘆, Shan-tung 山東, Ho-tung 河東, Shan-hsi 山西, Kuang-tung 廣東, Fu-chien 福建, Ssu-ch'uan, Yun-nan 雲南, and Liao-yang 遼陽 (Sheng-ching 盛京).¹⁴ The division of the salt distribution regions was mainly for prohibiting illegal salt and securing collection of salt tax. Just as Wang Shou-chi 王守基 (1852 *chin-shih* 進士, d. 1873), who was very familiar with salt affairs, stated: "The division is depending on terrain of mountains and rivers; there must have strategic barriers for defending. It is not by accident."¹⁵ There were not many incidents in which the areas were changed officially.¹⁶ Since the quality of salt from different region was not the same,¹⁷ the confinement of salt regions served as a barrier for competition.

(2) Salt merchants were convened by official announcements, thus, there was a limitation of entering into and existing market. After the adoption of *kang-fa* 綱法 (a system of organizing salt shipment) in 1617 the salt trade became hereditary.¹⁸

¹³ *Shih-ch'ü yü-chi* 石渠餘記, p. 7.

¹⁴ For the sphere of each salt region see *Hsu wen-hsien t'ung-k'ao* 續文獻通考, 20/2955-2959; *Ch'in-ting ta-Ch'ing hui-tien shih-li* 欽定大清會典事例 (1899 edition), chuan 221-229. Names of salt regions are Romanized in this paper to avoid of confusion with those of provinces. The Liao-yang salt fields in Ming times were not under official administration and the Sheng-ching salt in Ch'ing times was distributed in Feng-t'ien 奉天 and Ching-chou 錦州 prefectures.

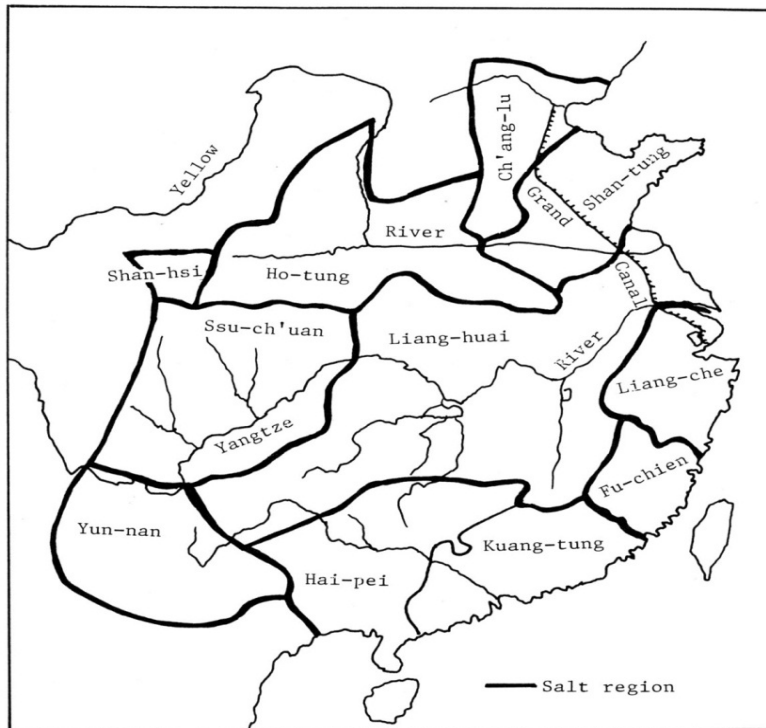
¹⁵ *Chiu-shneg yen-wu-i-lüeh* 九省鹽務議略, p. 113. For modern scholars' opinions on the salt region, see Hsu Hung, 1974, pp. 247-254; Katō Shigeshi 加藤繁, 1937, pp. 4-5; Saeki Tomi, 1956, pp.83-103; Chiang Tao-chang, 1983, pp.213-218.

¹⁶ For incidents in Ch'ing times, see *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 221/6a-b, 7a; 222/20a; 223/3a; 224/2b, 3a, 3b, 21b; 225/17a; 227/4a, 4b, 5b, 6a, 8a, 24b; 228/4a-b, 8b; 229/ 2b-3a, 5a-b, 6a, 14b.

¹⁷ The quality of salt from different regions differed and it was one reason for smuggling, see Hsu Hung, 1972a, pp. 142-154.

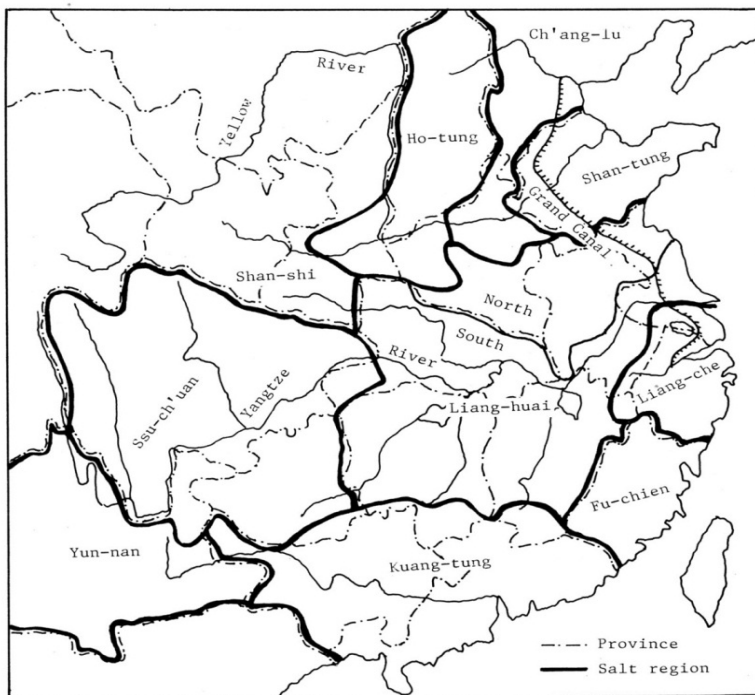
¹⁸ Wu Tuo 吳鐸, 1935, pp. 108-155, there were many cases in which the salt trade was hereditary.

Map 1: Salt Regions in Ming Times



Source: Wada Sei 和田清 ed., *Minshi shokkashi yakuchū* 明史食貨志譯註 (*The Shih-huo-chih of the Ming-shih: Translation and Notes*), Tokyo: The Toyo Bunko, 1957.

Map 2: Salt Regions in Ch'ing Times



Source: Saeki Tomi 佐伯富, *Shindai shiose no kenkyū* 清代鹽政の研究 (*The Salt Administration under the Ch'ing Dynasty*), Kyoto: The Society of Oriental Researches, Kyoto University, 1956.

(3) The license (or certificate) for salt distribution, known as *yin* 引, was issued by the Board of Revenue. The amount of salt per *yin* was officially determined. It was not allowable to separate the *yin* from the salt. There were regulations for shipment to be followed carefully by salt merchants.¹⁹ In some places, another kind of license known as *p'iao* 票 was used. However, no matter it was *yin* or *p'iao*, the salt merchants must pay a price officially given. The price of *yin* (*p'iao*) was a part of cost borne by merchants and thus could be considered as a proxy of wholesale price. Moreover, in most localities, the market price of salt was set officially. Obviously, the price of salt was not determined by the market under these circumstances.

(4) For prohibiting illegal (private) salt, severe restrictions were set up by the government. For example, death penalty was a punishment for those who committed smuggling of salt.²⁰

The phenomenon of salt smuggling during the Ming and Ch'ing periods has been studied by scholars in great details. According to estimates of Hsu Hung, in the late Ming period the volume of salt illegally sold by producers (*tsao-hu* 灶戶) consisted of a half of the total products and in the Ch'ing period, around the year 1800, the illegal salt occupied 40-60% of the salt market.²¹ Moreover, Saeki Tomi estimated that in 1821-1850 the illegal salt occupied more than one half of the market.²² Wu Cheng-ming and his collaborators estimated that prior to the Opium War there were about 800 million catties of illegal salt which accounted for one fourth of the salt market.²³ So flourishing was the illegal salt that the barrier of imperfect competition market was already eroded. However, for collecting revenue from salt tax, the government had tried various methods to maintain the official salt market.

As for institutions regulating the salt market in Ming-Ch'ing times, a turning point of change was in 1617; before that year the official monopoly system and after, the merchant monopoly system was dominated. Under the former system, the main method was *k'ai-chung* 開中 while under the latter, it was *kang-fa*. In addition, a supplementary system known as *p'iao-fa* 票法 was put into practice in both periods in some localities of Liang-che, Shan-tung, Ho-tung, and Liang-huai.²⁴ This paper will first discuss the problem of surplus salt under the *k'ai-chung* system, then discuss the

¹⁹ For the style of *yin* see, *Ta-Ming hui-tien* 大明會典, 34/14a-16a; *Liang-huai yen-fa-chih* 兩淮鹽法志, 7/23b-25b. Items printed on *yin* included name of merchant, distribution location, number of *yin* and important rules of prohibition.

²⁰ For prohibiting regulations and precedents, see *Ta-Ming hui-tien*, 34/19b-34a; *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 231/1a-26b; *Ch'ing-ch'ao wen-hsien t'ung-k'ao* 清朝文獻通考, chuan 28.

²¹ Hsu Hung, 1982, p. 543; Hsu-Hung, 1972, p.154.

²² Saeki Tomi, 1956, p. 205.

²³ Wu Ch'eng-ming and Hsu Ti-hsin, 1987, p. 430.

²⁴ In the early Ming period, a system of salt rationing, known as *hu-k'ou-shih-yen-fa* 戶口食鹽法, was adopted but this was gradually combined with land tax and had little to do with the salt market, for details, see Hsu Hung, 1974, pp. 221-226; Hsu Hung, 1975, pp.139-144.

official salt market under the merchant monopoly system and finally investigate opinions on releasing control. This paper will conclude that even the illegal salt consistently occupied a part of the market, the Ming and Ch'ing governments had tried to maintain the official salt market with various methods. Thus, the monopoly system was not kept all intact and there were opinions proposed for releasing control every now and then. However, imperfect competition of the salt market in Ming-Ch'ing times had not been changed into perfect competition and this suggested that a fundamental institutional reform was not an easy task which required the society prepared to bear a great cost.

I. Problem of Surplus Salt Under *K'ai-chung* System

The origin of *k'ai-chung* in Ming times could be traced to *che-chung* 折中 in Sung times. The similarity of these two systems was that merchants were commanded by the government to transport grain to the frontier and rewarded by certificates for distributing salt.²⁵ A very brief definition of *k'ai-chung* was given by the treatise on economy in *Ming-shih* (Ming history) as: "To call merchants to send grain and give them salt in return is called *k'ai-chung*."²⁶ As a matter of fact, *k'ai-chung* was a quite complicated system.²⁷ In respect to salt, this method required a prerequisite condition that the government controlled all product of salt.²⁸ The government was to play a role of wholesaler and the merchant that of distributor of salt. In 1370 *k'ai-chung* was first adopted in Shansi province. The method was to call merchants to send 1 *shih* 石 of rice to the granary in Ta-t'ung 大同 and 1.3 *shih* to the granary in T'ai-yuan 太原 and receive in return one *yin* (200 catties) of the Huai salt. The merchants must distribute the salt at assigned localities and after finishing distribution return the used *yin* to the local official office. This method was for the purpose of saving transport cost and securing abundance of frontier granaries.²⁹ In the Yung-lo 永樂 period (1403-1424) and after, the method of sending rice to interior granaries was interrupted

²⁵ Fujii Hiroshi, 1941, pp.677-700; Tai I-hsuan 戴裔煊, 1982, pp.231-232.

²⁶ *Ming Shih* 明史, 80/5a.

²⁷ Aside for salt, *k'ai-chung* was also related to tea, horse, iron and other goods, see Ho Wei-ning, 1966, pp. 220-222; Hsu Hung, 1974, pp.232-235; Lee Lung-wah 李龍華, 1971, p. 371.

²⁸ The design of the system was that the salt producers should just produce the quota assigned to them. For instance, in Fu-chien each producer was assigned to produce 450 catties per annum in early Ming, see Yen-wu-shu 鹽務署, 1914-15, Vol. 3, p. 14. This paper will not discuss the aspect of salt production, for production organization and pattern in Ming see Hsu Hung, 1975a and 1976; in Ch'ing see Hsu Hung, 1972a; for geographical variations, also see Chiang Tao-chang, 1976.

²⁹ Modern scholars used to cite the record of Hung-wu 洪武 3/6/hsin-ssu 辛巳 in the *Ming-shih-lu* 明實錄, that record was quoted exactly in *Ming-shih*, 80/5a. Ku Yen-wu 顧炎武 had mentioned the method adopted in Shansi and said that was "the beginning of *k'ai-chung* for salt", however, he did not refer precisely that the salt given to merchants was the Huai salt, see *Jih-chih-lu* 日知錄, p. 247.

and thus *k'ai-chung* was mainly practiced in the frontier areas.³⁰

In accordance with the practice of *k'ai-chung*, there were restrictive regulations, such that merchants had to distribute salt at assigned localities, the salt should not be separated with the *yin*, and commitment of smuggling would be punish to death.³¹ Under such severe restrictions a merchant must spend his time in transporting grain to the frontier granary, receiving salt at appointed producing field and distributing salt at assigned localities. Obviously, under the condition of traditional transportation facilities the whole process would take a long time to complete. There must have a great amount of premium between the cost of transporting grain and the revenue of distributing salt so that merchants would have profit and be willing to respond to the government's calling. In designing the system in early Ming, the government had actually considered this factor, thus the *Ming-shih* stated: "The regulations were not always the same; they were changed according to the need of time, the price of rice, and whether merchants would be benefited; where the distance was long and the terrain was not favorable the rate would be reduced."³²

No matter what measures were adopted by merchants to reduce their cost of transporting grain,³³ a normal operation of *k'ai-chung* required that the number of *yin* given should be agreed to the amount of salt controlled by the government. Otherwise, even if merchants had obtained *k'an-ho* 勘合 (certificate)³⁴ at the frontier granary, he might not be able to obtain salt at the fields. As a matter of fact, in early years of *k'ai-chung*, merchants got a lot of profit because the cost of transporting grain was far less than the revenue of distributing salt. For example, in the Yung-lo period it was said: "The cost was one while the profit was always six or seven folds."³⁵ Due to merchants' enthusiastic responses, the number of *yin* given was more than the amount of salt supply. There might not have enough communication of demand and supply between frontier granaries and interior administrative offices, and thus, merchants had to wait for many years before obtaining the salt.³⁶ In 1428 the regulation of

³⁰ For details see Fujii Hiroshi, 1941, p. 697; also see *Ming-shih*, 80/5a-b; for practice in the Yung-lo period, see *Ming-shih*, 80/6a.

³¹ *Ming-shih*, 80/5b.

³² *Ming-shih*, 80/5a-b. A very detailed list of grain-salt exchange rates during 1370-1482 in various regions is provided in Lee Lung-wah, 1971, pp. 376-427.

³³ The merchants adopted colonization at frontier, known as *shang-t'un* 商屯 (commercial colonization), to obtain cheap grain, see Wang Ch'ung-wu 王崇武, 1936, Hsu Hung, 1974, pp. 238-240; *Ming-shih*, 80/9a; *Tieh-lu-chi* 鐵廬集, pp. 534-535.

³⁴ *K'an-ho* was a certificate obtained by merchants after transporting grain to frontier granaries, it should be carried to the salt fields for checking against the official records; regulations about *k'an-ho* were adopted in 1395, see *Ta-Ming hui-tien*, 34/4b-5a; Hsu Hung, 1974, pp.241-242; Li Lung-ch'ien 李龍潛 had discussed differences between *k'an-ho* and *yin-mu*, see 1987, p. 616. Nevertheless, when *k'ai-chung* was not in practiced, there was no use of *k'an-ho* and *yin* became a general name of the license for salt distribution.

³⁵ Li Lung-ch'ien, 1987, p. 625.

³⁶ Terada Takanobu had pointed out that in early Ming there was a tendency to issue the *yin* in

k'ai-chung was once changed and paper money was given to merchants in compensation for their capital (known as *tzu-pen-ch'ao* 資本鈔). In 1440, merchants who had been waiting since the Yung-lo period and their grandsons had taken their places in waiting would be given 30 *ting* 錠 of paper money for one *yin* of salt; those who preferred to wait would be allowed to do so. In 1483 the amount of paper money given for salts of regions other than Liang-huai was reduced.³⁷ Since *ta-Ming pao-ch'ao* 大明寶鈔 (paper money of Ming) had been devalued a great deal,³⁸ it was possible that not many merchants wanted to receive paper money.

