



## The Rural Economy of Kiangsu Province 1870 - 1911

David Faure

The rural economy of Kiangsu Province between 1870 and 1911 was a microcosm of the rural economy of China as a whole as the country came increasingly under the pressure of modern industrial development. This is not to argue that industrialization ever proceeded to any marked extent on a wide scale. On the contrary, just as exemplified in the case of Kiangsu Province between 1870 and 1911, industrialization in China was confined chiefly to the major cities, but this industrialization of the cities, coupled with other factors, left unmistakable effects even on the countryside. This was a complicated process, but on the records of this development are hinged some of the most important problems in China's economic development: Did the general productivity decline? Did the peasants come to have a smaller share of the produce? Were handicraft industries displaced by foreign imports? How, in fact, was the rural economy affected in the process of economic development?<sup>1</sup> Because of its important position in the economy of China, as well

as because of the availability of resources for research, Kiangsu Province has been the center of many of these arguments. In this paper, I shall put together some of the relevant material available concerning this province, and examine it in an attempt to reconstruct a general picture.

### Basics of agricultural production

By whatever reckoning, agriculture must have been, by far, the largest portion of the total produce of Kiangsu Province. In many places, farm income was supplemented by handicraft industries. Other than agriculture and rural handicraft, production in Kiangsu included only salt and city industries, which consisted of a combination of modernized light industries and traditional handicrafts, there being no significant mining in the province, and little heavy industry to speak of.

In general, agricultural production can be seen as a function of the quantity of cultivated land and the yield per unit area

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*Acknowledgement:* This article is based on the author's Ph.D. dissertation at Princeton University. Among the many people who read the related chapters on which this article is based, thanks are due in particular to Gil Rozman, Roberta Cohen, Marion Levy, Jim Geiss, Lynn White III, and Bill Attwell. Thanks are also due to former President Chuan Han-sheng of New Asia College for kindly suggesting that this material be turned into an article and for a very careful reading of an early draft.

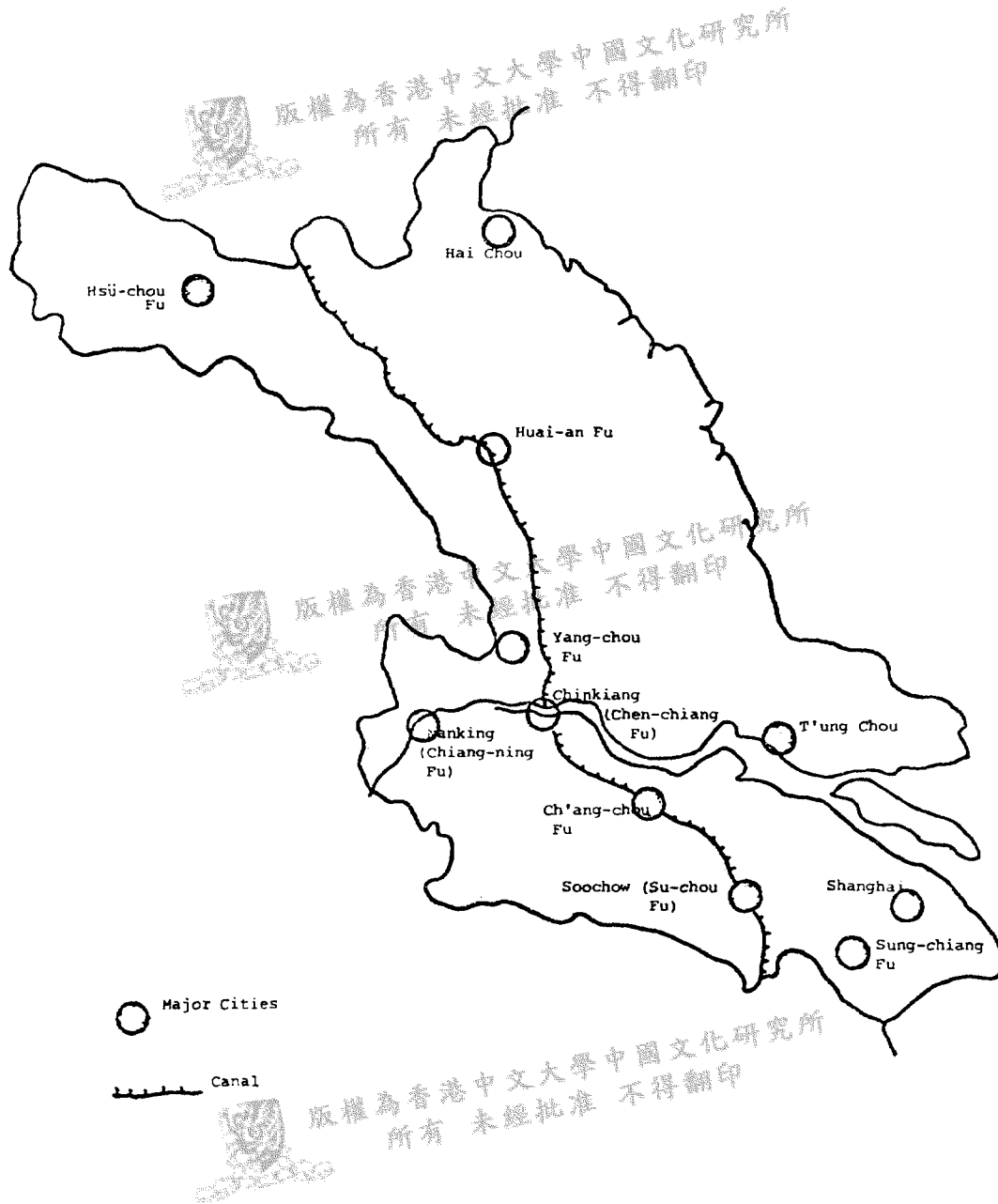
*A note on romanization:* Except for names of provinces and major cities, the romanization system used here is Wade-Giles. In the case of provinces and cities, the Post Office spelling is used. Thus "Soochow" refers to the city, and "Su-chou" the prefecture.

*Abbreviations:* SP(TC) 13.5.14 = *Shen-pao* (T'ung-chih era) year 13, 5th month, 14th day; SP(KS) = *Shen-pao* (Kuang-hsü era); NCH 1902-1: 1210 = *North-China Herald and Supreme Court and Consular Gazette*, 1902-volume 1: page 1210.

<sup>1</sup> There is an extensive literature covering these arguments. See, in particular, Li Wen-chih (1957), Li Shih-yüeh (1958), Albert Feuerwerker (1969), Ramon Myers (1970).

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# KIANGSU 江蘇



of each crop on the land. Long term variation can be calculated if we take into account long term variation in these two factors, and the production of any year can be estimated if, in addition, we have a record of random variation in such factors as natural disasters and the weather. In a very rudimentary way, the task is first to find out what was grown and how much was grown per unit area, changes in the crops, changes in cultivated area, and finally to compile a basic record of harvest results. With this rudimentary knowledge, we shall then be able to assess other developments in Kiangsu.

*Crops and crop yields.* The principal cropping pattern of Kiangsu Province was food grain rotated with cash crops, food grain being by far the more dominant produce. For food-grain, in the northern half of Chiang-pei,\* the main pattern was a winter crop of wheat and a summer crop of kaoliang. In the rest of the province, the winter wheat was followed by a summer crop of rice. For cash crops, the dominant items were cotton, opium, rapeseed, indigo, and soya beans. Mulberry was grown, chiefly to supply the farm with the feed for silkworm rearing, and was a particularly advantageous crop, as it could be grown on the side of the field without occupying

land devoted to food grain. Such crops as buckwheat, sweet potatoes, and peanuts, were supplementary food crops, with buckwheat sometimes grown as a replacement where a first crop had been destroyed by unfavorable weather conditions.<sup>2</sup>

In terms of area, it is unlikely that the amount of cultivated land devoted to principal food crops (grain) could be much below 70 percent. In most places in Kiangsu it was probably much higher. Of the area devoted to grain, it seems that the winter wheat and rice combination in Chiang-nan was followed much more closely than the winter wheat-kaoliang combination was in Chiang-pei. To use J. L. Buck's 1929-1933 data as a guideline (Table 1), in Su-chou, Ch'ang-chou, Chiang-ning, 70 percent or over of the crop area was devoted to grain. In Chiang-pei, where the crop area under grain fell below 70 percent, the difference could be more than made up by the area under legumes. The one exception was a single locality surveyed in Yen-ch'eng hsien, in which district from the early years of the 20th century some area had come to be devoted to cotton. In the 19th century, cotton was largely not planted in this area. By far, most of the area under grain was given to rice and wheat, kaoliang being a much smaller proportion compared to the other two. In Chiang-nan, above 75 percent of the area devoted to grain crops

\* Chiang-pei refers to the part of the province north of the Yangtze River, and Chiang-nan the portion south of the river.

<sup>2</sup> J. L. Buck (1937) pp. 62-72, 204-244; Wang Wei-p'ing (1956). Alfred Kai-ming Chiu (1933) pp. 501-501H gives the following crop distributions for Kiangsu in the 1930's. The data are revised from *Statistical Monthly*, 1932, collected from reports by district magistrates, postmasters, and farmers:

Rice	17.28 percent	Soyabeans	12.89 percent
Glutinous rice	3.82	Peas	0.32
Wheat	28.09	Other legumes	2.41
Barley	14.81	Sweet potatoes	2.31
Kaoliang	4.49	Rapeseeds	0.42
Millet	1.05	Cotton	8.01
Corn	2.62	Peanuts	1.49

(Above data in percentages of crop acreage. This is the measure of the amount of land on which crop is actually grown, taking into consideration the fact that on some land there is more than one crop. Crop acreage in Kiangsu = 163.62 percent of total cultivated area.)

TABLE 1. PERCENTAGE OF CROP AREA DEVOTED TO PRINCIPAL FOOD CROPS

	Grain	Legumes	Oilseed	Grain and legumes	Grain and oilseed	Legumes and oilseed	All seeds
Su-chou							
Ch'ang-shu . . .	75.9 (76)†	1.8	14.0	—	—	—	91.7
K'un-shan . . .	69.4 (91)	5.5	3.1	—	—	—	78.0
Ch'ang-chou							
Wu-hsi . . . .	82.2 (100)	—	—	—	—	—	82.2
	85.1 (100)	—	—	—	—	—	85.1
Wu-chin . . . .	78.3 (78)	9.0	0.8	0.5	—	—	88.6
	86.6 (83)	8.0	—	—	—	—	94.6
	98.4 (78)	0.5	—	—	—	—	98.9
Huai-an							
Fou-ning . . . .	41.0 (37)	33.3	0.1	13.2	—	12.3	99.9
Huai-yin . . . .	63.3 (56)	16.5	7.5	—	—	—	87.3
Yen-ch'eng . . .	2.2 (27)	—	—	—	—	—	2.2*
	99.9 (90)	—	—	—	—	—	99.9
	53.8 (97)	—	—	—	—	—	53.8
	100.0 (89)	—	—	—	—	—	100.0
Yang-chou							
Chiang-tu . . . .	86.0 (99)	14.0	—	—	—	—	100.0
T'ai . . . . .	79.9 (41)	19.1	0.1	—	—	—	99.1
Chiang-ning							
Chiang-ning . . .	77.7 (98)	20.9	0.4	—	—	—	99.0
Hai Chou							
Kuan-yün . . . .	64.3 (65)	22.6	—	10.6	—	—	97.5
Sung-chiang							
Shang-hai							
self-owners . . .	42.1	13.2	—	—	—	—	55.3†
part-owners . . .	39.2	10.5	—	—	—	—	49.7
tenants . . . . .	46.0	14.5	—	—	—	—	60.5

† percentage of grain area given to rice, wheat, or kaoliang.

\* 97.8 percent devoted to fibers.

† Acreage for cotton: 36.7 percent for self-owners, 38.1 percent part-owners, 23.5 percent tenants.

N.B. Cultivated area in this table is the total acreage under crops throughout the year, i.e. counting separately the crop area in different seasons.

Source: J. L. Buck (1937) statistics volume, pp. 172-175; Shang-hai shih she-hui-chü, in Feng Ho-fa (1933) pp. 281-282.

was for rice and winter wheat, while in Chiang-pei, the proportion fell to as low as 37 percent for rice, wheat, and kaoliang, if the very high fiber-producing area of Yen-ch'eng is excluded as an anomaly. In Buck's original data, the area devoted to kaoliang was particularly small: 2.2 percent for Fou-ning, 1.9 percent for Huai-yin, 18.5 percent for T'ai hsien (formerly T'ai chou) and 8.1 percent for Kuan-yün. Other food grain in these areas included barley, buck-wheat, corn, and millet. Thus, the Chinese countryside was much less monotonous than any brief division into agricultural regions might lead one to believe.

Buck's survey omitted the Sung-chiang area, and the data for this I have nonetheless included in Table 1. The Sung-chiang-T'ai-ts'ang area had long been known as the main cotton-producing district in Chiang-nan. Indications are that the concentration

of cotton production continued after 1870 as it had existed before 1850, but nowhere was it ever at the "70 percent cotton and 30 percent rice" proportion that was usually given as a description of the acreage. This description is most likely a confusion of the crop rotation for cotton with the general impression that cotton-growing was dominant.<sup>3</sup> In the survey of Shang-hai hsien, for which the grain production data have been included in Table 1, the crop acreage under cotton amounts to 35 percent. In terms of area, the *Shina shōhetsu zenshi* in 1920 gives the acreage as: Sung-chiang 2,500,000 *mou*, T'ai-ts'ang 1,500,000 *mou*, T'ung chou 3,500,000 *mou*, Ch'ang-yin-sha (i.e. on the Yangtze shore from Shanghai to T'ung chou) 800,000 *mou*. This places the area considered to be cotton-producing in Sung-chiang at almost 60 percent, and T'ai-ts'ang at 20 percent. Even then, be-

<sup>3</sup> Let us work this out: The *Lo-chi chen chih* (1889) 1/9a discusses how this proportion was arrived at: "...If cotton is grown for a long time (continuously), weeds become a serious problem. Hence, for every three years of cotton, it is necessary to grow paddy for one year. Consequently, there is the saying '70 percent cotton and 30 percent rice'."

If the two crops are evenly distributed over a four-year period on a piece of land, in each year 25 percent of the land would be devoted to rice, and 75 percent to cotton. This is close to the estimate. However, from two other sources, it seems that even this is an exaggeration. First, the *Yüeh-p'u li chih* (1934) 5/1a:

"In usual practice, land devoted to cotton does not require manure. But every two years, rice must be planted. At this time, ash and manure, alluvial soil and beancake, are added to enrich the land as preparation for the cotton."

*Ch'uan-sha t'ing chih* (1879) 4/6a-b gives an account of the rotation in detail:

"If the land is left fallow after the harvest (of cotton), it is called weed-land. In the following year, the land can be used for cotton or rice. (If rice is grown on the land), the rice can be harvested in autumn, and then the land is called 'hard rice land'. This can be used immediately for growing wheat, and the wheatland used for cotton in the following year. In this case, wheat is planted in double rows with cotton. Some people do not grow the wheat, but plant the cotton early the next year. The common saying is, 'count the fallow as a harvest,' ... on elevated land, which can be used for cotton or rice, if cotton is grown for two years and then rice for one year, the roots of the weeds would be broken, the soil would be thicker and there would be no worms. If cotton is grown for three years, worms will grow, and the soil will be exhausted."

Thus, the cropping pattern is either cotton—fallow—cotton—fallow—rice—wheat, or cotton—fallow—cotton—fallow—rice—fallow. In either case, the amount of land under cotton, for cotton-growing land, was about one-third.

cause of the need of a crop rotation, not all this acreage could be devoted to cotton at the same time.<sup>4</sup>

It is difficult to assess how cotton acreage after 1870 compared with the years before 1850. Sung-chiang was for long the area in which cotton cultivation had been most intense. Before 1850, cultivation had extended eastward from here to Chao-wen (Su-chou) and Chiang-yin (Ch'ang-chou). Clear evidence of extension after 1870 was towards the coastal area immediately to the north: particularly to T'ung chou, Ch'ung-ming Island, and Hai-men t'ing, and it seems that before 1850 this area had not been heavily under cotton. Cotton is also mentioned in the *Tan-t'u hsien chih*, but its extent is not clear. Between 1870 and 1911, it did not extend into Yang-chou, Huai-an, or Hai chou. The cotton that was used in Yang-chou in the 1870's was imported from T'ung chou. However, at least for the later part of the 1870-1911 period, cotton was cultivated in parts of Hsü-chou. Where cotton was cultivated, however, it seems quite certain that the profits from cotton cultivation were higher than profits from grain. Export of raw cotton continued to expand from 1870 to 1911, and prices increased.<sup>5</sup>

In the case of mulberry and silkworm rearing, there is evidence only of some limited extension. After the Taiping Rebellion, mulberry and silkworms were encouraged as part of the government rehabilitation policy, and in the area where silkworms were traditionally reared, i.e. Su-chou fu, it was quickly re-established. Some areas in Sung-chiang and T'ai-ts'ang also reported that silkworm rearing began from about the same time. From Chiang-ning and Chen-chiang, there were similar reports, the *Tan-t'u hsien chih* noting that for this district, this was a new development. What is clear in this rehabilitation project is that the better quality mulberry of Hu-chou fu in Chekiang, known as *Hu sang* (i.e. Hu-chou mulberry) was introduced to a much wider area, with the result of better quality silk. Again, it seems that silkworm rearing was adopted in Hsü-chou, but aside from this prefecture, it was not successful in most of Chiang-pei. An attempt was made in Yang-chou in 1871 to introduce Hu-chou mulberry, and a *k'o-sang-chu* (mulberry planting office) was set up in Yangchow City to serve Huai-an and Yang-chou. But the establishment was closed before 1875 because of lack of funds. It is clear that

<sup>4</sup> Tōa Dōbunkai (1920) pp. 447-8.

<sup>5</sup> The cotton area before 1850 was described as the region from Chiang-yin to Ch'ang-shu, and from there to T'ai-ts'ang and Sung-chiang, and then into Chekiang Province. See Cheng Kuang-tsu, *I-pan-lu* quoted in Kobayashi Kazumi (1967-1) pp. 10-11. For cultivation from 1870, *Shang-hai hsien hsü chih* (1918) 8/1b-2b, *Ch'ing-p'u hsien chih* (1879) 2/31b, *Nan-hui hsien chih* (1879) 20/7a-b, and *Lo-chi chen chih* (1889) 1/9a, 31b, report the cultivation of cotton, with no qualification for change. *Hua-t'ing hsien chih* (1878) 23/5a indicates that there was some increase since the Rebellion. For other cotton producing areas, reports are taken from *Ching-chiang hsien chih* (1879) 5/8b, *Hai-men t'ing t'u chih* (1899) 10/1a-b, *Tan-t'u hsien chih* (1879) 17/37a-b, *T'ung-shan hsien hsiang-tu chih* (1904) 50b-51a, *Feng hsien chih* (1894) 1/18a, *SP(KS)* 8.10.27. For lack of cotton in other areas, see *Huai-an fu chih* (1884) 2/5b-6a, *Kan-yü hsien chih* (1888) 6/12a, *SP(KS)* 8.3.19, 8.4.13. The notable exception in Huai-an was An-t'ung Hsien, see *An-t'ung hsien chih* (1875) 1/3a. *Fou-ning hsien chih* (1924) 12/1b reports that cotton was grown on land being developed by cultivation companies, but this was a development in the Republican era. T'ung chou, apparently, was well-known for its cotton from the 1870's. *Fou-ning hsien chih* (1886) 1/8a reports that the magistrate tried to import cotton seeds from T'ung chou in an attempt to develop cotton in Fou-ning. For profit from cotton, see *Hua-t'ing hsien chih* (1878) 23/5a. See also Li Wen-chih (1957) pp. 418-420.

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Hai chou never adopted mulberry or silk-worms.<sup>6</sup>

The Imperial Maritime Customs produced a report on silk production in 1881 which shows the distribution of silkworm rearing at the time.<sup>7</sup> Silk was reported in Chinkiang (Tan-t'u), Tan-yang, and Li-yang, all in Chen-chiang Fu; Wu-hsi, Ch'ang-chou City suburbs, and I-hsing, in Ch'ang-chou fu; in I-cheng of Yang-chou fu, and in Hsü-chou fu, as well as in Chiang-ning. It was reported that Tan-yang, Wu-hsi, Ch'ang-chou, and I-hsing, produced little silk before the rebellion. The silk from Yang-chou fu and Hsü-chou fu was from wild mulberry. In the Su-chou area silk production was reported to be 1,200,000 catties in 1878 and 1,250,000 catties in 1879. From this source, there was no report of silkworm rearing in the Sung-chiang and T'ai-ts'ang area, i.e. the traditional cotton cultivation region. However, the *Shina shōbetsu zenshi* (1920) reports that the major silkworm rearing areas were Ch'ang-chou, Sung-chiang, Su-chou, Chen-chiang, T'ung chou, Hai-men, T'ai-ts'ang, Chiang-ning, and Yang-chou. Hsü-chou was notably missing. Of these, the most important area became Ch'ang-chou.<sup>8</sup>

Opium was planted in Kiangsu some time between 1840 and the 1860's. By the early 1870's, Tang-shan in Hsü-chou fu had acquired a reputation for its opium. There was considerable increase of "native opium" in the 1870's and 1880's. Although the official policy in the 1860's had been against opium cultivation, it was never clearly enforced, and by the 1880's, there was no visible official opposition. There was little extension of opium acreage beyond Hsü-chou until the 1890's, but from the early 1890's, opium was reported also in Huai-an. It is also clear that opium was two to three times more profitable than grain. In 1909, the International Opium Commission placed the opium production in Kiangsu at 16,000 piculs, which would amount to the cultivation of 500,000 *mou*.<sup>9</sup>

In all cases, the cash crop introduced fetched a higher profit than the grain crop. In the case of silk, the crop consumed labour, but not land. Hence, if we estimate overall production figures in terms of grain crops alone, the estimates would be slightly lower than the actual production, although, if we take into consideration the extent of cash crops, the difference would not be substantial except in particular localities.

<sup>6</sup> For rehabilitation program see *Shang-hai hsien hsü-chih* (1918) 8/24a, 15/3b, *T'ung-chih Sheng Chiang liang-hsien chih* (1874) 7/10a, *SP(TC)* 12.127, 4.13. On the experience of Yang-chou, see *Hsü-tsuan Yang-chou fu chih* (1874) 3/4b-6a, and *SP(KS)* 1.5.20. For a clear statement of the failure in Huai-an and Yang-chou, see *Yen-ch'eng hsien chih* (1895) 4/44b-45a. For the experience of Chen-chiang, see *Tan-t'u hsien chih* (1879) 17/37b-38a, *NCH* 1871-2: 733, 1870-1: 184-5. The *Nan-hui hsien chih* (1879) reports that mulberry and silkworms were introduced by refugees from the Taiping Rebellion from Chekiang and Chiang-ning, see 20/3b. There is also a report on Chiang-yin in a later period in *NCH* 1901-1: 1074. The *Ch'ing-p'u hsien chih* (1879) 2/33a, reports that the natives did not raise silkworms, and so does the *Kan-yü hsien chih* (1888) 6/12a.

<sup>7</sup> Imperial Maritime Customs, special series, No. 3: *Silk* (1917 reprint of 1881 report) pp. 45-109.

<sup>8</sup> See Tōa Dōbunkai (1920) pp. 528, 538-557. This also gives the number of cocoon companies in each district in the 1910's, which is useful in giving some idea of the distribution of silkworms rearing: Wu-hsi 217, Wu-chin 85, Chiang-yin 29, I-hsing 26, Li-yang 14, Chin-t'an 6, Wu hsien 16, Wu-chiang 4, Ching-chiang 7, Chiang-ning 3, Yang-chung 8, Tan-t'u 3, Chiang-tu 4, Pao-ying 1, Yang-tzu (?) 2, Chü-jung 2, Ch'ang-shu 5, Sung-chiang 3, Feng hsien 1, Chin-shan 1, Shang-hai 9, Nan-t'ung 6, Hai-men 8.

<sup>9</sup> *NCH* 1881-1: 253, 1886-2: 68, 1891-2: 663, 1893-2: 144, 1901-2: 250, 1908-4: 641-2, 1909-4: 525; *SP(KS)* 8.6.25, *SP(TC)* 13.5.14. For figures from International Opium Commission, see Li Wen-chih (1957) p. 457.



It is important to determine whether there is evidence for an increase in yield. This is a very difficult question, as none of the sources available is very reliable.

The more detailed information that is available concerns the Su-chou fu area and the Chen-chiang fu area, and is presented in Table 2.

TABLE 2. CHANGE IN PADDY YIELD

Year	Source	Report	Catties/mou
Su-chou			
1884	T'ao Hsü	2.4 <i>shih/mou</i> , ave. high	241
1923	Tung-nan ta-hsüeh	ave. of 34 reports	302
1937	J. L. Buck	ave. of 2 reports	306 (s.d. 77.5)
1946	Fei Hsiao-tung	6 bushels of rice/mou	405 (s.d. 125)
Chen-chiang			
1888	E. L. Oxenham	4 picul/mou high 3 — 3.5 ave.	400 300 — 350
1930	Chang Han-lin	ave. of 11 reports	267 (s.d. 57.8)

s.d. = standard deviation.

Source: E. L. Oxenham's report is in George Jamieson (1888). For other reports, see bibliography under name of source and year of publication. For details, see Appendix I.

Let me comment briefly on the figures in the table: T'ao Hsü was a small landlord in the Soochow suburbs, and championed rent reduction in the early 1880's.<sup>10</sup> It seems that throughout the 19th century, the estimate of 2.5 to 3 *shih* per *mou* of paddy that he gave was commonly accepted for the Soochow area. There are several reports to this effect in *Shen-pao*, the Shanghai Chinese language newspaper.<sup>11</sup> It is very interesting too that Pao Shih-chen, writing in the 1820's, reported a similar figure, and Pao demonstrated a very close knowledge of the area's agriculture.<sup>12</sup> The figures from Tung-nan ta-hsüeh and J. L. Buck are from surveys. The Tung-nan ta-hsüeh figures cover 34 localities in Su-chou fu, and of these, 17 reported poor harvest, 11 ordinary, and 6 good harvest, and hence the figures presented here may tend towards a lower estimate. However, in both the Tung-nan ta-hsüeh's report as well as Buck's, there are figures of close to 5 *shih* per *mou*, which seem to be hardly likely. Without doubt, there are errors in these reports, including possibly confusion of

<sup>10</sup> For T'ao Hsü, see Suzuki Tomoo (1967).

<sup>11</sup> See, for instance, *SP(TC)* 4.9.12; *SP(KS)* 3.5.01, 3.8.06, 5.9.27, 8.9.27. These figures are discussed in David Faure (1975) pp. 417-424.

<sup>12</sup> Pao Shih-ch'en, *An-wu szu-chung* 26/2b-3a.

husked rice with unhusked rice, as Fei Hsiao-tung pointed out for Buck's study.<sup>13</sup> Fei's study, however, does not describe how he arrived at this yield figure, although he used the same estimate later in his dispute with Buck. In comparison with other figures, it would seem that Fei's report here is very high, although the T'ai hu vicinity, where he carried out his community study, was an extremely high-yield area. And then, the very much lower figures reported by Chang Han-lin's survey for Chen-chiang in 1930 compared to Oxenham's for 1888 are baffling; but Oxenham's figures are much less strongly supported by contemporary evidence (compare T'ao Hsü's). With these figures, it is very difficult to draw a conclusion on changes in yield over time. I am somewhat suspicious of the reports for production of much over 400 cattles per *mou* in these data: In Buck's data, one of the two reports from which this average is derived is 530 cattles per *mou* for K'un-shan, which would seem very unlikely. Given first the ease of error in confusing husked and unhusked rice in the reporting, the errors over conversion units, after this, also the lack of distinction between the produce of a year and the produce of a season, and then the very large standard deviations in many cases, it is difficult to conclude from these figures that there had been any marked change in yield. In the absence of any clear reporting on changes in agricultural technology being practised on a wide scale, and as the 19th century reports fall well within the limits of the 20th century survey, I would rather conclude that the change in yield, if any, was limited. However, it is clear that the

evidence rules out marked contraction in yield.

On the basis that there was no substantial change in crop yields from 1870 to 1930's, we can use the post-1911 survey material to calculate the crop yields of individual areas (Table 3). On the whole, the pattern is as may be expected. The yield of rice was considerably higher in Chiang-nan than in Chiang-pei, but that of wheat was higher in Chiang-pei, where wheat, rather than rice, was grown as the principal food crop in some localities. Yield declined to the north of Huai-an and T'ung chou as would be expected. These two areas cover the transition from alluvial soil to calcareous soil, and in the case of T'ung chou, to considerably poorer alkaline areas towards the coast. Statistics for areas where information is unavailable can be approximated. Hai chou is likely to be similar to the poorer sections of T'ung chou and Hsü-chou, and Hai-men and T'ai-ts'ang would be similar to the Sung-chiang area.

*Cultivated acreage.* Cultivated acreage for Kiangsu Province is presented here in Table 4, with population estimates. A discussion of the population will be left to the next section, but a few comments are in order concerning the land area. The figures here are taken from J. L. Buck's survey report, and are based on Republican government statistics for the entire country. Buck reported that his interviewers had checked these figures on the basis of crude impression, but in the case of Kiangsu, he made no alteration in the government statistics. Compared to land data in the 19th century, there is considerable variation, but this is difficult to interpret as different

<sup>13</sup> Fei Hsiao-tung (1946) pp. 4-6. This is a particularly serious problem in the interpretation of nineteenth century figures. T'ao Hsü (1884), for instance, refers specifically to paddy (*tao*) when he quotes the yield figure of 2.4 *shih* per *mou* (page 19a). However, he then calculates its market worth on the basis of a price he quotes specifically for rice (*mi*, page 17b), without making any allowance for conversion. I have accepted his figure as that for paddy because the alternative would give too high an estimate for yield, even by the standard of twentieth century reports. Even then, one must be prepared for a substantial error margin from reports of this nature.

measuring units had been used, although they all went by the same name. This is particularly the case in Chiang-pei, where a much larger *mou* had been used. The total of 91 million *mou* here compares with 119 million *mou* reported in 1955.<sup>14</sup>

TABLE 3. PER *mou* YIELD OF MAJOR FOOD CROPS

	<i>Paddy</i>	<i>Wheat</i>	<i>Kaoliang</i>
Chiang-ning . . . . .	370 catties	80 catties	
Su-chou . . . . .	320-420	80	
Sung-chiang . . . . .	300-450	n.a.	
Ch'ang-chou . . . . .	400-450	100-150	
Chen-chiang . . . . .	300-400	120	
Huai-an . . . . .	250	90	50 catties
Yang-chou . . . . .	370	120	132
Hsü-chou . . . . .	*	90	
Hai-men . . . . .	n.a.	n.a.	
T'ai-ts'ang . . . . .	*	n.a.	
Hai chou . . . . .	n.a.	80	80
T'ung chou . . . . .	270-300	90	

*Source:* These figures are taken from the following surveys: George Jamieson (1888), Tung-nan ta-hsüeh (1923), Chang Han-lin (1930), J. L. Buck (1930, 1937), Shang-hai shih she-hui-chü (1933), and Chang Hsin-i (1934). In addition, Wu Shou-pang (1930) gives figures on Hsü-chou fu; Fei Hsiao-tung (1945) p. 201, and (1946) p. 5 quote figures for Su-chou fu. Tung-nan ta-hsüeh data on Hu-Hai Tao are taken from Feng Ho-fa (1933) pp. 522-529. For conversion and detailed listing, see Appendix I. Entries here are not the means of survey figures, but are based on general background on soil and productivity in each prefecture or sub-prefecture, and checked against frequency distributions as well as means.