The necessity of waiting caused the turnover of capital to slow down and merchants' responses gradually decreased. Thus, in 1440, it was also decided that the salts of Linag-huai, Liang-che and Ch'ang-lu should be divided annually into ten portions, of which eight portions were to provide for the waiting merchants and was known as *ch'ang-ku* 常股 and the other two portions were to be reserved in official warehouses and known as *ch'un-chi* 存積. The proportions of *ch'ang-ku* and *ch'un-chi* changed from time to time and were fixed at a ratio of six to four in 1526. The salt of *ch'un-chi* was mainly for emergent need at the frontier and its price was higher than that of *ch'ang-ku*, however, because it was not necessary to wait merchants competed to bid for *ch'un-chi*. In the beginning of Ch'eng-hua 成化 period (1465-1487) there even occurred an event of bribing the influential official to memorialize for *ch'un-chi*, and the *Ming-shih* called this was "a beginning of decay of the salt system."³⁹

Moreover, for solving the problem of waiting a method of transfer was adopted in 1435. At that time the Ho-tung salt had surplus while the Huai and Che salts were in short supply, therefore, the Board of Revenue decided that the Ho-tung salt should be given to the waiting merchants. Again in 1437, it was ordered that merchants waiting for the Huai salt should be given four portions of the Huai salt and the other six portions should be given with the Shan-tung salt; those who would not take this should be allowed to wait. Furthermore, the scope of transference was extended later to the salt fields of Ch'ang-lu, Shan-hsi, Fu-chien and Kuang-tung.⁴⁰ In 1438, the

excessive number, see 1972, p. 82. What Terada referred to as "excessive" was probably due to the fact that there was no perfect communication between the frontier granaries and the salt offices at fields; it might also be a result of colonization which brought merchants to respond to *k'ai-chung* promptly; excessive issues of *yin* might not be a planned result.

³⁷ *Ta-Ming hui-tien*, 34/7b, 8b.

³⁸ In early Ming, paper money was issued at the standard of one *kuan* 貫 (string) equaled to 1,000 *wen* 文 of cash or one tael of silver, and four *kuan* equaled to one tael of gold, see *Ming-shih*, 81/2a. As for *ting*, it was a unit for 50 taels of silver since the T'ang-Sung periods, in Yuan times it was also used to refer to 50 *kuan* of paper money, see Lien-sheng Yang, 1971, p. 43, p. 45. For the devaluation of the Ming paper money, see Line-sheng Yang, 1971, p. 67; Ch'uan Han-sheng 全漢昇, 1976, pp. 194-195.

³⁹ *Ta-Ming hui-tien*, 34/1b-2a; *Ming-shih*, 80/8a. As early as in 1394 an order was issued to prohibit officials from engaging in *k'ai-chung*, and many orders were issued to repeat the prohibition later, see *Ta-Ming hui-tien*, 34/19b; *Hsu wen-hsien t'ung-k'ao*, 20/2958-2963.

⁴⁰ *Ta-Ming hui-tien*, 34/5a; *Hsu wen-hsien t'ung-k'ao*, 20/2958-2963.

merchants were permitted to bid for both the Huai and Che salts at the same time.⁴¹ As a result of these practices, a merchant might have to obtain his salt supply from several salt fields and the distance would prevent him from going to these places all by himself, thus, during 1465-1487, there occurred a phenomenon of selling the *yin* to wealthy peoples around the salt producing areas. The merchants were thus divided into *pian-shang* 邊商 (frontier merchant) and *nei-shang* 內商 (interior merchant). The former expertized in bidding the *yin* at the frontier while the latter in waiting for salt at various fields.⁴² This change destroyed restricted limitation of one merchant to engage both in transporting grain and distributing salt in the *k'ai-chung* system. During 1465-1487 there were several orders for prohibiting transaction of *yin*.⁴³

On the one hand there were influential persons who engaged in *ka'i-chung* and on the other hand, there were differentiations between the frontier and interior merchants, thus, the *yin* became an instrument which could be transferred for profit. For example, during 1522-1566 the number of *yin* bidden by influential persons ranged from one or two thousands to several thousands. For every *yin* transferred the profit was 0.6 tael of silver. This not only brought about an increase of the merchant's cost but also was harmful to the government's revenue.⁴⁴

The long waiting for obtaining salt also revealed the fact that the government was not able to control the entire salt product. In early Ming times, the government provided the salt producers with *kung-pen-ch'ao* 工本鈔 (paper money for covering production expenses) according to the price of rice and strictly prohibited illegal selling, when diligent producers had surplus salt the field officials should purchase it with one *shih* of rice for one *yin* (200 catties) of salt.⁴⁵ Due to devaluation of the paper money, however, the *kung-pen-ch'ao* gradually became void.⁴⁶ Beyond that, the price provided by the government became lower and lower. In 1437, the official price for surplus salt was only 0.2 *shih* of rice or wheat per *yin*. In 1448, although an order of providing one *shih* for one *yin* was issued again, in 1450 and 1454 the decisions were made that for one *yin* of the Huai salt the price was 0.8 *shih*, of the Che salt, 0.6 *shih*, and of the Ch'ang-lu and Kuang-tung salt, 0.4 *shih*.⁴⁷ As the

⁴¹ *Ta-Ming hui-tien*, 34/5a-6a.

⁴² *Hsu wen-hsien t'ung-k'ao*, 20/2962-2963.

⁴³ *Ta-Ming hui-tien*, 34/21b-22b.

⁴⁴ Li Lung-ch'ien, 1987, pp. 632-633; *Huang-Ming shu-ch'ao* 皇明疏鈔, pp. 3095-3096, 3101-3012; 3105.

⁴⁵ *Ta-Ming hui-tien*, 34/2b; *Ming-shih*, 80/7a, 8b; *Hsu wen-hsien t'ung-k'ao*, 20/2958, 2963. The surplus salt discussed here referred only to the surplus of producers. There was another category of surplus salt referring to the amount confiscated from merchants, in the Ch'eng-hua period this category of surplus was also allowed to be paid for not being confiscated, see *Ta-Ming hui-tien*, 34/16b-19a.

⁴⁶ Hsu Hung, 1982, p. 527.

⁴⁷ See respectively in *Ta-Ming hui-tien*, 34/34b-55a; 32/5b; 34/3a; 33/15b; also see Nakayama Hachirō, 1941, pp. 510-513; Hsu Hung, 1982, p. 527.

income of salt producers deteriorated it was unavoidable that they would sell surplus salt illegally. More important, the government was actually not able to purchase all surpluses. Thus in the beginning of the Ch'eng-hua period (1465-1487) it was decided that merchants could provide rice or wheat for the relief of poor salt producers, and in 1483 it was further decided that the waiting merchants be allowed to purchase surplus salt in order to fill up deficit amount of the official *yin* and the pretension of the poor relief be dropped. The *Ming-shih* called this "a small change in the salt system" and Nakayama Hachirō 中山八郎 called this the beginning of destroying the salt monopoly system.⁴⁸ In 1489, the regulation for the waiting merchants to purchase surplus salt was formally established.⁴⁹

Inasmuch as merchants were allowed to purchase surplus salt legally, the government still tried various methods to control the surplus. For instance, to purchase surplus salt should be preceded by regular salt (originally, one *yin* of regular salt should be accompanied by one *yin* of surplus, it was gradually added to two, three or even six), the amount purchased should not be over 2,000 catties for one time, etc. Thus, the amount of salt actually under control by the government was two and a half folds of regular salt.⁵⁰ Indeed, the amount of surplus salt was rather large; according to a memorial in 1527 by Huo T'ao 霍韜 (1487-1540) in the Liang-huai region alone there were 3 million *yin*.⁵¹ Thus, from the mid Ming, the problem of surplus salt became very crucial for the government to maintain the official salt market.

Before continuing to discuss surplus salt, another change in *k'ai-chung* should be mentioned here, namely, a change from payment of grain at frontier granaries to payment of silver at salt administration offices. Although as early as in 1374 there was a precedent of commutation into silver payment and during 1465-1478 commutation was also permitted, formal regulation was announced in 1492 and more extensively practiced afterwards. At that time, the price of salt per *yin* was set at 0.3-0.4 tael of silver, this was about two folds of that in 1374; however, the merchants could save the trouble of transporting grain and the Treasury of the Board of Revenue accumulated more than one million taels of silver and both parties were in convenience for a short time. The commutation had changed the original *ka'i-chung* system and finally brought about a serious result of insufficient grain stockpiles at the frontier, but the *k'ai-chung* system was not all abolished.⁵² What were the timing and consequence of the practice of commutation?

⁴⁸ *Ming-shih*, 80/8b-9a; Nakayama Hachirō, 1941, pp. 514-515, 523.

⁴⁹ Nakayama Hachirō, 1941, pp. 517-522; Hsu Hung, 1982, p. 528; *Huang-Ming shu-ch'ao*, p. 3119; *Wen-hsien t'ung-k'ao*, 20/2963.

⁵⁰ Hsu Hung, 1976, p. 405.

⁵¹ *Huang-Ming shu-ch'ao*, p. 3129.

⁵² *Ming-shih*, 80/9a; Hsu Hung, 1975, pp. 144-152. For details of silver rates, see Lee Lung-wah, 1971, pp.434-446.

From the viewpoint of economic change in Ming times, commutation into silver payment in *k'ai-chung* during the fifteenth century was not an isolated phenomenon. As early as in 1436 land tax of some districts was commuted and the silver, known as *chin-hua-yin* 金花銀 (“gold-patterned silver”), was collected in the emperor’s personal treasury.⁵³ Later on, commutation of land tax became more and more widely practiced and eventually brought forth the single-whip system (*i-t'ao-pien-fa* 一條鞭法).⁵⁴ In the latter half of Ming dynasty, revenue and expenditure of the Board of Revenue mainly consisted of silver.⁵⁵ Thus the timing of commutation into silver payment in *k'ai-chung* was just following a trend of adopting silver as money in the Ming economy; whether it was Yeh Ch'i 葉淇 (1426-1501) who proposed this change, it was likely to be unavoidable.⁵⁶ The problem was that after commutation into silver payment, the price of salt must be adjusted and this was an important issue that should be investigated for the salt monopoly system during the late Ming period.

Now, return to the problem of surplus salt. As mentioned above, in early period of 1465-1487, the salt merchants were urged to provide rice or wheat for surplus salt in the name of poor relief, there was no record about how much rice or wheat was paid for one *yin* of salt. It was only known that in 1488 the salt merchants were ordered to purchase surplus salt with 0.1 *shih* of rice or 0.15 *shih* of wheat for one *yin* of salt.⁵⁷ These prices were far less than those officially provided quoted before. But the situation was changed after commutation. For the purpose of maintaining revenue from salt tax, the government regulated a higher price for surplus salt. For example, in the early Chia-ching 嘉靖 reign (1522-1566) the price of one regular *yin* of the Huai salt was 0.6 tael (previously only 0.35 tael) and that of the Che salt, 0.4 tael. However, for surplus salt, the price of the southern Huai salt was 0.8 tael and that of the northern Huai salt was 0.6 tael.⁵⁸

The price of *yin* collected from merchants by the government could be considered as a proxy of wholesale price. Because the burden of silver payment became gradually heavier, the merchants were gradually exhausted and the government’s revenue was also disturbed. Thus, a reduction of price was suggested by

⁵³ *Ming-shih*, 78/3b-4a; Lien-sheng Yang, 1971, p. 46; Ray Huang, 1969, pp.89-91.

⁵⁴ Among scholars who had studied the single-whip system Liang Fang-chung 梁方仲 was perhaps the most eminent, see his works in 1936 and 1944. For relation between the inflow of silver and the reform of single-whip system, see Liang Fang-chung, 1939.

⁵⁵ Ch'uan Han-sheng, 1972, pp.355-367; Ch'uan Han-sheng and Li Lung-wah, 1972, pp. 123-155; Hsu Hung, 1982, pp.559-560; Hsu-Hung, 1976, pp. 393-399.

⁵⁶ The Ming-Ch'ing contemporaries liked to blame Yeh Ch'i for the decay of *k'ai-chung* and this seems not to be very fair, for example, see Ch'u Ta-wen 儲大文, “K'ai-chung yen-fa 開中鹽法” in *Huang-ch'ao ching-shih wen-pien* 皇朝經世文編, 49/49a-b; Tung I-ning 董以寧, “Shang-t'un-i 商屯議,” in *ibid.*, 49/54a-b. Both Hsu Hung and Lee Lung-wah had discussed the role of Yeh ch'i, see Hsu Hung, 1975b, pp.155-157; Lee Lung-wah, 1971, pp. 475-480.

⁵⁷ *Ta-ming hui-tien*, 34/9b.

⁵⁸ *Huang-ming shu-ch'ao*, p. 3105, p. 3108, p. 3109.

many officials researching for the improvement of salt system. Listed in Table 1 were the prices of *yin* proposed in 1535 by the Minister of the Board of Revenue, Liang Ts'ai 梁材 (1470-1540), after summarizing many officials' opinions.

Table 1: The *yin* price of four salt regions, 1535

Salt region	Regular salt			Surplus salt		
	Weight (catty)	Original (tael)	Reduced (tael)	Weight (catty)	Original (tael)	Reduced (tael)
Liang-huai	285	0.6	0.5	265	S: 0.80	0.65
					N: 0.60	0.50
Liang-che	250	0.4	0.35	200	Chia: 0.50	--
					Hang: 0.45	--
					Shao: 0.40	--
					Wen: 0.20	--
Ch'ang-lu	205	0.2	--	235	S: 0.30	--
					N: 0.35	--
Shan-tung	205	0.15	--	225	0.38	0.31

Source: Liang Ts'ai, "Yen-fa shih-pien shu 鹽法實邊疏 (Memorial on the salt system for securing sufficiency at the frontier)," in Sun Hsun ed., *Huang-Ming shu-ch'ao*, pp. 2130-3121; also see *Ta-Ming hui-tien*, 34/12a-b.

It can be calculated from Table 1 that in the Liang-huai region surplus salt was weighted only 93% of regular salt, while the *yin* price of the former was on the average 40% higher than the latter. In the Liang-che region, the weight of surplus salt was 80% of the regular salt, while the *yin* price was 7% higher on the average. In the Ch'ang-lu and Shan-tung regions, the weight of surplus salt was 10% higher than the regular salt, while the *yin* price was 50% to 150% higher. In 1535, the price reduction was mainly for the salt of Liang-huai and Shan-tung. If differences of weight were taken into account, the *yin* price of surplus salt after reduction in Liang-huai was still 15% higher than that of regular salt and in Shan-tung still 97% higher. In other words, the government adopted a measure of price discrimination and reduction to manage problem of surplus salt in order to maintain the official salt market and secure revenue from the salt tax.

As for whether the price of *yin* was rational, it may be investigated by comparing with the price of rice during Ming times. According to a study of Ch'uan Han-sheng, around the Nanking area in 1436-1500 the normal price of rice was 0.25 tael per *shih* and around 1535, the price of rice was 0.5-0.9 tael per *shih*.⁵⁹ Taking the average of 0.7 *shih*, then, the price of rice increased about 180% between the two time points. The *yin* price of the southern Huai salt in 1465-1487 was 0.35 tael and in 1535 was 0.7 tael on the average, thus the increased was 100%. In other words, during about the

⁵⁹ Ch'uan Han-sheng, 1976, pp. 186-187.

same period from around mid-fifteenth century to 1535, the increase in the price of *yin* was not as great as that in the price of rice. What was more was an adoption of price reduction at that time, some effects on controlling surplus salt might be expected.

Furthermore, when calculation was done with the number of *yin* distributed it was clear that the tax collected from surplus salt was more than that from regular salt. The statistics derived from the same memorial by Liang Ts'ai was listed in Table 2.

Table 2: The salt tax from four salt regions, 1535

Salt region	No. of <i>yin</i>	Regular salt (tael)	Surplus salt (tael)	Total (tael)
Liang-huai	696,030	348,015	417,618*	765,633
Liang-che	440,000	154,000	132,000	286,000
Ch'ang-lu	135,775a	33,944*	42,090	76,034
Shan-tung	83,122b	12,468	26,599*	39,067
Total	--*	548,427*	618,307	1,166,734

Source: *Huang-Ming shu-ch'ao*, pp. 3125-3127.