\* Available figure not reliable.

n.a. = not available.

<sup>14</sup> Numerous areas in Chiang-pei measured land by a larger unit, known as the *ching-t'ien mou*. In the Pao-ying area, this was equivalent to 11.75 local *mou*, while in Fou-ning, it was 4 local *mou*. The local *mou* in question was close to the *shih mou*, the later standardized unit. The most important implication of this for an investigator estimating production and standard of living is to be very careful as to what unit was being cited in any report. As a rule, gazetteers are very explicit on the issue. See *Pao-ying hsien chih* (1932) 4/15a-b; *Fou-ning hsien chih* (1886) 5/7a-b; J. L. Buck (1937) statistics volume, p. 473; Ho Ping-ti (1959) pp. 101-106. The 1955 figure is taken from *Subcontractor's Monograph: East China* (HRAF-29, Stanford-3) Table I.

TABLE 4. POPULATION AND AREA UNDER CULTIVATION

<i>Prefecture/sub-prefecture</i>	<i>Cult. area in mou</i>	<i>Pop. in 1920</i>	<i>Urban Pop. c. 1918</i>	<i>Rural Pop. est. c. 1904</i>	<i>Density of rural Pop. per 1,000 mou</i>
Chiang-ning . . . . .	4,390,000	1,877,000	330,000	1,428,000	324
Su-chou . . . . .	5,794,000	2,618,000	418,000	2,031,000	351
Sung-chiang . . . . .	4,344,000	3,021,000	1,600,000	1,421,000	327
Ch'ang-chou . . . . .	6,583,000	3,048,000	325,000	2,514,000	381
Chen-chiang . . . . .	4,323,000	1,845,000	390,000	1,343,000	310
Huai-an . . . . .	13,940,000	4,507,000	370,000	3,820,000	274
Yang-chou . . . . .	12,988,000	5,619,000	340,000	4,874,000	375
Hsü-chou . . . . .	14,174,000	3,684,000	230,000	3,189,000	225
Hai-men . . . . .	1,608,000	635,000	—	586,000	364
T'ai-ts'ang . . . . .	4,317,000	1,640,000	40,000	1,600,000	371
Hai chou . . . . .	10,366,000	2,076,000	70,000	1,852,000	179
T'ung chou . . . . .	8,849,000	3,191,000	115,000	2,840,000	320
Total . . . . .	91,684,000	33,761,000	4,228,000	27,498,000	Ave. 300

Sources: Cult. area from J. L. Buck (1937) statistics volume, pp. 23-24; Pop. from Chu Ho-chen (1926); Urban pop. from Milton T. Stauffer (1922) pp. lxxviii—lxxix; Rural pop. estimated at .5 percent increase, with allowance made for urban development in Sung-chiang and T'ai-ts'ang; Density of rural pop. = Rural pop. est. c. 1904 / Cult. area in thousand *mou*.

Neither the overall statistics (which are 1920's figures), nor the closeness to the 19th century registered figures (for tax collection) helps us to determine whether there was any expansion in cultivated acreage between 1870 and 1911. The most telling element in this is probably the lack of evidence in the records for any major change in this respect, while there was continued interest in the cultivated acreage. In support of his argument that cultivated acreage in fact had shrunk in the 1870 to 1911 period, Li Wen-chih has compiled a substantial portion of this kind of data, and this deserves close attention.<sup>15</sup>

The most important evidence for Li is in the decay of water projects, which he argues was due to negligence. For Kiangsu Province, however, most of his

material does not stand. First, most of the passages he quotes which concern the 1870 to 1911 period pertain to the Shanghai area (Shanghai, Chin-shan, Ch'ing-p'u). In the same places that he describes, there is in fact evidence that water projects had been carried out, and Li has clearly selected only confirming evidence. Of the other items, the entry on Tan-t'u hsien does not, as Li argues, show that water projects had been neglected, but that there had been continuous sedimentation on the bank of the Yangtze which could be used for cultivation. The item on North Kiangsu is a description of the lie of the land, arguing correctly that the low-lying nature of North Kiangsu was susceptible to flooding. The only items that are incontrovertible are the entries on K'un-shan and Ch'ang-shu.<sup>16</sup>

<sup>15</sup> Li Wen-chih (1957) pp. 710-714, 723-728.

<sup>16</sup> The *Shang-hai hsien hsü-chih* (1918) ch. 5, for instance, lists 84 river projects carried out between 1870 to 1911. Li uses the earlier edition, which was published in 1870. The *Ch'ing-p'u hsien chih* (1879) 5/28b does record dredging the Wu-sung River in 1861, 1862, 1872, which Li ignores as he quotes a passage in it which says, of the Wu-sung River, "If the river is not well kept, there will be great damage to the fields."

However, in presenting this evidence, Li ignores all the water projects which were completed and quoted in the gazetteers. The *Kuang-hsüan I-Ching hsü-chih* quotes at least eight water projects carried out between 1890 and 1911, some of which were carried out without official participation. The *Yen-ch'eng hsien chih* reports at some length the repairs on the various sluice gates in the district, which regulated the irrigation network based on the overflow from the lakes to the west of the province, which were of considerable importance to the coastal areas in Huai-an.<sup>17</sup>

Many more projects can be quoted. There can hardly be any doubt that on local projects, there is no reason to believe that water projects were followed through with more or less enthusiasm than before. If government inefficiency was the cause of neglect on water projects, the relevant data are on the harnessing of the principal rivers. In Kiangsu Province, this was the network combining the Huang-ho, the Huai, the Canal, and the Yangtze.

In 1679, the newly established Ch'ing dynasty government completed a massive project on the Huang-ho. Through a series of dykes and sluice gates, the Huai, which flowed into the Hung-tse Lake, was joined to the Huang, and careful control was maintained of the water levels of the Huang and the Canal. The theory behind this was that the perpetual problem from the Huang was due to silting, which could be avoided were the speed of its flow increased. The clear water from the Huai (filtered by the Hung-tse Lake) was to provide extra water needed to increase the flow. Regardless of whether the floods on the Huang-ho were controlled, however, the silting did not stop, and by the late 18th century, the bed of the Huang was higher than the channel leading from the Hung-tse Lake into the Huang-ho.

This threw into disorder the regulation of the Canal. Understandably, this was a matter of considerable concern to the Ch'ing government, as the food supply of the Capital in the 18th and early 19th century depended on Canal transport. Numerous projects designed to remedy the situation did not succeed. However, the problem of the Canal was removed when the Huang changed its course in 1856, and when sea-transport of rice to the capital was instituted. Of course, the problem of the control of the Huai remained, which now drained into the Hung-tse Lake without a major outlet to the sea. It was well realized by Ch'ing officials that this posed a problem of flooding, if the Hung-tse Lake overflowed. And it is true that no action was taken in the last decades of the Ch'ing dynasty, despite the innumerable proposals that were made. What effect did all this have on farmland, however? Throughout the Ch'ing dynasty, the Huai overflowed 66 times and burst its embankment 7 times, and for the 1870 to 1911 period, an embankment collapsed once (1873), and it overflowed once (1887). In 1887, the Huang-ho overflowed into the Huai when an embankment collapsed in Cheng chou (Honan Province), and the flood covered northern Honan and Anhwei, and affected also part of North Kiangsu. The embankment was repaired at the cost of 12 million taels in 1888. In 1906, the Canal flooded, affecting Huai-an and Hsü-chou. This was all the major flooding there was in Kiangsu from 1870 to 1911. There was no permanent dislocation of farmland.<sup>18</sup>

On the other hand, Li provides other information on land reclamation. Most of these projects were carried out by commercial concerns under the name of "cultivation companies" (*k'an-chih kung-ssu*). Some of

<sup>17</sup> *Kuang-hsüan I-Ching hsü-chih* (1920) 1/6a-9a. *Yen-ch'eng hsien chih* (1895) 3/28a-34a.

<sup>18</sup> See Cheng Chao-ching (1950) pp. 144-168.

these were attempts to grow fruits and raise silkworms near the cities, and the acreage was only in hundreds of *mou*. The larger concerns were interested in developing land which had been classified as salt-producing, on which agriculture had been forbidden. The largest of these companies, organized by the local Kiangsu gentry leader Chang Chien, was designed to reclaim 30,000 *mou*. For projects of commercial development in Ch'ing China, these figures are impressive, but they are negligible in Kiangsu where total cultivated land was already 90 million *mou*.<sup>19</sup>

*Harvest conditions.* There are two sources of information on harvest conditions. The *Ch'ing shih-lu* records remission of taxes granted on the state of the harvest. There are also reports on the harvest conditions in the *Shen-pao* and the *North China Herald and Supreme Court and Consular Gazette*. As is well-known, tax-remission records are highly unreliable as a reflection of the true harvest condition. The newspaper source, however, quite aside from general interest, was concerned with the prices of such items as cotton, silk, and opium, as well as the likelihood of a refugee influx into the cities. Moreover, the newspaper source generally provides some description of the state of the harvest, which the *Ch'ing shih-lu* does not provide.<sup>20</sup>

The information compiled from the *North China Herald* and the *Shen-pao* is presented in Table 5. Perhaps the best commentary to make here is a brief account of the harvests.

There is little information on Chiang-pei for 1870-73, but Chiang-nan was reported to have had some good harvests. The second half of 1873 saw a spell of dry weather in Chiang-nan. In late 1874 came the much belated report of the inundation of the Huang-ho, which affected Hai chou.<sup>21</sup> In 1876-77, there was a clear situation of famine in Chiang-pei. In 1876, this was due to a spell of dry weather, followed by locusts. Locusts were reported also in Chiang-nan, but not to as serious an extent as in Chiang-pei. The southern limit of the famine was Yangchou fu, where locusts were reported, but also noted to be "not amounting to disaster" (*pu-wei-tsai*). Much of Yang-chou fu, however, lost its second harvest in 1877, and planted buckwheat. Relief continued to be organized in 1878, but it seems that the worst of the Chiang-pei famine had passed. In 1879, there was an early drought in Chiang-nan, but the harvest was favorable. In 1880, there were reports of disaster in Su-chou, where numerous places claimed that half the rice crop had withered from drought in the autumn harvest. It is highly likely that this was very much exaggerated.<sup>22</sup>

<sup>19</sup> Li Wen-chih (1957) pp. 698-709.

<sup>20</sup> The following accounts are indicative of the kind of problem encountered in tax-reporting: "This year... the harvest in Su-chou is good. However, when the peasants harvest their grain, they hide more than five *tau* per *mou* of their produce. Calculated from the tax quota of the Su-chou area, this means a loss of over 1 million *shih* of rice..." [*SP(KS)* 7.10.10]. "There is no danger of a famine in this section as far as the wheat crop goes. It is just now being harvested and is good, though not one in ten of the country people will acknowledge it, because soon they will have to pay the taxes..." (*NCH* 1892-1: 849, report from Ch'ing-chiang-p'u).

<sup>21</sup> See also Cheng Chao-ching (1950) pp. 94-95.

<sup>22</sup> It is unlikely that there could have been such serious decrease in production in the Su-chou area without plenty of reporting on the details. There is some description in *SP(KS)* 6.7.19, 6.9.15, 6.9.25, but *SP(KS)* 6.8.14 reports low price for rice. What could have happened is that the later crop was damaged, but not the earlier summer crop.

TABLE 5. HARVEST CONDITIONS IN KIANGSU PROVINCE, 1870-1911

	1870	1880	1890	1900	1910
Chiang-ning	. . . 0 0 0 1 0 0 1 1 0 0 0 0 0 0	0 1 0 0 1 1 0 0 0 0 0 0 0 0	0 1 0 0 1 1 0 0 0 0 0 0 0 0	0 0 0 0 1 0 0 0 0 0 0 0 0 0	0 0 0 0 1 0 0 0 0 0 0 0 0 0
Su-chou	. . . 0 0 0 1 0 1 1 1 1 0 1 0 0 0	0 0 0 0 1 0 0 0 0 0 0 0 0 0	0 0 0 0 1 0 0 0 0 0 0 0 0 0	0 0 0 0 1 0 0 0 0 0 0 0 0 0	0 0 0 0 1 0 0 0 0 0 0 0 0 0
Sung-chiang	. . . 0 0 0 1 0 0 0 1 0 0 0 0 0 1	0 0 0 0 0 0 0 0 0 0 0 0 0 1	0 0 0 0 0 0 0 0 0 0 0 0 0 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0
Ch'ang-chou	. . . 0 0 0 1 0 0 0 0 0 0 0 0 0 1	0 1 1 0 0 0 0 0 0 0 0 0 0 1	0 1 1 0 0 0 0 0 0 0 0 0 0 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0
Chen-chiang	. . . 0 0 0 1 0 0 0 0 0 0 0 0 0 0	0 1 1 0 1 1 1 0 0 0 0 0 0 0	0 1 1 0 1 1 1 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0
T'ai-ts'ang	. . . 0 0 0 0 0 0 0 0 1 0 0 0 0 0	0 0 0 0 0 0 0 0 1 0 0 0 0 0	0 0 0 0 0 0 0 0 1 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0
Huai-an	. . . 0 0 0 0 0 0 2 2 0 0 0 0 0 1	0 1 0 0 0 0 1 0 0 0 0 0 0 1	0 1 0 0 0 0 1 0 0 0 0 0 0 1	0 1 0 0 0 0 1 0 0 0 0 0 0 0	0 1 0 0 0 0 1 0 0 0 0 0 0 0
Yang-chou	. . . 0 0 0 0 0 0 0 0 1 1 0 0 0 1 0	0 1 1 0 1 1 1 0 0 0 0 0 0 0	0 1 1 0 1 1 1 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0
Hsi-chou	. . . 0 0 0 0 0 0 2 2 0 0 0 0 0 1	0 1 0 0 0 0 0 0 0 0 0 0 0 1	0 1 0 0 0 0 0 0 0 0 0 0 0 1	0 2 2 0 0 0 0 0 0 0 0 0 0 0	0 2 2 0 0 0 0 0 0 0 0 0 0 0
Hai-men	. . . 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0
Hai chou	. . . 0 0 0 0 1 0 2 2 0 0 0 0 0 1	0 0 0 0 0 0 0 0 0 0 0 0 0 1	0 0 0 0 0 0 0 0 0 0 0 0 0 1	0 2 2 0 0 0 0 0 0 0 0 0 0 0	0 2 2 0 0 0 0 0 0 0 0 0 0 0
T'ung chou	. . . 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0

0 = no report of bad harvest; 1 = bad harvest, but not reported as famine; 2 = famine; blank = information most likely missing.

SP(TC) 126.11.21; 6.08,12.14,17.21; 7.19; 8.04;  
 9.19,25; 10.09;  
 (TC) 13.8.27; 10.05;  
 (KS) 18.08.15; 9.06; 11.10;  
 (KS) 2.5.01.22; 6.08,21.23,27; 7.12,28; 11.12,22;  
 (KS) 3.1.24,29; 3.03; 5.01; 6.04,06,09,13,14,16;  
 7.02,23; 8.04,14; 9.16,23; 10.01,06,18;  
 11.08,17;  
 (KS) 4.3.03; 4.24; 5.14,18; 6.03; 7.08; 8.10;  
 9.12; 10.17;  
 (KS) 5.4.17; 7.04,28; 8.02; 9.12;  
 (KS) 6.7.19; 9.04,15,25;  
 (KS) 7.7.04; 9.18;  
 (KS) 8.1.12; 6.13,23; 7.04; 12.17;  
 (KS) 9.4.10,14,25,28; 8.01,17; 9.02,28; 12.15,24  
 NCH 1870-2: 336

NCH 1871-1:84; 2:875;  
 NCH 1873-2: 3,89,106-7;  
 NCH 1874-2: 483;  
 NCH 1875-2: 83;  
 NCH 1877-1:589,611;  
 NCH 1881-2:210;  
 NCH 1882-2:531;  
 NCH 1887-2:214-5,379,437;  
 NCH 1888-2:328,447;  
 NCH 1889-1:41; 2:506,750;  
 NCH 1890-1:432; 2:310,558,625;  
 NCH 1891-1:96,542,691;  
 NCH 1892-1:108,377,754;  
 2:11-12,110,144,190,276,564;  
 2:50,183,419,456,478,598;  
 NCH 1893-1:166,485,515,834-5; 2:55,534;  
 NCH 1894-2:781;  
 NCH 1895-2:522,731;

NCH 1896-1:800; 2:17,145,375,919;  
 NCH 1897-1:816,818; 2:116,740,996,1036,1130;  
 NCH 1898-1:660,795,1112; 2:340,675,772,1201;  
 NCH 1899-1:170-1,478,961,1061,1112;  
 2:16,616-7,914,1070,1265;  
 NCH 1900-1:498,867,1063; 2:559,1030;  
 NCH 1901-1:50; 2:11,13,334,495,637,653,729,879;  
 NCH 1902-1:132,119,1099; 2:781,889,1273;  
 NCH 1903-1:1156; 2:952;  
 NCH 1904-1:817; 2:796;  
 NCH 1905-1:672;  
 NCH 1906-1:705; 2:132-3; 3:254-5;  
 4:11-12,76,140-1,204,439;  
 NCH 1907-1:32-35; 2:380-1,733; 3:189,721;  
 NCH 1908-2:803; 3:282,383; 4:190-1,642;  
 NCH 1909-2:552; 3:15; 4:292,333;  
 NCH 1910-2:138,253; 3:368; 4:343-4,491;  
 NCH 1911-2:483; 3:656;

In 1881, there could not have been any serious bad harvest anywhere in Kiangsu. There were some local incidents from typhoons and tidal waves, and Huai-an and Yang-chou reported mediocre harvests. The Su-chou area had good harvests for 1881 and 1882. The only place where clearly the crops suffered was Yang-chou in the 1882 early harvest, reported to be from excessive rain. In 1883, there were several reports of floods, apparently from independent sources. It was reported that there was a breach of the river in P'ei chou (Hsü-chou fu), most likely a very local incident, reported because the telegraph was on the route, and telegraph transmission became affected. The more serious description is for Huai-an: This is a very short report, but says that there was some flooding when the sluice-gates were opened in Fou-ning and Yen-ch'eng, and there was flooding in the more inland districts.<sup>23</sup> There was also flooding in Ch'ang-chou, but no details were given.

There is very little local reporting in the *North China Herald*, from 1884 to 1886, and hence the harvest conditions for these three years are best treated as unknown. The Huai ho flood in 1887 was reported in October, which was too late to affect the 1887 harvest, but much of Chiang-pei appears to be flooded in 1888, and there was a drought in Chiang-nan in the same year. The effect of the flood in Kiangsu subsided more quickly than the drought: in 1889, the flood was no longer

reported, but the drought continued in Ch'ang-chou, Chen-chiang, and Yang-chou. Only in early 1890 (April) came the report that there was to be a good wheat harvest in Chen-chiang.

For the 1890's, in 1891 Chen-chiang had less than half a crop owing to bad weather, and in 1892-3, Chen-chiang and Chiang-ning reported drought and locusts. None of this was anywhere near famine condition. Aside from this, Chiang-nan reported fair to good harvests for most of the decade. In view of the sharp increase in food prices from 1896, it is useful to note that there are decidedly some reports of good harvests in that year.<sup>24</sup> As for Chiang-pei, during the second half of the decade, Hsü-chou and Hai chou appear to be deeply disturbed by bad harvests, where the condition was described as a famine. It is not clear what the cause was, but it seems that there were several bad harvests in succession. The spring harvest in 1897 was damaged by heavy rain. The report in October 1897 describes bad harvests for the two years, without explanation. The situation was somewhat relieved by a good wheat harvest in early 1898, but in late 1898, reports from Chinkiang state that refugees had been leaving the northern areas. Not surprisingly, the reports of famine were from the two months before the spring harvest, the season known as the *ch'ing-huang pu-chieh* (where the green has not been replaced by the yellow, i.e. before the autumn crop ripens). Prosperity is said to have returned by the

<sup>23</sup> This is interesting as an example of the mechanics of these sluice gates. As this was one of the outlets of the Hung-tse Lake, the sluice gates were opened when there was likelihood of flooding farther inland.

<sup>24</sup> There are specific reports from Chinkiang, Chiang-yin, Soochow, and Nanking from 1895-1900. Chinkiang reported good harvests in 1895 and 1898, but below average for 1896. Chiang-yin reported good harvests for 1895, 1897, 1899, as well as 1900. Soochow had an ambiguous report for 1897. It was reported that the rice crop seemed good until it was threshed. Nanking and Chinkiang both reported some losses in 1900. Source: *NCH* 1895-2: 522, 731; 1896-2: 56, 1897-2: 996, 1036; 1898-1: 1112, 2: 675; 1899-2: 616-7, 914; 1900-1: 867, 1063; 2-1030.



late harvest in 1899. There were reports of good harvests in 1900.<sup>25</sup>

In 1901, the embankment of the Yangtze in the Chen-chiang and Ch'ang-chou area was damaged by heavy rain, and some flooding was reported in the two prefectures. Apparently, the water lowered within a month, and there was no serious damage. The heavy rain also damaged the cotton crop in T'ai-ts'ang. For the remainder of the decade, except for a report for Chen-chiang in 1902, and one for Chiang-ning in 1909, bad harvests were not reported in Chiang-nan. As for Chiang-pei, aside from several isolated reports, there was serious flooding affecting Hsü-chou and Huai-an in 1906-7. There were conflicting reports for this, but the most likely event was an overflow of the lakes connected to the Huai-ho into the Canal. This meant flooding in the *li-hsia-ho* area, and from all reports, it reached famine condition. This must have affected rice production in Kiangsu, and consequently rice prices. However, by mid-year 1907, the famine was clearly over. There was a good harvest in Hsü-chou and Huai-an in the second half of 1907, and Hsü-chou reported good harvests for 1909

to 1911, except for the Shantung border. The change in food prices after 1907 which will be described in a later section was thus not due to production shortage in Kiangsu.<sup>26</sup>

*Summary so far:* Between 1870 and 1911, there was no major change in the predominance of grain crops in Kiangsu and little change in overall crop acreage. In the areas of Chiang-nan which before 1850 had been given to cash crops (silk, cotton), there was quick recovery after 1870. Cash crops extended to Hsü-chou fu and the areas in Chiang-pei immediately north of the Yangtze, i.e. Yang-chou, T'ung chou, Hai-men. There was no bad harvest in Chiang-nan which approached famine, and other than the annual shortage before the autumn harvest, serious famine conditions prevailed in Hsü-chou and Huai-an only in 1876-7 and 1906-7. In 1896-9, there were bad harvests also in isolated areas in Chiang-pei.

### The population problem

If we judge from official reports, the population of Kiangsu in 1850 was approximately equal to that in 1953. The major

<sup>25</sup> The report for 1897 states: "The crops in this section have been greatly damaged for two years, and now the people are suffering from want in thousands of homes. Fortunately, the suffering district is not very large or the want would have paralysed all law and trade. The district is in North Kiangsu and South Shantung. It is about 200 miles long by 200 miles wide. Food stuffs have not been as dear since the great famine of 1834." (NCH 1897-2: 740).

Reports of serious famine for the northern portions of Chiang-pei in 1898 are vague. Here is one example: "Famine is now on us in earnest. Famine and fever and its accompanying evils are claiming many haggard victims. From every quarter within a radius of one hundred miles the same story comes. Of course in some district where the land is more subject to overflow the distress is greater. It makes me shudder to see to what a pass many of the people are driven. Perhaps one-half (some say one-fifth) of the people have means and can, with economy, meet all demands. Of the balance, four-fifths can beg or borrow or sell houses, horses, cows, ploughs, utensils, etc., etc., all of which are for sale everywhere at ridiculous figures, and thus manage to get along by eating a little grain mixed with greens and weeds. The remaining one-fifth are dying, not all from absolute want of anything to eat as much as from eating grass, green wheat blades, dried bean and peanut hulls, etc." (NCH 1898-1: 660).

It is likely that this kind of reporting included a fair amount of exaggeration. My suspicion is that a considerable number of these reports were from refugees who had come out of the Huang-ho inundation much farther to the north, in Shantung.

<sup>26</sup> For good harvest in Huai-an in October 1907, see NCH 1907-4: 204; for Hsü-chou fu in the same year, NCH 1907-3: 189, 754; and for harvest conditions in 1910 and 1911, NCH 1910-2: 343, 3: 733; 1911-2: 483.

reason which accounts for this is the Taiping Rebellion, which subjected Kiangsu to considerable loss of lives. Later disturbances, particularly after 1911 (which would include also World War II) must also account for considerable depletion, but these are factors which are as yet little studied. By far the majority of the population was rural, but there was considerable increase in urban population in this period. Between 1870 and 1895, the increase in population was considerably less than from 1900 to 1920, and this was also less than the post-1920 increase, i.e. through the 1920's and 1930's, as well as after 1949. Briefly, this is the outline of the population history of Kiangsu.

The relevant overall population figures are as follows:<sup>27</sup>

1787	.. .. .	31,427,000
1850	.. .. .	44,155,000
1920	.. .. .	33,146,000
1928	.. .. .	34,624,000
1953	.. .. .	47,457,000

As is well known, Chinese population statistics are highly unreliable. The 1787 and 1850 figures are based on household registration, and the 1953 figure on a nationwide census. For both procedures, very little is known as to what went on at the local level. For estimates between 1850 and 1953 here, the Post Office estimates are given. These estimates are based on information supplied by local informants, chiefly officials. They are likely to be not very reliable. Nevertheless, they are much better than the very much under-reported figures from the 1910 census and the Customs estimates, which are the other figures available.

On this data, it is possible to arrive at some estimate as to the rate of population change, but the estimate is equivalent to that of an informed guess made by contemporaries. On the basis of the 1787 and 1850 figures, the increase of population would be placed at about 0.5 percent per year. On the basis of the Post Office estimate, it would be about 0.3 percent between 1920 and 1928. If we estimate from different sources, for example the 1920 Post Office figure and the 1953 census, this would be slightly over 1 percent. If we examine the little information there is of the age-specific population reported, e.g. the relatively careful survey of Chü-jung hsien, on the basis of the female population it will be found that an 0.5 percent annual increase would correspond to that of the female population of backward countries with a life expectation of 30 years, and this life expectation corresponds to that of such countries as Austria in the 1870's, Holland between 1816 and 1825, and is somewhat higher than India's for 1881 to 1931 (approximately 26 years), and somewhat lower than the usual estimate for rural China in the late 1920's (35 years). This is still highly conjectural, but an estimate of 0.5 percent per year increase would be close to these estimates.<sup>28</sup>

The population of Kiangsu can be further divided into a rural and an urban element. Thanks to a survey taken by the Christian missions in China, we happen to have a list of cities with population above 25,000 and their individual populations. Again, it is likely that there are problems about accuracy, as, like the Post Office census, this was essentially the product of questions sent to well-informed local residents. To compile Table 4 (p. 102), I have revised

<sup>27</sup> Ho Ping-ti (1959), Wang Shih-ta (1931).

<sup>28</sup> Data from Ta Chen (1946), Wang Shih-ta (1931), L. I. Dublin and A. J. Lotka (1936) pp. 364-371.

the Christian missions' figures on the basis of other sources.<sup>29</sup>

Let me point out some of the glaring discrepancies with other sources: Shanghai and Nanking check out to be consistent with other estimates, but the population of Soochow and Yangchow are highly problematic. The Christian missions' estimate for Soochow in 1918 is 600,000, and agrees with du Bose's report that the machinery for the *pao-chia* registered 90,000 families, which together with unregistered families, he estimated to be 700,000 people. This is, however, much higher than other reports. In 1910, the magistrate reported a population of slightly over 200,000 people, and between 1930 and 1949, reports varied between 350,000 and 400,000, while in 1953 it was 474,000. A population of 300,000 is thus more likely to be a reliable figure for Soochow. As for the population of Yangchow, the Christian missions give 300,000, while later reports varied between 125,000 and 200,000. Hence, 120,000 for 1870-1911 is probably nearer. On the basis of comparison with later figures, the populations of T'ai chou, Hsing-hua, and Huai-an also have to be revised down to 50,000.<sup>30</sup>

With the data we already have on cultivated acreage, it is possible to have a very crude estimate of the density of rural population. This is also given in Table 4. The estimate is consistent with the usual impression that Chiang-nan had denser population than Chiang-pei, although Chen-chiang, the northernmost of the Chiang-nan prefectures, was at the provincial average. With these figures, it is also possible to obtain a very crude estimate of the quantity

of cultivated land available per person. This ranged from 2.6 *mou* to 4.4 *mou*. If we assume that the family farm predominated, and that there were 5 to 6 persons per family, this meant that on average the size of a farm ranged from 13 to 27 *mou*. If we assume that annual production of food grain was 300 cattles per *mou* in Chiang-nan and 250 cattles per *mou* in Chiang-pei, it nowhere fell below the 400 cattles of grain per person per year taken by Perkins to be just about subsistence level.<sup>31</sup>

However, the major problem here is how the standard of living could have changed, and hence what needs to be considered is how the increase in population might have affected it. Even on the basis of 0.5 percent increase per year, in 42 years (1870-1911) this represents an increase of 23 percent of the population. In the absence of comparable increase in cultivated land, without increase in yield, this alone would imply a decrease in per capita standard of living, unless there were other activities to support grain import. Some of this population increase could have been absorbed into the cities. On the basis of the urban population for 1920, however, even if we allow for the maximum annual increase (0.2 percent, i.e. Shanghai's figure), this would account for only 2.4 million people, or 37 percent of the increase. Some considerable portion of the increase could also have been accommodated by the government rehabilitation program in the early 1870's. Thus, if we do work on the basis that increase in population did not affect crop yield substantially, what we have to account for is about a 10 percent increase

<sup>29</sup> Milton T. Stauffer (1922). The urban data are compared with studies in Glenn T. Trewartha (1951).

<sup>30</sup> The various sources are: du Bose (1899) p. 36, Glenn T. Trewartha (1951) p. 338, Morris Ullman in G. Breese, ed. (1969) p. 101, *NCH* 1910-1: 692. There is also considerable discrepancy between figures given by Tōa Dōbunkai (1920) and Trewartha or Milton T. Stauffer (1922).

<sup>31</sup> Dwight Perkins (1969) pp. 14-15. Colin Clark points out that there is a wide flexibility in what counts as subsistence. Clark, however, gives a similar estimate: 250-300 kg./person/year of unmilled grain, i.e. 412-495 cattles. See Colin Clark and M. Haswell (1966) p. 49.

in population over 42 years. When the problem is stated this way, not only does the increase in population not seem such a serious threat to the standard of living, but it may also be fairly easily overcome by other changes such as increase in cash crops and handicraft.

### Land tenure and the question of distribution

The question that is being considered here is whether there were changes in land tenure arrangement whereby the peasant-cultivator became more impoverished. That this could have happened has been advanced by some historians as the result of two developments: (1) that there were changes in tenancy structure; (2) that there was increase in rent.

This is a very involved issue, and it is one that finds support among historians who tend to see social history primarily in the light of the theory of exploitation. However, even among these historians, those who specialize on agricultural changes have been very careful not to impute that changes in tenancy were of any substantial scale in the 1870 to 1911 period, not only in Kiangsu, but for China in general. In their specific writings, the changes are placed in the post-1911 period, and their argument on the effects of land tenure in 1870 to 1911 rests on increase in tax, generally documented in the case of Kiangsu from data in the

Soochow area. Nonetheless, they do not make clear why this increase in tenancy would not have extended to the earlier decades, an argument which used to be advanced by advocates for agrarian reforms in the 1920's and 1930's who were responsible for many of the agricultural studies at the time. Indeed, the increase in the proportion of tenants could be indicative of a lower standard of living. This would have been the case if the change was in the loss of land by self-owners, who themselves now became tenants, and thus suffered an increase in expenditure in the form of rent.<sup>32</sup>

The counter argument is most forcefully advanced by Ramon Myers, using material from Shantung and Hopei from 1890 to 1949. Myers argues that there was no increase in the proportion of tenants, that what had happened was the breakup of larger estates, and that contrary to the claims of the reform advocates of the 1930's, there was a trend not towards greater disparity in the distribution of farmland, but quite the reverse, towards more equal distribution. Myers also argues that where the distribution was unequal in the 1930's, it had been unequal in the late 19th century also, and that the change had thus been much exaggerated. The question of rent increase Myers left unanswered. While I believe Myers' argument on the breakup of larger estates can be substantiated, as can also his view that there was much less

<sup>32</sup> Generally, for late Ch'ing China the theory of exploitation has had the problem of compromising the argument of rapid increase in tenancy in the early 19th century as a cause for the Taiping Rebellion and repeating practically an identical argument for peasant unrest in the 20th century. Li Wen-chih (1961), in fact, tried to argue that the Taiping Rebellion led to a sudden increase in small owner-cultivators in Chiang-nan, and this argument, if true, would have allowed the further argument of increasing tenancy for the 1870's onwards. Li's argument has been conclusively disproved by the re-examination of his data by Shao Hsün-cheng (1961). Some advocates avoid the issue altogether: Kobayashi Kazumi (1967-1) discusses rent in his explanation of the riots in the 1840's in Kiangsu, but leaves open the issue of changes in tenancy in his more general article (1967-2). Li Shih-yüeh (1958) is silent on the issue of change in tenancy patterns. For the writers in the 1920's and 1930's, see Feng Ho-fa (1933, 1935). See particularly Ch'iao Ch'i-ming (1926), and Chen Han-seng (1933).

change than has been claimed, I think Myers is mistaken to argue that the proportion of tenants did not increase. Much of Myers' argument on this score is derived from comparing a study of the 1950's on the 1890's with survey material from the 1930's. Valuable as the study of Ching Su and Lo Lun is on Shantung in the 1890's, it is questionable if the data can be used on a par with survey material without correction. On the other hand, the material that has been brought forward to substantiate the claims of increase in tenancy includes some of the best surveys carried out in China. Evidence is abundant that on the basis of survey results, there was this increase in the proportion of tenants, the question which is left is only whether this did imply a more unequal distribution of the produce. Quite aside from this issue,

of course, the increase in rent has to be considered.<sup>33</sup>

*Tenancy structure.* While there are abundant data on the tenancy situation in the 20th century, there is little information on the 19th century. With what little we have, it is possible to construct a clearer picture of Chiang-nan than Chiang-pei, and once again, the two regions were substantially different. In the following, I shall discuss Chiang-nan and Chiang-pei separately.

What little information there is on Chiang-nan after 1870 has been carefully collated by Shao Hsün-cheng.<sup>34</sup> What material I have been able to find from 20th century survey statistics are outlined in Tables 6 and 7 and further discussed in Appendix II. In Tables 6 and 7, information on tenancy distribution is given in terms of the status of the cultivator. It was taken

<sup>33</sup> Ramon Myers (1970) pp. 217-229. Myers quotes from Ching Su and Lo Lun (1957), who depended on accounts recalled from memory by local people as well as some account books. It is highly likely that in statistical terms, Ching and Lo's informants exaggerated larger estates and failed to recall a large number of medium size estates (say, 100 to 200 *mou*), and this would invalidate Myers' argument. Ching and Lo is an invaluable account generally on a descriptive basis, and some of the statistics (e.g. wages, production) are highly useful, but frequencies from memory are not comparable to frequencies compiled on the basis of a contemporary survey. Data for the opposing argument, however, are not decisive. Ch'iao Ch'i-ming's study of K'un-shan, Nan-t'ung, and Su Hsien (Anhwei) is easily the most famous, and he produced the following results:

Status	K'un-shan			Nan-t'ung			Su Hsien		
	1905	1914	1924	1905	1914	1924	1905	1914	1924
Owners . . . . .	26.0	11.7	8.3	20.2	15.8	13.0	59.5	42.5	44.0
Part-owners . . . . .	16.6	16.6	14.1	22.9	22.7	22.6	22.6	30.6	30.5
Tenants . . . . .	57.4	71.7	77.6	56.9	61.5	64.4	17.9	26.9	25.5

Percent of households

These results show clearly an increase in tenancy. However, how were these results obtained? Alfred Kai-ming Chiu describes the survey as follows: "In each district, the information is supplied by from seven to over ten old farmers who are familiar with local conditions. Answers from such a number of informants are checked with each other. . . . In Quesan (K'un-shan), all the eleven *hsiang* are visited and estimates from 77 persons were obtained. At Nantung (Nan-t'ung) all the 20 *chu* were visited and estimates are obtained from 140 inhabitants. . . ." Thus, we are once again reduced to informed guesses and memory. Ch'iao Ch'i-ming's study may be found in Feng Ho-fa (1933) pp. 80-117. The quote is from Chiu's Ph.D. thesis. See Alfred Kai-ming Chiu (1933) p. 172. For other figures, see also Nung-ts'un fu-hsing wei-yüan-hui (1934), and Feng Ho-fa (1935) pp. 599-600.

<sup>34</sup> Shao Hsun-cheng (1961).

as obvious in both 19th and 20th century literature that each household could be ascribed a status, which for rural inhabitants amounted to whether it was owner-cultivator (*tzu-keng*), part-owner (*pan-tzu-keng*), or tenant (*tien*). With data on farm size and amount of land rented according to each cultivator's status, it has been possible to calculate the proportion of agricultural land rented. These estimates are also included in the tables.

The accounts that are available from the 19th century are impressionistic. However, the impression is that after the Taiping

TABLE 6. SUMMARY OF LAND TENURE IN CHIANG-NAN

	Status Distribution			Land Owned		Land Rented		Total Land Rented
	Percents			Hectares		Hectares		Percents
	Self-owner (A)	Part-owner (B)	Tenant (C)	By self-owner (D)	By part-owner (E)	By part-owner (F)	By tenant (G)	(H)
Chiang-ning . . . . .	35.4	33.5	31.1	1.72	0.59	0.50	0.75	33
Su-chou . . . . .	18.1	47.0	34.9	1.33	0.44	1.11	0.60	62
Sung-chiang . . . . .	(18.1)	(47.0)	(34.9)	(1.33)	(0.44)	(1.11)	(0.60)	(62)
Ch'ang-chou . . . . .	15.0	46.0	39.0	1.32	1.01	0.75	1.07	53
Chen-chiang . . . . .	68.0	22.0	10.0	(1.72)	(0.59)	(0.50)	(0.75)	(12)
T'ai-ts'ang . . . . .	20.5	7.2	72.3	n.a.	n.a.	n.a.	n.a.	n.a.

Source: Status distribution figures for Su-chou are from observation in K'un-shan, for Ch'ang-chou from Wu-chin, both from J. L. Buck (1937). Status distribution figures for Chiang-ning are averages from 15 observations by Chang Hsin-i (1929); for Chen-chiang, averages from 11 observations in Tan-yang by Chang Han-lin (1930); and T'ai-ts'ang, from Ch'i-tung, quoted in the survey by the Nung-ts'un fu-hsing wei-yüan-hui (1934). Figures on land owned or rented are from observations in Chiang-ning hsien, K'un-shan, and Wu-chin for Chiang-ning fu, Su-chou, and Ch'ang-chou respectively in J. L. Buck (1937). Total land rented is calculated on the assumption that all cultivated land was included in the surveys and distributed according to the patterns given. Total Land Rented (H) =  $(B \times F + C \times G) / [A \times D + B \times (E + F) + C \times G]$ . Figures in brackets are estimates on basis of observations outside the locality stated. Sung-chiang figures are estimated from Sc-chou, Chen-chiang from Chiang-ning.

TABLE 7. SUMMARY OF LAND TENURE IN CHIANG-PEI

	Status Distribution			Land Owned		Land Rented		Total Land Rented
	Percent			Hectares		Hectares		Percent
	Self-owner (A)	Part-owner (B)	Tenant (C)	By self-owner (D)	By part-owner (E)	By part-owner (F)	By tenant (G)	(H)
Huai-an . . . . .	42.0	20.0	38.0	2.73	2.27	1.40	3.83	52
Yang-chou . . . . .	70.7	23.2	6.1	1.14	0.60	0.58	1.26	18
Hsü-chou . . . . .	70.7	7.1	22.3	n.a.	n.a.	n.a.	n.a.	n.a.
Hai-men . . . . .	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Hai chou . . . . .	68.7	7.1	24.2	3.35	1.73	1.00	6.64	41
T'ung chou . . . . .	24.8	20.9	54.2	n.a.	n.a.	n.a.	n.a.	n.a.

Source: Figures for Huai-an, Yang-chou, and Hai chou are from Yen-ch'eng, T'ai chou and Kuan-yün, J. L. Buck (1937). Figures for Hsü-chou from P'ei hsien, Nung-ts'un fu-hsing wei-yüan-hui (1934), and T'ung chou from averages of 33 observations in T'ung chou, Ju-kao, and T'ai-hsing, Tung-nan ta-hsüeh (1923). Total land rented is calculated from assumption stated in Table 6.

Rebellion, Chiang-nan may be divided into two principal areas in terms of their differences in patterns of land-holding. During the Taiping era, Chiang-ning and Chen-chiang were grossly depopulated, as noted in the last section. After the Rebellion, there were programs to re-populate the area undertaken by both landlords and the provincial government, and the result of this was a higher proportion of owner-cultivators here in the 1870 to 1911 period than elsewhere in Chiang-nan. In the Su-chow and Sung-chiang area, there had for long been a very high concentration of tenants, quoted to be 90 percent of the total households in 19th century sources. The impression that is given for this area is that small holdings by tenant farmers were predominant. In Table 6, this is reflected in the high proportion of land rented (62 percent for Su-chow), the high proportion of part-owners and tenants (47.0 and 34.9 percent respectively), and the small land holdings for tenants (0.6 hectare, i.e. 9 *mou*). In Chiang-ning, the proportion of land rented was among the smallest, the proportion of self-owners and part-owners was somewhat higher, and the farm size was larger. In Chen-chiang, the predominant status group was self-owners. This comparison shows great similarities between the condition in the early 20th century and the late Ch'ing, and hence it is unlikely that there was any great increase of land under tenancy from the 1870's to the 1930's. It confirms Myers' argument that the land which was heavily tenanted was in such a state long before the 1930's, and that the areas where tenancy was low remained low. It is most unlikely that Chiang-ning and Ch'ang-chou were much below their 1930's figures in the 19th century, although some changes even then are not impossible.

The situation in Chiang-pei is considerably more complicated owing to the lack of data. I have not been able to find any usable data from the 19th century directly on Chiang-pei, but what is available from 20th century material closely resembles the 19th century situation in Shantung Province on its northern border, and there is strong likelihood that the northern reaches of Chiang-pei in the 19th century closely resembled Shantung agricultural conditions, studied by Ching Su and Lo Lun. Statistics similar to those given for Chiang-nan are presented in Table 7. Except in T'ung chou, which was on the immediate northern bank of the Yangtze, and hence close to the Su-chow and Sung-chiang area, there was clearly a much higher proportion of owner-cultivators' households, and a much smaller proportion of tenants. In general, farms were larger, but contrary to much of Chiang-nan, tenants and part-owners had larger farms than self-owners. Moreover, the proportion of land under tenancy in both Yang-chou and Hai-chou was lower than that in the east Chiang-nan prefectures of Su-chow and Ch'ang-chou. In Huai-an, however, over half the land was rented, and here there was a substantially lower proportion of owners, although even then, it was higher than the Chiang-nan prefectures except for Chen-chiang. This is in accord with the information available on Shantung. We have no way of knowing if the proportion of tenants or land rented was increasing from the 19th century in this area, but there is some survey material to show that it did in the 20th.<sup>35</sup> However, this description for Chiang-pei is far from clear in outlining the general situation. To assess what could be happening with changes in tenancy proportions, it is necessary to consider further the implications of these status distributions.

<sup>35</sup> A particularly good account of this is the diary of the survey team in the 1933 survey of the Rural Rehabilitation Commission of the Executive Yuan, see Nung-tsun fu-hsing wei-yüan-hui (1934) pp. 65-73. See also Wu Shou-p'eng (1930) in Feng Ho-fa (1933) pp. 330-361.

Firstly, it is possible to disprove the argument that an increase in the proportion of tenants was necessarily a move towards greater disparity in the distribution of agricultural produce. As Myers rightly points out, quite aside from rent and proportion of land rented, an important aspect of distribution was the amount of land that was farmed. On the basis of rent estimate which we shall presently document, let us examine the situation that J. L. Buck reported for K'un-shan and Wu-chin, both in Chiang-nan, reproduced in Table 8.

It is clear that in Wu-chin, there is a slightly higher proportion of tenants. Does this mean that distribution of income was more unequal than in K'un-shan?

In K'un-shan, 12 percent of the crops was distributed among the 34.9 percent of

the population who were tenants. In Wu-chin, the equivalent was 20 percent of the crops being distributed among 39 percent of the population. In K'un-shan, this averaged out to be 0.34 percent of production for each percent of the population among tenants, while in Wu-chin, it was 0.51 percent. The Wu-chin tenant household, which had 80 percent more land than the K'un-shan tenant household, had a considerably higher income as a proportion of the overall produce. The reason for this discrepancy is quite obvious from these statistics: Although there was proportionally less land rented out in Wu-chin, the tenant could on the whole obtain a much larger proportion of the land rented. Even with rent deducted, this meant that the tenant was left with a larger income.

TABLE 8. TENANCY AND CROP DISTRIBUTION IN K'UN-SHAN AND WU-CHIN

	Status Distribution (percent)			Land Owned/Rented (hectare)		Land Owned/Rented (hectare)	
	Self-owner	Part-owner	Tenant	Self-owner	Part-owner	Part-owner	Tenant
K'un-shan . . . . .	18.1	47.0	34.9	1.33	0.44	1.11	0.60
Wu-chin . . . . .	15.0	46.0	39.0	1.32	1.01	0.75	1.07

	Percent of Crops Distributed*				Percent of Total Land Rented
	Self-owner	Part-owner	Tenant	Rent	
K'un-shan . . . . .	20 (1.10)	48 (1.02)	12 (0.34)	19	62
Wu-chin . . . . .	14 (0.93)	49 (1.07)	20 (0.51)	17	53

\* Figures in brackets are percentages of crops divided by percentages of population in status groups.

Source: J. L. Buck (1937) statistics volume, pp. 58, 60 for Status Distribution, Land Owned, and Land Rented. Percent of Crops Distributed calculated on assumption that yields are the same for all types of land, and rent is charged at 31 percent of overall production. Percent of Total Land Rented is calculated from assumption stated in Table 6.



Secondly, as Fei Hsiao-tung pointed out, the status distribution does not make a distinction between the farm that is operated primarily by the family and that which employs hired labour as its principal mode of operation.<sup>36</sup> In Chiang-nan, this is less of a problem because few farms employed primarily hired labour, although practically all farms, Chiang-nan or Chiang-pei, employed extra hands in the busy season. In Chiang-pei, from both the survey material of the 1930's and the description of Shantung in the 1890's, it is clear that these medium-sized farms of between 100 and 200 *mou* employing hired labour were much more common, and their land-holding was partly rented and partly owned. Thus, while the farm size for tenants in Chiang-nan can be expected to be fairly uniform, in Chiang-pei, the data for all three categories varied much more.

In Tables 9 and 10, data are summarized from the 1933 survey of the Rural Rehabilitation Commission which give further details concerning the composition of the status categories in different places. Besides tenancy status, the surveys of the 1930's also divided the cultivators into three

income categories: "rich peasants" (*fu-nung*), "middle peasants" (*chung-nung*), and "poor peasants" (*p'in-nung*). It seems that much of this division rests on the amount of land that was used by each household. Those who owned land but did not cultivate were landlords (*ti-chu*). "Rich peasants" were not landlords *per se*, but were land-owners who had some cultivation and who also received a substantial income from rent. "Middle peasants" operated large estates on the basis of hired labour, some possessing the land that they farmed, others renting it. The distinction between the two seems to be a blend of the size of farm and amount rented. "Poor peasants" were predominantly family farms near subsistence level, whether the land was rented, part-owned, or wholly owned.<sup>37</sup>

Table 9 shows the distribution of the status of the cultivators by this income status. This shows much more clearly the pattern that has been described from impression: In Chiang-pei, most family farms were self-owned, while in Chiang-nan, they were rented. In P'ei Hsien (former P'ei chou, north Hsü-chou fu), the category of "poor peasants" who were "owner-cultiva-

<sup>36</sup> Fei Hsiao-tung (1946) pp. 12-18. In this article, he asks why some farms were operated on hired labour and others rented to tenants. His answer is enlightening, and highly relevant to the possibility of the breaking up of large estates in Chiang-pei, although we do not have the data to prove it one way or the other. Fei's answer is that firstly hired labour required the land-owner's management, and hence was not common in areas where landlords were largely absentee. If this condition was satisfied, then the criterion was profitability, depending on wages and rent. Low labour cost encouraged hired labour, and so did low rent. Low wages came from excess labour, and low rent from excess land. Fei argued that where community land (schools, temples, clans) was sizable, and had to be rented out, rent was kept low.

<sup>37</sup> There is also a very interesting discussion of these categories in a document issued first by the Chinese Soviet Republic in Jui-chin (Kiangsi) in 1933 (re-issued by the People's Republic in 1948): These categories did not take care of those peasants who were themselves producers and who at the same time rented out a small amount of land. These were classed as "rich middle peasants", and were defined as those middle peasants whose annual income from exploitation was below 15 percent of their total annual income. Income from exploitation had been explained as including income from rent, interest, and management of public estates. It was also stated that there could be many of these "rich middle peasants" in a village. Even for the 19th century, it is consistent with many references that much land that was rented out was by these small land-owners. See *Tsen-yang fen-hsi nung-ts'un chieh-chi* (1950).



tors" constituted 52 percent of the population.<sup>38</sup> In Ch'ang-shu hsien (in Su-chou fu), this was the reverse, where 56 percent of the population were "poor peasants" who were tenants. Reference to Table 10 will show that the 'poor peasants' of P'ei hsien on average had 4 *mou* per family, and in Ch'ang-shu, they had 4.7 *mou*. Quite aside from other factors, one of the most important reasons why these two groups had a low income was because they farmed insufficient land. In Ch'ang-shu, where tenancy was already high in the 19th century, it is unlikely that this could have been the result of development in the 1870 to 1911 period. In P'ei hsien, the situation was considerably different: the question that is material is whether an increase in the proportion of tenants could have made substantial difference to this group and how. Numerous possibilities are available, and there are not really the data to decide among the alternatives. However, the possibility is open that increase in tenancy could in fact make available more cultivated land for this category of "poor peasants", and this would have reduced rather than

increased the disparity in distribution. As for the other possibilities, had there been a movement resulting in these people losing their land-holding, and consequently their being removed into tenant or farm labourer status, we would either see a much higher proportion of poor peasants who were also tenants than is given here, or a decline in the proportion of tenant households, rather than an increase. Had this group been the result of landed categories losing their land, we would not see the increase in proportion of tenants. Thus, this is in line with Myers' argument on the possibility of the break-up of the larger estates as a cause for the rise in tenancy, with perhaps the corollary that it was accompanied not necessarily by land-owners losing their land, but by a change from hired labour to tenancy.

All this is far from conclusive, but it rules out the simple interpretation that the increase in the proportion of tenants was decisively indicative of any change in the pattern of distribution.

*Rent.* To discuss the changes in rent, it is necessary first to outline the different systems of rent payment.<sup>39</sup>

<sup>38</sup> This is similar to two other surveys in Hsü-chou in the same period: In Hsiao-hsien (1932), out of 191 farming households, 77 (40 percent) were self-owners or part-owners farming less than 10 *mou*. In a village near T'ung-shan City (1932), 56 out of 127 farming households (46 percent) were also in this category. Sources: "Pa-li-t'un nung-ts'un ching-chi tiao-ch'a pao-kao" (1932); "Chang-an ts'un nung-ts'un ching-chi tiao-ch'a pao-kao" (1932), in Feng Ho-fa (1935) pp. 4-23.

<sup>39</sup> The terms of land-holding, of which rent and tax are a part, are highly important aspects of social organization in peasant societies. There are two central issues in these terms: the definition of the rights to the use of the soil, including the terms of inheritance and eviction; and the definition of the distribution of produce. No short discussion will do justice to the complexities of tenancy terms in full, but all that is needed here is an estimate of the proportion of the produce retained by the cultivator, from which we may calculate net farm income. For this purpose, to simplify matters somewhat, only rent payment will be considered, and we shall ignore such issues as payment for transfer of tenancy or ownership, and the numerous tenancy systems with built-in guarantees for the tenants' use of the soil, such as multiple ownership (*i-t'ien liang-chu*), except insofar as the amount of rent paid was affected. Quite aside from the terms of payment for rent and tax, there is also the issue of the organizations available through which rent and tax were collected. There is a sizable literature on rental arrangement in China which is enlightening to any study of Kiangsu. Particularly interesting are T. T. Meadows (1847), Peter Hoang (1888), Fu I-ling (1961), and Muramatsu Yüji (1970).

Basically, in Kiangsu Province, there were three systems in which rent was paid:<sup>40</sup> Firstly, the rent was in some areas considered as a proportion of the produce. Under this system, the landlord was considered to be an investing party on the farm, and was responsible for providing half the seeds, as well as the equipment. It seems, however, that there were many exceptions to these ideals. In general, where the share-rent (*fen-tsu*) system was invoked, the only clear distinction is that the crop was approximately divided in a 50-50 division with the landlord. There are cases also, where the division of crops applied only to the autumn harvest, and the tenant kept the full produce of the spring harvest. Secondly, the rent could be considered in terms of a fixed quantity of particular crops (*ku-tsu*, *mai-tsu*). It seems that the payment of this crop rent was based on the principle that this amounted to half the produce of the harvest of the principal crop, and in Chiang-nan this was calculated as 0.9 to 1.0 *shih* of rice for each *mou* of land rented.<sup>41</sup> Thirdly, the rent could also be considered as a crop rent commuted to cash payment. This commuted rent (*che-tsu*) was supposedly based on current grain prices, but was in actual fact decided on by landlords for each harvest, and there is evidence that the commutation rate was above the price level. Thus, there was some ideal standard common to all three systems of rent payment, but, it should also be obvious that without altering the basic crop rent, the change in commutation ratio could be a mechanism for rent increase. As the

commutation rate was quoted in copper, and the price of rice in silver dollars, the exchange ratio of copper to silver was also an important factor in commuted rent. Because consideration of the copper-silver exchange ratio increases considerably the complexity of the proportion of crops paid as rent, this issue will be deferred to a later section.

In connection with rent payment, many local agreements had to be developed, and arrangements had to be made to cover such occasions as natural disasters. As already mentioned, one of the widespread local customs in China, not only in Kiangsu, was reduction of rent and tax in times of bad harvest. A common distinction was thus made between the titular rent (*o-tsu*) and the real rent (*shih-tsu*). Where the rent was stated as titular, the amount collected would take into account the state of the harvest, and normally this would be a portion of the titular amount. Where the rent was stated as real (or *pu-che-pu-yang*, i.e. no commutation no reduction), the rent was paid as stated. Most quotations for rent I have come across are titular.<sup>42</sup>

Two other forms of tenancy are occasionally mentioned in the records: payment of rent by labour service, and a fixed cash rent. For Kiangsu Province, I have come across labour service as a form of rent only in 20th century sources, and then with only very limited application. The fixed cash rent seems to be more popular in the 20th century than in the 19th, where in all the cases I have come across, the fixed cash rent was quoted for institutional land (e.g.

<sup>40</sup> Most survey reports give a very clear account of these various rent systems. A straight forward discussion is J. L. Buck (1930) pp. 147-149. For 19th century references see Li Wen-chih (1957) pp. 70-78, 251-279.

<sup>41</sup> In some areas growing wheat and kaoliang, I have come across a rent which was expressed as "3 tou paddy, 3 tou autumn crop" (*ku san tou, ch'iu san tou*), which would be below this rent at 1 *shih* of rice per *mou*, or a 50-50 share rent. I have not been able to check to see if this was general in the winter wheat—kaoliang area. See report on Hsiao hsien in Feng Ho-fa (1935) p. 19.

<sup>42</sup> Peter Hoang (1888) p. 139 states that there should be a 25 percent reduction on the titular rent for actual payment. There were further reductions for early payment.

school land). Even then, the fixed cash rent was far from being the dominant proportion of the land-holding.

In terms of area, crop-rent is noted primarily in Chiang-pei, and then in the areas of lower production which were less adapted to cash crops. Share-rent was the most general form of rent payment throughout Kiangsu. Commuted rent was undoubtedly most highly concentrated in the Soochow City area, although it is difficult from descriptive material to decide on the territorial limit.

What I wish to demonstrate now are the mechanics of rent increase in 19th century China. I wish to argue that in the first place, titular rent was remarkably stable, and that secondly, changes to rent were brought about not by changes to the titular rate, but by changing from one rent system to another. There is no space here to explore further the ideology of rent increase, but I believe that in Ch'ing China, regulation of rent and tax was couched in a very widespread ideology which defined what was considered to be a just rent or tax. In studies of peasant uprisings, historians have frequently come across slogans concerning the cultivators' right to the soil and his rightful share of the produce. When these commonly accepted standards were disturbed, disputes and violence had frequently followed, and we read of these incidents as refusal to pay rent or tax, unfair demands from landlords, and corruption. This is an important aspect of 19th century Chinese society, and it seems that this ideology was successful in keeping down titular rates.<sup>43</sup>

There is an abundance of titular rent data for 19th century China. Two series of statistics are given in Tables 11 and 12. Table 11, compiled by P'an Kuang-tan from records in the Ch'ang-shu and Chao-wen

gazetteer, is the average rent for each family estate recorded, and the year given is the year in which the estate was founded. It is clear in this series that rent did not increase, and this can be further substantiated by the material that goes to make up Table 12 will show that this objection can be overcome.

TABLE 11. RENT FROM FAMILY ESTATES IN CH'ANG-SHU AND CHAO-WEN, 1810-1893

1810	0.816 <i>shih per mou</i>	1871	0.985
1810	0.863	1875	1.000
1838	0.900	1878	0.980
1844	0.939	1880	0.980
1845	0.750	1882	0.843
1856	0.880	1885	1.000
1861	1.060	1887	0.926
1867	0.702	1893	1.000

Source: P'an Kuang-tau, et al. (1952) p. 92, quoting from *Ch'ang Chao ho-chih kao* (1904).

The data in Table 12 consists of the material I have been able to find from genealogies in Kiangsu. The rent data in these genealogies are given for family estates, either for the welfare of members of the clan, or as burial land. These family estates are precisely the kinds of estates from which the data for Table 11 are compiled. In the most detailed of these I came across, the *Ch'i-pei Chiang shih tsung-p'u* (1905), a list is included of the different plots of land which together made up the family estate, giving for each plot, the size as quoted, the size as measured, the initial price, later payments, and the rent. The rent data here are given for the quoted size. Moreover, it is difficult to tell how much rent was actually paid because of varia-

<sup>43</sup> Two useful articles in this respect are Muramatsu Yūji, in Arthur F. Wright ed. (1960), and Vincent Y. C. Shih (1956).



To discuss the effects of changes in these rent systems, we can examine the implications of these systems as outlined, and we can also examine contemporary records that note areas where there was change from one system to another. These implications are presented in Diagram 1 and Tables 13 and 14, based largely on statistical estimates made from known evidence. The patterns implied in Diagram 1 and Table 13 will also be further documented.

In Diagram 1 are presented the three systems of rent collection in their general forms. Of course, share rent presupposes a constant proportion of the produce paid as rent, and is thus represented in the diagram. However, the proportion of crops paid as rent in crop rent and commuted rent both alter with yield. The higher the yield, the smaller rent was as its proportion. Also, below a certain level of production (in Kiangsu, approximately 300 catties of edible grain), rent paid as share rent would be a lower proportion of yield than as crop rent.