*These figures were not correctly written in the original text; here calculations were done with the number of *yin* and the average tax per *yin*. As for the total number of *yin*, the original text did not provide a figure; here it was not calculated as the weight of *yin* in regions was not the same.

a. Another 86 catties was not included.

b. another 124 catties was not included.

Table 2 shows that in 1535 the salt tax collected from the surplus of four regions was already more than half (53%) of the total salt tax. These statistics demonstrated that the merchant's purchasing of surplus salt though destroyed the rigidity of salt monopoly system, the Ming government applying measures of price discrimination and price reduction was able to prevent a loss of revenue and thus to maintain the official salt market to some extent.

Nevertheless, since the original purpose of *k'ai-chung* was for the security of frontier, the government in late Ming was still attempted to keep the principle of payment in kind by the merchants. For instance, in 1548 a decision was made that from the next year on all the *yin* bidden for *k'ai-chung*, no matter it was *ch'ang-ku* or *ch'un-chi* and no matter it was Liang-huai, Liang-che, Ch'ang-lu or Shan-tung, should be paid with grain or straw according to the originally fixed rates.⁶⁰ It should be noted that this decision referred only to regular salt while surplus salt should still be paid in silver.⁶¹ Moreover, for the purpose of controlling silver payment of surplus salt, in 1542 the *yin* price of Liang-huai surplus salt was further reduced to 0.55 tael

⁶⁰ *Ta-Ming hui-tien*, 34/13a.

⁶¹ In the memorial of Liang Ts'ai it was pointed out that the surplus salt was not appropriate for *k'ai-chung* at the frontier, see *Huang-Ming shu-ch'ao*, p. 3127. In 1542, it was decided that only the regular salt should be *k'ai-chung*, see *Ta-Ming hui-tien*, 34/3b.

for the south and 0.4 tael for the north, and that of Liang-che, Ch'ang-lu and Shan-tung remained unchanged.⁶² In 1549, the prices of Liang-huai surplus salt were adjusted again to 0.7 tael for the south and 0.5012 tael for the north.⁶³

If compare the revenue of surplus salt in 1535 with that in 1578, the increase was shown in Table 3. It is quite clear that for the four salt regions, the silver revenue of surplus salt all increased and the total amount increased 47% between 1535 and 1578. This indicated that the government still had considerable capability in controlling surplus salt.

Table 3: Increase in the surplus salt tax, 1535-1578

Salt region	1535	1578	Amount of increase
Liang-huai	417,618	600,000	182,382
Liang-che	132,000	140,000	8,000
Ch'ang-lu	42,090	120,000	77,910
Shan-tung	26,599	50,000	23,410
Total	618,307	910,000	291,693

Source: Table 2; *Ta-Ming hui-tien*, 32/3b, 14b, 21a, 25b.

In addition to the four regions discussed above, the surplus salt tax of Kuang-tung salt region was not sent to the Board of Revenue but was retained for local military expenditures. Beginning in the period of 1465-1487, offices for collecting salt tax were set up in Kuang-tung salt region at Wu-chou 梧州, Shao-chou 韶州, Nan-hsiung 南雄, Chao-ch'ing 肇慶, and Ch'ing-yuan 清遠. The merchants must pay tax at these locations for their salt supply and one *yin* of regular salt could be accompanied with six *yin* of surplus salt; the price of one regular *yin* was 0.05 tael and that of surplus *yin* was 0.1 tael. The surplus salt beyond the permitted amount could still be reported and be paid for 0.2 tael per *yin*. This method was put into practice for about 30-40 years before 1511 when it was decided that only 3 *yin* of surplus salt should be allowed for one regular *yin* and the extra amount should not be reported for not being confiscated. However, by a memorial of Huang Tso 黃佐 (1490-1566) the old regulations were restored and the payment for regular salt was exempted while that for surplus salt was changed to 0.15 tael per *yin*, and the extra amount should be paid for 0.25 tael per *yin*.⁶⁴ This method was again changed in 1579 that the payment for all six *yin* of surplus salt should be 0.65 tael and for extra amount 0.2 tael per *yin*.⁶⁵ The above regulations also showed that the *yin* price of surplus salt in Kuang-tung was higher than that of regular salt and the price was also reduced later

⁶² *Ta-Ming hui-tien*, 34/3b-4a.

⁶³ *Ta-Ming hui-tien*, 34/9b.

⁶⁴ *Huang-Ming shu-ch'ao*, pp. 3141-3151; also see *Ming-shih*, 80/9b-10a.

⁶⁵ *Ta-Ming hui-tien*, 33/16a-b.

indicating that measures of price discrimination and price reduction were also adopted for maintaining competitive capacity of the official salt in the Kuang-tung region.

In summation, *k'ai-chung* in Ming times changed from very strict to gradually loosened and following the tendency of using silver as money, the payment was also commuted. From 1489 onwards, the merchants were able to purchase surplus salt legally and the government adopted measures of price discrimination and price reduction so that by the end of the sixteenth century it was still able to control the increase of tax from surplus salt and thus prevent the official salt market from being aggressed upon completely by illegal salt. At that time, however, the *k'ai-chung* system was not able to function as before for the security of frontier granaries. In the beginning of the seventeenth century when the frontier was in emergent condition, the government though wanted to increase salt tax for solving fiscal crisis and yet was not able to reach its goal.⁶⁶ As a result of prevailing illegal salt, the official salt was obstructed and thus a reform in 1617 was brought forth. This reform, known as *kang-fa* in documents, was proposed by Yuan Shih-chen 袁世振 (*chin-shih* in 1598), who once served as a senior secretary at the Division of Shan-tung in the Board of Revenue was very familiar with the salt affairs. The reform involved aspects of salt administration, salt producers' organization, salt merchants' organization and the organization for seizing smuggling.⁶⁷ A short-run effect of this reform was to clear up accumulated *yin* in a period of thirteen years (1618-1630).⁶⁸ A long-term effect was the establishment of monopoly by the *kang* merchants, and thus scholars called the salt system after this reform the merchant monopoly system.⁶⁹

II. Official Salt Market under Merchant Monopoly

The *kang-fa* of the late Ming was adopted by the Ch'ing government. Since *k'ai-chung* was no longer in practice, the institution was somewhat simplified. Ch'eng Chün 程浚, a senior licentiate in early Ch'ing, point out:

The *yin* was not bidden anymore at the frontier under our dynasty and was assigned to interior merchants. There were no such names as granary certificate and surplus salt tax and all were embodied in the price of *yin*. There were no regulations for obtaining salt at different fields and all salts were purchased by merchants, and the affairs of salt were all in charged by

⁶⁶ Hsu Hung, 1982, pp. 553-568.

⁶⁷ Hsu Hung, 1977, pp. 303-311; Hsu Hung, 1972a, pp. 182-183.

⁶⁸ Ch'eng Chün 程浚, "Yen-cheng yin-ke-i 鹽政因革議 (On changes in salt administration)," in *Liang-huai yen-fa-chih*, 26/34a-b; also see Hsu Hung, 1977, pp. 303-311; Hsu Hung, 1972a, pp. 182-183.

⁶⁹ Hsu Hung, 1977, p. 299; Hsu Hung, 1972a, p. 182.

the salt administration office and the responsibility was unified.⁷⁰

The above statement included four points which were just the major facets of the operation of official salt market under merchant monopoly. In short, the interior merchants paid the price of *yin* to the salt office and obtained the *yin* and then went to salt fields to purchase salt for distributing to assigned localities. Basically, the instrument for controlling official salt market was still the *yin*. Through regulating the weight, the number, and the price of *yin*, the government could control the official salt market. The interior merchants were those who had obtained the salt monopoly right; they had registered in the *kang-ts'e* 綱冊 (registration of the *kang*) and enjoyed monopolistic profit while the government in turn could control them through the registration.

In addition to *kang-fa*, at some localities *p'iao-fa* was in practice. As mentioned before, *p'iao* was a kind of salt license other than the *yin*. The *p'iao-fa* system was first put into practice in 1529 in the Liang-huai region; the main effect of it was to complement shortcomings of the *yin* and to send enough salt to hilly districts. In late Ming, *p'iao-fa* was also put into practice in T'ai-yuan and Fen-chou 汾州 in Shansi province and in Ch'ing-chou 青州, Teng-chou 登州 and Lai-chou 萊州 prefectures in Shantung province. Since *p'iao-fa* was much simpler and even very small merchants could engaged in distribution of salt, it was a quite efficient method for fighting against illegal salt in late Ming.⁷¹ In the Ch'ing period, part of Chekiang and Shantung provinces still carried on *p'iao-fa*. In the Liang-che salt region, there were 100,698 *p'iao* which accounted for 13% of the total number of *yin* and *p'iao*; in the Shan-tung salt region there were 171,740 (or 171,240) *p'iao* which shared 31% of the total.⁷² Moreover, the Yun-nan salt region had never used *yin* in the Ch'ing period but sometimes used *p'iao*;⁷³ while the Liang-hui salt region replaced *yin* with *p'iao* in 1830 and 1850.⁷⁴ In short, *p'iao* was a complementary instrument for the government to control official salt market.

The following discussions will be focused on operation of official salt market first from the role played by salt merchants and then from the growth and decline of official salt market.

1. The Role of Salt Merchants

⁷⁰ *Liang-huai yen-fa-chih*, 26/35a.

⁷¹ Hsu Hung, 1977, pp. 299-303.

⁷² *Liang-che yen-fa-chih* 兩浙鹽法志, 5/1a-4b; *Shan-tung yen-fa-chih* 山東鹽法志, 7/6a-9a,

⁷³ Liu Chun, 1933b, pp. 27-141.

⁷⁴ Liu Chun, 1933a, pp.123-188; Hsu Hung, 1972a, pp.188-189; Wei Hsiu-mei 魏秀梅, 1985, pp. 122-154; William T. Rowe, 1984, pp. 91-94.

As mentioned before, the salt merchants were divided into frontier and interior groups in the period of 1465-1487. By the end of Ming dynasty there appeared triple names of frontier merchant, interior merchant, and distribution merchant (*shui-shang* 水商) in documents. The interior merchant bought *yin* from the frontier merchant and the distribution merchant bought salt from the interior merchant; and there were only one-tenth among interior merchants who also engaged in distribution.⁷⁵ The relations among the three tiers of merchants were succinctly observed by Ch'eng Chün as: "More fees were required with more hands of transaction."⁷⁶ What was more was that there were hoarders, known as *t'un-hu* 囤戶, appeared in the period of 1522-1566 to specialize in buying *yin* at the frontier for transference and thus much abuses were created. During the Lung-ch'ing 隆慶 reign (1567-1572), P'ang Shang-p'eng 龐尚鵬 (ca. 1524-1581) proposed to divide the *yin* into three grades with different prices and thus the abuses of hoarders were curbed to some extent.⁷⁷

In short, *yin* had become some sort of "portfolio" which could be transferred for profit. For example, in the Wang-li 萬曆 period (1573-1619) the situation of Liang-huai was that the *yin* price fixed officially for the southern Huai salt was 0.85 tael and for the northern Huai salt was 0.75 tael, but the salt price paid by distribution merchants to interior merchants was about 3.2 taels, thus, interior merchants could get a windfall profit of 2.4-2.5 taels for every transaction.⁷⁸ After *kang-fa* was put into practice, merchants who were registered in the *kang-ts'e* occupied *ken-wo* 根窩 (lit. "rooted nest", that is, certificate permitted by the government for the monopolistic right) and thus there occurred a phenomenon of selling *ken-wo*. The price of *ken-wo* varied depending on flourishing or contracting of the assigned markets, and almost all salt regions had this phenomenon of selling *ken-wo*.⁷⁹ Take the situation of Liang-huai for example, in 1659-1740 the prices of *ken-wo* increased from about 0.5-0.6 tael to 1.6-2.0 or 2.5 taels. It was only in 1740 that the price of *ken-wo* was fixed at 1 tael officially. At that time, about one half of the Liang-huai salt merchants did not have their own *ken-wo*.⁸⁰ A lawsuit revealed that in 1696 the price of *ken-wo* for the Ch'ang-lu salt was as high as 4 taels per *yin*.⁸¹ These evidences of extra profit gained by the monopolistic salt merchants demonstrated the feature of imperfect competition of the salt market.

In addition to the problem of *ken-wo*, the operation of official salt market could

⁷⁵ Hsu Hung, 1975b, pp. 159-164. Although the names of three tiers of merchant appeared first in documents of the Wan-li period (1573-1619), it was quite possible that *shui-shang* was in existence earlier.

⁷⁶ *Liang-huai yen-fa-chih*, 26/34b-35a.

⁷⁷ *Ming-shih*, 80/14a-15a; Hsu Hung, 1977, pp. 303-305; Hsu Hung, 1972a, p. 183.

⁷⁸ Hsu Hung, 1975b, p. 164.

⁷⁹ *Chiu-sheng yen-wu-i-lüeh*, pp. 43-44.

⁸⁰ Pint-ti Ho, 1954, pp. 136-137; Hsu Hung, 1972a, p. 187.

⁸¹ *Kung-chung-tan K'ang-hsi-ch'ao tsou-tse* 宮中檔康熙朝奏摺, Vol. 2, pp. 56-57, p. 165.

be understood partially from relations among salt merchants and relations between the merchant and the government. Since each salt region had special conditions, each will be discussed individually below.

Ch'ang-lu: In the beginning of the Ch'ing dynasty, because the native merchants (*t'u-shang* 土商) and the Peking merchant (*ching-shang* 京商) had owed salt tax year after year, a decision was made in 1660 to dismiss them and to convene the *kang* merchants in the next year.⁸² This showed that the government had power to change the merchants for distributing salt. Since Peking was in the region of Ch'ang-lu, *yin* was divided into *ching-yin* 京引 (the *yin* for distributed in Peking and districts of Wan-p'ing 宛平 and Ta-hsing 大興) and *wai-yin* 外引 (the *yin* for other districts). According to the *kang-ts'e* recorded in the early Yung-cheng 雍正 period (1723-1738), there were 101 merchants for *ching-yin* and 142 for *wai-yin*.⁸³ The numbers of the two categories were reduced to 21 and 111 respectively in late Ch'ing.⁸⁴ The number of *yin* bidden by each merchant was not recorded, however, those who had large amount of capital might have bid a lot of *yin*. For example, Yung-ch'ing-hao 永慶號 had distributed salt at 21 districts and Fan Yu-pin 范毓麟 at 20 districts before they were dismissed in 1791 and 1797 respectively.⁸⁵ In the Tao-kuang 道光 period (1820-1850), distribution of salt in Yung-p'ing prefecture was changed from the hands of merchants to those of officials and 20 districts in Honan provinces were changes to the *p'iao* system.⁸⁶ These changes indicated the decline of the salt merchant in Ch'ang-lu region.

Usually, the merchants who had bid the *yin* were to be in charge of distribution themselves. But in 1684 those who distributed the Peking *yin* agreed to establish a Ch'ang-lu-kuan 長蘆館 (Hall of Ch'ang-lu) to regulate the order of selling salt. The order to sell salt was arranged according to the order of arrival and the purpose was to rectify presumptuous abuses. However, the abuses did appear later and Ch'ang-lu-kuan was closed in 1715 by the appeal of the Peking merchants. Another method known as *hsun-tan huan-chao* 循單環照 (circulate pass) was proposed and adopted by the Censor to regulate the order of salt distribution in Peking.⁸⁷ This incident suggested that the government had power to maintain the order of salt

⁸² *Hsin-hsiu Ch'ang-lu yen-fa-chih* 新修長蘆鹽法志, 7/3b-5a.

⁸³ *Hsin-hsiu Ch'ang-lu yen-fa-chih*, 7/69a-72b; names of merchants were listed in detail.

⁸⁴ *Ch'ing yen-fa-chih* 清鹽法志, 17/12a-15b.

⁸⁵ *Chiu-sheng yen-wu-i-lüeh*, p. 31. According to *Chi-fu t'ung-chih* 畿輔通志 (1884 edition), 100/4074, it was known that Yung-ch'ing-hao was operated by merchant Wang Te-i 王得宜. Fan Yu-ping was a member of Fan family from Chieh-hsiu 介休 county, Shansi; this family was famous for being served as emperor's merchant in early Ch'ing, see Liu Ts'ui-jung 劉翠溶, 1969, pp. 98-103.

⁸⁶ *Ch'ing yen-fa-chih*, 17/3a-b; 18/1a.

⁸⁷ *Hsin-hsiu Ch'ang-lu yen-fa-chih*, 7/49a-50b; 15/4b-6a; *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 221/8a.

market.