The diagram represents commuted rent as being higher than crop rent, but this is a matter of some dispute. An opposing argument has been presented by Rawski, who, using Muramatsu's data, has argued that commutation lowered the overall rent by some 30 percent. This conclusion Rawski arrives at by comparing the commutation rate with the price of rice in Shanghai, and it is clear that Rawski is well aware of the pitfalls in problems of conversion and has also made allowance for the difference in price between Shanghai and Soochow, where commutation concentrated.<sup>44</sup>

Nevertheless, I believe that there are stronger reasons to argue for the reverse: Firstly, the price of rice that we see quoted, like many other prices in contemporary records, was much more likely to be the market price than the price actually received by farmers. It would be unrealistic not to allow a substantial margin for rice dealers in the cities. Secondly, the price of rice in Shanghai is an annual average, while we know from other records that the price of rice in the harvest season was lower than in other seasons, or, in other words, below the annual average.<sup>45</sup> Thirdly, there are a fair number of accounts from the *Shen-pao*, not referred to by Rawski, that report specifically a higher rent due to commutation. The following is only one example:<sup>46</sup>

"The price of rice in Soochow has been very low. Coarse rice from the new crop, in this year of good harvest, is only 1.3 dollar on average. It is also feared that this price would drop further in the future. As for those farmers who have to market their rice to pay their rent, because rent in Soochow is largely commuted, it is necessary to have 1 *shih* and 6 to 7 *tou* in order to pay a rent of 1 *shih*. This is much more than what the amount should be in grain, but it is barely enough if it is converted to cash. It is not unreasonable to say that farmers are hurt when the price of grain is low."

The same argument can also be found in the account given by the Soochow landlord, T'ao Hsü:<sup>47</sup>

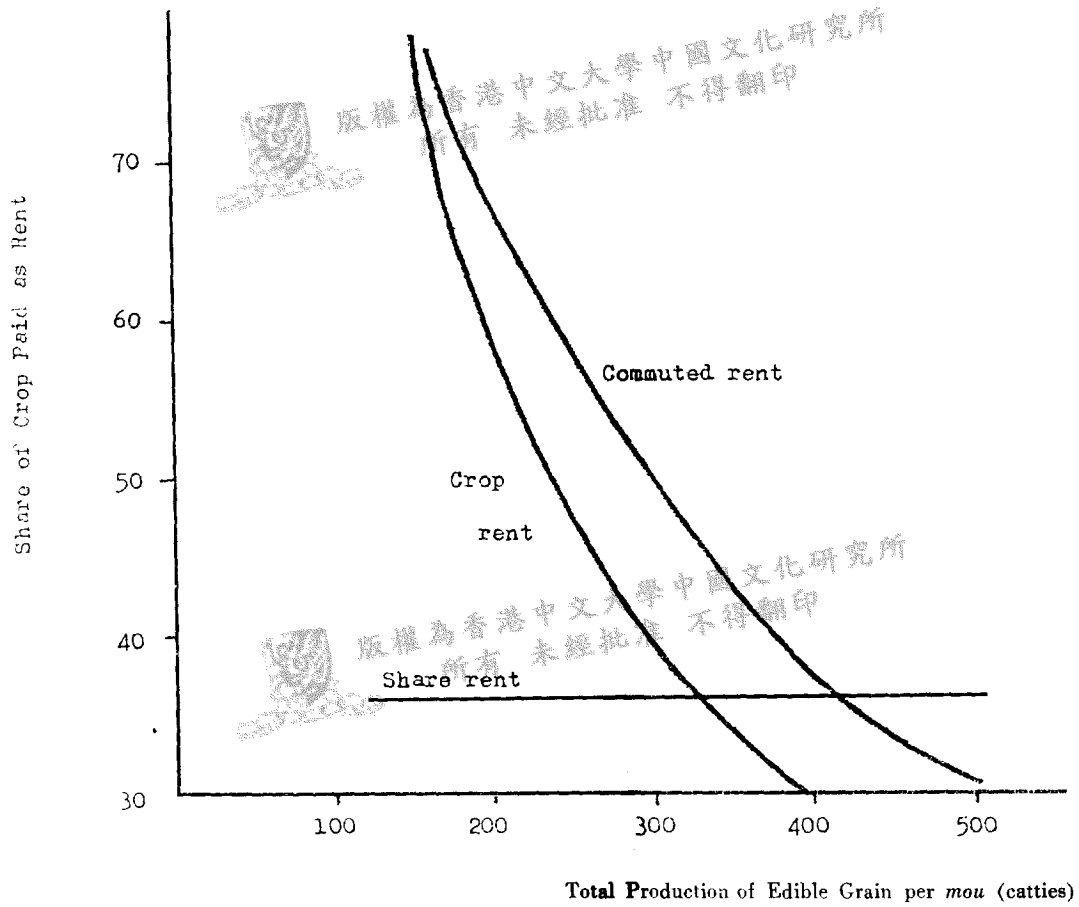
<sup>44</sup> Evelyn Sakakida Rawski (1972) pp. 155-159.

<sup>45</sup> Chuan Han-sheng and Richard A. Kraus (1975) pp. 17-39.

<sup>46</sup> *SP(KS)* 6.9.28, quoted in Li Wen-chih (1957) p. 258. Li also provides other examples from *Shen-pao*.

<sup>47</sup> T'ao Hsü (1884) 2a, also quoted in Li Wen-chih (1957) p. 259.

DIAGRAM 1. PROPORTION OF CROP PAID AS RENT





"The strangest feature (in Soochow) is that rent is collected in cash and not in rice. As the rent is not collected in rice, the price of rice is made to be higher: The equivalent of 1 *shih* and 2 to 3 *tou*, or even 1 *shih* and 4 or 5 *tou*, at market price, is taken to be 1 *shih* (for rent). This is called commuted rent."

On the basis of this evidence, it would seem that commuted rent was in fact above crop rent.

The relative proportions of crops paid as rent are further brought out in Table 13. In this table, using data on crop yield already given, I have calculated the proportion that was paid in rent under these various rent systems in Kiangsu.<sup>48</sup> The

TABLE 13. ESTIMATES OF RENT AND TAX AS PERCENTAGES OF PRODUCE

	Percent of crop paid as rent*			Tax as percentage of Rent
	Share-rent	Crop-rent	Commuted	
Chiang-ning . . . . .	36	33	—	11-24
Su-chou . . . . .	—	31	38	23-53
Sung-chiang . . . . .	—	31	—	23-53
Ch'ang-chou . . . . .	—	31	—	23-53
Chen-chiang . . . . .	36	31	—	11-43
Huai-an . . . . .	18-36	43	—	5-6
Yang-chou . . . . .	—	30	—	7-20
Hsü-chou . . . . .	17-36	43	—	6-7
Hai-men . . . . .	—	—	—	—
T'ai-ts'ang . . . . .	—	31	—	23-53
Hai chou . . . . .	(17-36)	(43)	—	(6-7)
T'ung chou . . . . .	—	(31)	—	(23-53)

\* In weight of edible grain.

Calculated on following bases:

1. Yield figures as given in Table 3;
2. Actual rent charged at 80 percent of nominal rent;
3. Share-rent nominally at 50 percent of produce, less 10 percent for seeds and overheads; allowances made for low-yield areas in Huai-an, Hsü-chou, and Hai chou;
4. Crop rent nominally at 1 *shih* of rice per *mou*;
5. Commuted rent nominally at 1 *shih* of rice per *mou*; commuted at 2,200 cash per *shih*;
6. Edible grain recoverable from paddy at 73 per cent (by weight), and loss in conversion to edible grain from wheat assumed to be negligible;
7. Current price of rice per *shih* at 1,800 cash;
8. Tax data as given in gazetteers, plus 25 percent additional charges. For details of tax calculation, see footnote 48.

<sup>48</sup> The assumptions used in the estimates are given with Table 13. This footnote will show the main calculations and provide documentation:

(1) In share rent areas, under normal conditions, the rent may be expressed as: (Yield-Overhead)  $\times \frac{1}{2} \times 80\%$ . This allows for half the produce to be kept by the tenant, in addition to a reduction in rent amounting to 20%. From T'ao Hsü (1884) 17b-19a—see Li Wen-chih (1957) p. 281 for tabulation of T'ao's data—it seems that 10% is a reasonable estimate for overheads. In this case, the rent would be  $(1-10\%) \times \frac{1}{2} \times 80\%$ , i.e. 36%.

(2) In low yield wheat-kaoliang areas, where only wheat was divided equally between the landlord and the tenant, this estimate would have to be revised. To work this out, it would be necessary to have figures for yield, expressed in weight of edible grain, as well as figures for rent, similarly expressed. The relevant figures are:

	Yield (catties)		In edible grain (catties)	Rent (catties)
Hsü-chou . . . . .	90 (wheat)	100 (kaoliang)	190	32.4
Huai-an . . . . .	100	100	200	36.0

The yield figures are taken from Table 3, with slight modifications to allow for a higher kaoliang yield as rice is assumed to be not grown on this class of land. A slightly higher wheat yield is also allowed Huai-an to take account of better soil and warmer weather. The equivalent in edible grain is the sum of the yield figures. The rent is calculated from the same formula as given in (1), using only wheat yield in the estimate for rent.

(3) For crop rent areas, the figures in Table 13 are estimated in the following manner:

	Yield (catties)		In edible grain (catties)	Rent (catties)
Chiang-ning . . . . .	370 (paddy)	80 (wheat)	350	116
East Chiang-nan . . . . .	400	80	372	116
Chen-chiang . . . . .	350	120	376	116
Huai-an . . . . .	250	90	273	116
Yang-chou . . . . .	370	120	390	116
Hsü-chou . . . . .	250	90	273	116

Again, the yield figures are from Table 3. Conversion to edible grain is calculated as (Paddy yield x 0.73) + Wheat yield, and quota rent charged at 1 *shih* of rice is taken to be 145 catties. Both conversion figures are derived from data given in Chuan Han-sheng and Richard A. Kraus (1975) pp. 92-98. Real rent is taken to be 80% of quota rent. For documentation, see footnote 42. East Chiang-nan refers to Su-chou, Sung-chiang, Ch'ang-chou, and T'ai-ts'ang.

(4) Commuted rent at 2,200 cash per *shih* is documented in Table 23 for most of the 1870's and 1893. The price of rice at 1,800 cash per *shih* is given in T'ao Hsü (1884) 17b. This is just about half the price of rice in Shanghai in the 1870's and 1880's. The commutation figure, as well as the price of rice, agrees with T'ao's own calculation on pp. 19a-b. At a nominal commuted rent of 2,200 cash per *shih*, with 20% reduction, the real rent to be paid amounted to 1,760 cash, or roughly 1 *shih* of rice, i.e. 145 catties.

(5) Data on quota tax rates are given below:

Source		Quota		Equivalent in Cash		
		Silver tael	Rice <i>shih</i>	Silver	Rice	Total
Chiang-ning . . . . .	Hsü-tsun Chü-jung hsien <i>chih</i>	.057	.042	136	147	283
	(1904) 2/11a-b	.027	.019	65	67	132
East Chiang-nan . . . . .	Nan-hui hsien hsü <i>chih</i>	.110	.100	264	350	614
	(1929) 4/14b-15a Ch'ing-p'u hsien hsü <i>chih</i> (1934) 6/16b-20a	.035	.050	84	175	259
Chen-chiang . . . . .	Tan-t'u hsien <i>chih</i>	.095	.075	228	263	491
	(1879) 14/9b, 17a-b	.037	.025	89	88	177
Huai-an . . . . .	Fou-ning hsien <i>chih</i>	.015	.009	36	32	68
	(1886) 5/8a-16a	.006	—	14	—	14
Yang-chou . . . . .	Chiang-tu hsien hsü <i>chih</i>	.066	.021	158	74	232
	(1884) 14/4a-6a	.023	.007	55	25	80
Hsü-chou . . . . .	Hsü-chou fu <i>chih</i>	.018	.007	43	25	68
	(1874) 12/1b-2a	.007	—	17	—	17

It is necessary to convert the tax quota to cash because the tax, however it was quoted, was collected in cash. The rates for conversion were, for the early 1880's, approximately 3,500 cash per *shih* of rice and 2,400 cash per tael. For documentation, see Table 23. In the tabulation above, two figures are quoted for each locality, representing an upper and a lower level for general tax collection.

(6) To calculate the percentage tax was of rent, however, it is necessary also to have the rent stated in cash. In other words, the percentage calculated represents the proportion of crops that had to be sold to pay the tax. It is also necessary to include a surcharge on the tax quota to construct a more realistic estimate. On the basis of data provided by Peter Hoang (1888) pp. 128-131, the surcharge is estimated here to be 25%. The relevant calculations are listed below:

	Rent		Cash	Quota	Tax	
	Rice (catties)	Wheat (catties)			With	Surcharge (cash)
Chiang-ning, share rent . . . . .	97	29	1,467	283	354	(24%)
crop rent . . . . .	116	—	1,440	132	165	(11)
East Chiang-nan, crop rent . . . . .	116	—	1,440	283	354	(25)
commuted rent . . . . .	—	—	1,760	132	165	(11)
Chen-chiang, share rent . . . . .	126	43	1,948	614	768	(53)
crop rent . . . . .	116	—	1,440	259	324	(23)
Huai-an, share rent . . . . .	—	36	351	614	768	(44)
crop rent . . . . .	116	—	1,440	259	324	(18)*
Yang-chou, crop rent . . . . .	116	—	1,440	491	614	(32)
Hsü-chou, share rent . . . . .	—	32.4	289	177	221	(11)
crop rent . . . . .	116	—	1,440	491	614	(43)
				177	221	(15)
				68	85	(24)*
				14	18	(5)
				68	85	(6)
				14	18	(1)*
				232	290	(20)
				80	100	(7)
				68	85	(29)*
				17	21	(7)
				68	85	(6)
				17	21	(1)*

Rent figures are taken from (1), (2), and (3). Rent is converted into cash at 1,800 cash per *shih* for rice, and for wheat, at 67% of the price of rice by volume. This price is estimated from Shen-pao reports for the respective prices of rice and wheat in Soochow for 1877, ranging from 3,500 to 4,500 cash per *shih* for rice, and 1,415 to 3,000 cash per *shih* for wheat. [Reference: SP(KS) 2.12.02, 3.5.01, 3.5.30, 3.7.09, 3.9.02, 3.10.13]. In other words, the price of wheat was approximately two-thirds the price of rice per *shih*. This compares with an average of 75% in the figures quoted in Chang Li-luan (1933) for Wu-chin for the years 1894 to 1911. As this price is quoted in *shih*, it is also necessary to know how many catties 1 *shih* of wheat consists of. Figures in Wu Shou-peng (1930) work out to be 135 catties per *shih*. Finally, figures in brackets are the percentages of rent that had to be paid for tax, both converted to cash. Figures with asterisks are excluded from Table 13 as being unlikely. In the case of Chiang-nan, this is because the commuted rent area would be the more fertile land, and hence should not be under the low quota rate. In Huai-an and Hsü-chou share rent areas, a low yield figure has been used, and hence should not be under high tax. In the crop rent areas in the same prefectures, the excluded estimates assume too low a yield for this rate of taxation. All said, however, this calculation only shows the very poor state of our present knowledge of taxation at the local level. These estimates are based on quota figures, and even with the 25% surcharge added, it is far from clear how the quota rates were assigned to land. There is strong evidence to argue that fertility was not the issue. Rather, what seems to matter was the local power position of the land-owners concerned. It is enlightening to see that the areas covered by Muramatsu (1970) paid approximately 13% of the total rent received as tax (see page 25). This was an area of fertile land covered by commuted rent. It would seem, on the present basis of our knowledge, that the only safe conclusion to draw on evidence based on the quota rate is that the quota rate, applied as stated, was only a small proportion of rent.

calculation allows for a 20 percent reduction on the titular rent, and a 25 percent surcharge on the quota tax. However, no allowance has been made for cash crops and other income-earning activities, and hence, especially for the high-yield areas, the percentage of crop paid as rent, as stated in the table, should be higher than the percentage of all farm income paid as rent, the latter being a much better reflection of the true standard of living of the tenant. In the calculation for share-rent, allowance is made for seeds and overheads, as there is ample evidence that the landlord contributed to these items as well as the tenant. For areas of northern Chiang-pei where rice was not grown, a lower estimate for rent has also been calculated that allows for the wheat crop to be shared but for the tenant to keep the entire crop of kaoliang. This probably underestimates the rent from low-yield areas somewhat, but this would reflect the lower limit to which rent might go in these areas. Crop-rent has been assumed to be uniformly 1 *shih* of rice per *mou*, and commuted rent has also been calculated on this basis but commutation to cash is allowed at a higher price than the market price. Hai chou is estimated on the basis of Hsu-chou, and T'ung chou from Sung-chiang. The distribution of the various methods of rent collection follows the pattern already discussed.

It should, of course, be only too obvious that the figures given in Table 13 incorporate many general estimates with a high degree of uncertainty. In the estimate for commuted rent, for instance, it is not at all clear from the documentary sources whether one should include into the calculation the 20 percent reduction to the nominal rate, although in this table, the reduction has been included all the same.<sup>49</sup> The situation would be quite different, if, for instance, the calculation for commuted rent announced

by the landlords had already taken account of reductions. While there is no decisive evidence on questions of this sort, however, it is useful to note that this difference would nonetheless provide only about 10 percent more of the produce as rent in Su-chou. Although this is a substantial addition, it is close to any upper estimate that may be allocated for rent. If one now takes into account the fact that the production figures in Table 13 have not included income from other sources than grain crops, the actual rent paid becomes considerably smaller than amounts generally conceived, for Chiang-nan as for Chiang-pei. Of course, this does not deny that peasants basically had a low standard of living. However, this does argue that if one would seriously calculate rent in terms of yield, and take into account appropriate reductions, it was much lower than normally taken to be the standard, whether the rent was collected as share-rent, crop-rent, or commuted rent.

With these reservations, several conclusions can be drawn from Table 13: Firstly, the area with the highest rent as a percentage of crop yield was not Chiang-nan, but the low-yield areas of Chiang-pei paying a fixed crop-rent. This conclusion can be further strengthened if one takes into consideration the more advanced development of cash crops and handicraft in Chiang-nan over Chiang-pei. Secondly, in the higher-yield areas of Chiang-pei, as a proportion of crop yield, share-rent and crop-rent were not substantially different, as can be seen in the examples of Chiang-ning and Chen-chiang. In low-yield areas, such as Huai-an and Hsü-chou, there would be greater difference between share-rent and crop-rent. However, in these areas, share rent was probably more common. Thirdly, as would be expected from the arguments that have been taken into account in the calculation, commuted rent was higher than

<sup>49</sup> Muramatsu Yūji (1970) pp. 156-162 provides a case for reduction in commuted rent areas, but the reduction was granted as an inducement for early rent payment and not generally applied.

crop-rent for the same localities. Fourthly, as for tax, it can be seen that in Chiang-pei the quota tax rate with 25 percent surcharge would amount to some 6 to 7 percent of the rent for most of the northern portions of this region. The tax rate increased southwards, reaching slightly more than 50 percent in East Chiang-nan. At this rate, it was considered extremely high in contemporary records, and it is most unlikely that this rate was very general. As tax was paid by the land-owner and not the tenant, the difference between rent and tax represents the net profit for the landlord. This net profit could easily reach 10 to 20 percent of the yield.

The observations from Table 13 emphasize the importance of yield as a factor in the calculation of rent. This argument should be obvious, as in an economy in which the tenant's standard of living was near subsistence, it would hardly be feasible

for rent to be charged at any higher rate unless there was major increase in production. That commutation could be introduced into the Su-chou area was itself a reflection of the increase in production in this area.

While the actual proportion of crops paid to the landlord as rent depended strongly on yield, to calculate the total farm crop income, we have yet to take into account cultivated acreage available. Table 14 is an attempt to incorporate this last factor into the calculation. The basic data on per capita acreage and production in edible grain are simply taken from estimates already calculated in Table 3 and 4. Again, as these are only at best crude estimates, the extra calculations provide no more than fairly rough comparisons. Nonetheless, with some caution, several broad generalizations may yet be drawn:

TABLE 14. QUANTITY OF EDIBLE GRAIN RETAINED PER CAPITA ON RENTED LAND, ESTIMATED FROM AVERAGE YIELD, LAND AVAILABLE, AND PROPORTION OF PRODUCE PAID AS RENT

	Cultivated land per capita	Total production in edible grain	Quantity retained		
			Share-rent	Crop-rent	Commuted
Hsü-chou . . . . .	4.4 mou	1,199 catties	647 catties	564 catties	— catties
Huai-an . . . . .	3.6	981	530	461	—
Chiang-ning . . . . .	3.1	1,085	586	618	—
Chen-chiang . . . . .	3.2	1,202	649	709	—
Yang-chou . . . . .	2.7	1,053	—	632	—
East Chiang-nan . . . . .	2.9	1,179	—	696	613

1. Cultivated land per capita calculated from Table 4.
2. Total production in edible grain = Average yield x Cultivated land per capita; average yield taken from Table 3, converted into edible grain at 73% for paddy, 100% for wheat, and yield of kaoliang is neglected.
3. Quantity retained = Total production in edible grain x (1 — 0.1 — Rent as percentage of production). Rent as percentage of production is taken from Table 13, and 10% is allowed for seeds and overheads.
4. Calculation for Hsü-chou and Huai-an based on higher yields, and share-rent calculated at 36 percent of production.
5. East Chiang-nan = Su-chou, Ch'ang-chou, Sung-chiang, and T'ai-ts'ang.

Firstly, the high crop-rent of the poorer Chiang-pei areas, i.e. Hsü-chou, Huai-an, could not be compensated for by the extra land available. Nonetheless, the lower rent implied in the share-rent system put Hsü-chou practically on the par with those high-yield areas paying crop-rent. Secondly, the change-over from crop-rent to commuted rent in Chiang-nan reduced substantially the tenant's income from farm produce. Because of the lack of cultivated land in Chiang-nan, this reduction put the tenant back into a level similar to crop-rent areas with comparable available acreage, e.g. Yang-chou, Chiang-ning. Thirdly, if we accept subsistence to be approximately 450 catties of edible grain, it can be seen that the quantity retained after rent was still above subsistence, although not by very much in crop-rent areas in Hsü-chou and Huai-an. This is not to say that the tenant's life was a comfortable one, or even adequate in years of shortages. However, farm produce alone could have been sufficient for the tenant to maintain livelihood. As increase in production was also accompanied by increase in rent, it would seem that if the standard of living for the tenant was to be a substantial amount above subsistence, he would have to rely on cash crops and handicrafts.

To document the changes in rent systems, Li Wen-chih has a very interesting entry from a landlord's account book in an unspecified area in Chiang-nan which illustrates the change from share to crop rent lasting from 1866 to 1903. The area covered was rented to 11 families, 7 of which were given a fixed sum by the landlord in 1866 to reclaim land which was not at that time under cultivation. The original contract specified share rent, with the landlord and the tenant each taking

half the produce, but for the tenant to be responsible for the tax. In 1869, three years after the original contract, new contracts were drawn up whereby the tenants were to pay the landlord a fixed crop rent, without commutation, at approximately the rate at which rent had been collected under share rent. The stipulation that the landlord would receive his rent without commutation guaranteed the same rent whatever the state of the harvest, and this would in fact have been a higher rate than that normally received under share rent, as in this latter method of collection harvest conditions were automatically taken into account.<sup>50</sup>

As for commuted rent, the evidence is not all that clear, but it seems that it was introduced in the Soochow City area after the Taiping Rebellion at a time when a new institution, the professional rent-collection bursary, appeared on the scene. With Muramatsu's painstaking research into the bursaries, much is known about their organization and power over tenants. Muramatsu's data, all drawn from the vicinity of Soochow City, show that these bursaries were organized by landlords with official standing, and not only collected rent for their own land, but also acted as agents for other landlords. Many of these landlords were, according to Muramatsu, engaged in other businesses, and were city residents. Moreover, their plots were small and scattered over numerous districts, and hence the bursaries did perform a function which was in demand.<sup>51</sup>

The bursaries kept the landlords' records. The problems that they faced in rent collection were singularly similar to the problems the magistracy had with tax, and the process that was designed was likewise. A date was decided on by the bursaries for

<sup>50</sup> Li Wen-chih (1957) pp. 260-262.

<sup>51</sup> Muramatsu Yūji (1970).

the payment of rent for each rent-collecting season, and some remission was allowed for early payment. Landlords issued notices to tenants as reminders of their rent, and tenants were obliged to pay at the city bursary, providing their own transport. Muramatsu reports that there were instances where the remission for early payment did produce substantial response. Rent was high in the Soochow area, however, and the success of rent-collection depended on the means of enforcement known as the *ch'ai-chui* (demand for payment) for rent in arrears. For the *ch'ai-chui*, the bursaries employed local functionaries from the magistracy for rent collection, and the process was carried out with much violence. Muramatsu makes clear that whereas tenants were occasionally brought back to the magistracy and punished, this was pursued only on a minority, and was designed as a warning for others.

Ideally, while rent payment could be enforced by the magistracy, landlords were not empowered to use force on their tenants to facilitate collection. The enforcement was the task of the magistracy, and the process ideally involved the bursaries drawing up a list of tenants who had perpetually withheld their rents, and magistracy functionaries were then despatched by the magistrate after his approval and with his warrant to the village to make the arrest. The employment of the magistracy functionaries, and the close connection between the bursaries and the magistrate, short-circuited this process. Muramatsu discovered instances whereby the landlord's agents could serve out the warrants without the magistrate's approval, and all this was with the tacit agreement of the magistrate. Aside from Muramatsu's study, evidence is abundant in the *Shen-pao* on the arrest and punishment of these tenants, and

periodically, magistrates had issued notices to the effect that withholding of rent would be thus punished. There was an official justification for this, known in contemporary official records as "tax having to be paid out of rent" (*liang-ts'ung tsu-ch'u*) and hence the magistrate could regard his involvement as legitimate.<sup>52</sup>

There does not seem to be any material which directly reports the beginning of commutation to market value. Most notable is the silence of commutation to market price in pre-1850's records. There are several studies of opposition to tax and rent in the first half of the 19th century, none of which discusses the commutation of rice to copper in rent collection, although quite a few discuss the Soochow area.

Kobayashi Kazumi has studied specifically the Su-chow situation. He discusses the issue of commutation from data in Chao-wen hsien, and he finds that there was commutation to cash instituted in this area, but crop was commuted to cash at a fixed price, although it was not maintained as such. The efforts of the tenants to uphold the fixed cash price, and efforts by landlords to adjust it, led to considerable dispute. This and other information has led Kobayashi to argue that in the first half of the 19th century, the tenants had won stronger rights over their land from landlords, in changing from a crop rent to a fixed cash rent. Yokoyama Suguru is notable in this argument also for having combed the *Ta-Ch'ing shih-lu* for this period for information on opposition to tax (and he discusses also rent issues), but again there is no mention of commutation of rent to cash. The description of tenancy by T'ao Hsü in Soochow is not decisive on it, unfortunately, but has very useful evidence

<sup>52</sup> Muramatsu discusses the phenomenon of *ch'ai-chui* very clearly, but see also Kojima Yoshio (1967) for evidence from contemporary newspapers.

which may nonetheless be supporting: T'ao noted that the Soochow commutation to cash at market price was a substantially different system of rent collection from other areas, which he regarded as unjust. Finally, from the documents that Li Wen-chih collected, again, commuted rent was reported only after 1850. In fact, one entry in *Shen-pao* was specific: "Before the Rebellion, land-owners in the Provincial Capital (Soochow) collected their rent in kind. Since the recovery, with the reform of the tax documents, they have been collecting in cash, and that has remained till today."<sup>53</sup>

The evidence is not conclusive, for what we would like to find is some discussion which documents the actual change over, and so far none of this has appeared. Even at a time when clearly some bursaries were collecting in cash rather than in kind, in the 1860's, official discussion on the issue was carried on as if the commutation was not occurring. It is as if there was some inhibition in acknowledging that the change had taken place, as on the one hand, landlords wanted to argue that rent had been reduced from former decades, and on the other, the commutation rate had actually kept the rent as high, if not higher. However, even if all this evidence does not pinpoint the time of the change, it seems quite clear that commutation was a development from about the time of the Taiping Rebellion.<sup>54</sup>

The origin of the bursaries is covered in the same kind of silence in the pre-1850

period. It should be made clear, however, that the organization of the bursaries and the rent-collection practice of former landlords differed as a matter of degree rather than kind. Some form of "prompting" (*ts'ui-tsu*) for rent had been necessary from earlier times, so was assistance from functionaries at the magistracy. What was new with the bursaries was the institution of rent collection quite separate from the landlord's own management, the adoption of this practice on a wide scale, and routinizing the involvement of magistracy functionaries in this process at the level of the *hsien*, with tacit approval from higher levels.<sup>55</sup> Some official approval had always been given for the collection of rent, but the difference between this and former approval was the borrowing of the *hsien* functionaries for the purpose.

Strangely enough, it seems that it was during the Taiping Rebellion that this institution came about, with the approval of the officialdom under the Taiping. The evidence that is available is that during the Taiping Rebellion, where the landlords could not collect rent through their personal management, Taiping local officials had encouraged their setting up semi-official institutions in the city for this purpose. This is the finding of Wu Yen-nan and Lung Sheng-yün. Lung, especially, examined individual *hsien* in Chiang-nan for his paper, and found this in Ch'ang-chou in 1860, but not in Yüan-ho or Wu hsien. He found this method of rent collection

<sup>53</sup> Kobayashi Kazumi (1967: 1 and 2), Yokoyama Suguru (1960), Tao Hsü (1884) pp. 1b-2a, Li Wen-chih (1957) p. 259.

<sup>54</sup> The survey data from which Table 13 is compiled are not conclusive about the extent of commutation from 1870 to 1911. Muramatsu's data from account books leave indisputable that not all the bursaries collected rent in cash. The Feng Lin-i bursary, belonging to the gentry leader Feng Kuai-fen, for instance, collected in kind. See Muramatsu Yüji (1970).

<sup>55</sup> Imabori Seiji (1967) quotes a very interesting text, *Chiang-su Shan-yang shou-tsu ch'üan-an* (1827) (The Complete Record Concerning Rent Collection in Shan-yang hsien in Kiangsu), which proves conclusively the involvement of magistracy functionaries in rent collection long before 1850. See also the stone tablet erected by the magistrate for enforcing rent payment on this occasion in Li Wen-chih (1957) pp. 79-80.



also tried in Wu-chiang, Ch'ang-shu, and in Wu-hsi. This was implemented at first in the cities as well as in the market towns. However, in Wu-chiang, there is evidence that the bursaries were not successful: The bursary staff in the *hsien* city were found unwilling to pay the due tax, and the bursary collapsed when the management was arrested and punished. In Wu-hsi *hsien*, in 1861, the city landlords issued a notice to ask other landlords to deliver to them their land registers, so that the central granary office (*tsung-ts'ang-t'ing*) might collect their rent and pay their tax for them. The same reference quoted in Wu also explains that the *tsung-ts'ang-t'ing* had been set up because Taiping officials had been unable to collect tax in the Wu-hsi area without landholding records. An attempt was made to collect rent at the former full rate. However, there was much opposition from tenants, and the office was destroyed. From then on, landlords had had to collect their rent again directly from the countryside. In Ch'ang-shu, there was also opposition from tenants. In 1863, after Soochow was recovered from the rebels, the high-ranking gentry of Soochow set up a similar institution, offering to give one-third of its receipt to troop support. This bursary did not seem to have lasted more than a couple of years, but from this time, we read of bursary records in the Soochow area. To go further on this question of the extent of the bursaries, although the *Shen-pao* after 1870 regularly reported on rent collection in these bursaries in Soochow, there was no report of these bursaries from other places. Thus, available evidence shows that the bursaries of Soochow City were a very peculiar institution, not generally found in Kiangsu.<sup>56</sup>

Muramatsu's data show that the profits of these bursary-managed estates were rising in the 1870 to 1911 period, in fact, into the 1920's. This is also confirmed by the increase in their holdings, although in this, the reason seems to vary. There are two reasons why this was so: Firstly, commutation to market value was the only system of rent collection with a built-in mechanism for rent increase. Secondly, rent was commuted above market price, and as I shall presently show, increase in rent commutation was faster than either the price increase or the tax increase in the late 19th century. There is no question from Muramatsu's data that there was a substantial increase in rent from 1870 to 1911. However, it is most likely that the increase was limited to the Soochow surrounding.

### Trade, handicraft industries, and salt production

Quite aside from the basic production of grain crops, Kiangsu Province was a rich salt-producing area, and compared to other provinces, a highly commercialized region. If the grain production of Kiangsu is obscure, however, the situation with salt, trade, and handicrafts, is even more so. Some statistics are available, and there are also descriptive accounts for the handicrafts, but there is very little material to use for checking the statistics, some of which are again highly questionable.

*The structure of marketing.* To describe the trading pattern of Kiangsu Province, it is convenient to begin with a description of the marketing structure. The marketing structure in China has been studied by Skinner and by Rozman, and the organization between villages, market

<sup>56</sup> Wu Yen-nan (1958), Lung Sheng-yün (1958), James Polachek (1975). See also T'ao Hsü (1884).

towns of various orders, and district cities has been made relatively clear.<sup>57</sup> In brief, a trading network existed such that the rural communities were integrated into a national economic structure, the residents of the village being able to sell their grain and handicraft produce at the local markets, from which they could also obtain their supply of non-local products. From the

markets, collecting agents and brokers also actively organized a local trade, and for certain essential items such as rice, the network ultimately was directed from a limited number of major market centers. In the case of rice in Kiangsu, these were: Hsien-nu-miao in Yang-chou, Pei-t'ang in Wu-hsi, Nan-shih in Shanghai, and T'ung-li chen in Wu-chiang.

TABLE 15. DISTRIBUTION OF CENTRAL PLACES

Prefecture/sub-prefecture	District Cities	Major Markets	Minor Markets	Major Markets per 100,000 people*	Major Markets per mill. mou
Chiang-ning . . . . .	6	85	n.a.	5.95	19.36
Su-chou . . . . .	5	41	146	2.02	7.08
Sung-chiang . . . . .	7	45	n.a.	3.17	10.36
Ch'ang-chou . . . . .	5	52	231	2.07	7.90
Chen-chiang . . . . .	4	30	65	2.23	6.94
Huai-an . . . . .	6	47	177	1.23	3.37
Yang-chou . . . . .	7	56	n.a.	1.15	4.31
Hsü-chou . . . . .	8	93	n.a.	2.92	6.56
Hai-men . . . . .	1	1	63	0.17	0.62
T'ai-ts'ang . . . . .	5	47	177	2.94	10.89
Hai chou . . . . .	3	20	121	1.08	1.93
T'ung chou . . . . .	3	20	92	0.70	2.26

\* Rural population.

Source: Chu K'o-pao (1895).

Table 15 provides the distribution of central places in the different prefectures in Kiangsu. The data presented here come from the *Chiang-su ch'üan-sheng yü-t'u*, which was compiled in 1895. In this compilation is given a brief description of each district in Kiangsu Province, in which are listed the major market towns, and in most cases, also the number of minor markets. There is no detailed information on these markets, and it is likely that places named

include both intermediate markets and standard markets. The market towns which have not been named are probably only standard markets.<sup>58</sup> There are several omissions in the records, chiefly because the number of towns in the district is too large to enumerate. In the case of the major market towns, information is not provided only for three districts in Hsü-chou fu, and this omission has been remedied here by extrapolation.

<sup>57</sup> G. William Skinner (1964-5), Gilbert Rozman (1973). See also Ch'iao Ch'i-ming (1934) for a very good description of a local market near Nanking.

<sup>58</sup> In the literature on the marketing network in China, standard markets are largely villages in which market was held at fixed intervals. Intermediate markets are those connecting standard markets to markets at higher levels. See Gilbert Rozman (1973) p. 14 for definition of these terms and further elaboration.

As for district cities, in most places in Ch'ing China, each *hsien* had its own city, frequently walled. However, in Kiangsu, there were also numerous *hsien* that shared the *hsien* city. Invariably, in these cases, administration became centralized. By Republican China, those *hsien* sharing one city were merged. The urban population given in Table 4, already described, includes some of these district cities, but none of the market towns. To allow for the market towns, the population figures would have to be considerably revised. In terms of the number of settlements at different levels, these figures are close to Rozman's, who gives 130 settlements at and above level 5 (lowest administrative centers), 600 settlements at level 6 (intermediate marketing settlements), and 2,000 at level 7 (standard marketing settlements).<sup>59</sup>

The general pattern of marketing as revealed in Table 15 may be summed up briefly:

In terms of the number of market towns per unit area, all of Chiang-nan had about 7 market towns per 1,000,000 *mou* or more. Within this region, Chiang-ning, Sung-chiang, and T'ai-ts'ang clearly had a larger number of market towns per unit area. It is hardly likely that there was less trade in Su-chou or Ch'ang-chou than in Chiang-ning. What seems to be a more likely explanation of the discrepancy between the two areas is that in Su-chou or Ch'ang-chou, river transport was possible through a widespread network of rivers and canals, while in the Chiang-ning area, much of the short-distance transport was carried overland, and this was much more costly.<sup>60</sup> As a result, there was stronger inducement for more markets to be set up in Chiang-ning. On the other

hand, the discrepancy between Sung-chiang and Su-chou cannot be explained in terms of transport differences. In this case, the possibility must be allowed that there might have been some difference in the volume of trade. However, this is contradicted by Table 15, which also shows that in Su-chou 2.02 market towns served 100,000 people, while in Sung-chiang the equivalent figure was 3.17 market towns. In fact, because the population densities of the Chiang-nan prefectures were close, the more market towns per unit area there were in a prefecture, the fewer people the market town served. In this situation, it would seem that ultimately it was the internal organization of the market, e.g. tradition, number of market days per month, rather than external factors, that determined the distribution.

In Chiang-pei, Hsü-chou was an anomaly, with 6.56 market towns per 1,000,000 *mou*, and 2.92 market towns per 100,000 people. It is difficult to interpret this situation, as we know very little about this prefecture. However, maybe it was more commercialized than the rest of Chiang-pei, on the level of the intermediate and standard market, and perhaps this was why cotton and silk could develop in this area in the 1870's while the same items were not taken up elsewhere in the north (except in T'ung chou). Huai-an and Yang-chou, the major rice-producing areas in Chiang-pei, had 3.37 and 4.31 market towns per 1,000,000 *mou* respectively, and the poorer prefectures, Hai chou, T'ung chou, and Hai-men, had even less than this number. Except for Hai-men, these prefectures had just about 1 market town for each 100,000 people, undoubtedly an indication of the low volume of trade. In other words, compared to Chiang-nan,

<sup>59</sup> *ibid.*, p. 218.

<sup>60</sup> Even in the Nanking surroundings, as late as 1930, J. L. Buck reported: "The farms in the Kiang-ning *hsien* (S), Kiangsu, area, are near the market town of Chünhwa, about fifteen kilometers southeast of Nanking. Transportation is by donkey chiefly and is so uneconomical that prices of farm products are necessarily low compared with the market price in Nanking." (p. 17).

these market towns were small and sparsely distributed.

*Trade.* The trade of Kiangsu Province can be divided first into external trade (i.e. import/export trade with other provinces and other countries), and internal trade. External trade was largely silk and cotton, and internal trade consisted of grain, salt, cash crop produce, handicraft, and sundry items. The debate on the effect of trade on the standard of living concerns the part played by external trade, and we can gain some ideas of its development from very clear statistics collected by the Imperial Maritime Customs.

As Rhoads Murphy noted, while the Imperial Maritime Customs statistics are already more reliable than most in Ch'ing China, they are still full of pitfalls, and great care is needed in using them in arguments.<sup>61</sup> Among other problems, they are quoted in silver (Haikwan Tael), while from 1870 to 1911 silver prices fluctuated considerably. Even more difficult than this is the question of coverage: These statistics were collected only from the ports in which the Imperial Maritime Customs Service was represented, i.e. the treaty ports, and even in these ports, the later years in the period are likely to be better covered than the earlier years. Thus, it is possible that the apparent increase in trade included also a fair amount that might be accounted for entirely in terms of the method of collecting the statistics. It is also more than likely that some of this increase, at least, was due not to any net increase in trade, but to changes in the method of transportation which brought existing trade under the sphere of the Customs Service, for instance, by the change in the carriage of native goods from traditional to Western-style shipping. Any detailed examination of these statistics is a serious research undertaking

on its own, and for this brief study, only very broad features can be noted. However, for the purpose at hand, this will suffice.

TABLE 16. SHANGHAI EXPORT OF "NATIVE PRODUCE" FROM KIANGSU, 1883 AND 1904

	1883	1904
Native produce of local origin exported to foreign countries	12.8	51.2
Native produce of local origin exported to Chinese ports . . .	10.5	29.0
Imports of native produce from other Kiangsu ports . . .	0.9	6.2

million Hk. taels

Source: Imperial Maritime Customs, *Returns of Trade and Trade Reports, 1883*, pp. 168, 181; *1904*, pp. 454, 480.

Table 16 gives the statistics that should be relevant to any discussion of the part played by Kiangsu production in the external trade. This table gives figures only for what the Imperial Maritime Customs referred to as "native produce". Under this category, Imperial Maritime Customs counted all goods originating in China, thus distinguishing them from "foreign goods". Fortunately, Imperial Maritime Customs gives detailed reports for each treaty ports, giving in each report breakdowns on the sources of the imports of "native produce" as well as for the commodity composition of the trade. Thus, "native produce of local origin": that was exported directly from Shanghai was counted separately from "native produce" that was imported into Shanghai. Figures are then also given for the origin of the imported "native produce", as well as the overall value that was re-exported.

While there are minor discrepancies in the different trade reports, the main features are relatively clear and are brought out in

<sup>61</sup> Rhoads Murphey (1970) pp. 44-48 is well worth reading for his comments on Imperial Maritime Customs trade figures.

Table 16.<sup>62</sup> By comparing the statistics for two years separated by an interval of twenty-one, we can see clearly that there was a substantial increase in the nominal value of trade. The bulk of this increase was for exports to foreign countries. The greater portion, by far, was collected indigenously in Shanghai, with only a small fraction directed from other Kiangsu ports. While we do not know exactly how much of the import of native produce from other Kiangsu ports into Shanghai was re-exported, we do know that of the total value of the import of native produce, 85 percent was re-exported in 1883, and 84 percent in 1904.<sup>63</sup> There is little reason to think that this would not apply to "native produce" imported from Kiangsu ports.

We can also gain a sense of comparison for this external trade through some simple arithmetic, if we work out what these figures were as a proportion of the agricultural produce of Kiangsu. Let us simplify matters by ignoring other uses of the land, and calculate only what the produce would have been had Kiangsu only produced grain. If we assume average production in Kiangsu to be 2 *shih* per *mou* for unhusked rice, at 91 million *mou*, this would be 182 million *shih*.<sup>64</sup> At the price of rice in 1883, this would fetch 262 million dollars, which would amount to 187 million taels at 1.4 dollar to the tael. For 1904, the equivalent figure is 356 million taels. If we now ignore the negligible imports from other Kiangsu ports, the proportion of external trade to agricultural production would be, for native produce exported to foreign countries, an

increase from 6.8 to 14.4 percent, and for export to Chinese ports, an increase from 5.6 to 8.1 percent. There are two conclusions that emerge from these figures that are significant: Firstly, the proportion of external trade in the rural economy of the province was not trivial. Secondly, as we have used in this calculation the current prices of rice in two different years, we have allowed for the change in the value of silver, i.e. for inflation, and it is clear that there was still substantial increase in foreign exports. Unlike the much more moderate increase in exports to Chinese ports, this could not have been due to changes in methods of shipping. There was, indeed, genuine substantial increase in foreign trade.

However, in examining how trade might have affected the Kiangsu rural economy, it is essential to ask how much of this "native produce" collected at Shanghai came from Kiangsu itself. It is well-known that junk transport, much of which would have escaped scrutiny from Imperial Maritime Customs, was very widely employed and could have carried "native produce" from other provinces into Shanghai. It is hard to believe, even then, that a substantial amount of what was collected in Shanghai did not come from Chiang-nan itself, although there is no way for us to tell what proportion this might be of the overall figures. Fortunately, we also have the breakdown of this "native produce" into commodities, and this should add some support to the belief. The relevant figures are presented in Table 17.

<sup>62</sup> Probably because of a time lapse in reporting, import figures from one city to another do not always agree with export figures from the exporting city. In terms of the overall trend here, the differences are small. Figures quoted in Table 16 are taken from the report on Shanghai.

<sup>63</sup> Calculated from figures in Imperial Maritime Customs, *Returns of Trade and Trade Reports, 1883*, p. 168; 1904, p. 454.

<sup>64</sup> This calculation does not take into account double-cropping, which would add to crop acreage by 60 percent. However, this estimate is likely to be more realistic, as firstly, the second crop did not produce as high a yield as the first, and secondly, parts of Chiang-pei were below the 2 *shih* per *mou* average. The actual production is likely to be less if we take into account weather conditions.

TABLE 17. MAJOR ITEMS OF "NATIVE PRODUCE" EXPORTED FROM SHANGHAI, 1883 AND 1904

	1883		1904	
	For. exp.	Ch. ports	For. exp.	Ch. ports
silk, raw . . . . .	10.9	0.1	24.3	0.3
silk, piece goods . . . . .	0.3	2.2	1.2	3.6
silk, sundries . . . . .	0.5	0.1	1.2	0.2
cotton, raw . . . . .	0.2	3.0	14.0	1.8
nankeens . . . . .	—	0.6	0.1	5.0
cotton yarn . . . . .	—	—	—	4.1
rice . . . . .	—	2.5	—	5.2
flour . . . . .	—	—	—	2.0
printed books . . . . .	—	—	—	1.0
straw . . . . .	—	—	0.5	—

million Hk. taels

Source: Imperial Maritime Customs, *Returns of Trade and Trade Reports, 1883*, pp. 182-186; *1904*, pp. 482-491.

In Table 17, only major items of exports have been included, but they represent 93 percent of the foreign exports of "native produce" in 1883, and 81 percent of this export to Chinese ports in the same year. In 1904, this was 81 percent of the foreign exports and 80 percent of the exports to Chinese ports. The dominant feature of this table is obvious, namely the very sharp increase in export in raw silk and cotton, both of which were produced in the Chiang-nan area. This was not matched by any major increase in exports to other Chinese ports, except for native cloth (nankeen) and cotton yarn, which came to be factory manufactured in Shanghai by 1904, and rice, which was genuinely due to changes in shipping as much of this was tribute rice. While the material in this table nonetheless does not give us clear ideas concerning the proportion of "native produce" exported from Kiangsu, it provides very important background for the increase in production of silk and cotton that has already been outlined. It should nonetheless be decisive

from this material that increase in production in rural Kiangsu was prompted to a large extent by expansion in foreign trade.

It may well be, as Rhoads Murphy noted for Tientsin, that foreign trade was little more than a "drop in the bucket" in terms of China's total volume of trade. However, it would seem that there were direct effects of this trade, extremely localized, in the Chiang-nan area. As a result of trade development, there was rapid expansion of the market for cotton and silk, i.e. rural cash crops, in the 1870 to 1911 period. Thus, although for China in general, there was an unfavourable trade balance throughout practically every year in the period, for the Chiang-nan area, if we use the import and export figures of Shanghai as a guide, there was a favorable, though small, balance.<sup>65</sup>

*Handicraft industry and imports.* The most heated discussion concerning the effects of foreign imports is the alleged displacement of rural handicraft industries. In order to set this problem in perspective, I have

<sup>65</sup> For comparison, the excess of exports over imports for various years in Shanghai are: 1870, 6.6 million taels; 1880, 13.0 mill.; 1890, 7.9 mill.; 1900, 3.8 mill.; 1910, 16.9 mill.

outlined the nature of the external trade. It is necessary now to give an account of Kiangsu's handicraft industries.

In a sense, all the traditional industries in China were handicrafts, although even then, they varied considerably in the combination of manual labour and mechanical devices. In its broadest sense, the term handicraft is used to cover such different trades as the village tinker and the silk-weaving workshops of Nanking whose products supplied the Imperial household. There is no reason why the term should not be thus used, except that it should be noted that the village tinker and the Imperial looms served a different market. At the level of the village and the standard market town, there were, as one would expect, a large variety of servicing industries, ranging from the production of agricultural and household implements to repairs, to sauce-making and various other forms of food processing, as well as the making of wine. These were the most local industries, which seldom reached even the records of the gazetteer — they were no more noted than, say, the village barber or the journeyman, whom everybody knew had existed, and could be taken for granted. Foreign imports in 1870 to 1911 were not of a nature that could displace these types of local industries.<sup>66</sup>

The industries that are recorded in the gazetteers are already on a higher level. For its industries, the *Ch'ing-p'u hsien chih* (1879), for instance, noted the production

of cotton cloth, shoes, weaving looms, incense-burners which were once famous but not any longer produced, and various kinds of foodstuffs, including wine and several local specialities. The *Chou-chuang chen chih* noted its fine combs and bamboo ware.<sup>67</sup> These are by no means complete lists. Unless the gazetteer entry also gives some detailed description, they were probably entered not so much because they were common as because it was a matter of status that the *hsien* was also productive in a variety of items. Frequently, these listings are interesting for their omissions as much as for their entries. Wu-hsi hsien, the major rice center in Kiangsu, does not record the presence of rice-milling as its industries, although clearly rice milling existed. Unlike the specialities of weaving, perhaps some famous porcelain, or wine-making, most handicrafts connected with agriculture were taken for granted.

There are good reasons why this should be so. The industries which made a difference to the district's economy were the ones which could be exported outside the district. Quite aside from its quality, the fame of the cotton weaving of the Sung-chiang area and the silk of Soochow and Nanking, was that these were items which were sold not only in Kiangsu, but in numerous other provinces as well. There were just several other items which could have this status, e.g. the stoneware of I-hsing and perhaps to some extent, the processing of salt in some of the Chiang-pei areas

<sup>66</sup> Compare, for instance, the reference to local industry by Arthur Smith (1899) with accounts in the gazetteers. The Westerners noted the village tinker and cobbler, while the local gazetteers omitted them. One of the best listing of handicrafts I have come across is for Wu-chin and Yang-hu, in *Chiang-su* No. 5 (1903), which gives 64 items of foodstuffs, 36 items of clothing, 57 items of sundry articles, 17 items connected with minerals, and 134 items of farming and fishing instruments produced in the two districts. Foodstuffs include bean curd, various kinds of wine, noodles, flour, sauces, oil, processed meat. Clothing items include various kinds of cloth, hats, garments, mats, shoes. Sundries include fire-crackers, candles, medicinal oils, incense, lanterns, paper, rope, glue, pens, needles, wood, lacquer and rattan articles, fans. Mineral items are bricks, tiles, stone works.

<sup>67</sup> *Ch'ing-p'u hsien chih* (1879) 2/33b-34a. P'eng Tse-i (1957) vol. I: 170.

would also be included.<sup>68</sup> It was widely understood that it was with the success of these industries that Chiang-nan could have supported its very dense population.

There can be no question that after the Taiping Rebellion, the silk industries never recovered their former level of production, although in the raising of silk worms there was clearly an increase in extent. Before the Taiping Rebellion, the major silk-weaving areas were Soochow, Nanking, and Sheng-tse chen. Soochow had 12,000 looms, Nanking had 35,000 in the city, and another 15,000 in villages outside. After the Rebellion, Soochow and Nanking were reduced to about 5,000 looms each, and there were also 8,000 looms in Sheng-tse. Moreover, after the rebellion, Chinkiang had 1,300 looms, Tan-yang (near Chinkiang) another 200, and a market town, Ta-i-ting, near Soochow another 500, making the total for Kiangsu approximately 20,000. The destruction caused by the rebellion might have accounted partly for the decline, but partly this was also due to the change in the market. The change has not been satisfactorily explained, but after 1870, the expansion in the market was for raw silk. Perhaps, as Feuerwerker conjectures, there could also have been some displacement of the city woven silk market by imported cotton cloth, but there is little evidence for this. Rather, the demand for raw silk could well have diverted supply from the native silk-weaving industry, which, given also the

lack of expansion in the woven silk market was never given a chance to recover.<sup>69</sup>

Much of the argument concerning the displacement of rural handicrafts is over the cotton industry, and on this subject many careful studies have been conducted, notably by Yen Chung-p'ing, P'eng Tse-i, Masaaki Oyama, and Yoshiro Hatano.<sup>70</sup> This is the one area in the discussion of the Kiangsu economy for which one can rely on secondary sources, with only minor checking into primary material.

P'eng presents statistics to the effect that foreign-made yarn and cloth were imported in increasing quantities from 1870 to 1911. Added to this, there is considerable descriptive material from both local gazetteers and general reports that local spinning and weaving were being displaced. Yen, Oyama, and Hatano, however, make a distinction between the production of hand-spun yarn and that of hand-woven cloth. The chief factors in the competition between hand-spun yarn and machine-spun yarn (imported), according to Yen, were cheaper yarn from India, and increasing demand for Chinese cotton. Thus, on the one hand, the price of foreign yarn in China declined, while on the other hand, the price of cotton rose steadily. The increasing cost of raw material and the availability of a cheaper substitute were responsible for stifling the handicraft spinning industry, despite much initial hostility to foreign yarn. In the case of hand-woven cloth, however,

<sup>68</sup> For I-hsing stoneware, see *I-hsing Ching-ch'i hsin-chih* (1882) 1/66b-67a. See also "K'o Li" (1969), and "The Pottery or Ihing" in *The Chinese Economic Monthly* 3:3 (1926) pp. 121-126.

<sup>69</sup> Imperial Maritime Customs, *Silk* (1917) pp. 69-85. Albert Feuerwerker (1970), E-tu Zen Sun (1972). Some connection between the export of silk and the development of silk weaving in the cities is clearly brought out in *SP(KS)* 3.8.13, which reported that as silk prices rose in the previous year, many workshops were closed. Employers took advantage of the tight job market to cut back on wages, and as the silk trade recovered in the following year, workmen demanded to be returned to former wages. Also, according to *SP(KS)* 21.2.24, in 1895, during the Sino-Japanese War, export of Chinkiang silk to Manchuria was temporarily stopped, and this led to considerable stoppage of work in Chinkiang. See also P'eng Tse-i (1957) vol. II, pp. 275, 281-2.

<sup>70</sup>Yen Chung-p'ing (1963), P'eng Tse-i (1957), Oyama Masaaki (1960), Yoshihiro Hatano (1961).



with cheaper yarn, there was higher production, and Chinese hand-woven cloth held its own against foreign competition. In fact, there was considerable expansion of hand-weaving. According to Yen, the difference between yarn and cloth lay in the international situation: While yarn was imported cheaply from India, and later Japan, cloth was produced primarily in England, at higher costs than it could be produced in China.

The material that P'eng presents as evidence of the loss of the hand-woven cloth market can thus be explained in terms of Yen's argument. The hand-woven cloth that was said to have lost to foreign competition, and later to city-based machine manufacture in China, was native cloth using hand-spun yarn. Another reason for reports of the loss of market for hand-woven cloth is that many areas formerly importing Chiang-nan cloth took up weaving when foreign imports made yarn more readily available. Thus, in the 1840's, there were reports of imported cloth displacing hand-spun cloth in the Soochow area, while in the 1880's, the complaint was that profits from weaving were decreasing, not because native cloth could not sell, but because cotton cloth became in general much cheaper.<sup>71</sup> In fact, according to Yen, Oyama, and Hatano, there was considerable persistence of the hand-produced material, both yarn and cloth, in Kiangsu, even with the foreign competition. Hatano and Oyama quote Japanese sources that describe household production based on locally produced cotton yarn as late as 1898 in the Shanghai

area, each household owning one to several weaving machines.<sup>72</sup> Hatano, moreover, shows that native spun yarn was used in combination with foreign yarn in weaving, as this was thought to produce a cloth of a higher quality than both purely native or foreign cloth, while its cost was halfway between the two.<sup>73</sup> Yen Chung-p'ing quotes a survey of 140 households in Shanghai in 1930 to show that there were still 47 households out of this which carried out spinning and weaving, having a total of 68 spinning machines, and 94 weaving machines.<sup>74</sup> Yen quotes a 1933 report from 373 *hsien* to the effect that 38 percent of the cotton crop in Kiangsu was not sold, but was kept on the farm by the cultivator, partly to make cotton quilts, and partly for raw material for hand-spun yarn.<sup>75</sup>

On the extension of the cotton cloth producing area, there is clear evidence for its extension only into Hsü-chou fu and T'ung chou in Kiangsu. The cotton yarn imported via Chinkiang was designated for Honan, Shantung, as well as North Kiangsu, part of which was used in Hsü-chou. The *Feng hsien chih* (1894) reports that by then, cotton cloth from Feng hsien had become famous over a wide area. The *T'ung-shan hsien hsiang-tu chih* lists weaving among its industrial produce.<sup>76</sup> T'ung chou, moreover, became one of the major producing areas for hand-woven cotton cloth.

The Maritime Customs' *Returns of Trade* in Chinkiang in 1893 argues that there were 4,000 to 5,000 hand machines for weaving in T'ung chou, and as late as

<sup>71</sup> The 1840's account is from Pao Shih-chen, 26/34b. For reports in 1880's, see *Chia-ting hsien chih* and *Sung-chiang fu hsü chih*, quoted in P'eng Tse-i (1957) II, p. 222.

<sup>72</sup> Hatano (1961) pp. 530-1, Oyama (1960) pp. 82-86.

<sup>73</sup> Hatano (1961), p. 524, quoting Japanese Consul in Amoy, 1898.

<sup>74</sup> Yen (1963) p. 241.

<sup>75</sup> *ibid.*, p. 252.

<sup>76</sup> *Feng Hsien chih* (1894) 1/18a; *T'ung-shan hsien hsiang-tu chih* (1904) 50b-51a; and P'eng Tse-i (1957) pp. 244-5 quoting customs reports.

1933, according to Yen Chung-p'ing, there were 63,000 families engaged in cotton weaving, with 83,000 machines, much of which was still being carried on by the family farms. Yen's monthly production statistics for 1933-1936 show that production was complementary to seasonal farm work.<sup>77</sup> Elsewhere in Chiang-pei, there is no evidence of the widespread adopting of weaving.

In a survey in 1934, it was found that the total production of hand-woven cloth as a household industry was 14 million pieces per year, with the highest production in Nan-t'ung (former T'ung chou), Chiang-yin, Wu-chin, and Ch'ang-shu.<sup>78</sup> This indicates that with the introduction of foreign yarn and production of machine yarn from the factories of the major cities, the centers of cotton weaving in Kiangsu as a household industry were moving away from Sung-chiang into the bordering predominantly rural areas. There was also the tendency for the organization of cotton weaving into some form of workshop management, although still using primitive machinery. The *Pao-shan hsien chih* argues that the increase in factories had been possible from the decline in the price of hand-woven cloth, resulting in lower profits for household workshops.<sup>79</sup> In a list of workshops for hand-woven cloth, P'eng shows that these workshops had started between 1899 and 1911 in Hua-t'ing, Ch'ang-shu, Wu-chin, Chiang-tu, Hai-man, Pao-shan, I-hsing, Nan-t'ung, Chiang-yin, Soochow, Wu-hsi, and Chia-t'ing.<sup>80</sup>

On the other hand, as P'eng Tse-i noted, the development of foreign trade was a

stimulus for a large variety of new handicrafts in the treaty ports and their vicinity. One large item was the making of wax candles and soap, reported in Nanking, Soochow, T'an-yang, and Pao-shan. There was also some mechanization of traditional industries, notably in oil pressing, flour-milling, and the cotton and silk industries. In a listing given by P'eng, between 1884 and 1911, 16 *hsien* in Kiangsu began oil pressing, 8 of which were in Chiang-pei. P'eng also gives an interesting series of statistics on the number of establishments and workers for 25 industries by province in 1912, and Kiangsu was prominently represented in, besides cotton and silk, pottery, paper making, oil and wax, wine, sugar, tobacco, printing, rattan and bamboo, and hide and leather.<sup>81</sup>

*Salt.* Salt production was organized in the Ch'ing dynasty as a government monopoly, from which came 15 percent of the central government's revenue in 1908.<sup>82</sup> Ideally, in this arrangement, salt production and sale was carried out by private merchants under official supervision (*kuan-tu shang-hsiao*). The supervision involved the division of the country into salt-producing and salt-consuming districts, such that salt produced in any locality was designated for a particular district, and every locality was covered. Kiangsu produced salt, but administratively was divided into three divisions: The bulk of the province was in the Liang-Huai district, sub-divided into Huai-nan, (Chiang-ning, Yang-chou, T'ung chou) and Huai-pei (Huai-an, Hai chou, and parts of Hsü-chou). All of Chiang-nan

<sup>77</sup> Oyama (1960) p. 62; Yen Chung-p'ing (1963) pp. 263-4.

<sup>78</sup> Yen Chung-p'ing *ibid.*, p. 246.

<sup>79</sup> *Pao-shan hsien hsü-chih* (1921) 6/8b.