As for Tientsin, since it was located nearby salt fields, it was set up as a public port (*kung-kung-k'oi-an* 公共口岸) in the Ch'ang-lu region and merchants were selected to take charge in turn. The selected merchants were originally changed once every year but in 1785 the term was extended to five years and in 1830 it was further regulated that when the five-year term was expired one should not ask for continuation in order to prevent abuses.⁸⁸

Shan-tung: In the early Ch'ing period, the native merchants flourished in the Shan-tung region and there was a practice of selling salt according to the transport orders. In 1657, a memorial by Yin Ying-chieh 陰應節 (1646 *chin-shih*) suggested that the native merchants should be dismissed and the practice should be prohibited.⁸⁹ In 1671, another memorial by Wu Sai 吳賽 suggested that the *kang* merchants should be responsible to pay the tax so that the retailers of *kang* merchants (*po-shang* 撥商) would not be able to occupy the assigned markets.⁹⁰ The *kang* merchants in Shan-tung were mostly non-natives and their trade was hereditary. There were originally 14 *kang* and in 1728 one was added to become 15 *kang* which included a total number of 480 merchants.⁹¹

From records in the Yung-cheng period, the average number of *yin* distributed per merchant could be calculated and the result showed that it ranged from 163 *yin* in Hsin-hsien 莘縣, Shantung, and 1,386 *yin* in Tang-shan 碭山, Kiangsu. In the following five districts, the number of *yin* per merchant was more than one thousand: Ch'ing-p'ing 清平 (1,099 *yin*), Ts'ao-chou 曹州 (1,051 *yin*), P'ing-yin 平陰 (1,101 *yin*), P'u-chou 濮州 (1,227 *yin*), all in Shantung province and Tang-shan 碭山 in Kiangsu.⁹² If aggregated into the unit of prefecture (*fu* 府) and independent department (*chih-li-chou* 直隸州), the result was listed in Table 4.

Table 4: The number of *yin* and merchant in the Shan-tung salt region, 1723-1735

Fu or Chih-li-chou	Number of district (1)	Number of <i>yin</i> (2)	Number of merchant (3)	Average <i>yin</i> (3)/(2)	Average merchant (3)/(1)
Shantung province					
Chi-nan fu	7	40,092	145	276	20.7
Yen-chou fu	14	106,292	248	429	17.7
Tung-ch'ang fu	14	84,287	259	325	18.5

⁸⁸ *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 221/13b-14a; 222/1b.

⁸⁹ *Shan-tung yen-fa-chih*, 11A/11a-13a.

⁹⁰ *Shan-tung yen-fa-chih*, 11A/38a-39a.

⁹¹ *Shan-tung yen-fa-chih*, 7/1a; *Chiu-sheng yen-wu-i-lieh*, p. 43.

⁹² *Shan-tung yen-fa-chih*, 7/9b-21a. The statistics were quoted as *hsien-e* 現額 (current amount), thus they were referred to as for the Yung-cheng period when the gazetteer was compiled.

T'ai-an chou	2	21,042	61	345	30.5
Ts'ao-chou	5	34,347	52	661	10.4
Tung-p'ing chou	5	26,442	101	262	20.2
P'u-chou	4	15,419	25	617	6.3
Honan province					
Kuei-te fu	9	92,260	187	493	20.7
Kiangsu province					
Hsu-chou fu	6	79,788	145	550	24.2
Total	66	499,969	1,223	409	18.5

Source: *Shan-tung yen-fa-chih*, 7/9b-21a.

It is notable that 66 of the total 1,223 merchants were listed with their names in representing the districts, and among them 6 names appeared twice and the identified pairs of districts were not very closed spatially to each other.⁹³ It was possible that there were other merchants who actually were in charge of distribution. Moreover, the number 1,223 was larger than 480 mentioned above. Table 4 shows that the average number of *yin* per merchant was 409 and the average number of merchant per district was 18.5. These evidences suggested that those who actually engaged in distribution were more than those registered in the *kang-ts'e*; this reflected that the salt merchants of Shan-tung were rather dispersed and each of them did not have very large capital.

In 1732, the Censor, O Li 鄂禮 (a bordered blue banner-man), proposed that for the improvement of management each merchant should distribute at least 800 *yin*. The merchants who already had this number of *yin* should be allowed to establish a registered name themselves, while those who did not should be combined with others to meet the requirement, and one who had the largest number of *yin* should be selected as leader to establish a registered name for taking up the responsibility.⁹⁴ Thus the number of *kang* was reduced to 12; the names of *kang* and the number of merchant were listed in Table 5. From the characters such as “chin”, “fen”, and “hung” engraved in the names of *kang*, it could be deduced that many merchants were from Shansi province. In late Ch'ing, there were only six *kang* left, namely, Yung-hsing 永興, T'ung-yu, T'ung-jen 同仁, Hsiang-jen 祥仁, Chi-yi 集義, and Heng-te 恆德.⁹⁵

Table 5: The Shan-tung *kang* merchants, 1732

Name of <i>kang</i>	No. of merchant	Name of <i>kang</i>	No. of merchant
Yung-hsing 永興	9	Chin-hsing 晉興	32
Chin-tse 晉澤	12	Yung-ch'ang 永昌	16
T'ung-jen 同仁	32	Hung-chien 洪戩	21

⁹³ *Shan-tung yen-fa-chih*, 7/9b-21a.

⁹⁴ *Shan-tung yen-fa-chih*, 7/1a-6a; for “Ping-shang hsi-wen 併商檄文 (A proclamation for merging the merchants)” see 11B/60b-61a.

⁹⁵ *Chiu-sheng yen-wu-i-lieh*, p. 44.

Hsiang-jen 祥仁	18	T'ung-yu 通裕	35
Ch'ing-fen 慶汾	15	Chin-kung 晉公	38
Chi-yi 集義	30	Hsiang-che 祥澗	15
Total	273		

Source: *Shan-tung yen-fa-chih*, 7/1a-6a.

The Shan-tung *kang* merchants was rather small in scale, however, it seemed that the official decisions in early Ch'ing tended to avoid concentration. For example, in 1696 and 1718, a few number of merchants sent applications to require a permission for distributing newly increased number of *yin* and they would pay tax in advance, but in both cases the permission was not given and the increased number of *yin* was allotted among all merchants.⁹⁶

Aside for *yin*, some localities in the Shan-tung region used *p'iao* for distributing salt and there were *p'iao* merchants. The *p'iao* merchants were not hereditary in the beginning; they entered into the business when they had enough capital and exited when they did not and most of them were natives of Shantung. In 1730, the Censor, Cheng Shan-pao 鄭禪寶, memorialized that no matter being a native or not, only if one was a wealthy good merchant and had secured a guaranty could one be a *p'iao* merchant. At that time there were 37 *p'iao* merchants.⁹⁷ In 1742, the *p'iao* was classified into three grades and the *p'iao* merchants were allowed to become hereditary with the assigned localities of distribution. The *p'iao* merchants were grouped into six *kang*: Hsing-hsiao 興孝, Tse-yu 則友, Ch'in-mu 親睦, Tu-yin 篤姻, Hsin-jen 信任, and Chou-hsu 周恤. Whenever there was a case of new entry or exit, the way of doing should follow that of the *yin-wo* 引窩 (i.e., *ken-wo* 根窩).⁹⁸ In this way, there was actually no difference between the *yin* and the *p'iao* merchants.

Ho-tung: The salt merchants in the Ho-tung region were originally divided into two groups: residential merchant (*tso-shang* 坐商) and transporting merchants (*yun-shang* 運商). The residential merchants expertized in salt production and were responsible for paying the tax while the transporting merchants only in distributing the salt. It was in the Yung-cheng period that there was a change of their roles. The responsibilities of paying tax and distribution were taken by the transporting merchants, while the residential merchants were to engage in production only; their role was thus similar to that of *tsao-hu* in Liang-huai and Ch'ang-lu.⁹⁹ The process of this change was not clear but the result was that the transporting merchants controlled

⁹⁶ *Shan-tung yen-fa-chih*, 11A/44a-45b; 51b-53b.

⁹⁷ *Shan-tung yen-fa-chih*, 7/21a. The traditional government used "pao 保" (security guaranty) to control merchants, see Lien-sheng Yang, 1970, pp. 188-189.

⁹⁸ *Chiu-sheng yen-wu-i-lüeh*, pp. 44-45; *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 222/22a; *Ch'ing yen-fa-chih*, 55/6a.

⁹⁹ *Ch'u-hsiu Ho-tung yen-fa-chih* 初修河東鹽法志, 3/shang-jen 商人, 1a-b.

the Ho-tung salt.¹⁰⁰

When the Ho-tung salt trade was still prosperous in the Ming period there were 500 merchants, but the number was reduced to only about 100 or so in late Ming.¹⁰¹ In 1644-1661, about one hundred more merchants were convened by the Ch'ing government.¹⁰² In 1723-1735 there were 421 residential merchants and among them 43 paid 12 *ting* 錠 (one *ting* consisted of 120 *yin*) of tax, 373 paid 6 *ting*, 2 paid less than 12 *ting* and 3 paid less than 6 *ting*.¹⁰³ The number of transporting merchants was not known and after they replaced the residential merchants to pay tax, they were registered under old names of the residential merchants. According to a record in 1789, there were 425 merchants registered in Ho-tung and among them 40 paid 12 *ting*, 379 paid 6 *ting* in other categories.¹⁰⁴ It seemed that in the eighteenth century the number of Ho-tung merchants did not change very much.

The incumbency of the Ho-tung merchants was originally set for five years. Because the wealthy households tried to avoid being convened as salt merchants and they mostly were not familiar with the salt trade, thus, in 1782 the five-year term practice was discarded. The wealthiest among the merchants who were then currently on the job was selected as *chang-shang* 長商 (leading merchant). Moreover, locations for distribution were classified into upper, middle, and lower grades and were evenly assigned among the merchants to avoid paralyzed on one side.¹⁰⁵

In 1792-1806 the Ho-tung salt tax was allotted to land tax and the transporting merchants were dismissed; the salt was then sold freely by the people. But this interruption was ended in 1806 and this episode need not be repeated here.¹⁰⁶ When the old practice was restored, it was not clear how many merchants were convened, but it was known that in 1853 there were more than one hundred transporting merchants.¹⁰⁷ In 1854 the transportation of Ho-tung salt was changed from the hand of merchant to that of official in districts of Shansi and Shensi provinces; and in Honan province to the hands of the people.¹⁰⁸ Owing to this change to free trade in most area within the region, the Ho-tung merchants gained a profit that they had not been able to get before. However, the scale of distribution was mostly very small. There were many officials (about 100 persons) engaged in salt trade and their windfall profit from transaction of *yin* was the most serious problem on the Ho-tung salt

¹⁰⁰ Wu Ch'eng-ming and Hsu Ti-hsin, 1987, pp. 795-796.

¹⁰¹ *Ch'u-hsiu Ho-tung yen-fa-chih*, 9/*huan-chi* 宦蹟, 11a-12a.

¹⁰² Wu Ch'eng-ming and Hsu Ti-hsin, 1987, p. 798.

¹⁰³ *Ch'u-hsiu Ho-tung yen-fa-chih*, 3/*shang-jen* 商人, 2a-3b.

¹⁰⁴ Wu Ch'eng-ming and Hsu Ti-hsin, 1987, p. 798.

¹⁰⁵ *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 224/6b-7a.

¹⁰⁶ *Liang-huai yen-fa-chih*; also see Wu Ch'eng-ming and Hsu Ti-hsin, 1987, p. 797.

¹⁰⁷ *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 224/16a.

¹⁰⁸ *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 224/16b; also see *Chiu-sheng yen-wu-i-lüeh*, pp. 99-100.

market.¹⁰⁹

Liang-huai: The Liang-huai salt merchants came mostly from Shansi province and from Hui-chou 徽州, Anhwei. This fact had been studied by many scholars.¹¹⁰ Here, aspects related to the merchant's engagement in production of salt, accumulation of capital and way of life will be omitted and the focus will be on a few points related to distribution of salt.

The transporting merchants in Liang-huai region were divided into *tsung-shang* 總商 (head merchant) and *san-shang* 散商 ("small merchants"). Those who had large capital and numerous *yin* were selected as *tsung-shang*. In 1677, the Censor, Hao Yu 郝裕, memorialized: "Twenty-four persons were selected and the *san-shang* were assigned under them."¹¹¹ Thus it was clear that in the beginning there were 24 head merchants. In 1725, there were 30 head merchants and among them 2-3 or 4-5 persons served as *ta-tsung* 大總 ("merchant chief"). Since the head merchants abused their authority to collect extra fees from the small merchants, in 1830 the name of *tsung-shang* was abolished and changed to *pan-shih-chih-shang* 辦事之商 (lit., "merchants who managed the affairs").¹¹²

As for the number of transporting merchants in Liang-huai region, there was no exact number in records. Scholars liked to quote Wang Hsi-sun 汪喜孫 (1786-1847) for the references. According to Wang, there were one hundred and several tens of *san-shang* for transporting the southern Huai salt and the number was reduced to 40 or 50 during the Tao-kuang period.¹¹³ Ho Ping-ti had tried to estimate the number of Liang-huai salt merchants and he believed that at the most prosperous time there were about 230 transporting merchants in the whole region.¹¹⁴ With this estimate the number of Liang-huai transporting merchants was smaller than 243 in Ch'ang-lu, 273 in Shan-tung, and 425 in Ho-tung. But the number of *yin* distributed in Liang-huai was the largest. For example, in 1800 there were 1.68 million *yin* and thus, on the average, each transporting merchant distributed 7,000 *yin*.¹¹⁵ During the eighteenth century, the largest transporting merchant in Liang-huai could distribute 100,000 *yin* annually.¹¹⁶ But in the mid-nineteenth century, "those who could distribute 20,000-30,000 *yin* were no more than twenty."¹¹⁷

¹⁰⁹ *Chiu-sheng yen-wu-i-lüeh*, pp. 101-102, 108-109.

¹¹⁰ Terada Takanobu, 1972, pp. 251-265; Fujii Hiroshi, 1953-54, pp. 183-192; Ping-ti Ho, 1954, pp. 130-168; Thomas A. Metzger, 1972, pp. 19-27; Hsu Hung, 1972a, pp. 95-112.

¹¹¹ *Liang-huai yen-fa-chih*, 13/8a-9b.

¹¹² Hsu Hung, 1972a, pp. 101-102; *Ch'in-ting ta-Ch'ing hui-tien shih-li*, 223/6a, 21b.

¹¹³ Hsu Hung, 1972a, p. 105; Ping-ti Ho, 1954, p. 140.

¹¹⁴ Ping-ti Ho, 1954, pp. 140-141.

¹¹⁵ *Ch'in-ting ta-Ch'ing hui-tien shih-li* 欽定大清會典事例 (1818 edition), 178/2a-b; *Ch'in-ting Ta-Ch'ing hui-tien shih-li* (1899 edition), 223/2a-b.

¹¹⁶ Ping-ti Ho, 1954, p. 150.

¹¹⁷ Yao Ying 姚瑩, "Pien yen-fa-i 變鹽法議 (On reform of salt system)," in *Huang-ch'ao ching-shih-*

The *p'iao-fa* was introduced to the northern and southern Huai areas in 1830 and 1850 respectively. At that time, there were about 20-30 merchants who were capable to transport salt, however, the new regulations were put into practice mainly with the *yin* merchants of the old days.¹¹⁸ From the viewpoint of merchants, the adoption of *p'iao-fa* reduced their extra burden and prevented them from being unemployed. Nevertheless, the Liang-huai salt merchants were in decline in the late Ch'ing period.¹¹⁹

Liang-che: Most of the salt merchants in Liang-che region were probably from Hui-chou. According to a petition presented in 1704 by the Liang-che merchants, Wang Wen-jui 汪文瑞 and others, the merchants were from Hui-chou and had been in the trade since the time of their grandfathers.¹²⁰ Just as in the case of Liang-huai, the precise number of Liang-che merchants was not recorded. It was known, however, the Liang-che merchants were classified into four categories according to the amount of capital, namely, *chia-shang* 甲商 (head merchant), *fu-chia-shang* 副甲商 (deputy merchant), *ching-kung-shang* 經公商 (managerial merchant) and *ssu-shang* 肆商 (marketer). It was the *ssu-shang* who actually engaged in transporting and distributing while others were only doing business of coordinating between the merchant and the officials.¹²¹ Again, just as the *tsung-shang* of Liang-huai, the *chia-shang* of Liang-che had abused their authority in excessive extortion and thus in 1821, it was decided to keep only one *chia-shang* at each shipment examining post located in Hang-chou 杭州, Shao-hsing 紹興, Chia-hsing 嘉興, and Sung-chiang 松江.¹²²

In addition to the usage of *yin*, hilly districts in Chekiang province had adopted *p'iao-fa* since 1529. In the early Ch'ing period, a couple of censors had suggested that the *p'iao* should be changed to *yin*, but these suggestions had not been agreed by the Board of Revenue.¹²³ It was also not clear how many *p'iao* merchants there were in Liang-che.