<sup>80</sup> P'eng Tse-i (1957) pp. 369-376.

<sup>81</sup> *ibid.*, pp. 343, 431-447.

<sup>82</sup> Wang Yeh-chien (1973:1) p. 74.

outside Chiang-ning was in the Chekiang salt district. A small portion of Hsü-chou fu was in the Shantung salt district.<sup>83</sup>

Liang-Huai was salt-producing, while the Chekiang salt district area in Kiangsu was salt-consuming. Huai-pei salt was exported to Anhwei and Honan, and Huai-nan salt supplied the entire Yangtze Valley to the border of Kuei-chou Province. However, the area of Chiang-nan outside Chiang-ning imported salt from Chekiang. In volume, the Liang-Huai was the richest salt-producing area in the country, responsible for 23.1 percent of the entire salt income of the Central Government. The difficulty of the salt trade, from the point of view of the Government operators, was the prevalence of "smuggling", i.e. the production and transport (illegally) away from Government management. In the first few decades of the 19th century, "smuggling" had developed in close connection with the slump in the sale of Government salt in the Liang-Huai. In order to compensate for the loss taken by Liang-Huai merchants, the price of salt was raised, with the result that illegal salt became even more marketable. In the 1840's, the Liang-Huai salt had been reformed: hereditary merchant households for the management of the trade were abolished, and tickets were issued for the sale of salt on an open "first-come-first-served" basis. This was successful for a while, but in 1864, the Liang-Huai administration reverted to a limited number of large merchants.

The earlier reforms in the 1840's were hinged on lowering the cost of Government salt and tightening control. From the 1850's, however, as it was necessary to raise funds locally to support military operations, local commanders imposed their own taxation on the transport of goods, a tax known as the *likin* (*li-chin*). Salt was one of the major items thus taxed. The reforms of

1864 did not extend to a reform of the salt *likin*, which was levied quite apart from the sale at the point of production. The *likin* income from salt soon came to exceed the income from sale. As *likin* was charged on salt in transit, undoubtedly it included also some "illegal salt". There were many though, of salt attempts "smugglers" to by-pass *likin* stations, and they led to a considerable number of violent incidents, as both the salt stations and the salt "smugglers" were heavily armed. There is no indication from 1870 to 1911 that illegal salt declined, and "smuggling" remained a constant source of conflict.<sup>84</sup>

#### Indicators of trends of trade

Table 18 shows the value of trade as noted in Shanghai and Chinkiang, the value of *likin* for general goods in the whole of Kiangsu, and the value of the *likin* on salt. The figures on Shanghai and Chinkiang are from the Maritime Customs, and are well documented. The *likin* figures are from reports to the Board of Revenue (*Hu pu*) in Peking and are somewhat more problematic.

The figures for Shanghai and Chinkiang are the sum of imports from foreign countries and from other places in China, including imports from other ports and "native produce of local origin". Much of this was re-exported, and so these figures are the gross trade value for these cities, and not the value of net import. These gross figures reveal the level of economic activities of the city, and perhaps also its immediate suburb, but not the region in general. It must be remembered also that these figures are given in silver, and depreciation has not yet been taken into account. In terms of silver value, the trade of Chinkiang declined somewhat from about 1907 but that of Shanghai expanded. The

<sup>83</sup> See Tomi Saeki (1956) pp. 1-26, and see particularly the very useful map facing p. 18.

<sup>84</sup> Thomas Metzger (1962), Liu Chiin (1933-1, 2). Tomi Saeki (1956).

difference had come from the different positions of the two cities. When Chinkiang was founded as a treaty port, foreigners had believed that it had the potential to develop into the collecting center for the more inland Yangtze provinces as well as Chiang-pei. However, Chinkiang never actually acquired this position, although it remained the chief port for import and export for the Chiang-pei area. The collecting center for the rich rice growing province, Kiangsi, continued to be Wu-hu, which was opened for foreign trade in 1877. The growth of Chinkiang was therefore much more moderate.

The difficulty with the Customs figures is that they do not reveal the general trade of the province, particularly internal trade. This is the reason for turning to likin figures, even though likin figures are also likely to be problematic. As an internal transit tax, the likin was more related to internal trade, and by 1870, they had been completely re-organized, and were collected from several hundred stations throughout Kiangsu.<sup>85</sup> The figures here are for the likin on general goods, which in Kiangsu ranged from food-stuffs (including daily necessities such as meat, grain, and oil), cotton goods and other handicrafts, raw material, tobacco, and medicines. Occasionally, in times of famine, likin on rice might be waived by provincial authorities. However, from the point of view of trying to discover the trend of internal trade, one serious drawback is that goods designated for foreign export could be shipped without likin on the acquisition of a "transit pass", and there was considerable abuse of the transit pass system. Moreover, although there was a standard rate for the taxing of goods in transit (approximately 5 percent *ad valorem* for each station passed), the likin management was known to be highly inefficient and corrupt, which was considerably different from the Maritime Customs.

<sup>85</sup> Lo Yü-tung (1936) pp. 27-55.

TABLE 18. INDICATORS OF ANNUAL TRADE

	Shanghai foreign trade	Chinkiang foreign trade	Likin	Salt likin
1870	106.3	9.3	2.6	1.8
1871	123.3	10.6	2.8	1.7
1872	131.3	14.9	2.5	1.9
1873	124.3	12.2	2.3	2.0
1874	105.0	12.4	1.9	1.9
1875	109.2	12.4	1.7	1.8
1876	124.0	11.0	1.6	2.0
1877	116.6	11.2	1.6	1.9
1878	110.8	14.8	1.9	2.3
1879	131.3	13.6	2.0	2.3
1880	134.8	14.4	—	2.1
1881	141.7	15.9	—	2.2
1882	122.5	14.8	1.8	2.1
1883	110.3	12.3	1.9	2.1
1884	113.1	12.0	2.1	2.5
1885	127.9	12.8	2.0	2.2
1886	132.5	12.8	1.9	2.0
1887	135.1	14.2	2.3	2.2
1888	146.8	12.8	—	2.0
1889	145.5	12.2	—	2.1
1890	145.1	15.1	2.3	2.2
1891	165.4	15.7	2.1	2.1
1892	166.6	16.9	2.3	2.3
1893	176.6	17.2	2.2	2.2
1894	195.5	19.2	2.3	—
1895	218.6	29.7	3.4	—
1896	226.7	22.9	2.9	1.9
1897	265.6	24.1	2.8	1.9
1898	251.0	23.2	1.6	2.2
1899	306.6	25.6	.7	2.2
1900	243.5	23.3	2.9	2.0
1901	298.3	27.4	3.3	2.0
1902	345.9	30.1	3.1	1.8
1903	351.1	34.5	3.3	—
1904	404.9	32.3	3.1	—
1905	443.8	33.3	3.0	—
1906	421.8	35.8	3.0	—
1907	392.6	32.9	2.8	—
1908	396.9	32.9	3.0	—
1909	449.1	34.1	—	—
1910	471.0	26.5	—	—
1911	484.1	24.2	—	—

in '000,000 taels. (Hk. tl. for Shanghai and Chinkiang, others not specified.)

Source: Imperial Maritime Customs, *Returns of Trade and Trade Reports*; Lo Yü-tung (1936) p. 486, Liu Ch'uan (1933-2) p. 147.

If we examine the trend of likin receipts, it will be seen that there was a steady decline from 1870 to the late 1880's. After that the figures increased again steadily. The sudden decrease in 1898 and 1899 was due not to a loss of revenue, but to the fact that for these years, the Maritime Customs collected part of the likin. The question to answer, despite all the shortcomings of these figures, is whether there are reasons to believe that the general trend in trade could have corresponded to this. Lo Yü-tung, who compiled this data, argues that it is possible that the decline in the 1870's and the 1880's could have been due to corruption. The difficulty with this explanation is that the same argument can be applied equally to the 1890's and the 1900's. If there are grounds to believe it at all, one would expect corruption to be more rampant after 1900 when much local management was in the hands of local people. The point here is not to dispute the weakness of the data, but to argue in the absence of any consistent program to change the likin, the many forces that distorted the figures were probably somewhat random, and that the general trends were the trends of internal trade. Indeed there were attempts to increase taxation after 1900, but although much of this came as new tax items broadly classed under likin also, it was not as part of the likin on general goods, and these other items have already been excluded. More will have to be said about the importance of the conversion from silver to copper. However, if we convert these likin figures to their copper value (i.e. the value of the common currency for small items of trade), it should be

noted that the increase in likin receipts was much more moderate than suggested by these silver values.<sup>86</sup> If this reflects the situation of internal trade, the picture of the development of trade in Kiangsu in 1870 to 1911 is that but for the increase connected with foreign trade, the trading pattern in the province remained steady, with a very slow increase. This is highly likely. In terms of the descriptive data available, the changes that one reads about are in connection with foreign trade with very few new developments in internal trade.

The figures for salt likin are only of limited application, but are useful if we wish to examine the economy of such a city as Yangchow, which remained the center of the Liang-Huai salt trade. In view of the great constancy of these figures in their silver value, however, it is difficult not to be highly suspicious of their accuracy, and this series of figures is actually resorted to in the absence of any reliable indicator for Chiang-pei cities. In terms of their copper value, these figures imply that there was a moderate increase to the 1880's, after which there was some decline, but this, again, is very difficult to accept, as there is very little indication of import of salt into Kiangsu, and all indications were that the Liang-Huai administration continued to lead in salt production.

### A note on the cities

Enough has been said to show that the cities played a very important role in Kiangsu's rural economy. First and foremost, the cities were seats of government, and as such they were the centers for tax

<sup>86</sup> Comparable figures are, when weighted by copper price of silver:

1870	3,104	1895	3,703
1875	1,985	1905	2,667
1885	2,288	1908	2,724
1894	2,509		

The increase in 1895 is deceptive, as this was the year when the price of silver, in terms of copper, suddenly dropped.

collection as well as many aspects of local organization. In the economic network, the cities were important centers for trade, and in the late 19th century in particular, of foreign trade and some degree of industrial development. It was this aspect of the city that led directly to the development of cash crops in the countryside. Both the administrative aspect of the city as well as this economic aspect were part of a long tradition, by no means a new development in the late 19th century. As is well known, the centers of urban development shifted from the Grand Canal to the coast after the Taiping Rebellion (i.e. from Soochow and Nanking to Shanghai).<sup>87</sup>

The industrial development in the cities of Kiangsu is well documented, and there is hardly any need to retrace the details. Until well into the 1890's, industrial development was at best only a beginning, and all the way to 1911, it was trade, linking the hinterland, other ports in China, and foreign countries, that was the prime mover of expansion. Given this situation, the moderate rate of expansion, even for Shanghai, was as may be expected. It is a foregone conclusion, too, that a working population grew that was dependent on wages, whose employment was easily affected by trade fluctuations. It should also be all too clear that another sizable portion of the city population subsisted not on trade but on extraction from the rural economy, partly from rent, and partly from tax. The landlord might prefer the city for its comfort, while the magistracy and other government offices provided employment for a host of "underlings". There were also the merchants, as well as the very large servicing

industry, whose rank and file would range from personal servants to secretarial positions to actors and operators of tea-houses. What distinguished this population from the countryside, aside from such questions as the standard of living, was its lack of an income directly from agriculture — with the exception of the magistracy and the landlords. This was true not only for the major cities, but also for the market towns.<sup>88</sup>

Aside from the regular population, the city also periodically collected large numbers of rural refugees. It was a perpetual phenomenon in 19th century China that in winter and in times of famine, rural people would drift into the city as this was the place where relief would be given out. These people were frequently referred to as vagabonds (*yu-min*) — in Kiangsu, often as "Chiang-pei vagabonds" — not only because they did not have a steady position, but also because it was believed that they did not belong to the city. This last distinction is not only terminological: in Ch'ing administrative concepts, a beggar was considered a member of the city in a way that the Chiang-pei vagabond was not. Beggars, like all professions, could be banded into *pao-chia* under a beggar chief, but the Chiang-pei vagabond was supported as a moral duty through the period of food shortage and then told to leave.<sup>89</sup>

The escape from famine in rural areas was known as *t'ao-fang*. During a famine year, entire villages would leave, *en masse*, to the major cities, where they expected to find famine relief. In North China, the regions with the most serious famine were Chiang-pei, Shantung, Honan, and Anhwei, and famine refugees from these areas would

<sup>87</sup> A general view on this shift can be seen from Gilbert Rozman (1973) pp. 224-227 and Rhoads Murphey (1953).

<sup>88</sup> I know of no attempt to estimate the composition of the city population. Some ideas can be gained, however, from discussions in Jean Chesneau (1968), Marie-Claire Bergere (1968), and Chou Ku-ch'eng (1931) pp. 92-180.

<sup>89</sup> Hsü Tung's *Pao-chia-shu*, in *Mu-ling-shu chi-yao*, re-issued by Ting Jih-ch'ang, Governor of Kiangsu in 1868, for instance, contains regulations for registration of beggars.

travel all the way to Peking or to the cities in the Yangtze or the *li-hsia-ho* area in search of relief. There is no question that many perished on the way, and only a fraction reached the cities. The descriptions that are available say that they came with their pots and pans, under some form of organization of their own, and were prepared to settle in until the following spring. In the major famines, the numbers that reached the cities were staggering, and partly contributed to the general disruption that was frequently associated with them. In 1876, the number that was reported was 60,000 to 70,000 in Ch'ing-chiang-p'u and 42,000 in Yangchow. There were some 9,000 in Nanking, and over 10,000 in Soochow and Ch'ang-chou, Sung-chiang, and T'ai-ts'ang. In 1898, 40,000 refugees camped in Yangchow, and some 100,000 in Ch'ing-chiang-p'u, the refugees having arrived at a rate of some 2,000 per day. In 1907, Ch'ing-chiang-p'u reported the impossible figure of 600,000 refugees, Yangchow 50,000 "by actual count", and Nanking 30,000. There were reports of famine refugees in Soochow and other Chiang-nan cities also in times of famine, but not to the extent of Ch'ing-chiang-p'u and Yangchow. It seems that massive famine relief was given out in these two northern cities as a matter of policy, and this did have the effect of successfully diverting the refugee population from the major Chiang-nan cities.<sup>90</sup>

The refugees of Chiang-pei were frequently associated with petty theft, small fights, and secret societies. There is little

question as to the disruption that they could cause, but Ch'ing magistrates were knowledgeable in their handling of this problem. Throughout the 19th century, it was a regular policy to organize relief for refugees in times of famine as well as in winter. The refugee shelter (*hsi-liu-so*) in the city was one of the regular features of local charity, and gruel was regularly distributed. The distribution of gruel (cooked rice thinned out with water) was not the same policy as cheap sale of rice in times of bad harvests. The former was designed to benefit a dislocated population, while the latter to lower the price of rice for the local inhabitants. There are very clear records for the famine organization in 1876 and 1907 in Ch'ing-chiang-p'u. In 1877 in Yangchow, for instance, 11 refugee shelters were established and 17 in Ch'ing-chiang-p'u. Every five days, uncooked rice was distributed to registered refugees, with a small sum of cash for fuel. There was distribution of clothes, medical stations were set up, with special treatment allowed for pregnant women, and the dead were quickly buried. In 1907, similar refugee settlements were organized.<sup>91</sup>

Yet another aspect of the city organization, not so well documented but of enormous importance to the rural economy, was banking. For the most part, banking was an important aspect of the city's pricing mechanism, and for those cities which were involved in foreign trade in the last years of the 19th century, it also became significant for its involvement in speculation.<sup>92</sup> The involvement of local banks

<sup>90</sup> There were many reports on these refugees. The reports used here are *SP(KS)* 2.10.15, 2.10.17, 3.1.29, 3.2.05, 3.11.08, 3.11.28, 4.8.12, 9.11.20; *NCH* 1877-1: 444, 1898-1: 105, 530-1, 1906-4: 515, 1907-1: 44, 59, 63, 281.

<sup>91</sup> *SP(KS)* 3.3.03. There are also some excellent photographs of the refugee camp at Ch'ing-chiang-p'u in a supplement to *NCH* Feb. 1, 1907.

<sup>92</sup> There were financial crises in Shanghai in 1867, 1883, 1897, 1910. The cause of the 1867 crisis is not clear. In 1883, it was partly through the loss of investment in the silk trade, and partly from land speculation. In 1897, banks which had offered high interest rates for fixed deposit accounts were unable to meet their commitments. In 1910, it was because of the collapse of stocks on the rubber market. See Chung-kuo jen-min yin-hang, Shang-hai shih fen-hang (1960) pp. 15-16, 44-53, 56-57, 74-75. Ch'üan Han-sheng (1964) and C. John Stanley (1961) give an interesting account of the 1883 crisis.

(*ch'ien-chuang*) in pricing is a problem too complicated to work out in full here, but it worked roughly in the following manner: Ch'ing China had a dual currency, in silver and copper, with little effective government regulation. The banks decided on a daily rate for silver and copper conversion, and prices were adjusted accordingly by merchants. The banks also issued credit notes, again without government control, and this meant that they could alter the volume of currency on the market on their own credit. The rate at which copper was made equivalent to silver depended on many factors, but the actual rate of conversion was regulated by the banks. As the price of silver declined throughout the second half of the 19th century, the conversion ratio was adjusted accordingly. As government tried to alter the conversion ratio when new currencies were introduced, the banks bargained with the government. It was through the banks that government finance and large businesses, both of which calculated in silver, were regulated from day to day such that despite a steadily declining price of silver, prices of other commodities in copper remained steady for much of the 1870 to 1911 period. As a considerable portion of agricultural produce was marketed, the steady pricing made possible by the banks was an important element of the rural economy.<sup>93</sup>

While the countryside was still predominantly in the copper sector of the market, the major cities, i.e. Shanghai, Soochow, Nanking, quickly switched over to silver dollars. Currency fluctuations thus came to have different effects in the cities from the countryside. In the next section, this issue will have to be gone into in some detail, but a brief introduction is useful nonetheless at this stage. In brief, then, there was a depreciation of the silver currency in terms of the copper currency for

most of the period from 1870 to 1911. This depreciation was arrested some time in the early 1900's, when the copper currency also depreciated, in terms of commodity prices. The price of rice in the cities followed fairly closely the value of silver. Before 1895, the price of rice was low when the price of silver was high, in the context of fairly constant copper prices but a fluctuating copper-silver exchange rate. The depreciation of copper, however, drove prices to unprecedented levels in the 1900's, with tremendous impact on the general social condition in Kiangsu. It is important not only to find out how these changes in the currency affected the countryside, but also to appreciate that the countryside would be affected quite differently from the city because of their different positions in the production process.

Already, this is beginning to indicate a complicated situation, and to make sense out of this, it will be necessary to devote much more space to the subject. However, let me note just one simple explanation on the copper-silver depreciation which will be helpful. Wei-ying Lin, in his study of the silver depreciation of 1926-1931, commented also in general on the earlier decades, and came to the conclusion that in silver depreciation, the silver prices of imports and exports, and domestic items, would vary differently. As international trade was priced basically on gold, a lowering of silver prices meant that for China, import prices would rise immediately and export prices would follow. As domestic prices were not directly affected, domestic prices would rise only with a considerable time lag. As a first approximation, this is a very interesting explanation of price changes, and would also guide us to focus our attention on the cities closely involved in import and export

<sup>93</sup> *SP(KS)* 3.10.05, 3.10.11. See also *NCH* 1896-2:123, 1897-1: 149, 1897-2: 985 quoted on pp. 434-5 below.



to search for the effects of the copper-silver conversion.<sup>94</sup> However, this explanation is based on the belief that China was a silver standard country, and as will be shown in the next section, the situation was somewhat more complicated than this.

### Prices and inflation

Most discussions of the rural standard of living in late Ch'ing China devote much more attention to production than to marketing. It should by now be obvious, however, that this paper is leading up to the conclusion that adverse effects on the standard of living in the late 19th century did not stem from contraction of production, but from fluctuations in the market. To explore this issue requires some discussion of rural marketing, comparison of prices, and then, in the case of 19th century China, an understanding of the currency system and money supply.

### The grain trade

It is useful to begin with the example of the grain trade because this constituted a very large section of the marketed agricultural produce and it is easier also to see in this example the different effects on different segments of the population.

Briefly, grain entered the market partly through direct sale by the peasant-producer, and partly through rent, where rent was paid in kind, as was the case in most of Kiangsu. The notable exception to this would be the Soochow area, where rent was commuted to cash, in which case the peasant-producers marketed their own produce. Even if the amount that entered the market as rent can only be crudely estimated, this must have been substantial.<sup>95</sup> It is conceivable that of the quantity left to the tenant, a proportion could have been marketed, but this is unlikely to be substantial after allowance is made for consumption and seeds.

The priority of farm consumption is of great importance to any question concerning grain prices and the peasants' standard of living. It is a matter of some surprise that this is as a rule not noted by writers on the subject, with the exception of Fei Hsiao-tung and J. L. Buck. According to Fei, the Kiangsu peasant reserved a year's food supply before he marketed the excess, no matter how high current prices were, because the price for the rest of the year was uncertain. Where rent was paid in cash, however, a low price of grain would induce the sale of a larger amount, as the proceeds had to cover rent payment. Data from J. L. Buck's survey on the proportion of farm produce consumed on the farm

<sup>94</sup> Lin Wei-ying (1935) pp. 90-92.

<sup>95</sup> (1) Let us assume that the amount marketed was all that was above subsistence level for the Kiangsu rural population less tax and overheads. (2) It has already been argued (p. 400) that for rented land, subsistence was the amount left after rent and overheads. (3) Proportion of crops marketed on rented land, therefore, was equivalent to rent less tax. (4) Proportion of crops marketed on unrented land was thus equivalent to the amount paid as rent, less tax, for rented land in the same prefecture. (5) The total amount marketed = (3) + (4), for each prefecture. (6) The proportion marketed that came from rent = (3) / [(3) + (4)]. (7) If the rent and tax in the prefecture were uniform, the proportion marketed that came from rent would be equal to the proportion of land rented. (8) In this case, the proportion that was marketed that came from rent was from 18 percent (Yang-chou) to 62 percent (Su-chou). (9) This ignores the difference made by commutation, which, however, has been argued here to have covered only the limited area around Soochow City.

also confirm this description of the farms' basic sufficiency in food supply.<sup>96</sup>

Even in areas devoted to cash crops, I very much doubt if the peasant producer depended on the market for his subsistence needs. When a piece of land is said to be devoted to cotton, for instance, this does not imply that the land was exclusively cotton-growing. First, there is the crop rotation to consider. Second, all the survey material available shows that even in cotton areas, a large variety of other crops were grown. Material presented in Table 19, from a survey in 1929, is a very interesting illustration of the use of farm land in the Sung-chiang-T'ai-ts'ang area. In Ch'uan-sha, for instance, out of 61 farms surveyed, each grew on average 3.3 crops, and of this number of farms, 60 grew rice, 49 grew wheat, 39 grew beans, and 56 grew

cotton. Of course, this was a cotton-producing area.<sup>97</sup>

Unless the cultivator had a substantial income from sources other than crops, it seems that the situation was unaffected by periodic shortages. In the period of the year known as the *ch'ing-huang pu-chieh* (where the green does not meet the yellow), i.e. before the summer crop was harvested, the farm household might face a shortage of food. As a rule, grain prices would rise in this part of the year,<sup>98</sup> and the same situation would apply in a year of bad harvest. However, for the farm family, the usual procedure to tie over a period of shortage was to turn to a substitute, and local records are detailed in the description of the substitutes available. In Kiangsu, it seems that yam was the most common, but also peanuts and grain of an inferior quality,

TABLE 19. NUMBER OF CROPS GROWN IN INDIVIDUAL FARMS IN CHIANG-NAN COTTON-GROWING AREA

	Farms surveyed	Ave. No. of crops	rice	wheat	Farms growing beans	cotton	others
Ch'uan-sha . . . . .	61	3.3	60	49	39	56	—
Sung-chiang . . . . .	21	1.0	21	—	—	—	—
Chia-t'ing . . . . .	30	5.0	30	30	30	30	31
T'ai-ts'ang . . . . .	14	3.0	14	13	6	5	4
Chung-ming . . . . .	30	3.0	30	30	6	29	2

Source: Survey of 17 counties in Kiangsu by the China Vocational Society in 1929, quoted in Alfred Kai-ming Chiu (1933).

<sup>96</sup> See Fei Hsiao-tung (1946), p. 260. J. L. Buck (1930) pp. 356-358 reports also that rice and kaoliang were also grown as cash crops in some places. Cultivators, in general, would sell better quality crops and purchase inferior varieties for their own consumption. Even then, in Buck's example (Sincheng hsien, Honan Province), only one-fifth of the kaoliang and one-fifth of the corn was purchased. The farmers near Taipingmen Railway Station, in Chiang-ning, who were already near a major city (national capital in 1930), purchased 45 percent of the rice consumed in a year with an abnormally poor rice crop.

<sup>97</sup> See also J. L. Buck (1937) statistics volume, pp. 229-243.

<sup>98</sup> The effect of this on rice prices is documented by Ch'uan Han-sheng and Richard A. Kraus (1975) pp. 17-28.

such as buckwheat. In more severe shortages, the eating of bark and roots was not unknown.<sup>99</sup>

If this description is true, the fluctuation of food prices on the market had very little to do with the peasant producer who paid his rent in kind. For the little amount that was sold, a rise in price was to his advantage. In examining this, one has to take into account the complex marketing structure. For most of the sale of grain would have originated at the standard market, and through brokers' firms and rice dealers, only a proportion of the produce would reach the pricing level at which we have data, i.e. the major cities, particularly Shanghai. Unfortunately, we do not know much about the dealings at a lower level, over such questions as how much was paid for milling, as most peasants did not have their own rice mills or how local prices at the standard market town reflected the changes at a higher level, as we also know that in many places there were monopolies of individual trade. This is also the level where the distribution of local markets might have made a difference.

Unless grain dealers could establish control over a number of markets, the more points of sale there were the less likely the success of a monopoly, and the more likely the peasant's sale price would have followed price fluctuations in the major cities. There is only one series of statistics for prices at this level, from Wu-chin hsien from 1896 to the 1920's, and this shows that prices did follow the fluctuations at higher level.<sup>100</sup>

There is some valuable information on this in the various reports on the rice trade in the 1930's, commissioned by the Rural Rehabilitation Committee. I examined the ones on Nanking and Shanghai. The Nanking report is by far the more interesting: In this area, the grain was brought to the city either by boat or overland. It seems that the larger dealers would use river transport, and these were referred to as the *ch'uan-chia* (boat dealers), while smaller dealers, or the producers themselves, would bring in their grain on mules or by human carriers. It seems also that the boat dealers delivered in the main unhusked rice, while

<sup>99</sup> There are too many records of this to list in full. The *T'ung-chih Shang-chiang hsien chih* (1874) 7/8a, for instance, lists the following, as substitute foods in a medium harvest: taro, buckwheat, sorghum, yam, sweet potato; and then for people who live near rivers, fish, crab, shrimps, bulrush, reed, and various aquatic grasses. The *Yen-ch'eng hsien chih* (1895) 4/43a-45b, has an interesting discussion of a very coarse late rice which can be planted.

<sup>100</sup> The one series of statistics is from Chang Li-luan (1933), who collected the price data from account books in Wu-chin, which, even then, did not seem to reach the periodic market. Price changes here followed very closely prices in Shanghai:

	Shanghai		Wu-chin			Shanghai		Wu-chin	
	Annual ave.	Index	Annual ave.	Index		Annual ave.	Index	Annual ave.	Index
1894	3.38	100	2.73	100	1903	6.31	187	5.33	195
1895	3.46	102	2.68	98	1904	5.48	162	4.22	155
1896	5.02	149	4.68	171	1905	4.31	128	3.33	123
1897	4.72	140	3.88	142	1906	5.86	173	4.45	163
1898	5.85	173	4.45	163	1907	7.51	222	6.08	223
1899	4.80	142	3.83	140	1908	7.06	209	5.58	204
1900	4.46	132	3.51	129	1909	5.63	167	4.61	169
1901	4.74	140	3.22	118	1910	7.13	211	5.75	211
1902	6.66	197	5.19	190	1911	7.98	236	6.32	232

Note also that the Wu-chin price is some 10 to 20 percent below the Shanghai price.

the rural occasionals (*hsiang-shao*) — as the ones who came in on land were called — might have had it husked.<sup>101</sup> There was a much greater degree of regulation concerning the rice brought in by the boat dealers (who also came from other provinces). There were independent brokerage firms which handled the sale to rice wholesalers, and independent measuring firms which measured the rice traded. "Rural occasionals" delivered the rice on their own to the larger wholesalers or large retailers. In 1935, when the price of rice in Shanghai stood at 10 dollars per *shih*, the price of husking in Nanking was 0.15 dollar per picul, and milling was 0.25 dollar. The labour cost of husking and milling was therefore trivial. However, whether the same applied to rural areas, we do not know. Many rice dealers, also, had their own mills.<sup>102</sup>

The peasant-producer who did sell his rice benefited from rising prices at the level of the big cities. The landlord who collected rent would be similarly affected, and one must remember that much land was owned by small land-owners, who were themselves *bona fide* producers. The people who suffered from a high price of grain clearly then, were not the ones who had grain to sell. And this was noted in the writing of the better economists of the Ch'ing dynasty. Wang Ching-yün, for instance, in his discussion on the granary system, noted that it was more difficult for local officials to handle the purchase of grain for granaries than the sale:

"For the management of a granary, sales are held in spring and early summer, and purchase in autumn and winter. This is the established practice. However, if there is too much purchase, market prices go up, and this hurts the people (*min*). If there is too little purchase, market prices go down, and this hurts farmers (*nung*)."<sup>103</sup>

Wang wrote in the first half of the 19th century, and it is noteworthy that even then there was the distinction between the *min* and the *nung*. This is usually not discussed in matters concerning granary management, as the granaries were organized with the avowed object of being universally beneficial as reserves against famine, when in fact, they served to lower agricultural prices for the cities.<sup>104</sup>

If we see the distinction between producers and consumers of rice, some of the descriptions which are present in the records are easier to understand. In a time of bad harvest, for instance, grain might be bought from surrounding areas and transported to the area affected by bad harvest. One common feature in this practice is the demand by people in the supplying area that the magistrate forbid export of rice, as this would drive up prices. As a rule, the records do not describe the status of the people who made such demands, but one would imagine that these were not people who had grain to sell. Another example: In a time of good harvest, in areas with commuted rent, the price of rice dropped, as there was now an increasing supply, and

<sup>101</sup> One might detect in this a point of economy. Husking reduces the volume of rice by half, and the weight by 20 percent. The additional weight would have cost much less by sea transport than overland.