Kuang-tung: In early Ch'ing dynasty prior to 1662, the Kuang-tung salt was distributed by *wang-shang* 王商 (lit., “king’s merchants”) referring to merchants under one of the three feudatory kings.¹²⁴ In 1662, the distribution was changed to the hand of *p'ai-shang* 排商 (alternative merchants) who “distributed salt at certain mart (*pu* 埠) and were changed once every three years.” The Kwangtung people called

wen hsü-pien 皇朝經世文續編, 43/5b.

¹¹⁸ *T'ao-wen-i-kung chi* 陶文毅公集, 4/53B; *Chiu-sheng yen-wu i-lüeh*, p. 123.

¹¹⁹ Hsu Hung, 1972a, pp. 104-126.

¹²⁰ *Liang-che yen-fa-chih*, 12/30a.

¹²¹ Lü Hsing-yüan 呂星垣, “Yen-fa-i 鹽法議 (Discourse on salt system)” in *Huang-ch'ao ching-shih wen-pien*, 50/2a.

¹²² *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 255/12a.

¹²³ See *Liang-che yen-fa-chih*, 11/7a-8a, for the memorial by Wang Hsien 王燮 in 1647; 11/47a-48b, for the memorial by Jen Kuan-ying 任觀瀛 in 1695.

¹²⁴ Wang Hsiao-ho, 1986, p. 66.

a salt mart opened by merchants as *pu*.¹²⁵ In 1688, it was proposed to abandon the alternative method and a new regulation was formally approved by the Board of Revenue in 1693. It was regulated that two merchants should be convened for each big mart and one for each small mart; those who traded fairly should be allowed to remain in the business permanently and their places should not be taken over privately.¹²⁶ The merchants who specialized in transporting and distributing salt were known as *pu-shang* 埠商 (mart merchants) and were differentiated from *ch'ang-shang* 場商 (field merchants). In 1718 the field merchants were dismissed because they did not have enough capital to purchase all products from the salt producers. An amount of 36,000 taels was provided from the salt administration office for purchasing salt so that every grain of the Kuang-tung salt became official salt which was then dispatched to *pu-shang* for distribution.¹²⁷ The wealthiest merchant among *pu-shang* was selected as *tsung-shang* (also known as *chang-shang*) in order to urge payment of tax. In 1784 the *tsung-shang* were dismissed because they proposed to collect extra payment.¹²⁸

Most distributing merchants (*pu-shang*) in Kwangtung province were natives and they were not very wealthy so that more than 50 among them had owed tax payments. In 1789 the Governor-General proposed a method as follows: All salt marts should be merged to one bureau and a head bureau (*tsung-chü* 總局) was established in the provincial capital and ten experienced merchants should be selected as bureau merchants (*chü-shang* 局商) to take responsibility of management. In addition, six branch bureaus (*tzu-kuei* 子櫃) were established in Wu-chou, Shao-chou, San-shui 三水, Hsiao-tan-shui-ch'ang 小淡水場, P'ing-t'ang-chiang-k'ou 平塘江口, and Mei-lu-chen 梅菪鎮 and trustful persons were selected to manage. The salt produced from fields should be dispatched by the bureau merchants to six branches according to the quota and conditions of markets in different localities and then be transported and distributed by the transporting merchants mostly convened from former *pu-shang*. Each branch bureau should report monthly the amount of silver received from trade to the head bureau and the latter in turn should report seasonally to the salt administration office for annual report to the Board of Revenue. This method was known as *kai-pu-kuei-kang* 改埠歸綱 (to change from *pu* to *kang*).¹²⁹ After being put

¹²⁵ *Chiu-sheng yen-wu i-lüeh*, p. 182.

¹²⁶ *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 227/11a; *Chiu-sheng yen-wu i-lüeh*, pp. 187-188; Kung Yueh-hung, 1987, p. 313; Wang Hsiao-ho, 1986, p. 66.

¹²⁷ *Chiu-sheng yen-wu i-lüeh*, pp. 188-189; *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 227/6b, it was recorded that the dismissal of *ch'ang-shang* was in 1723; Kung Yueh-hung, 1987, p. 315, it was said that the *pu-shang* was dismissed, this seems to be wrong.

¹²⁸ *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 227/11a; *Chiu-sheng yen-wu i-lüeh*, p. 118; in Kung Yueh-hung, 1987, p. 314, it was said that in 1698 the *p'ai-shang* was changed into *chang-shang*.

¹²⁹ *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 227/11b-12a; *Chiu-sheng yen-wu i-lüeh*, pp.

into practice for more than ten years, because the official fund had not been paid back and the ten bureau merchants almost all died off, therefore, the Governor-General memorialized in 1812 to dismiss the bureau merchants and retain only the six branch bureaus to be managed by six experienced merchants selected among *pu-shang*. As for transportation and distribution, merchants who had their own marts should do these works by themselves while those who did not should be allowed to call other distributing merchants (*shui-k'e* 水客) to do for them. This change was known as *kai-kang-kuei so* 改綱歸所 (to change from *kang* to *so*; *so* lit. means a bureau or an office) and the practice was carried on until early years of the T'ung-chih 同治 period (1862-1874).¹³⁰

As for the number of *pu-shang*, a list in 1747 showed that among 142 *pu*, there were 31 belonging to the upper grade, 100 the middle grade, and 11 the lower grade.¹³¹ If names of *pu* listed in the *Ta-Ch'ing hui-tien shih-li* were counted, then, including Sheng-ho 省河 and Ch'ao-ch'iao 潮橋 there were 196 *pu* in 1818.¹³² If the above mentioned criterion of two merchants for one big mart, then, the total number of *pu-shang* must be more than 200.

Fu-chien: In early Ch'ing, the Fu-chien salt was distributed by *shui-shang*. In 1727 it was decided that the distribution should still be done by *shui-shang* and after two or three years if tax payments were not delayed, then the practice of Liang-huai and other regions should be adopted to convene merchants.¹³³ It was not until 1742 that Fu-chien region began to convene the *kang* merchants to distribute salt.¹³⁴ In 1812, the Fu-chien salt product was reverted to official authority and the distribution was allotted evenly among the official merchants.¹³⁵ As for the number of Fu-chien salt merchants, it was known that by 1827, there were more than 30; most of them were hereditary and among them some distributed salt in more than one county.¹³⁶

The Fu-chien salt merchants mostly relied on loans for their business and in 1779 an official loan was provided to small merchants with secured guaranty by all

190-192; Kung Yueh-hung, 1987, pp. 317-320.

¹³⁰ *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 227/22a-b; *Chiu-sheng yen-wu i-lüeh*, pp. 193-194; Kung Yueh-hung, 1987, p.320, it was said that the *kai-kang-kuei-so* was adopted in 1806.

¹³¹ Wang Hsiao-ho, 1986, p. 74.

¹³² *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 227/15a-20b; Kung Yueh-hung, 1987, p. 319, it was said that there were more than 150 *pu* belonging to six branches of Sheng-ho and 29 *pu* belonging to Ch'ao-ch'iao; the number of Ch'ao-ch'iao was the same as in *Ch'in-ting ta-Ch'ing hui-tien shih-li*. In *Ts'o-cheng pei-lan* 齏政備覽, p. 8, it was said that there were 160 *pu* which had merchants belonging to Sheng-ho; and in *Ch'ing yen-fa-chih*, 217/26b, it was said that altogether there were 188 *pu*.

¹³³ *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 226/4b.

¹³⁴ *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 226/6a; *Chung-kuo yen-cheng yen-ke-shih*, Vol. 3, pp. 24-25.

¹³⁵ *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 226/9a.

¹³⁶ *Fu-chien yen-fa-chih* 福建鹽法志, 3/26b; 5/3a-10b.

merchants.¹³⁷ In the period of 1796-1820, the Fu-chien salt merchants had accumulated a large amount of arrears which were not paid up, and in 1824 a decision was made to allot the arrears annually. It was in 1865 when Tso Tsung-t'ang 左宗棠 (1812-1885) memorialized to adopt *p'iao-fa* then the arrears were all exempted.¹³⁸

Ssu-ch'uan: Before 1683 the distribution of Ssu-ch'uan salt did not use *yin* issued by the Board of Revenue. In 1686 *yin* was first issued and allotted to merchants who transported salt to assigned markets for redistribution.¹³⁹ The *yin* merchants were mostly non-native and most of them were from Shensi province.¹⁴⁰ In addition to the *yin* merchants, there were *pen-shang* 本商 (or known as *tso-shang* 坐商, residential merchants) who were assigned to become salt merchants among wealthy households in each district when in 1729 a method of "salt allotment according to number of mouth" was adopted. The *pen-shangs* were officially assigned salt merchants, however, they were not familiar with the business and thus they usually called upon other merchants to undertake distribution on their behalf and received interest of *yin* themselves.¹⁴¹ In 1830 because the *pen-shang* had owed tax payments year after year, it was decided that local officials should compel the transporting merchants who undertook distribution on behalf of the *pen-shang* to pay tax.¹⁴²

In 1853 the Ssu-ch'uan salt was permitted to be distributed in Hupei and Hunan provinces, originally the Huai salt areas, because the Yangtze River was barricaded by the Taiping Rebellion. The transportation of Ssu-ch'uan salt to Hupei and Hunan was either done by the merchant or by the official. In general, in 1853-1880 the transportation was mainly by the merchant while after 1889 it was concurrently by the merchant and by the official. Because the Ssu-ch'uan salt was allowed to enter the sphere of Huai salt only as a measure of expediency, thus from 1864 onwards when the Yangtze waterway returned to normal condition the successive Governor-Generals of Liang-chiang, Hu-kuang and Szechwan had debated over how to recover the sphere of Huai salt and solutions finally reached were to allow both by the merchant and by the official.¹⁴³ As for in the Ssu-ch'uan salt region itself, in 1877 when a change to official transportation was adopted thus the official authority controlled the price of *yin* and the price of salt at all distribution markets. The advantage of official transportation was that the demand for and the supply of salt could be adjusted and

¹³⁷ *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 226/7a.

¹³⁸ *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 226/11b, 12a, 13a-14a; also see *Chiu-sheng yen-wu-i-lieh*, pp. 170-175; *Huang-ch'ao ching-shih-wen hsü-pien*, 45/10b-11a; Yen-wu-shu, 1914-15, Vol. 3, pp. 35-36.

¹³⁹ Wu Tuo, 1935, pp. 148-149; Jan Kuang-jung 冉光榮 and Chang Hsüeh-chün 張學君, 1987, p. 696.

¹⁴⁰ *Chiu-sheng yen-wu-i-lieh*, p. 207; Jan Kuang-jung and Chang Hsüeh-chün, 1987, p. 696.

¹⁴¹ *Chiu-sheng yen-wu-i-lieh*, pp. 212-213; Jan Kuang-jung and Chang Hsüeh-chün, 1987, p. 696.

¹⁴² *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 228/7b.

¹⁴³ Wu Tuo, 1935, pp. 156-157; Lin Ti-huan 林地煥, 1983, pp. 22-29; Ch'en Tsu-yu, 1976, pp. 590-593; *Ch'ing-ch'ao hsü wen-hsien t'ung-k'ao* 清朝續文獻通考, 37/7909, 38/7913.

abuses created by merchants could be reduced, while its shortcoming was that the salt was monopolized by the government and the people could not trade freely.¹⁴⁴

Yun-nan: In the Ch'ing period, the distribution of Yun-nan salt had never used *yin*. Instead, *p'iao* was issued by the provincial authority and the merchants were induced to pay tax and transport salt. There were no such abuses as usually found in regions where the *kang* merchants dominated the market. Liu Chun called the Yun-nan system as *pao-chang-chih* 包商制 (farming merchant system). But the *pao-shang-chih* was practiced only during 1644-1722. During 1723-1795 the Yun-nan salt was distributed under the local official monopoly. During 1796-1850 it was distributed freely by the people and the tax was collected at wells where salt was produced. During 1862-1908 the method was changed again to the official monopoly at salt producing wells.¹⁴⁵ In short, although the merchant monopoly system of other salt regions was not adopted in Yun-nan, the official control of the Yun-nan salt was in fact not all disappeared. Those who engaged in distribution of the Yun-nan salt were possibly "very small sellers" (*hsiao-fan* 小販) and rather common people and merchants (*shang-min* 商民).¹⁴⁶

Very little was known about merchants who distributed the Shan-hsi and the Sheng-ching salts. Prior to 1794 the Shan-hsi salt was distributed with *yin*, but from then on free transport by the people took over and there was not a certain organization of these people.¹⁴⁷ As for the Sheng-ching (Feng-t'ien) salt, it was provided for usage at the Imperial Household in Sheng-ching and only the extra amount was traded by merchants. In the beginning there were 6,000 *yin* of salt distributed by merchants but in 1765 the *yin* was not issued any more.¹⁴⁸ Since then until 1908 when official transport was adopted,¹⁴⁹ the Sheng-ching salt was transported by merchants, but their number was unknown. It should be noted that in 1900, the amount of salt distributed in the Sheng-ching region was 3.6 million piculs which ranked only next to Liang-huai, Ssu-ch'uan, Ch'ang-lu, and Kuang-tung.¹⁵⁰

It could be mentioned by passing that for taking care of the poor small salt sellers who were either old or young, the government had set up such designations as *p'ai-yen* 牌鹽 (warranted salt) or *chao-p'iao* 照票 (a pass for salt) for them to sell salt around places nearby producing fields. During the Ch'ien-lung 乾隆 period (1736-1795), however, these practices were dropped and the poor were supported by money contributed by salt merchants. The poor were not to sell salt anymore in order

¹⁴⁴ Wu Tuo, 1935, pp. 179-261; Lin Ti-huan, 1983, pp. 29-44.

¹⁴⁵ Liu Chun, 1933b, p. 27, pp. 73-99.

¹⁴⁶ *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 229/7b, 8a-b.

¹⁴⁷ *Ch'ing yen-fa-chih*, 96/2b; 97/1a.

¹⁴⁸ *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 222/1b-3a.

¹⁴⁹ *Ch'ing yen-fa-chih*, 42/1a.

¹⁵⁰ S. A. M. Adshead, 1970, p.11, Table 1.

to prevent from using their names in smuggling.¹⁵¹

In summation, under the merchant monopoly system, salt merchants paid the price of *yin* (*p'iao*) to obtain monopolistic right of distribution. With the number that was recorded or estimated, there were altogether about 1,440 transporting merchants in Ch'ang-lu, Shan-tung, Ho-tung, Liang-huai, Kuang-tung, and Fu-chien. If Shan-hsi, Yun-nan and Sheng-ching were not taken into account, then, in eight salt regions there might have about 2,000 transporting merchants whose scale of distribution was large enough when the official salt market was at times of prosperity. Among these merchants 50 or so might be the richest and be selected as head merchants. As for other merchants with various capacities who depended on the salt market for making a living, it was not possible to speculate on their number.¹⁵²

As stated above, the relationship between the salt merchant and the government was established basically on receiving and giving of the monopoly right. Different from what was under the *k'ai-chung* system, the government did not play the role of wholesaler under the merchant monopoly system (except for in cases of official transport), but only to control the official salt market through controlling *yin* and *p'iao*. The merchants paid tax (including regular salt tax, i.e., the price of *yin*, and formal items of miscellaneous charges) and they usually could not avoid extortion from officials and clerks.¹⁵³

Moreover, between the salt merchants and the government there were relations of borrowing and lending of money. This was one chain in a system, known as *fa-shang-sheng-hsi* 發商生息 (provide loans to merchants for generating interest), adopted by the Ch'ing government. The objects of loans were foremost pawnshops and next the salt merchants.¹⁵⁴ Almost in every salt region, the merchants borrowed a large sum of money from the government and the interest became a heavy burden for them on top of the tax. The situation in each region could be briefly stated below.

The Ch'ang-lu merchants had borrowed an accumulated amount of 1.5 million taels from the Imperial Household and no less than one million taels during the period

¹⁵¹ The practice was abolished in Fu-chien in 1736, in Ch'ang-lu in 1745, and in Shan-tung, Liang-huai and Ssu-ch'uan in 1778, see respectively in *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 226/5a; 221/10b; 222/22b; 223/16b; 228/6b.