<sup>102</sup> She-hui ching-chi tiao-ch'a-so (1935: 1 and 2). There was also similar organization in Shanghai in the 1870's, see *SP(KS)* 9.5.15.

<sup>103</sup> Wang Ch'ing-yün (n.d.) 4/34a.

<sup>104</sup> See Hsiao Kung-ch'üan (1960) pp. 145-148, Ch'uan Han-sheng and Richard A. Kraus (1975) pp. 32-39. See also Endymion Wilkinson (1970) for a description of the maintenance of price reporting for the granaries and grain purchase which lasted well into the late 19th century.

the amount demanded for rent did not always decline with it. When this happened, the newspapers reported that the tenant had had to sell at a low price, and pay his rent at a high price, hence, the popular term "cheap grain hurts farmers" (*ku-chien shang-nung*). Yet another example: Take the obscure statement in the *Chin-shan hsien chih* that is quoted by Li Wen-chih as an instance of food prices under commercial capital:

"Prices here correspond to Shanghai prices. As the *fu* gazetteer records, when the price of rice is too high, those with people to support have a hard time; and when prices are too low, those dependent on others have a hard time."

Most likely, this refers to employment, where part of the payment was in food support, which was the common practice for wage labour in both city and countryside. If the employer of the market town and city, for instance, did not have an independent source of grain income, his expenses depended to a large extent on the price of grain on the market.<sup>105</sup>

On a long term basis, the price of rice was increasing from 1870 to 1911. In this interpretation, the increase in the price of rice did not, in itself, lower the producer's standard of living. What matters is whether the increase in the price of rice matched the increase in the prices of commodities which counted as his expenditure.

## Commodity prices compared

Tables 20 and 21 give the prices of silk (and cocoon), cotton, bean, beancake, yarn, and cloth, as well as the price of rice.<sup>106</sup> In the remainder of this section, I shall outline briefly the changes in these prices, and how they affected standard of living. There are various methods that can be used in the analysis. However, as I wish to compare their relative increases, I shall compare average prices over 10 year intervals.

Rice, beans, and beancake, were primarily not exported. Their price changes in the long run were similar:

	Rice	Bean	Beancake
1870-9 . . . . .	3.26	1.0	n.a.
1880-9 . . . . .	3.07	1.2	n.a.
1890-9 . . . . .	4.01	1.6	1.2
1900-9 . . . . .	5.80	2.2	1.8

Rice in dollars per picul, bean and beancake in Hk.Tl. per picul

For both beans and rice, prices were relatively stable in the first half of the period. There was an increase of 30 percent in the 1890's, and a further increase in the 1900's, which amounted to 45 percent for rice, and 38 percent for beans. For the same period, beancake increased by 50 percent. Beancake was one of the principal fertilizers for Chiang-nan, and had to be purchased by the peasant-producer.<sup>107</sup> However, it should be clear that the discrepancy in price changes was small.

<sup>105</sup> See *SP(KS)* 5.12.27, 6.9.28, *NCH* 1886-1:171. The quotation is from Li Wen-chih (1957) p. 557.

<sup>106</sup> Notably missing here are the two price indices used in many studies of the rural economy after 1870: the Wu-chin index of farm prices, and the Nankai index. For the 1870 to 1911 period, the items which make up the Wu-chin index are rice, wheat, beans. The data on rice have been compared with prices in Shanghai (see footnote 100), and found to have varied similarly. The wheat prices will have to be further considered. The Wu-chin index also provides information on peasants' expenditure, which however, is based on very sparse data before 1911. The Nankai Index is deceptive as a guide to prices within the country as it consists mainly of import-export items. It is far more accurate to consider the individual commodities separately until we have a much better knowledge of the composition of these different items in aggregate income and expenditure in different places and among different sectors of the population.

<sup>107</sup> Beancake was also a major export from Hai chou. The *Kan-yu hsien chih* (1888) 6/12a notes that in 1887 the sale was 1 to 2 million pieces at 56 catties per piece.

TABLE 20. PRICES OF AGRICULTURAL PRODUCE, 1870-1911

	Rice*	Cocoon	Silk	Cotton	Bean	Beancake
1870 . . . . .	4.40	57	515	14.3	1.2	
1871 . . . . .	3.28	56	503	12.0	1.0	
1872 . . . . .	2.71	64	490	12.0	1.2	
1873 . . . . .	2.90	92	500	9.0	0.9	
1874 . . . . .	3.50	125	300	9.0	0.8	
1875 . . . . .	2.89	78	285	10.2	0.9	
1876 . . . . .	2.53	78	443	9.2	1.0	
1877 . . . . .	3.68	88	340	9.9	1.1	
1878 . . . . .	3.68	59	329	10.2	0.8	
1879 . . . . .	3.00	64	321	9.9	1.0	
1880 . . . . .	3.19	52	300	10.0	1.0	
1881 . . . . .	2.79	65	350	10.0	1.2	
1882 . . . . .	2.76	54	307	9.7	1.0	
1883 . . . . .	2.88	68	320	10.9	1.0	
1884 . . . . .	2.98	45	273	11.5	1.2	
1885 . . . . .	2.91	45	272	11.6	1.2	
1886 . . . . .	3.86	65	300	11.0	1.2	
1887 . . . . .	3.17	56	320	9.8	1.3	
1888 . . . . .	3.02	56	306	11.3	1.3	
1889 . . . . .	3.15	56	315	10.0	1.3	
1890 . . . . .	3.38	70	340	10.0	1.3	
1891 . . . . .	3.15	58	281	10.8	1.2	
1892 . . . . .	3.30	63	306	10.0	1.0	
1893 . . . . .	3.06	64	315	10.7	1.3	
1894 . . . . .	3.38	67	320	9.9	1.3	1.0
1895 . . . . .	3.46	45	314	12.5	1.9	1.0
1896 . . . . .	5.02	48	340	12.0	1.6	1.2
1897 . . . . .	4.72	59	330	15.0	1.8	1.3
1898 . . . . .	5.85	82	400	11.5	2.1	1.6
1899 . . . . .	4.80	88	450	13.0	2.0	1.5
1900 . . . . .	4.46	86	439	13.9	1.8	1.4
1901 . . . . .	4.74	75	340	16.2	2.1	1.6
1902 . . . . .	6.66	114	500	17.0	2.0	1.4
1903 . . . . .	6.31	139	570	17.5	2.1	1.6
1904 . . . . .	5.48	86	525	20.2	2.6	2.0
1905 . . . . .	4.31	94	545	15.2	2.6	2.1
1906 . . . . .	5.86	94	555	15.1	2.1	1.8
1907 . . . . .	7.51	91	538	17.2	2.4	2.2
1908 . . . . .	7.06	93	475	16.9	1.9	1.8
1909 . . . . .	5.63	106	436	22.8	2.3	1.9
1910 . . . . .	7.13	106	467	22.6	2.0	2.0
1911 . . . . .	7.98	92	549	24.4	2.4	2.1

\* This is the price of rice in Shanghai, in dollars per *shih*; the others are import/export figures, in Haikuan Taels per picul.

Sources: Rice from Tsou Ta-fan (1965); cocoon and silk from IMC, *Silk* (1917); cotton, bean, and beancake from Yang Tuan-liu, *Liu-shih-wu nien lai Chung-kuo kuò-chi mao-i tung-chi* (Statistics of China's foreign trade during the last sixty-five years), 1931, quoted in Li Wen-chih (1957). Except for rice, these figures are average values calculated from export statistics.

Cotton and silk (including cocoon) were primarily cash crops, and were exported in large quantities. As may be expected, the trend of cocoon prices was similar to silk. However, these two items were somewhat different from cotton. It should be noted that compared to silk, cotton prices were much steadier from year to year, as well as on a long term basis. The long term trend would be more clearly seen if we again break down the data of Table 20 by decades:

	Cocoon	Silk	Cotton
1870-79 . . . . .	76.1	402.6	10.6
1880-89 . . . . .	56.2	306.3	10.6
1890-99 . . . . .	64.4	339.6	11.5
1900-09 . . . . .	97.8	492.3	17.2

Hk.Tl. per picul

Taking these price changes with the increase in trade for these two items already noted, it is difficult to avoid the conclusion that foreign trade must have been quite a boom, in fact, to the Kiangsu countryside, particularly in Chiang-nan. In other words, silk began at higher prices in the 1870's than it reached in the next two decades, but then rose again in the 1900's. For cotton, there was a steady increase, not only in price as shown here, but also in the amount exported.

As for imported items, from Table 21, the average prices by decades are as follows:

	Yarn	Cloth
1870-79 . . . . .	28.3	1.6
1880-89 . . . . .	21.8	1.5
1890-99 . . . . .	18.9	2.2
1900-09 . . . . .	24.4	3.3

Hk.Tl./picul      Hk.Tl./piece

The price of yarn dropped considerably between the 1870's and the 1890's, and rose by some 30 percent in the 1900's. There was a steady increase in the price of cloth.

TABLE 21. PRICES OF IMPORTED YARN AND CLOTH

	Yarn*	Cloth
1871 . . . . .	26.8	1.72
1872 . . . . .	27.4	1.75
1873 . . . . .	46.0	1.80
1874 . . . . .	28.5	1.67
1875 . . . . .	30.2	1.62
1876 . . . . .	25.1	1.46
1877 . . . . .	24.5	1.44
1878 . . . . .	23.3	1.48
1879 . . . . .	23.1	1.52
1880 . . . . .	24.0	1.46
1881 . . . . .	24.6	1.46
1882 . . . . .	24.4	1.50
1883 . . . . .	23.0	1.46
1884 . . . . .	21.4	1.47
1885 . . . . .	20.2	1.50
1886 . . . . .	20.6	1.51
1887 . . . . .	21.2	1.60
1888 . . . . .	19.8	1.66
1889 . . . . .	19.2	1.62
1890 . . . . .	17.9	1.55
1891 . . . . .	17.3	1.84
1892 . . . . .	17.0	1.87
1893 . . . . .	18.2	2.18
1894 . . . . .	18.5	2.30
1895 . . . . .	18.7	2.37
1896 . . . . .	19.8	2.50
1897 . . . . .	21.9	2.62
1898 . . . . .	20.1	2.47
1899 . . . . .	20.0	2.50
1900 . . . . .	20.3	2.85
1901 . . . . .	21.6	3.03
1902 . . . . .	22.4	3.17
1903 . . . . .	24.7	3.16
1904 . . . . .	26.1	3.45
1905 . . . . .	26.3	3.19
1906 . . . . .	25.6	3.05
1907 . . . . .	25.3	3.37
1908 . . . . .	25.3	3.83
1909 . . . . .	26.0	3.53
1910 . . . . .	27.5	3.99

\* Price of yarn in Haikwan taels per picul, cloth in Haikwan taels per piece.

Source: Albert Feuerwerker (1969) pp. 22-23, calculated from Yang Tuan-liu, *ibid.*

Does the increase in the price of imported cloth imply an increase in the cost of living for the rural inhabitant, however? This issue has been clearly settled by Feuerwerker and others who have studied the development in the spinning and weaving industries and whose work has already been referred to in the discussion on the effect of foreign trade on rural handicraft. The salient fact is that while there was considerable increase in the import of foreign yarn, there was a much smaller increase in the import of foreign, machine-woven cloth. Figures are not available for Kiangsu Province alone, but for the whole of China, the import of foreign yarn rose from 150,000 piculs in 1880, to about 2,300,000 piculs in 1910, while for imported cloth, the increase was only from 13,600,000 pieces in 1880 to just under 20,000,000 pieces in 1910.<sup>108</sup> The reason for this discrepancy is that imported foreign yarn came to be raw material of hand-woven cloth, and this hand-woven cloth held firm against imported machine-cloth. It was this hand-woven cloth, chea-

per and produced in larger quantities than before, that was the basic consumption of the rural inhabitant, while the small increase in the imported machine-woven cloth, probably reflects that its consumption was, to the end, confined to the cities, not being able to compete with hand-woven cloth in the countryside. When allowance has been made for the import figures, the effect of the increase in price of imported cloth on the rural standard of living can be very much discounted.

The claim is sometimes made, nonetheless, that there was a larger increase in the price of manufactured items than in farm produce from 1870 to 1911. Li Shih-yüeh, for instance, quotes comparative figures for cotton, wheat, and cloth, to argue that prices of farm produce had lagged, and that consequently the peasant's standard of living had deteriorated.<sup>109</sup> In terms of the figures here, this is a very much distorted view. Expressed as index numbers (1870-79 = 100), the relative prices of the different commodities were:

	Rice	Bean	Cocoon	Silk	Cotton	Yarn	Cloth
1870-79 . . . . .	100	100	100	100	100	100	100
1880-89 . . . . .	94	120	74	76	100	77	94
1890-99 . . . . .	123	160	85	84	108	67	138
1900-09 . . . . .	178	220	128	122	162	86	206

An index has not been included for bean-cake, as figures for the 1870's are not available. However, its 50 percent increase in the 20th century over the 1890's was only slightly higher than the increase in rice (45 percent) for the same period, and about the same as that for cotton (51 percent), the two items for which it was principally used. Imported cloth did increase in price faster than food grain and cash crops.

However, without a substantial increase in the volume of cloth imported, it is unlikely that the peasant-producer was buying foreign cloth in the periodic market. On the other hand, the price of the principal raw material for home-woven cloth, i.e. foreign yarn, was not increasing as much as other commodities. The prices of rice, silk, cotton, all increased substantially more than yarn.

<sup>108</sup> Albert Feuerwerker (1969) pp. 22-23. See also Masaaki Oyama (1960).

<sup>109</sup> See Li Shih-yüeh (1958). Li Wen-chih (1957) pp. 557-563 also hints at this, but does not state it specifically.



Unlike rice, the increase in the price for silk and cotton did not have to be taken out of the standard of living of local consumers, as the items were exported. There was, nonetheless, some effect on the urban economy in the case of silk. There are reports when the price of cocoon and silk was high that the silk weaving industries (largely urban) suffered.<sup>110</sup> Basically, after 1870 local industries had to compete with foreign industries for silk, but this competition was once again beneficial to the peasant producer. Unlike rice, the production of cotton and silk was capable of great extension, and evidence has already been given to show that this did take place in Kiangsu. Figures for the export of native produce of local origin in Shanghai, already presented, show that export of cotton rose from some 3 million taels in 1883 to almost 16 million taels by 1904. This represents a substantial increase in silver income for the Chiang-nan area, despite the earlier reducing price.

This discussion has as yet not taken into account the changes in rent, tax, and wages, which were also essential items of income and expenditure. To see what happened with these factors, it is now absolutely essential to discuss the principal causes of the price changes.

### The silver and copper deflation

To disentangle the factors that governed prices in China, it is necessary to take into account the national market as well as the international market. On the highest level, rice was largely a national trade, while export commodities were affected by international supply and demand. The two markets behaved differently, hence, in terms of year to year variations, based on supply

and demand factors, there need be little correspondence in the price fluctuations of these items. The one element that was common to both the rice market and the export and import market was the value of silver, which was the currency used in Ch'ing China for large volume trade. The silver deflation in the latter half of the 19th century is thus a very important common factor affecting changes in the standard of living.

The deflation of silver in the latter half of the 19th century was an international phenomenon. In the second half of the 19th century, the international price of silver (in terms of gold) declined. China traded with other countries in silver, while European countries pegged their prices to gold. As the price of silver declined, therefore, the situation was a *de facto* devaluation of China's currency on the international market, with the usual consequences that devaluation brought. Import prices increased as export prices declined. The decline in export prices undoubtedly helped to secure for China a larger market, while higher import prices deterred larger imports. Yarn, however, came to be mass-produced in India and Japan, and the price of yarn was kept low despite this devaluation. Along this argument, it is possible to understand the change from foreign-imported opium to home-grown opium, while, however, much import persisted in items that China could not produce, including many items of machinery and such material as kerosene.<sup>111</sup>

In the short-run, in places which depended on foreign imports, the rise in the price of imports did have some effect. But this effect would exclude most rural areas, as the price of yarn was not among the items that became more costly. For most

<sup>110</sup> See for instance *SP(KS)* 3.8.13, referred to in footnote 69.

<sup>111</sup> For a general introduction to the silver problem, see Yang Tuan-liu (1962), Wei-ying Lin (1935), and China, Ministry of Industries, Committee for the Study of Silver Values and Commodities Prices (1935).

of Kiangsu, the effect of price changes depended on the exchange rate between copper and silver, rather than gold and silver, as was the case in international trade.

Ch'ing China had two currencies which were used concurrently, copper and silver. Copper was used in the form of coins (referred to as cash), and silver in the form of Western-minted silver dollars and locally regulated ingots, referred to as *sycee*. Legally, all copper coins were minted by the government. There was, however, a large amount of counterfeit coin, and this tended periodically to debase the coinage. The Ch'ing government did not have a monetary policy. There was no control on either bank credit or the quantity of coins put into circulation. Government-minted coins were used to pay the salaries of government officials and for local purchases, and thus entered the market. Silver was evaluated by local banks, with no government control and no regulation governing the volume circulated. At all times, therefore, the exchange rate between copper and silver was "floated", to use the terminology of present-day international monetary exchange. Their prices fluctuated according to the relative worth of the metals, and the volume of coins on the market. As China's supply of both silver and copper in the late 19th century was imported from abroad, the exchange of copper and silver was strongly influenced by the value of these two metals on the international market. The value of copper (metal) in terms of silver dollars, as well as the number of copper coins exchanged for a silver dollar, is given in Table 22. The decline in silver relative to copper was abrupt. It can be noted that notwithstanding annual fluctuations, the copper-silver exchange ratio was at different levels in the following periods: 1870-75, 1875-86, 1887-95, 1896-1911. The decline in silver relative to copper was abrupt in 1875, as it was in 1887 and 1896. There was a general decline of the silver dollar relative to copper cash until 1905,

after which it rose moderately. To find out how prices were changing, it is necessary to work out the implications of these changes.

TABLE 22. PRICE OF COPPER AND COPPER CASH PER DOLLAR

	Price of copper in Hk. TL/picul	Cash/dollar
1870	15.26	1,194
1871	15.05	1,239
1872	14.97	1,238
1873	18.00	1,252
1874	16.21	1,220
1875	16.61	1,168
1876	16.66	1,192
1877	16.65	1,172
1878	17.00	1,102
1879	14.97	1,131
1880	15.24	1,152
1881	14.27	1,146
1882	15.00	1,148
1883	15.00	1,149
1884	15.03	1,157
1885	13.47	1,144
1886	12.12	1,145
1887	9.61	1,079
1888	14.00	1,081
1889	14.00	1,086
1890	14.00	1,093
1891	16.13	1,094
1892	16.00	1,092
1893	21.99	1,097
1894	20.01	1,091
1895	23.11	1,089
1896	18.82	956
1897	24.65	908
1898	22.25	932
1899	31.00	944
1900	32.30	933
1901	30.02	920
1902	36.05	932
1903	27.97	855
1904	28.15	865
1905	29.35	889
1906	31.00	967
1907	35.00	976
1908	30.00	908
1909	29.02	925
1910	29.66	—
1911	28.77	—

Source: Yang Tuan-liu (1962), pp. 224-5; Yin hsien t'ung-chih (1935), pp. 224b-229b.

The medium of exchange for small purchases was copper, and the medium for large quantities and long distance trade was silver. Taxation was quoted in kind and in silver, but collected in copper. The price of rice in Shanghai was quoted in silver dollars, and rice was sold by the peasant producers in the cities in silver dollars, but rent was nonetheless commuted to copper. In smaller market towns, most likely, the prices were quoted in copper. In the cities, wages were quoted in taels and dollars, but in the countryside a mixture of both was used. Thus, it is a very confusing situation. To find out how price changes made a difference, it is necessary to find out in which medium the price was originally quoted.<sup>112</sup>

All things equal, a decline in the price of silver relative to copper would bring about an increase in the silver price of a commodity where the price of the commodity in copper had remained constant. The relative price of silver to copper in itself would have little effect on articles produced and consumed in the copper sector. Few items belonged solely to the silver sector, and hence this need not be considered.<sup>113</sup>

Let us examine the prices of two commodities which cross the different currency barriers. The most revealing items would be rice and silk. The data used are a combination of the price of rice and silk as given in Table 20 and the copper-silver exchange as given in Table 22.

The price of rice followed closely the copper-silver exchange rate, and the price level of rice can also be considered in terms of the different periods which have just been noted for copper-silver exchange. However, as the supply of rice varied annually according to the state of the harvest, rice fluctuated much more than the exchange rate of copper and silver. Except in those years when the change was sharp, the fluctuation due to changes in the exchange rate is much less obvious than in the case of silver-copper exchange. In 1896, nonetheless, rice rose rapidly to above 4.50 dollars, and did not return to the lower level. In 1907, it rose above 7 dollars, and stayed at that level for most of the next decade, except in 1909. All this can be made clearer if we tabulate the prices in these different periods in silver and in their cash equivalent:

	<i>cash/ dollar</i>	<i>rice in dollar</i>	<i>rice in cash</i>
1870-1874 . . .	1,228.6	3.36	4,125
1875-1886 . . .	1,150.6	3.09	3,562
1887-1895 . . .	1,089.1	3.23	3,518
1896-1905 . . .	913.4	5.24	4,782
1906-1909 . . .	944.0	6.52	6,150

per *shih*

In terms of its copper value the price of rice declined after the first four years, and then remained remarkably steady for the next twenty. In the same period, the cash

<sup>112</sup> The following report from *SP(KS)* 9.10.21 is very clear on rent collection: "This year, the rain came at a good time, and there was a good harvest of rice. The rent collection bursaries, as usual, demanded that rent be paid commuted to cash. They posted notices in the streets they were located, and most of them set the time limits on the 9th and the 12th (of the month). However, it rained during those few days, and some people who could not harvest their crop in time had had to borrow to pay their rent. The highest price of coarse rice, however, was no more than 2.10 dollar (per *shih*). The landlords demanded 1,900 cash to 2,500 cash for a *shih*. Moreover, in these few days, the price of the dollar in the Capital was dropping: a dollar was worth only 1,075 cash. Thus, as the rural people sold their rice in dollars, and the rent bursaries collected at above market rate, they suffered a loss..." See also *SP(KS)* 2.12.09, 4.11.16; 5.10.26; 7.9.13; 7.12.01; 8.10.08; 9.12.28.

<sup>113</sup> Imported cloth sold in the city could be one such item, but I am working on the assumption that the effect of this on rural inhabitants was small.

value of silver declined by 5 percent, and this was reflected in the silver price of rice (by an increase of exactly 5 percent). After 1896, the cash price of silver declined by 16 percent, but the price of rice in silver increased by 62 percent, and this was equivalent to a 35 percent increase in the price of rice in cash. After 1905, the cash price of silver increased by 3 percent, but the cash price of rice continued to increase (29 percent). This is highly significant. This is conclusive that as the price of silver declined relative to copper in 1870 to 1895, the price of copper relative to home-produced and home-consumed items did not

decline. However, after 1895, the price of copper relative to commodities did decline considerably, and with this, the decline in the price of silver relative to copper seemed to have stopped.

It is possible to find the same phenomenon in silk, which, although produced for export, was from rural areas, which basically transacted their business in copper. Unlike rice, however, silk was tied to international competition and was mediated also through gold prices, and hence did not follow the change in copper-silver prices as quickly as did rice. The figures are as follows:<sup>114</sup>

	<i>silver price</i> <i>(Hk. Tl.</i> <i>per picul)</i> <i>(A)</i>	<i>cash/dollar</i> <i>(B)</i>	<i>cash price</i> <i>(index)</i> <i>(C)</i>	<i>gold/silver</i> <i>(index)</i> <i>(D)</i>	<i>gold price</i> <i>(index)</i> <i>(E)</i>
1871-75 . . . . .	415.6	1,223	128	102.7	134
1876-80 . . . . .	346.6	1,150	100	114.7	100
1881-85 . . . . .	304.4	1,149	88	119.7	84
1886-90 . . . . .	316.2	1,097	87	133.6	78
1891-95 . . . . .	307.2	1,093	84	173.0	59
1896-1900 . . . . .	391.8	935	92	216.4	60
1901-05 . . . . .	496.0	892	111	235.9	70
1906-10 . . . . .	494.2	944	117	230.6	71

The price of silk in cash remained more stable than its price in gold. After an initial high price in the 1870's, it declined quickly and remained stable until the 1890's. Again, like rice, the cash price remained stable as the cash equivalence of silver declined. Like rice, also, its cash price increased in the 1900's, although this can partly be explained by the higher international price. Even then, however, the increase of the 1901-5 period over the previous five years is 21 percent for the cash price, and 17 percent for the gold price, while in the last five year period, the cash price increased by 5 percent as the gold price increased

by 1 percent. The loss due to the cash price increase was in the silver sector.

It is quite remarkable that copper prices could have remained so stable before 1895, and could have risen so quickly afterwards. The usual impression that is given of the rice and silk trades is that prices were decided by the major dealers and in the cities, and that very little bargaining was available. The impression is usually given also that the people who sold directly to these dealers were the independent peasant-producers who understandably had little leeway to bargain with. The actual situation was quite different from this. The

<sup>114</sup> (A) is taken from Table 20, (B) from Table 22; (C) = (A) × (B) and expressed in index numbers; (D) is taken from *Nankai Weekly Statistical Service*, Vol. V, April 11, 1932, p. 70; and (E) = (A) ÷ (D) and expressed in index numbers. In both (C) and (E), 1876-80 is taken as the base.

major dealers listed a daily price for such items as silk and rice, but the produce was not sold directly to them by the peasant-producers. Brokers and smaller dealers collected cocoon and silk from villages and market towns, and much of the rice sold, collected in the first place as rent, was also passed along through the hands of these smaller agents. There was probably much more competition among local agencies than is usually allowed for.

Throughout the 1870 to 1911 period, there was a silver deflation. Copper prices relative to commodities remained stable until 1895, but from 1896 to 1911, copper prices also declined relative to commodities. Hence, silver prices relative to copper flattened out some time in the 1900's. The silver deflation affected from the start all

items originally pegged to copper but sold in silver. It was the copper deflation, however, which had the widespread effect of creating the runaway inflation which can be seen in every price listing for the 1900's. The question remains as to how the copper deflation could have come about. To answer this, we shall have to examine the other area of economic transaction across the silver-copper barrier, namely in rent and taxation. The relevant figures are in Table 23.

As taxation was quoted in silver, all other things equal, the inflation of prices in silver represented a net loss of government income in copper. Two courses of action were open to the Ch'ing government to combat this situation:

TABLE 23. RENT AND TAX CONVERSION

	<i>Rent*</i>	<i>Grain tax†</i>	<i>Land tax</i>		<i>Rent*</i>	<i>Grain tax†</i>	<i>Land tax</i>
1870	2,216	3,752	2,200	1891	—	3,452	2,200
1871	2,298	3,752	2,400	1892	—	3,552	2,200
1872	2,194	3,652	2,400	1893	2,202	3,552	2,200
1873	2,397	3,852	2,400	1894	—	3,952	2,200
1874	2,229	3,452	2,400	1895	—	3,952	2,200
1875	2,196	3,552	2,400	1896	—	3,752	2,000
1876	2,197	3,652	2,400	1897	—	3,952	2,000
1877	2,600	4,052	2,200	1898	—	4,252	2,000
1878	2,407	3,552	2,200	1899	2,900	4,252	2,000
1879	2,200	3,452	2,200	1900	2,523	3,852	2,000
1880	—	3,152	2,200	1901	3,051	4,352	2,000
1881	—	3,252	2,200	1902	3,302	4,952	2,200
1882	—	3,452	2,200	1903	3,424	4,952	2,200
1883	—	3,352	2,200	1904	3,075	4,652	2,200
1884	—	3,252	2,200	1905	2,869	4,452	2,200
1885	—	3,452	2,200	1906	3,792	5,552	2,400
1886	—	3,652	2,200	1907	4,351	6,252	2,400
1887	—	3,352	2,200	1908	6,015	6,752	2,400
1888	—	3,352	2,200	1909	5,922	7,552	2,400
1889	—	3,352	2,200	1910	5,562	7,552	2,400
1890	—	3,452	2,200		cash/shih	cash/shih	cash/tael

\* These are conversions of nominal rates to copper cash.

† This includes a fixed surcharge of 1,052 cash.

Sources: Ihara Hirosuke (1967), Muramatsu Yūji (1970), *Shang-hai hsien hsü-chih* (1918) 6/20b-21a, *Ch'uan-shu hsien chih* (1936) 8/23a-b.

It could increase tax, by introducing new taxes, or by altering the commutation rates for silver or rice. Or, as an alternative, it could devalue the copper coinage. Before 1896, the Ch'ing government had relied on the former. After 1896, it tried both policies.

The increase in tax has been studied by Wang Yeh-chien, and there is little need to say very much more on the subject. I only want to raise several issues which bear directly on the standard of living.<sup>115</sup>

From the 1860's, the Kiangsu Provincial Governor had pegged taxation to current prices. Under this system, the land-tax was collected according to the copper-silver ratio, and the grain tax adjusted by the price of rice in cash. In addition to this adjusted portion, the grain tax was charged a fixed sum of 1,000 cash per *shih* and an additional 52 cash for service. In actual fact, what was demanded for the land-tax was considerably higher than the market price of cash per silver tael, and the commutable portion of the grain tax was substantially lower than the price of rice for Shanghai, but might be quite close to the lower-level wholesale price received by farmers and landlords. If this was successful, tax collection was covered against both the devaluation of silver relative to copper, and changes in commodity prices in copper. In the case of Kiangsu before 1895, as

the copper price of rice was relatively constant, there would have been little change in the grain tax receipt, and as the copper price of silver declined, a small decrease in the land tax. After 1895, with changes in the price of rice, the grain tax conversion was revised upwards, although the land tax conversion was left at the earlier level, with a small revision after 1906. The following figures, summarizing the data in Table 23, will make this description clear:<sup>116</sup>

	Conversion		Total collected (index)	
	grain	land	in copper	in silver
1871-75	3,652	2,400	105	99
1876-80	3,572	2,240	100	100
1881-85	3,352	2,200	96	96
1886-90	3,432	2,200	97	102
1892-95	3,692	2,200	101	106
1896-1900	4,012	2,000	100	123
1901-05	4,672	2,160	113	146
1906-10	6,732	2,400	145	177

cash/*shih* tael 1876-80 = 100

There were probably many reasons for the price increases (in copper) after 1895. The few years from 1895 to 1900 were extremely turbulent years, with a war with Japan, and then invasion by numerous countries into Peking. There were rife rumours of foreign intervention in Kiangsu, and in times of crisis in the past, grain prices had

<sup>115</sup> Wang Yeh-chien (1973: 1 and 2).