¹⁵² Kung-ming 公名, "Liang-huai yen-shang k'u-ch'ing shu-lüeh 兩淮鹽商苦情述略 (A brief statement on sufferance of the Liang-huai salt merchants)," said: "The [registered] merchants themselves are not able to be in two places personally at one time, thus they have to entrust other people to do jobs for them. The one to purchase salt is called *mai-pu-shang-jen* 買補商人, the one to pass the port is called *pa-k'e* 壩客, the one to pay tax is called *pan-k'e-shang-jen* 辦課商人, the one to wait for salt is called *ch'e-k'e* 掣客, the one to supervise binding of packages is called *k'un-k'e* 網客, and the one to sell salt is called *mai-yen-k'e* 賣鹽客." See, *Liang-huai yen-fa-chih*, 26/42b-43a.

¹⁵³ Saeki Tomi, 1956, pp. 225-230; Hsu Hung, 1972a, pp. 145-146.

¹⁵⁴ Lien-sheng Yang, 1970, pp.197-198; P'an Ming-te 潘敏德, 1985, pp. 39-65.

of 1821-1850 from the local governments.¹⁵⁵ The Shan-tung merchants had accumulated their loans to 1.99 million taels in 1796-1820 and in 1827 it was decided to retain only 1.29 million taels for generating interest while the other 700,000 taels would be returned by allotments in a certain period.¹⁵⁶ The Liang-che merchants borrowed altogether 1.9 million taels for payments of annual repairmen of dikes along the coast, dikes at various localities, for seizing smuggling, for the safety of boats, for the horse price of Manchu banner army, for Fu-wen 敷文 Academy, for *yu-ying-t'ang* 育嬰堂 (home for abandoned children), and for gifts to banner-men at occasions of wedding and funeral.¹⁵⁷ As for the Fu-chien merchants, their loans were about 800,000 taels; since the old merchants had bankrupted, the loans could not be paid back at all.¹⁵⁸ The Kuang-tung merchants borrowed altogether during 1723-1838 a sum of 943,993 taels from the local government treasuries.¹⁵⁹ The most serious problem was with the Liang-huai merchants. From 1748 to 1801, the total amount of silver borrowed by the Liang-huai merchants was 2,309,756 taels and in 1826 the amount was accumulated to 7.8 million taels.¹⁶⁰ The loans provided to the Liang-huai merchants from the government were first borrowed by the *tsung-shang* and then lent to the *san-shang* so there was one more portion of interest to be born. For example, the official interest rate was 10% monthly while the relending rate was 15% monthly.¹⁶¹

In addition to regular burden of interest, whenever there was big occasion of ceremony or military expedition the salt merchants had to contribute voluntarily. It was said: "The amount contributed by the Liang-huai merchants was usually several million taels and that by the Ch'ang-lu and Shan-tung merchants was also no less than one million."¹⁶² In 1736-1830, the Liang-huai merchants' "voluntary contributions" were in four major items: military expenditure, famine relief, public works, and imperial expenditures (for Imperial Household and emperor's excursions), altogether the amount reached 37,394,951 taels and of which 54% were for military expenditure.¹⁶³ The Kuang-tung merchants contributed during 1749-1861 a total amount of 57.9 million taels.¹⁶⁴ These "voluntary contributions" must have helped the government to carry through times of need, however, the result was that the salt

¹⁵⁵ *Chiu-sheng yen-wu-i-lüeh*, pp. 29-30, 31-32.

¹⁵⁶ *Chiu-sheng yen-wu-i-lüeh*, pp. 65-67.

¹⁵⁷ *Chiu-sheng yen-wu-i-lüeh*, pp. 148-149

¹⁵⁸ *Chiu-sheng yen-wu-i-lüeh*, pp. 170-1771; also see *Huang-ch'ao ching-shih-wen hsü-pien*, 48/10b.

¹⁵⁹ Wang Hsiao-ho, 1986, pp. 78-79.

¹⁶⁰ Liu Chun, 1933a, p. 136; Saeki Tomi, 1956, p. 221. For details, see *Liang-huai yen-fa-chih* 兩淮鹽法志 (1806 edition), chuan 17.

¹⁶¹ Hsu Hung, 1972a, p. 109, p. 111.

¹⁶² *Chiu-sheng yen-wu-i-lüeh*, p. 29; Lien-sheng Yang, 1970, pp. 198-199.

¹⁶³ Liu Chun, 1933a, p. 132.

¹⁶⁴ Wang Hsiao-ho, 1986, p. 77.

merchants were dragged to bankruptcy and this was not favorable for normal operation of the official salt market.

2. Growth and Decline of Official Salt Market

The instruments that the government used to control official salt market were *yin* and *p'iao* as mentioned before. The government had the right to set the price and weight of *yin* (*p'iao*), and the quota to be distributed at each district. Moreover, at most places, the salt price was officially fixed. This section will discuss growth and decline of official salt market during the Ch'ing period by investigating the number of *yin* (quantity of salt) distributed and changes in the prices of *yin* and salt.

During 1644-1722, the Ch'ing government was able to adopt measures such as increasing the number, the weight, and the price of *yin* to obtain an increase in salt tax for helping to solve the problem of fiscal deficit.¹⁶⁵ Here examples could be given for some salt regions. For the Ch'ang-lu salt, it was distributed in 1661 for 758,603 *yin* and on the average each *yin* paid 0.39 tael of tax; while in 1720 the number of *yin* was 927,246 and the average tax was 0.46 tael.¹⁶⁶ The Liang-huai salt quota was set in 1645 for 1,410,360 *yin* and the average tax per *yin* was 0.675 tael; while in 1689 it was distributed for 1,598,555 *yin* (including *kang-yin* and *shih-yin* 食引) and the average tax was 0.8659 taels per *yin*; moreover, there were miscellaneous items which, when included, would increase the average tax per *yin* to 1.1525 taels.¹⁶⁷ In 1660 the Shan-tung salt was distributed for 245,000 *yin* but actually paid for tax of 325,000 *yin*, thus, the average tax per *yin* was 0.272 tael (originally, 0.205 tael), and in 1728 it was distributed for 500,000 *yin* and the average tax per *yin* was 0.245 tael.¹⁶⁸

An increase in the number of *yin* indicated an expansion of the official salt market. In early Ch'ing when the political situation was gradually settled, the social and economic conditions were gradually stabilized, and the population gradually increased, the government was able to take measures of increasing the number of *yin* to expand the official salt market. Table 6 lists some aggregated figures of selected years for observing the growth and decline of the official salt market throughout the Ch'ing period.

¹⁶⁵ Liu Ts'ui-jung, 1969, pp. 43-57.

¹⁶⁶ *Hsin-hsiu Ch'ang-lu yen-fa-chih*, 7/30b-44a.

¹⁶⁷ *Liang-huai yen-fa-chih*, 7/1a-8a, 11a-12b, 23b-25b; 11/51b-52b. The Liang-huai salt was divided into *kang-yin* and *shih-yin*, the latter was distributed at districts near the salt fields. In terms of style, the difference was that the *kang-yin* had a rule for checking the *yin* while the *shih-yin* did not. As for the price of *yin*, the two were originally different but in 1669 the prices were unified.

¹⁶⁸ *Shan-tung yen-fa-chih*, 7/6a-9a. In 1656, there was an increase of 80,000 *yin* and in 1660 it was decided that the salt of 80,000 *yin* should not be distributed but still be paid for tax.

Table 6: The number of *yin*, the price of *yin*, and the index of prices in the Ch'ing period

Selected year	No. of <i>yin</i>	Salt tax (tael)	Average tax per <i>yin</i> (tael)	Index of Tax per <i>yin</i> (1682=100)	Index of prices (1682=100)
1652	3,740,623	2,120,014	0.567	--	--
1660	4,155,897	2,716,816	0.654	--	--
1682	4,356,150	2,761,258	0.634	100	100
1709	4,829,597	3,271,228	0.677	107	130
1721	5,114,540	3,772,363	0.738	116	130
1753	6,384,231	5,560,540a	0.871	137	200
1800	6,558,658	5,652,575b	0.862	136	300
1841	6,931,092c	4,536,126d	0.654	103	150
		(7,026,173)e	(1.014)	(160)	
1891	4,177,293	7,398,799	1.797	283	360

Source: For 1652 to 1721, see Liu Ts'ui-jung, *Shun-chih K'ang-hsi nien-chien te ts'ai-cheng p'ing-heng wen-t'i*, p. 47, the original figures were from the *Ch'ing-shih-lu* 清實錄 (Veritable records of the Ch'ing dynasty); for 1753, 1800, and 1891, see *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 221/1a; for 1841, see *Ch'ing-ch'ao hsü wen-hsien t'ung-k'ao*, 35/7891. Since the *yin* was not issued in Yun-nan, its figures were not included here for 1841; for Liang-huai, Shan-tung, and Liang-che, the numbers of *yin* and *p'iao* were counted together. For the index of prices, see Yeh-chien Wang, "The Secular Trend of Prices during the Ch'ing Period", p. 361.

- a. Not including 1,454,401 tael of *ying-yu-yin* 盈餘銀 (surplus silver).
- b. Not including 428,942 tael of *yin-yu-yin*.
- c. This was the quota.
- d. This was actual collected amount.
- e. This was the quota.

It should be noted first that except for the year 1841, the number of *yin* listed in Table 6 was exactly the number recorded for each year in the cited documents; therefore, differences of weight per *yin* among regions might not have been taken into account.¹⁶⁹ Thus, here the *yin* was considered as an accounting unit. At any rate, viewed from the number of *yin*, it was quite clear that by the beginning of the nineteenth century the official salt market was still expanding as the number of *yin* was increasing.

As shown in Table 6, from the late seventeenth to the mid-eighteenth century there was a trend of continuous increase in the average tax per *yin*, however, its magnitude of movement was not as great as that of the prices. This suggested that during that period the salt merchants were still able to bear burden of increasing price

¹⁶⁹ In 1644 it was set that except of Fu-chien, Kuang-tung, and Ssu-ch'uan, the weight of one *yin* was 200 catties, see *Ch'u-hsiu Ho-tung yen-fa-chih*, 4/chih-ch'e, 1b-2b. The changes of weight in various regions see *Ch'ing-ch'ao hsü wen-hsien t'ung-k'ao*, 35/7891; *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), chuan 221-229.

of *yin* (i.e., regular salt tax) and the consumers were still able to tolerate the increasing salt price due to transposition of burden by merchants. In the latter half of eighteenth century, the average tax per *yin* decreased slightly and in 1800 the surplus silver of salt tax decreased more than one million taels from the amount in 1753. On the contrary, the index of prices showed that the prices were rising in general and this could be an indication that the official salt with a higher price would encounter more difficulties in competing with cheaper illegal salt under this circumstance. In 1841 the situation was that the quota number of *yin* was not all really distributed and the actual collected amount of salt tax decreased. If the average tax per *yin* was calculated with the quota, then, an increase of it just ran against the trend of falling prices; thus in reality the tax quota was not fulfilled. If the calculation was done with the quota of *yin* and actual collected tax, then, the average tax per *yin* decreased, conforming to the trend of prices. At that period almost every salt region had serious problem of accumulated arrears of tax.¹⁷⁰ The reform in Liang-huai just reflected this time of crisis. As for the situation in the late nineteenth century, the number of *yin* decreased while the amount of tax increased; the average tax per *yin* also was increasing with a magnitude of momentum being closer to that of the prices than in the period prior to the mid-eighteenth century.

For investigating into the situation of each salt region in a comparative sense, there were statistics for three time points as listed in Table 7. First of all, it should be pointed out that since the weight of *yin* differed, a standard weight was chosen for each region and thus the original number of *yin* was converted by the standard weight (see explanations below the table). With the converted number of *yin* and standard weight, the total volume of salt can be calculated. Although the statistics listed in Table 7 represented only the formal sector of the Ch'ing fiscal system,¹⁷¹ they were good approximations for what were effectively under the official control. The following facts could be discerned from Table 7.

Table 7: The number of *yin*, volume of salt, salt tax, and average tax per catty in ten salt regions

Salt region	No. of <i>yin</i>	Weight (catty)	Total volume		Salt tax (tael)	Tax/catty (Tael)
			(Mil. catty)	(%)		
In 1800						
Liang-huai	1,685,492	364	613.52	30.1	2,202,930	0.0036
Liang-che	824,934 ^a	335	276.35	13.6	974,316	0.0035

¹⁷⁰ For example, in 1828 the accumulated arrears of Ch'ang-lu were more than 10 million taels and in 1848 more than 20 million taels, and the arrears of Shan-tung in 1821 were 5.36 million taels, see *Chiu-sheng yen-wu-i-lüeh*, p. 33, p. 35, p. 66. The arrears of Liang-huai were more than 60 million taels in 1821-1850, see Hsu Hung, 1972a, p. 156.

¹⁷¹ For a discussion on the formal and informal sectors of the Ch'ing fiscal system, see Yeh-chien Wang, 1973, pp. 49-57.

Ch'ang-lu	966,046	300	289.81	14.2	681,313	0.0024
Shan-tung	721,740 ^b	225	162.39	8.0	243,354	0.0015
Ho-tung	426,947 ^c	240 ^c	102.47 ^c	5.0 ^c	468,267 ^c	0.0046 ^c
Kuang-tung	814,510	279 ^d	227.25	11.1	644,981	0.0028
Fu-chien	182,146 ^e	675 ^e	122.95	6.0	318,419	0.0026
Ssu-ch'uan	491,701 ^f	400	196.68	9.6	148,487	0.0008
Shan-hsi	72,145 ^g	200 ^g	13.45	0.7	20,417	0.0014
Yun-nan	--	--	34.76 ^h	1.7	283,447	--
Total	--	--	2,039.63	100.0	5,985,931	0.0029
In 1841						
Liang-huai	1,692,032 ⁱ	400	676.81	30.8	2,120,948	0.0031
Liang-che	824,934 ^a	335	276.35	12.6	418,334	0.0015
Ch'ang-lu	1,016,046	300	304.81	13.9	502,553	0.0016
Shan-tung	721,740 ^b	225	162.39	7.4	107,536	0.0007
Ho-tung	708,802	240	170.11	7.8	530,603	0.0030
Kuang-tung	814,509	279 ^d	227.25	10.4	534,274	0.0024
Fu-chien	179,451 ^j	675	121.12	5.5	145,568	0.0012
Ssu-ch'uan	506,828 ^k	400	202.73	9.2	155,451	0.0008
Shan-hsi	72,145 ^l	200 ^l	13.81	0.6	20,859	0.0014
Yun-nan	(p'iao 130,227)	300	39.07	1.8	366,293	0.0094
Total	--	--	2,194.45	100.0	4,902,419	0.0022
In 1891						
Liang-huai	400000 ^m	400 ^r	160.00	10.3	2,800,000 ^m	0.0175
Liang-che	336600	335 ^r	112.76	7.2	607,247	0.0054
Ch'ang-lu	662497	550	364.37	23.4	1,025,800	0.0028
Shan-tung	521225 ⁿ	320	166.80	10.7	131,500	0.0008
Ho-tung	650971	240 ^r	156.23	10.0	600,000	0.0038
Kuang-tung	940630	279 ^r	262.44	16.9	729,340	0.0028
Fu-chien	104882 ^o	675	70.80	4.6	377,209	0.0053
Ssu-ch'uan	513407 ^p	400	205.36	13.2	306,626	0.0015
Shan-hsi	72145 ^l	200 ^r	13.81	0.9	19,841	0.0014
Yun-nan	(p'iao 433786) ^q	100 ^q	43.88	2.8	261,645	0.0060
Total	--	--	1,555.95	100.0	6,859,208	0.0044

Source: *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1818 edition), chuan 177-181;
Ch'in-ting ta-Ch'ing hui-tien shih-li (1899 edition), chuan 221-229;
Ch'ing-ch'ao hsü wen-hsien-t'ung-k'ao, 35/7981.

Notes:

- There were 704,698 *yin* each carried 335 catties and 100,698 *p'iao* each carried 400 catties, the number of *p'iao* was converted into *yin*.
- There were 550,000 *yin* and 171,240 *p'iao*, both for 225 catties per unit, thus they were added together.
- These figures were for the year 1791.
- The weight of *yin* varied from 235 to 323 catties and the average was taken here.
- There were 545,062 regular *yin* and 401,423 extra *yin* and the total was 946,485 *yin*. The west route was 675 catties per *yin* and the east and south routes were 100 catties per *yin*. According to *Ch'ing yen-fa-chih*, there were 545,062 regular *yin* and among them 25,026 *yin* belonging to the west route and there were 387,423 extra *yin* and among them 23,530 *yin* belonging to the west route, see 192/8b-12a.

Thus, altogether there were 48,556 *yin* belonging to the west route which accounted for 5.2% of the total number. Based on this percentage, the original number of *yin* is converted into the standard *yin*.

- f. There were 28,833 *yin* for water route each carried 5,000 catties and 131,288 *yin* for land route each carried 500 catties; here the water route *yin* was converted into the land route *yin*.
- g. There were 69,066 *yin* each carried 200 catties and 3,622 *yin* each carried 170 catties, here the latter was converted into the former.
- h. The difference of the total volume in Yun-nan between 1841 and 1891 was 4.31 million catties, thus this number was deducted from the total in 1841.
- i. There were 1,395,050 *yin* in the south and 296,982 *p'iao* in the north, both one *yin* and one *p'iao* carried 400 catties, thus the numbers were added together.
- j. There were 932,485 *yin* converted by the method noted in e.
- k. There were 29,516 water route *yin* and 137, 878 land route *yin*, the method noted in f was used to calculate here.
- l. The total number of *yin* was 72,688 which was the same as in g, thus the same method was used.
- m. This was only the number for the south, the number of *p'iao* in the north was not known but the tax amount was 312,182 taels which were not included here.
- n. The number of *yin* was 400,500 each carried 320 catties, the number of *p'iao* was 171,740 each carried 225 catties, here the *p'iao* was converted into *yin*.
- o. There were 545,000 *yin* converted with the method noted in e.
- p. The total number of *yin* was 168,407, here take 30,000 *yin* for the water route and converted with the method noted in f.
- q. Each big *p'iao* carried 100 catties and there were 371,141 *p'iao*, each small *p'iao* carried 50 catties and there were 125,290 *p'iao*; here the small one was converted into the big one.
- r. The original documents did not provide the weight per *yin* thus that of the previous period was used here.

(1) Prior to late Ch'ing, the scale of official salt markets among regions varied; but it is clear that Liang-huai was the largest and Shan-hsi the smallest. The variation could be seen rather clearly from the volume of salt distributed. Ever since the Taiping Rebellion broke out, the Liang-huai salt market lost its prestigious position, particularly in Hupei and Hunan where about 60 percent of the Huai salt was previously distributed but now taken by the salt from Ssu-ch'uan, Kuang-tung, and Ho-tung.¹⁷² The Ssu-ch'uan salt industry developed rapidly since the mid-Ch'ing period and in 1812 the distribution amount reached 323.51 million catties.¹⁷³ Thus, it was clear that the volume listed in Table 7 for Ssu-ch'uan did not include the amount distributed outside the region itself. As for other regions, the increases of Ch'ang-lu

¹⁷² Lin Tse-hsu 林則徐 said in "Cheng-tun ts'o-wu che 整頓鹺務摺 (A memorial on readjustment of salt affairs) that about six-tenth of the Liang-huai salt were distributed in Hupei and Hunan, see *Huang-ch'ao ching-shih-wen hsü-pien*, 42/7b. For details of penetration by illegal salt from neighboring regions see Hsu Hung, 1972a, pp. 141-142.

¹⁷³ Ch'en Tsu-yu, 1976, p. 594. Another estimate showed that in late Ch'ing, the taxable salt in Ssu-ch'uan reached 300 million catties, see Madeleine Zelin, 1988, p. 83.

and Kuang-tung were quite notable, while the volumes of Liang-che, Ho-tung, and Fu-chien decreased.

(2) As for the total volume of salt distributed in ten regions, there were 2,039.63 million catties in 1800; 2,194.45 million catties in 1841; and 1,555.95 million catties in 1891. But the figure of 1841 was the expected quota rather than the actual distributed amount so the volume for that year could be bias to over estimation. Wu Ch'eng-ming and his collaborators had used records of different dates to estimate the volume of official salt (including the Northeast provinces in late Ch'ing) distributed prior to the Opium War as 2,418.13 million catties.¹⁷⁴ This estimate for the first half of nineteenth century was probably too high. A plausible reasoning was that the official salt market reached a zenith around the year 1800 and declined afterwards.

(3) As for the average tax per catty, the highest value was generally found in Liang-huai (the 1791 figure of Ho-tung could be set aside for the time being). In 1800 the Liang-huai salt paid 0.0036 tael of tax per catty while in 1891 it paid 0.0175 tael; there was an increase of four folds. During the same period, the average tax of Fu-chien and Ssu-ch'uan salt doubled while that of the other regions increased only slightly or even decreased. It should be noted that the Yun-nan salt though did not use *yin* for distribution, its average tax per catty was not smaller than other regions, except for Liang-huai in 1891. The salt tax paid by merchants was part of their cost as pointed out by T'ao Chu 陶澍 (1779-1839), he said: "The merchants managed transport of salt, what they paid for the price of *yin*, the price of fields, the price of transport, and miscellaneous fees were counted into the cost."¹⁷⁵ The fact that the official salt of Liang-huai could not compete with the illegal salt due to its high price had been studied in details by scholars.¹⁷⁶ Here, a comparison between the salt tax and the salt price could be made for explaining the share of salt tax. In 1801 the officially set salt price in Hupei and Hunan was 0.0368 tael per catty,¹⁷⁷ thus, the salt tax was about one-tenth of the salt price. In 1895 the official salt price in Kiangsi, Hupei and Hunan was 0.033 tael per catty,¹⁷⁸ thus, the salt tax was about one half of the salt price.¹⁷⁹ Among other three items of the merchant's cost, miscellaneous fees was the most criticized item by many observers. The figures of Liang-huai in 1830 showed that the miscellaneous item was double of the regular tax.¹⁸⁰ From the above evidences it could be said that before the nineteenth century the salt tax occupied only

¹⁷⁴ Wu Cheng-ming and Hsu Ti-hsin, 1987, p. 429.

¹⁷⁵ *T'ao-wen-i-kung chi*, 11/5a.

¹⁷⁶ Saeku Tomi, 1956, pp. 211-275; Hsu Hung, 1972a, pp. 142-149.

¹⁷⁷ Saeku Tomi, 1956, p. 273.

¹⁷⁸ Saeku Tomi, 1956, p. 274.

¹⁷⁹ Another study showed that in Chekiang the salt tax made up 40.9% of the salt price in 1912, see Chiang Tao-chang, 1976, p. 40.

¹⁸⁰ Liu Chun, 1933a, pp. 142-143.

rather small share in the cost, the official salt market could still be maintained rather easily and the merchants had a greater opportunity to get profit.

As for the salt price on the market, it was not all determined by monopolistic merchants. Take the case of Liang-huai for example, in 1776 the Liang-huai region was divided into three zones of price: (1) the zone in which the salt price should be set by following a fixed precedent; (2) the zone in which the salt price should be set by the salt administrators and reported to the Board of Revenue annually; and (3) the zone in which the salt price was not fixed and could be fluctuated with time.¹⁸¹ In other words, it was only in the third zone, including districts in Kiangsu and Anhwei provinces where the Huai salt was distributed, that merchants might control the market price or the salt price was allow to be determined by the “market”. In other salt regions, aside for the salt of the *p'iao* area in Chekiang, the salt of Ssu-ch'uan and the Hua-ma-ch'ih 花馬池 salt in Shensi, the market price of salt was all determined officially.¹⁸² Imperfect competition of the salt market was fully manifested by the fact that the price was officially determined. The exhaustion of merchants was partly due to official interference of the salt price. As early as in the late seventeenth century there were merchants who pointed out trenchantly that the first thing the high ranked local official to do after his arrival was to limit the salt price, he “does not even know that the exhaustion of merchants is just due to official prohibition of the salt price.”¹⁸³

The officially determined salt price was, in fact, not all set without considering changes in the market conditions. Here an example could be given with the prices of Ch'ang-lu and Shan-tung salt as listed in Table 8. It could be seen from Table 8 that the officially set salt prices of Ch'ang-lu and Shan-tung increased and decreased in the same direction. As for reasons of price increase, except for supporting dike construction and military expenditures the main reason was for reflecting changes in silver-cash ratio and market situations so that public welfare could be taken care of (the so-called “for convenience of both merchants and peoples”).

Table 8: Changes in the salt price in Ch'ang-lu and Shan-tung during the Ch'ing period

Year	Ch'ang-lu		Shan-tung	
	Wen/catty	Price increase and reason	Wen/catty	Price increase and reason
1732	1	For convenience of both merchants	--	

¹⁸¹ *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 223/13b-16b.

¹⁸² *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 225/10b; 224/22a; 228/6a. for the official salt prices at different counties, see *Ch'in-ting Hu-pu tse-li*, 26/13a-30b. For example, the prices of Ch'ang-lu salt in Chihli were from 2.5 to 14 *wen* 文, in Honan were from 11 to 17 *wen*; the prices of Shan-tung salt in Shantung were from 9 to 14 *wen*, in Honan was 18 *wen*, and in Kiangsu were from 14 to 18 *wen*; the Shan-tung *p'iao* salt was from 5 to 12 *wen*. These prices quoted in the *Hu-pu tse-li* were those set in the K'ang-hsi and Yung-cheng periods before the price increases took place, see *Ch'ing yen-fa-chih*, 21/1a; 59/1a-b.

¹⁸³ *Liang-huai yen-fa-chih*, 26/46b-47a.

		and peoples		
1764	1	Prices were rising	--	
1770	2	Cash was cheap and silver was dear	2	Cash was cheap and silver was dear
1782	2	To facilitate transport	2	to relieve merchants from exhaustion
1788	2	Cash was cheap	2	To facilitate transport
1812	1	Merchants lost capital	--	--
1825	2	Dike construction	2	Dike construction
1838	--	--	2	For subsidy
1842	2	(not clear)	--	--
1848	-2	Let both merchants and peoples be benefited	--	--
1849	--	--	-2*	Let both merchants and peoples be benefited
1858	2	Coast defense in Tientsin; soldiers' salary in Chili	--	--
1866	2	Conservancy of the River and Braves' salary in Honan	--	--
1874	2	Silver price was rising (salt price increase outside Honan)	--	--
1895	2	Maritime defense need	2	Maritime defense need
1896	1	Urgent need	0.5	Urgent need
1900	2	Military expenditure	2	Military expenditure
1901	4	Indemnity payment	--	--
1902	--	--	4	Indemnity payment
1905	--	--	4	Railroad
1906	1	Honan military training	--	--
1908	4	Railroad	4	Railroad
1908	4	Compensation for opium tax	4	Compensation for opium tax
1909	4	Railroad	--	--

Source: *Ch'in-ting ta-Ch'ing hui-tien shih-li* (1899 edition), 221/9b, 12a, 12b-13a, 14a, 16a-b; 222/1a, 14b, 15b, 16a, 17a, 18a, 22a, 22b, 22b-23a, 25a, 27a. For increase since 1895, see *Ch'ing yen-fa-chih*, 21/9a-13b, 59/5b-6a.

*The original text said: "In the fifth year of Tao-kuang, the price was increased two *wen* for dike construction, for each *yin* merchants used to pay 0.34 tael of silver, now 0.1 tael should be reduced,...; as for the price increase of two *wen* in the eighteenth year, now one *wen* should be reduced." (222/27a). The first item of reduction of 0.1 tael of silver can be converted into one *wen* as there were 225 catties per *yin* even if the silver-cash ratio was 1 tael = 2000 *wen*.

As for changes in silver-cash ratio, prior to 1786 the cash price was generally below the standard ratio of 1,000 *wen* to 1 tael, though there were fluctuations the magnitude of momentum was not very great. After 1780 the cash price around Chihli fell continuously until 1804 and then during 1808-1850, due to import of opium and outflow of silver, the silver price was rising and the cash price was falling continuously.¹⁸⁴

From the standpoint of official, it was rational to raise the salt price quoted in cash along with the falling trend of the cash price in order to prevent merchants from being lost their capital and thus owed the salt tax. This was the price increasing measure taken by the government due to fiscal consideration. During the eighteenth century when the prices were rising in general, an increase in salt price could be

¹⁸⁴ Ch'en Chao-nan 陳昭南, 1966, pp. 5-12; Yeh-chien Wang, 1972, p. 355.

rational, however, during the first half of nineteenth century the continuous rising salt price just ran against the falling trend of prices. Thus the government adopted the price increasing measure in that period simply caused the official salt to lose competitive capability and could not reach the goal of increasing salt tax. The prices reduction in 1848 and 1849 was in fact a choice made after recalling past pains, however, at that time to reduce price for fighting against illegal salt would not be effective any more.¹⁸⁵

The salt price increase after the mid-nineteenth century was almost all for the purpose of government finance. It is notable that after 1895, the retail prices of salt were increased in every province for raising revenue for indemnity payments, railroads construction, the opium tax compensation, as well as military and education expenditures. Through these forced price increases, the Ch'ing government obtained an annual amount from 2.1 to 18 million taels during 1898-1910.¹⁸⁶ Obviously, these price increases distorted the price level of the official salt and caused it to lose competitive power against the illicit salt. For example, as shown in Table 9, between the two time points of the 1800s and the 1910s, the magnitude of changes in salt prices in Ch'ang-lu and Shan-tung (except for the *p'iao* districts) was greater than that of the general price level.

Table 9: Changes of salt prices in Ch'ang-lu and Shan-tung

Unit: average price in wen/catty

Ch'ang-lu			Shan-tung				General prices		
Year	Salt price	Index	Year	Salt price		Index		Year	Index
				<i>yin</i>	<i>p'iao</i>	<i>yin</i>	<i>p'iao</i>		
1804	18.4	10	1808	17.7	13.8	100	100	1800	100
1902	32.0	174	--	--	--	--	--	--	--
1911	44.8	243	1911	39.6	26.8	224	194	1910	200

Source: *Ch'ing yen-fa-chih*, 21/14a-24a, 59/7a-12a, for salt prices.

Yeh-chien Wang, 1972, p. 361, for general prices; the indices have been recalculated.

In addition to the salt price increases which had become part of the salt tax, there was *likin*. In terms of national total, from 1869 to 1908 the annual revenue from *likin* was 14.2 million taels on the average and among it the salt *likin* accounted for only 0.8%.¹⁸⁷ In terms of Liang-huai, however, from 1864 to 1902 the total amount of salt tax was 26.3 million taels and the salt *likin* was estimated as being more than

¹⁸⁵ *Huang-ch'ao ch'ing-shih-wen hsü-pien*, 42/9b, 13a.

¹⁸⁶ For the study of this issue see Hon-wai Ho, 1985, pp. 45/78, the figures are quoted from p. 77.

¹⁸⁷ Lo Yu-tung 羅玉東, 1970, pp. 470-471.

four folds.¹⁸⁸ Thus, it can be calculated that the salt *likin* in the Liang-huai was about 2.7 million taels annually and which was about 19% of the national total of *likin*. In other words, in the late Ch'ing period when the official salt of Liang-huai had lost most of its market, tax revenue (including tax and *likin*) from salt was still increasing rather than decreasing.

As for whether the supply of official salt was enough for the market demand, it was related to the number of *yin*. In ideal designing of salt monopoly system, the number of *yin* must be in accordance with the number of population so that a balance between the supply of and the demand for salt could always be maintained. The contemporaries in Ming-Ch'ing times often mentioned the point that the number of *yin* should be adjusted according to the area of distribution and the size of population.¹⁸⁹ In the early Ch'ing period when increases of *yin* were introduced to various salt regions, criteria were usually based on the number of *ting* 丁 (adult male) registered officially.¹⁹⁰ As a matter of fact, the quantity of official salt might not have been adjusted with the size of population all the time thus provided an opportunity for the illegal salt to penetrate into the market. Scholars tended to estimate the share of illegal salt with figures of per capita consumption of salt and the population at certain time. As it is very difficult to get precise figures of population it is not easy to make exact estimate of the salt demand. Here attempts are only to make a few plausible estimates.

For the year 1800 figures could be grasped and estimated were as follows:

(1) The total amount of official salt was 2,039.63 million catties (Table 7).

(2) The official record of population was 295,273,111 persons.¹⁹¹

(3) There were four estimates for per capita consumption of salt:

(i) Lin Tse hsu 林則徐 (1785-1850) once states that every person would take 3 *ch'ien* 錢 (1 *ch'ien* = 1/160 catty) of salt daily and thus 400 catties of salt would be enough for 60 persons to consume annually.¹⁹² With this, annual consumption of salt per capita was about 7 catties.

(ii) There was a statement in early Ch'ing saying that including all usages of salt in dishes and preserving fish, vegetables, cucumbers and sauce, every person would use 8 catties annually.¹⁹³

¹⁸⁸ Liu Chun, 1933c, pp. 145-148.

¹⁸⁹ See *Huang-ch'ao ching-shih wen-pien*, 50/26a, 32b, 35a, 49a, 59a-60a, for opinions of Wang Sheng 汪牲, Lu Hung 盧紘, Chu shih 朱軾, T'ien Wen-ching 田文鏡, and Chiang Fan 江繁.

¹⁹⁰ *Hsin-hsiu Ch'ang-lu yen-fa-chih*, 7/9b-22b; *Liang-che yen-fa-chih*, 7/1a-10. It should be noted that *ting* was not the actual number of population but was just a fiscal unit, see Ping-ti Ho, 1959, pp. 24-25,

¹⁹¹ Ping-ti Ho, 1959, p. 281.

¹⁹² *Huang-ch'ao ching-shih wen hsü-pien*, 42/8a; that daily consumption of salt per capita was three *ch'ien* was also noted in *Liang-che yen-fa-chih*, 12/36a.

¹⁹³ *Liang-huai yen-fa-chih*, 26/44b-45a.

(iii) In late Ch'ing there was a statement saying that every person would not use more than one catty of salt monthly.¹⁹⁴

(iv) The standard taken by Saeki Tomi and Hsu Hung was 10 to 15 catties per capita per annum.¹⁹⁵

(4) Here 8 catties per capita will be taken as a low estimate and 12 catties for a high estimate. By the low estimate the total demand of salt would be 2,362.28 million catties and by the high estimate it would be 3,543.28 million catties.

(5) Thus, the official salt was counted about 86% or 58% of the total demand.

In other words, at the time when the official salt market reached a zenith of prosperity, the most conservative estimate showed that the illegal salt occupied probably only 14% of the salt market.

For the year 1891 the figures were as follows:

(1) The total amount of official salt was 155.95 million catties (table 7).

(2) The official record of population in 1893 was 376.1 million persons (not including Northeast, Mongolia, Sinkiang and Tibet).¹⁹⁶

(3) Take 8 catties per capita per year for the low estimate and 12 catties for the high estimate.

(4) The total demand by the low estimate would be 3,008.8 million catties and by the high estimate 4,513.2 million catties.

(5) Thus, the official salt was about 52% or 34% of the total demand.

Another way to calculate may be tried here. An estimate of average annual production of salt in China during 1840-1890 showed that the national total amount was 1,725,110 metric tons; if the amount of Liao-tung was excluded, then, the total was 1,507,382 metric tons, which was convertible to 3,014.76 million catties (1 metric ton = 2,000 catties).¹⁹⁷ Thus, it may be calculated that the officially distributed amount of 1,555.95 million catties in 1891 was about 52% of the total production in ten salt regions. This estimate happens to be the same as the upper bound of the estimates shown above and it suggests that the lower bound of the official market share is perhaps too low to be taken seriously.

In other words, on the salt market in late Ch'ing times the shares of official and illegal salts were about the same. The decline of official salt market could not be recovered easily.

In summation, the Ch'ing official salt market was able to operate normally and

¹⁹⁴ See Hu Ch'uan 胡傳, "Liao-hai chueh-yen ssu-i 遼海榷鹽私議 (a private opinion on salt tax in Liao-tung), in *Huang-ch'ao ching-shih wen hsü-pien*, 42/4b.

¹⁹⁵ Saeki Tomi, 1956, p. 205; Hsu Hung, 1972a, p. 154.

¹⁹⁶ Dwight H. Perkins, 1969, 212. According to Liang Fan-chung 梁方仲, 1980, pp. 266-267, the population registered in 1891 did not have figures for Anhwei, Kansu, Fukien, Kwangsi, and Yunnan, thus the 1893 figure was used here.

¹⁹⁷ Tao-chang Chiang, 1983, p. 198.

to expand continuously by the beginning of the nineteenth century. A zenith of prosperity was reached around 1800. At that time the share of official salt on the market could be at most 86%. By the end of the Ch'ing period, however, the official salt market had declined and the shares of official and illegal salts almost equaled. As for the operation of official salt market, the movement of price of *yin* (a proxy of the wholesale price of salt) showed that its trend was in accordance with that of prices but with a more moderate momentum. As for the salt price on the market, it was determined officially in most regions and its trend of movement was quite agreed with that of the prices prior to 1800, however, it was not afterwards indicating that the official salt with increasing price had difficulty in competing with the illegal salt at that time. In the late nineteenth century, the officially increased salt price was mainly under fiscal consideration and it moved beyond the general price level showing clearly the feature of imperfect competition. As for the scale of official salt markets among regions, it was largest in Liang-huai and smallest in Shan-hsi. But in late Ch'ing, there was a significant change which manifested mainly the decline of Liang-huai official salt market.

III. Opinions on Releasing Control

As discussed above, the government control over the salt market was mainly in aspects of assigning distribution areas, restricting the use of *yin* and *p'iao*, and fixing the salt price. To distribute salt not following official regulations was regarded as illegal and the illegal salt became a great harm to the official salt market. There were a lot of debates on the salt system in Ming-Ch'ing times, either to point out abuses or to suggest measures for preventing abuses, here only those related to release of control will be discussed below.

Opinions of this type mostly pointed to abolishing boundary of salt distribution regions and were grouped as a "school of collecting tax at salt fields" by Liu Chun.¹⁹⁸ This school of opinion traced its origin of idea to Liu Yen 劉偃 (715-780) in the T'ang dynasty. The most eminent character of this school was Ku Yen-wu 顧炎武 (1613-1682). In his *Jih-chih-lu*, Ku introduced an idea of Li Wen 李雯, his contemporary from Sung-chiang, stated: "What should be done is to set rates at salt fields and after once taxed, not to ask where the salt goes." He praised and recommended this idea as appropriate for putting into practice. He then pointed out that the idea of Li Wen was just what had been put into practice by Liu Yen in the following way: "To set up officials only at places where salt was produced to collect salt and to sell it to merchants for transporting to any place, while at other districts no

¹⁹⁸ Liu Chun, 1933a, pp. 150-152.

official should be set up to manage salt affairs.” Moreover, Ku argued with his own experiences at his home town in Kiangsu and in Shensi that the illegal salt was popularly traded because it had an advantage of being very convenience and could not be prohibited by the law of the state; the government knowing that it was not possible to prohibit and yet still established prohibitive regulations was just playing the “politics of stealing a bell by covering the ears.”¹⁹⁹

In addition to Ku Yen-wu, from the beginning to the end of the Ch’ing period, there were some liberal spirits proposing opinions of releasing control. For example, Ch’ü Ta-chün 屈大均 (1630-1696) not only mentioned Liu Yen for his reference but also quoted Ou-yang Hsiu 歐陽修 (1007-1072) and said that the distribution of salt must be as free as the flowing of water, and “why should the officials try to limit it?” He proposed that the monopolistic salt merchants should be dismissed and in so doing there would have no need to prohibit illegal salt.²⁰⁰ Moreover, a statement by Kung Ching-han 龔景瀚 (1747-1803) was: “It is appropriate to imitate the method of Liu Yen, to set up rates at salt fields and after being taxed, the salt should be let go to anywhere, thus both the state and the people will be benefited.”²⁰¹ A similar saying of Cheng Tzu-sheng 鄭祖琛 (1784-?) was: “To imitate the method of Liu Yen, to collect tax at salt fields and let merchants to transport freely, then all abuses could be removed.”²⁰² Furthermore, around the year 1850 Li Tzu-t’ao 李祖陶 (1776-1858) sighed that the ideas of Ku yen-wu and others had not been practiced at all and criticized that regulations of *p’iao-fa* were still operated by officials from place to place and therefore, he proposed that no officials should be set up to interfere salt trade.²⁰³

A method of collecting tax at salt fields was proposed by Sun Ting-ch’en 孫鼎臣 (1819-1859) in some details that could be summarized in five points: (1) The annual regular salt tax collected previously and the amount of salt production should be examined carefully for establishing appropriate tax rates, the standard should be unified in order to prevent from being unequal which would induce advancing or withdrawing of merchants. (2) The salt producers should be allowed to produce freely and report to the official for opening market after the salt was produced. The trade at fields should be inspected by the field officials and the tax should be paid according to the rates, a ticket (*p’iao*) should be given after paying tax in order to facilitate transportation and to inspect illegal selling. (3) The merchants who transported salt

¹⁹⁹ *Jih-chih-lu*, pp. 246-247.

²⁰⁰ *Kuang-tung hsin-yü* 廣東新語, pp. 400-401.

²⁰¹ “Yen-kuei-ti-ting pu-ju shou-shui i 鹽歸地丁不如收稅議 (On it is better to collect tax than to merge salt tax into land tax),” in *Huang-ch’ao ching-shih wen-pien*, 49/25b.

²⁰² “Keng-yen-fa 更鹽法 (On reform of salt system),” in *Huang-ch’ao ching-shih wen-pien*, 49/8a.

²⁰³ “Yen-pu-she-kuan-i 鹽不設官議,” in *Huang-ch’ao ching-shih wen-pien*, 42/11a-b.

out of fields should be inspected at inland customs only for the ticket and not be limited for the distribution localities; the merchants must obtain a permission from the local official of district where they had registered their households before going to salt fields in order to prevent concealing from tax payment. (4) The salt price should not be fixed by the official because the production might vary, the price might fluctuate and the way of exchange could not be unified by the law. (5) Honest and capable district officials should be selected as the field officials to be under command of the Yun-ssu 運司 (lit., the transport official) while other salt officials should all be abolished and in this way salt administration could be rectified and channels of seeking profit would be closed.²⁰⁴ In fact, Sun's opinions though based on the idea of collecting tax at fields were dotted with inspection of ticket at inland customs and thus still had a smell of control. What was most notable of his proposal was not to determine salt price officially.

The main idea of collecting tax at salt fields was to abolish boundary limitation of distribution. This idea was not adopted by the late Ch'ing government. Instead, what was taken was the *p'iao-fa* or even official transport (*kuan-yun*). Moreover, there were opinions arguing against this idea. For example, after quoting Ku Yen-wu's idea, Feng Kuei-fen 馮桂芬 (1809-1874) had the following comments:

His meaning is to remove all boundaries so that to realize his method of not interfering whereabouts of the salt. This seems to be an argument of investigating into fundamental and searching into original. I liked it very much after reading it when I was young. However, after I participated in compiling a gazetteer of salt system in Yang-chou and visited salt fields personally I realized that his idea was just a pedantic view.²⁰⁵

Feng Kuei-fen had revealed with these words that a fundamental institutional change was not easy, just as it had been pointed out by Douglass North that to change primary institutions required a great cost.²⁰⁶

The *p'iao-fa* in late Ch'ing had, indeed, had fewer limitations than the *kang-fa* and its main purpose was to reduce the price of official salt in order to compete with the illegal salt.²⁰⁷ However, just as pointed out by Yu Te-yuan 俞德淵 (?-1836): "The argument of reducing the price for competing against the illegal salt seems to be rather eloquent and yet it is not effective at all. Since the cost of official salt is not just double of that of the illegal salt, how can it compete with? If it is wanted to fight

²⁰⁴ "Lun yen san 論鹽三 (The third discourse on salt)," in *Huang-ch'ao ching-shih wen-pien*, 43/8b.

²⁰⁵ "Li Huai-ts'o i 利淮鹺議 (On how to benefit the Huai salt system), in *Huang-ch'ao ching-shih wen-pien*, 43/9a.

²⁰⁶ Douglass North, 1971, pp. 118-125.

²⁰⁷ Liu Chun, 1933a, pp. 181-188; Hsu Hung, 1972a, pp. 191-199; Saeki Tomi, 1956, pp. 385-394.

against the illegal salt the only way is that the state does not collect tax.”²⁰⁸ That the state is not to collect tax is to give up control completely. Such a thorough proposal, however, was for sure not to be adopted by the late Ch’ing government which was facing fiscal crisis.²⁰⁹

In summation, there was no lack of opinions on releasing or even abolishing control of salt market in Ming-Ch’ing times, how ideal were statements such as “The illegal salt should not be prohibited”,²¹⁰ and “When salts under heaven are all illegal they will be all official”.²¹¹ As a matter of fact, the illegal salt had occupied a large share of the salt market and the monopoly system had lost its strength. These proposals of releasing or abolishing control, however, had not been really put into practice mainly because a reform of “investigating into fundamental and searching into original” would require a great cost. While the financial distressed late Ming and late Ch’ing governments were not prepared to pay the cost of not collecting salt tax, the society was not prepared to pay the cost of no control.

Concluding Remarks

The above discussions could be summarized into six points as follows:

(1) The salt monopoly system in Ming-Ch’ing times had gone through substantial changes and could be differentiated into two major phases of official monopoly and merchant monopoly with a turning point in 1617. Some features demonstrating imperfect competition of the salt market could be found in both phases. The most distinguished feature was that there were restrictions in respect to the amount and price of salt to be distributed in certain regions defined by the government. Moreover, with the privilege of monopoly, the salt merchant was able to gain extra profit through selling the monopoly certificate.

(2) The timing of institutional changes in the salt monopoly was notable. During the fifteenth century, under the *k’ai-chung* system, *yin* became a transferable instrument, the practices of merchant purchasing of surplus salt and the commutation of payment into silver were formally regulated in 1489 and 1492 respectively. These changes reflected the phenomena of commercialization and usage of silver as money and the readiness of some conditions for market economy in the agrarian society of traditional China. In this sense, the late fifteenth century could be considered as a

²⁰⁸ “Shang Ho Ou-keng chih-fu shu 上賀耦庚知府書 (A letter of Ho Ch’ang-ling),” in *Huang-ch’ao ching-shih wen-pien*, 42/13a.

²⁰⁹ Lo Yu-tung 羅玉東, 1933, pp. 189-270; Ho Lieh 何烈, 1972, pp. 10-20.

²¹⁰ Hu shih-ning 胡世寧, “Ping-pu shih-shih shu 兵部十事疏 (Memorial on ten matters of the Board of Military),” in *Huang-Ming shu-ch’ao*, p. 3814.

²¹¹ This was the words of Li Wen, see *Jih-chih-lu*, p. 246.

period of transformation in Chinese economic history and a beginning period of modern Chinese economy.

(3) Before chaos set in and the decline of the Ming dynasty, the government adopted measures of price discrimination and price reduction to control surplus salt so that by the end of the sixteenth century the tax revenue from surplus salt was more than that from regular salt, and there even had increases. Thus, the official salt market was somewhat maintained without falling apart.

(4) Under the merchant monopoly system, the Ch'ing official salt market reached a zenith of prosperity around the year 1800. There were about 2,000 salt merchants who had a large enough scale of distribution and among them 50 or so might have very large capital. The official salt had a market share as much as 86% at times of prosperity. From the nineteenth century onwards, the official salt market gradually declined and by the end of the century, its share of the market was only about 52%.

(5) From the mid-fifteenth to the mid-sixteenth century, the movement of the *yin* price was generally in agree with that of the rice price in the lower Yangtze area, but its magnitude of momentum was not as great as that of rice price. From 1682 onwards, the price of *yin* also moved along with the trend of prices in general and its momentum was not as great, either. Moreover, the officially increased salt price in Ch'ang-lu and Shan-tung regions demonstrated that by the beginning of the nineteenth century, the movement was quite in accordance with that of silver-cash ratio and general prices, however, in the first half of the nineteenth century the increasing salt price ran against the falling trend of prices and to the end, the increase of salt price was almost all for the fiscal purpose and moved beyond the level of general prices. The official salt with its high prices was naturally not able to compete with the illegal salt.

(6) The salt monopoly was the most concrete manifestation of economic control during the Ming and Ch'ing periods. Although there were opinions on releasing or abolishing control proposed every now and then by some liberal spirits, these ideas had not been put into practice at all; this revealed the difficulty of fundamental institutional reform. Indeed, even in the twentieth century, "the existence of a perfect market is likely to be extremely rare in the real world."²¹² In today's China, however, as requirements of "liberalization" and "modernization" of the economy are becoming more and more urgent, the experience of official salt market in Ming-Ch'ing times may provide us with a mirror for reflection.

²¹² Joan Robinson, 1933, p. 89.

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