<sup>116</sup> Conversion figures are five year averages from Table 23. The columns under "Total collected (index)" represent the total land tax, from both grain and silver, collected in Kiangsu. To calculate this amount, it is necessary to take into account the quotas for the two items, given by Wang Yeh-chien (1973-2) Table 10 as 1,674,000 *shih* and 3,038,000 tael respectively. In other words, for every *shih* of rice collected, just over 1.8 taels of silver was also collected. To calculate the total collected in copper, then, the value for conversion for silver is weighted by 1.8 and then summed with the value for grain. This is then expressed in index numbers, with 1876-1880 as the base. To calculate what this was in silver, these values are then converted according to the average cash-per-dollar ratio given on page 430. It should also be noted that the grain tax figure for 1906-10 is taken from *Ch'uan-sha hsien chih* (1936), which does not include a surcharge of 1,000 cash for 1910. Neither *Shang-hai hsien hsü-chih* (1918), nor *Nan-hui hsien hsü-chih* (1929), however, gives any indication that there was this deduction. Nevertheless, averaged into five years, the difference is small. If the alternative estimate is accepted, it would only make the average conversion for grain 6,932 cash per *shih*, and the indices for total amount collected 148 (copper), and 180 (silver).

always increased. The prices which increased in 1895, however, did not come down after 1900. At the time, there were two current arguments concerning prices. It was argued that demand had increased considerably since 1870, while supply had remained stable. It was also argued that there was a scarcity of copper coins, due to the increasing price of copper and the suspension of minting new coins for several years. It was pointed out later in a survey by the Royal Asiatic Society (North China Branch) that the one would have led to increasing copper prices of commodities, while the other would have demanded that copper prices decline, although it is true that both arguments could explain why the silver prices of commodities was increasing.<sup>117</sup>

If one follows through the reports of the *North China Herald* in 1895 to 1897, however, the change was dramatic:

December 20, 1885. Nanking: "For some weeks past the supply of silver in Nanking has been largely increased by the introduction of the Viceroy's new coins from Hankow, the dollar is a very neat piece and deserves to replace the rude Mexican.

One result of the new coinage has been to put the ten-cent and twenty-cent pieces of Japan, Hongkong, and the Straits at a discount, and the price of a dollar in cash has fallen to 950, the lowest in eight or ten years." (NCH 1895-2: 1016)

January 17, 1896. Nanking: "The superabundance of silver in the city causes the dollar steadily to depreciate in value. It changes now for only 870 cash and will fall still lower in all probability, though the officials are endeavouring by proclamation to compel merchants to exchange at 1,000." (NCH 1896-1: 84)

January 24, 1896. Nanking: "I mentioned in my last letter the effort of the Government to bolster up the price of silver dollars by a proclamation, requiring exchange to be fixed at 1,000 cash. The immediate result was that on the day following its issue all the large cash shops closed their

doors and a compromise was effected at 940. Still many of the changers have refused to comply. If one enquires of them the rate they will reply 940, but if you present a dollar to be exchanged at this rate they will decline, saying they have no cash. As a consequence the dollar has fallen again to 910." (NCH 1896-1: 123)

February 12, 1896. Ch'ing-chiang-p'u: "The merchants here complain of dull business, and of the rapid fluctuation in the value of the Mexican dollar. Within the last month, the dollar went down rapidly from 950 cash to 860, then rose again to 920, and now has gone down again below 900 cash. A good many shops for several days would not take the dollar at all..." (NCH 1896-1: 246)

February 28, 1896. Chiang-yin: "The variations of the cash market have been so continuous and often so rapid that the natives have become much perplexed, the lowest figure being 850 cash per dollar. Up to the 1st of November last almost all prices in the stores were given in dollars and cents, now prices are given wholly in cash. Apropos of dollars the new Hupeh coinage has made its advent, but not enough to bring it into general circulation. The natives seem to be quite proud of it, and well they might be when compared to the ugly Mexican." (NCH 1896-1: 318)

January 15, 1897. Summary of news: "Some twelve million copper cash from the Canton mints have lately arrived at Nanking as a portion of the cargoes of copper and spelter sent several months ago to the South by the former acting Viceroy Chang Chih-tung for that purpose. The influx of the new coins has slightly eased the copper cash exchange in Nanking which will be further relieved by the shipment of the balance of 50 million copper cash still to arrive from Canton. The cash market for the closing month of the Chinese year is therefore brighter in Nanking. But for the arrival of the new cash it was apprehended by the authorities that riots against the banks would have occurred at the end of the Chinese year." (NCH 1897-1: 44)

January 29, 1897. "Despatches received from Soochow state that as a remedy for

<sup>117</sup> For a brief summary and interpretation, see F. E. Taylor (1899).

the present scarcity of copper cash in that city, which threatens the failure of an unprecedented number of banks and hongcs doing a large business in imports and exports, the Provincial Treasurer, H. E. Nieh, our former Taotai, has issued to several of the largest and most reliable banks and hongcs copper cash notes with values ranging from 100 cash to 5,000 cash aggregating the value of 200,000 'strings' of 1,000 cash to the string. The Provincial Treasury will guarantee the cashing of the notes at full face value, if the issuing banks and hongcs fail to redeem them. It is expected that the new cash notes will relieve somewhat the present tension on the market which was on the point of panic when stopped by the new measure. The silver dollars and decimal coinage and copper cash struck at Canton for Soochow last November were insufficient to materially influence the money market." (*NCH* 1897-1: 149)

December 3, 1897. "Measures are still being taken to relieve the financial stringency caused by the scarcity of silver. An agreement has been made to accept daily 'chopped' native bank orders for the present as cash, and the native banks have agreed to suspend temporarily altogether the export of silver...." (*NCH* 1897-2: 985)

One wants to be careful in placing the issuing of new coinage as the sole reason of inflation. There were probably other factors, particularly the war. But the sheer volume of coinage after 1895 was staggering. It may be noted that the coins issued were small units in silver, designed to be introduced into the retail market, i.e. the traditional copper sector. One report has it that in 1897 alone, the number of coins issued by the mints at Tientsin, Wuchang, Foochow, and Canton, would have amounted to the current worth of 8,000,000 dollars, or 7,609,000,000 copper cash.<sup>118</sup> There is no room here to enter into the politics of the issue, but it may be noted that the coins were minted outside Kiangsu, at con-

siderable profit, to be introduced into the province at a superimposed value, which would amount to an attempt by other provinces to tax Kiangsu. The initial effect in Kiangsu was that the coins were not accepted on the market. However, as the status of copper was uncertain, prices remained high. Upon this, Chang Chih-tung imported copper coins into Kiangsu, which had a lower intrinsic value in copper than their equivalent in the former coinage, thus amounting to depreciating the copper coinage. If the merchants of Kiangsu had accepted the government order earlier to maintain a high exchange rate for the new silver coins, this would have had the same effect.<sup>119</sup>

The principal governments which pursued such measures were of course in financial stringency. There had been increasingly expenditure over the previous 25 years, in attempts to re-organize the army, as well as in other modernization attempts. After 1895, such expenditure continued to increase at a much faster rate, now with further army reforms, foreign indemnities, and many more programs of modernization. There were also great disputes among provincial authorities and the government in Peking as to how central administration expenses were to be borne. The central government, moreover, had set its mind on increasing the budget, and had given up restricting provincial governments on the means by which the tax was to be raised. Despite the inflating effects, the central government and provincial governments continued to accept the argument concerning copper shortage, forgetting conveniently the new silver coinage that had brought this about. Henceforth, there was constant increase in taxation, and further increase of the coinage.

<sup>118</sup> This included: 214,796 50-cent pieces, 31,852,571 20-cent pieces, 17,892,931 10-cent pieces, and 66,921 5-cent pieces. See also F. E. Taylor (1899) p. 78.

<sup>119</sup> See Yang Tuan-liu (1962) pp. 288-294, 342-361. F. E. Taylor (1899); Eduard Kann (1927) pp. 532-550.



Kiangsu Province also produced its own copper coinage from 1901. This was begun by the Governor, whose influence was largely in Chiang-nan. In 1904, another factory began at Ch'ing-chiang-p'u, established by the Governor of Grain Tribute (*ts'ao-tu*), whose influence was in Chiang-pei. I have not been able to find out how much was coined in Kiangsu, but one source has it that between 1904 and 1908 there were 15,000,000,000 copper coins minted. This was for the whole of China, but Kiangsu was affected at least as much as other coastal provinces.<sup>120</sup>

It is difficult to do justice to the abundant material that documents the effects of the inflation. However, in a period of inflation, due not to shortage, but to the devaluation of coinage, it was not people who had goods to sell who suffered from

rising prices as such. It must be remembered that the peasant producer was well cushioned against changes in the price of grain, as basically, he produced what he consumed. The reports that are available concern the impoverishment of people in the cities and the market towns, where wages had not been rising. The uncertainty of prices also had the effect of prohibiting trade towards the city, and hence, the many stories in the newspapers about hoarding, of millers who were in financial troubles because grain had become difficult to procure, of silk weavers finding themselves out of work, and of rice shortages in years where no serious famine was reported. There were attempts to import rice from abroad, but although this supply could temporarily reduce prices in Shanghai, its effect was short-lived and not extensive.<sup>121</sup>

<sup>120</sup> The Government in 1910 estimated that the new copper coinage was at a silver value of 100 million taels. Eduard Kann (1927) p. 422.

<sup>121</sup> For some illuminating passages:

July 9, 1897. Summary of news: "It is reported from Soochow that the gentry recently petitioned the three district magistrates of the city asking them to open the doors of the government reserve granaries (these are required by law to hold enough grain to last the people of Soochow city three years), and to allow the people of that city and suburbs to buy rice at cost price, for already the market price has risen 100 per cent." (*NCH* 1897-2: 56).

July 11, 1898. Nanking: "Rice is now \$7.00 a picul and it is supposed that the rice merchants have plenty of rice but are working the market. Friday morning the people began to attack the rice stores and help themselves to the rice. This was continued on Saturday and the Viceroy issued a proclamation fixing the price of rice at \$4.50 per picul. Today (Sunday) the rice stores are closed and refuse to sell rice. A supply of 20,000 piculs is expected to arrive soon. The officials are active in their endeavours to preserve order and keep close watch over the residences of foreigners." (*NCH* 1898-2: 65).

July 18, 1900. Nanking: "Ready money was getting very scarce. The foreigners have had great difficulty in getting any dollars for private use. But the Viceroy has satisfied this need by bringing in several tons of thousands of taels of silver." (*NCH* 1900-2: 120).

June 18, 1902. "Never in the history of Shanghai has this port ever been burdened by such famine prices as are now demanded for the staple food of the native—rice. The long drought, the cheapness of the Mexican dollar, and the higher rates demanded for labour, have all combined to more than double the expenses of even the economical and very frugal native. Rice that used to be sold a couple of months ago here at \$4.20 or so per picul, cannot be obtained today under \$9.20. The excuse given by rice dealers for this is that not sufficient quantities of the staple have been imported from the inland towns, west and south-west of this." (*NCH* 1902-1: 1210).

June 18, 1902. Kiangyin: "The price of rice is still rising. One would expect wages to advance in proportion, but such is not the case in this land of contradictions. Instead of advancing wages have steadily gone down, and in many cases applicants for work are only asking for their food. The wheat, barley, and rye crops are little more than half the average." (*NCH* 1902-1: 1198).

April 16, 1908. "This end of the province, writes our Hauchoufu correspondent on March 22, is still groaning over the depreciated currency. The settled customs and rules for wages that have probably existed for hundreds of years are hopelessly overturned..." (*NCH* 1908-2: 173).

If we now examine the increase in rent and tax with reference to the copper-silver depreciation, the change should be relatively clear. As already discussed under tenancy conditions, rural taxes were increased in the late Ch'ing dynasty not by altering the quota, but by adjusting the commutation of silver and grain to copper. This could be done with relative ease in the case of grain, because the terms of reference had been to adjust the grain tribute according to the grain market price, while there was no such arrangement for silver commutation.

The government adjustment of the grain tax was in turn a standard which could be appealed to by landlords who received their rent commuted to copper. Thus, the data provided by Muramatsu show that there was a similar increase in the price of rice as in grain tax commutation.

If we break down the rent and tax commutation to the intervals we have been using for copper-silver exchange and the price of rice, the changes are much more obvious:

	Rent	Grain	Tax Silver	Price of rice		Copper/ silver
				In cash	In silver	
1870-74 . . . . .	100	100	100	100	100	100
1875-86 . . . . .	102	94	95	86	92	94
1887-95 . . . . .	—	96	93	85	96	89
1896-1905 . . . . .	133	118	88	116	156	74
1906-11 . . . . .	226	182	102	149	194	77

The price of rice was increasing after 1896. It was increasing in silver faster than it was in copper. The increase in rent and tax up to 1905 was moderate, below the increase in silver price of rice, but above the copper price. The increase in rent after 1906 was tremendous, far above the increase in both other categories. In other words, after 1895, while the currencies depreciated, prices increased, and hence government had to increase tax to make up for the loss through depreciation. Now, cultivators who sold their rice to pay rent suffered considerably after 1906. This loss must have been substantial for those who sold their rice in silver and then paid their rent in cash.

Geographically, how would the increase in rent and tax be distributed in Kiangsu Province? To begin with, the increase in rent, was, at least for the time being, con-

finned to the commuted rent area. In other words, this would be confined to the vicinity of Soochow City. The increase in tax came primarily from the commutation for the grain tax, and hence would be confined only to those areas that had a grain tax quota. According to Wang Yeh-chien, this would include just about 1,300,000 *mou* in Chiang-nan outside Chiang-ning, and 340,000 *mou* in Chiang-ning and Chiang-pei. However, this would only amount to a small proportion of the total registered land of the province, of which the Chiang-ning and Chiang-pei region would account for 48,000,000 *mou*, and the rest of the country province 30,000,000 *mou*.<sup>122</sup> From these figures, it would seem that while there was a genuine loss to the farmer who had to pay the grain tax in the inflation, the extent of this effect was nonetheless somewhat limited. It was more concentrated in Chiang-nan

<sup>122</sup> Wang Yeh-chien (1973-2) Table 10.

than in Chiang-pei, and even in Chiang-nan, it was limited to only 4 percent of the area.

There were other taxes created: In Kiangsu, this included a fuel tax (firewood and charcoal) in 1894, a housetax (actually, tax on commercial concerns) in 1901, a fee was charged on public documents from 1902, a rice tax was imposed in 1904, a commercial brokerage tax from 1905, and a meat and wine tax in 1908. These were taxes imposed directly on the city population. In the countryside, with the land tax, 200 cash per tael was collected to pay towards the foreign indemnity, and under various names, donations were enforced on grain tribute amounting from 100 to 200 cash per *shih*. In terms of the amount that was collected anyway for grain and silver, this was clearly negligible.<sup>123</sup> The chief factor that contributed to a sense of economic crisis in the Kiangsu countryside remained the inflation.

It should be a surprise indeed that the chief factor that affected the Kiangsu rural standard of living was not production, or tenancy, but inflation, due to a sudden increase in money supply. However, this is the conclusion that has been reached from the preceding pages. If this analysis is correct, the picture of the Kiangsu farm family should be one that might have given priority to producing the family's basic food requirement, but was nonetheless closely tied to the market. In this way, changes in the market were at least as important to the rural economy as changes in production or tenancy.

## The rural standard of living in Kiangsu's economic development

It would probably be useful to sum up very briefly the conclusions reached in the preceding pages. In sum:

1. Yield figures from the 19th to the early 20th century do not show that there was much change in yield.
2. There might have been limited decline in the standard of living due to increase in population, but this could have been offset by the considerable increase in cash crops and handicraft industries between 1870 and 1911.
3. There could have been little change in tenancy arrangements, and little change in rent and tax until the early 1900's. The changes that came about were due mainly to inflation, created very largely through the introduction of a new copper coinage.
4. There is little evidence that foreign imports displaced rural handicrafts. The major change that took place in rural handicrafts was a decline in hand-spinning but an increase in hand-weaving, using imported yarn.
5. Relative price changes were not to the disadvantage of farmers.
6. The only development that could have depressed farmers' standard of living was the increase in rent and grain tax through adjustments in the commutation rate. This was confined mainly to Chiang-nan, but even then, only to a small proportion of the cultivated area of this part of the province.

<sup>123</sup> In the case of Ch'uan-sha in 1909, for instance, the additional charge from land tax was 20 cash for each tael, i.e. hardly 1 percent, and 140 cash for each *shih*, or 1.9 percent. It is interesting that the additional charges actually collected quoted in the *Ch'uan-sha hsien chih* and reproduced in Wang Yeh-chien (1973-1) pp. 118-9 were 10 times the amount that would have been collected had these charges come from the two land taxes. In the absence of a report on city taxes in this very detailed record, most likely, the discrepancy can be accounted for by collection from the city. For the period under consideration, the material provided in Chung-yang ta-hsüeh ching-chi tzu-liao-shih (1935) gives the same impression. For a useful listing of these charges applying mainly to market towns and cities, see *Kan-ch'uan hsien hsü chih* (1921) ch. 4 *hsia* pp. 1a-9a.

7. There was, however, an increase in agricultural prices, which should lead to substantial increase in farm income. In other words, the picture that is painted is one of stability in food production, considerable expansion of cash crops due to foreign exports in particular areas, and a somewhat sudden price disturbance towards the end of the period. These findings agree by and large with Ramon Myers' writing on Shantung and Hopei for the same period, and Albert Feuerwerker's in a more general vein.<sup>124</sup> The effect of the inflation, however, has been so far unnoticed in the current literature, and should be an important area for further exploration.<sup>125</sup>

Of course, until further explored, one has to be cautious in drawing conclusions on the effect of inflation on the rural standard of living. However, one of the interesting features of this effect, also suggested in the text above, is that not the entire rural population would be affected by inflation in the same way. To begin with, clearly there would be a major difference between suppliers of goods and consumers. Then, the question would arise where in the community network of rural Kiangsu the suppliers and the consumers would be located, and one would have to draw very marked distinctions between the inhabitants of the villages and the inhabitants of the market towns, i.e. between the farmer and the tradespeople and craftsmen. An increase in the price of rice, not accompanied by a comparable increase in the price of overheads (such as rent) and industrial products consumed by the farmer (such as cloth), would not imply a decline in the standard of living in the farming

village. Whether the inflation had adverse effects on the non-farm population depended on such factors as changes in wages and profit rates. On the last there is practically no information, and on wages, the material I managed to find in contemporary newspapers and examined elsewhere is not satisfactory.<sup>126</sup>

Nevertheless, there are numerous indications that in the period of inflation, it was the town population that would have been directly affected adversely that was the most disturbed. Statistical tests aside, it is well documented that the rioting in Kiangsu after 1900 took place principally in the towns and cities, consisting mainly of attacks on the granaries, the modern schools, the police stations, and the newly established local government offices. There is little information on the composition of the participants, but it is clear that popular feeling was directed against rising prices and newly imposed taxes, and hence the attack on the newly established institutions in the belief that they had been the general underlying cause. It is also clear, however, that these years of frequent riots were not years of bad harvests in Kiangsu, and hence the riots — food riots included — could not have come from food shortages in food-producing areas, i.e. the villages (as distinct from market towns and cities). In fact, the one explanation that would fit into these different events is that food prices had gone up in the towns and cities, and that the non-farm population, in desperation, had turned to rioting. Ironically, these were commonly referred to as "peasant riots" in the literature.<sup>127</sup>

<sup>124</sup> Ramon Myers (1970), Albert Feuerwerker (1969).

<sup>125</sup> The importance of inflation on the rural standard of living is recognized in several studies conducted in the 1930s. See, for instance, China, Ministry of Industry Committee for the Study of Silver Values and Commodity Prices (1935). See also J. L. Buck's comments on this in Paul K. T. Sih (1970) pp. 189-191.

<sup>126</sup> David Faure (1975) pp. 378-379.

<sup>127</sup> A bibliography and discussion can be found in David Faure (1975).

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David Faure

It is another question whether the conditions of Kiangsu Province can be generalized to the rest of China in the same period. After all, Kiangsu was the richest province of China, with the most advanced handicraft industries. Although Kiangsu bore the brunt of Western commercial impact in the 1870 to 1911 period, that Kiangsu could withstand the onslaught with

the exception of the currency issue is no guarantee that other provinces could bear the impact as well. More must await research on other provinces, and then through comparison and contrast a general picture on the entire country can be constructed. The case of Kiangsu, however, does bear out some of the main issues that must be faced in these further studies.

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## Appendix I:

## ESTIMATES FOR YIELD

Estimates for yield in Tables 2 and 3 converted to catties per *mou*. For conversion, I have relied principally on Chuan Han-sheng and Richard A. Kraus (1975) and H. B. Morse (1890) for paddy and rice, and also Wu Shou-pang (1930) for wheat.

TABLE A-1. YIELD OF PADDY PER *mou*

Chiang-ning fu			
Buck (1930)	Chiang-ning		33.82 quintal/
			15.25 hectare
		mean	372 catt/ <i>mou</i>
		s.d.	167
Chang Hsin-i (1934)	Chü-jung		2.89 <i>shih-shih/</i>
			3.00 <i>shih-mou</i>
			3.04
			3.10
			2.46
			3.01
			3.30
			3.51
		mean	277
		s.d.	287
Su-chou fu			
Tung-nan ta-hsüeh (1923)	Wu		3.05 (P) <i>shih/mou</i>
			3.90 (P)
			3.89 (P)
			3.46 (P)
			3.85 (P)
			3.32 (O)
			2.85 (P)
			3.96 (P)
			4.05 (O)
			2.20 (P)
	Ch'ang-chou		1.86 (P)
			2.42 (O)
			2.27 (G)
			2.19 (P)
			3.17 (G)
			1.39 (P)
			2.78 (P)
			2.51 (G)
			2.83 (G)
			2.52 (G)
	2.25 (O)		

	K'un-shan	1.07 (O)*	212
		1.47 (O)*	291
		1.39 (P)*	276
		1.66 (P)*	329
		1.23 (P)*	244
		1.36 (P)	270
	Wu-chiang	4.11 (O)	413
		4.71 (O)	474
		3.35 (O)	337
		3.42 (O)	344
		4.14 (G)	416
		4.12 (O)	414
		2.70 (P)	272
	mean		306
	s.d.		77.5
Buck (1937)	Ch'ang-shu	25.49 quintal/ha.	280 catt/mou
	K'un-shan	48.23	530
	mean		405
	s.d.		125
Fei (1946)		6 bushel/mou*	416
(1945)		40 bushel/acre	463
	mean		440
	s.d.		23.5
<i>Sung-chiang fu</i>			
Tung-nan ta-hsüeh (1923)	Sung-chiang	3.60 (G) shih/mou	362
		3.45 (G)	347
		2.30 (O)	231
		2.53 (O)	255
		2.00 (G)	201
		1.92 (G)	193
	Nan-hui	3.72 (G)	374
	Ch'ing-p'u	1.33 (O)	134
		1.85 (O)	186
		3.00 (G)	302
		1.89 (O)	190
		2.15 (O)	216
	Chin-shan	2.12 (G)	213
		2.20 (O)	221
		4.03 (O)	405
		2.20 (O)	221
		1.80 (G)	181
	mean		249
	s.d.		76.8
Shang-hai shih	Highest	Lowest	Medium
she-hui-chü (1933)	320 catt/mou	170 catt/mou	245 catt/mou
	400	200	300
	600	400	500
	400	250	325
	600	400	500

	650	150	400
	500	150	350
	350	200	280
	550	250	400
	550	360	450
	500	300	400
	400	200	300
Mean	485	253	371
<i>Ch'ang-chou fu</i>			
Tung-nan ta-hsüeh (1923)	Wu-chin	4.95 shih/mou (O)	499 catt/mou
		4.87 (P)	490
		4.85 (O)	488
		4.23 (O)	426
		3.06 (P)	308
		3.90 (P)	392
		3.67 (P)	369
		3.50 (P)	352
		4.48 (O)	451
	Wu-hsi	3.51 (O)	353
		5.30 (O)	533
		5.78 (P)	581
		6.10 (O)	614
		4.14 (P)	416
		5.08 (P)	511
		4.00 (P)	402
		5.07 (O)	510
		4.58 (P)	461
		5.23 (O)	526
		4.22 (P)	426
		5.60 (O)	563
	I-hsing	4.74 (O)	477
		3.80 (O)	382
		3.90 (O)	392
		3.80 (O)	382
		3.90 (O)	392
		4.05 (O)	407
		4.50 (G)	453
		4.40 (O)	443
	Chiang-yin	3.24 (O)	326
		4.00 (P)	402
		2.00 (O)	201
		5.00 (P)	503
		3.76 (P)	378
		4.08 (P)	410
		4.32 (P)	435
		3.00 (O)	302
		5.10 (O)	513
		5.40 (G)	543



	Ching-chiang	1.77 (P)	178
		3.52 (P)	354
		6.21 (P)	625
		4.63 (P)	466
		3.87 (P)	389
		3.61 (P)	363
		3.27 (P)	329
	mean		428
	s.d.		92.8
Buck (1937)	Wu-hsi	20.83 quintal/ha.	229 catt/mou
		18.97	208
	Wu-chin	32.27	354
		28.57	314
		32.87	361
	mean		293
	s.d.		63
Buck (1930)	Wu-chin	35.76 quintal/ha.	393 catt/mou
<i>Chen-chiang fu</i>			
Oxenham(1888)		3-4 picul/mou	300-400 catt/mou
Chang Han-lin (1930)	Tan-yang	2.20 shih/mou	221 catt/mou
		3.00	302
		3.50	352
		3.00	302
		3.00	302
		2.80	281
		3.40	342
		2.50	252
		2.00	201
		2.40	241
		1.50	151
	mean		267
	s.d.		57.8
<i>Huai-an fu</i>			
Buck (1937)	Fou-ning	13.40 quintal/ha.	147 catt/mou
	Yen-ch'eng	22.76	250
		34.73	382
		22.16	243
	mean		255
	s.d.		83
<i>Yang-chou fu</i>			
Buck (1937)	Chiang-tu	33.56 quintal/ha.	369 catt/mou
<i>Hsü-chou Fu</i>			
Wu Shou-pang (1930)		In 1927	0.90 shih/mou
		In 1928	0.70
		mean	90
		s.d.	11

<i>Hai-men chih-li-t'ing</i>		not available		
<i>Chih-li T'ai-ts'ang chou</i>				
Tung-nan ta-hsüeh (1923)	T'ai-ts'ang	1.16 shih/mou (O)	117 catt/mou	
	Chia-ting		2.07 (O)	208
			2.12 (O)	213
			1.70 (O)	171
			1.40 (G)	141
			2.02 (O)	203
	Chung-ming	3.00 (G)	302	
		mean	193	
		s.d.	55	
	<i>Chih-li Hai chou</i>			
<i>Chih-li T'ung chou</i>		not available		
Tung-nan ta hsüeh (1923)	Nan-t'ung	3.97 (P) shih/mou	399	
		1.93 (G)	194	
		3.51 (P)	353	
		0.67 (O)	67	
		2.71 (O)	273	
		1.41 (O)	142	
		3.28 (O)	330	
		1.83 (O)	184	
		2.30 (O)	231	
		1.79 (O)	180	
	Ju-kao	0.89 (P)	99	
		1.90 (P)	191	
		2.50 (O)	252	
		2.73 (O)	275	
		2.57 (O)	259	
		1.43 (P)	144	
		1.53 (P)	154	
		1.38 (P)	139	
		1.96 (P)	197	
		T'ai-hsing	2.42 (O)	243
	3.93 (P)	395		
	mean	223		
	s.d.	90		

Conversion ratios: 1 quintal/hectare = 11 cattles/mou; 1 shih-shih/shih-mou of paddy = 95.8 cattles/mou; 1 picul = 100 cattles; 1 shih/mou of paddy in Hsü-chou fu = 112.3 cattles/mou, 1 shih/mou of paddy except in Hsü-chou = 100.6 cattles/mou. 1 shih of husked rice is equivalent to 2 shih of unhusked rice, or 198 cattles of unhusked rice.

P = Poor harvest; O = Ordinary harvest; G = Good harvest.

\* husked rice.

TABLE A-2. YIELD OF WHEAT PER *mou*

<i>Chiang-ning fu</i>				
Buck (1930)	Chiang-ning	6.84 quintal/	75 catt/ <i>mou</i>	
		8.04 hectare	88	
		mean	81	
		s.d.	6	
Chang Hsin-i (1934)	Chü-jung	0.49 <i>shih-shih/</i>	62 catt/ <i>mou</i>	
		0.50 <i>shih-mou</i>	64	
		0.51	65	
		0.45	57	
		0.64	81	
		0.51	65	
		0.46	58	
		0.60	76	
		0.69	88	
			mean	68
			s.d.	10
<i>Su-chou fu</i>				
Tung-nan ta-hsüeh (1923)	Wu	0.25 <i>shih/mou</i> (O)	33 catt/ <i>mou</i>	
		0.39 (O)	52	
		0.48 (O)	64	
		0.34 (O)	45	
		0.19 (O)	25	
		0.24 (O)	32	
		0.40 (O)	54	
		0.29 (O)	39	
		0.30 (O)	40	
		Ch'ang-shu	0.88 (P)	118
			1.12 (O)	151
			1.09 (O)	147
			1.13 (G)	152
			1.22 (P)	164
	1.01 (G)		136	
	K'un-shan	0.65 (P)	87	
		0.46 (P)	62	
		1.71 (G)	230	
		2.36 (G)	318	
		1.58 (G)	213	
		0.98 (O)	132	
		0.44 (O)	59	
		0.39 (O)	52	
		0.53 (P)	71	
		0.44 (P)	59	
	Wu-chiang	0.41 (P)	55	
		0.68 (P)	91	
0.52 (P)		70		
0.28 (O)		37		
0.41 (O)		55		
	mean	95		
	s.d.	67		
Buck (1937)	Ch'ang-shu	9.89 quintal/	108 catt/ <i>mou</i>	
		11.68 hectare	128	
		mean	118	
		s.d.	9	

<i>Sung-chiang fu</i>			not available
<i>Ch'ang-chou fu</i>			
Tung-nan ta-hsüeh	Wu-chin		1.00 shih/mou (O) 135 catt/mou
			1.36 (P) 183
			0.87 (O) 117
			0.85 (G) 114
			1.33 (O) 179
			1.17 (P) 157
			1.20 (P) 162
			0.91 (P) 122
			1.68 (O) 226
	Wu-hsi		1.05 (O) 141
			1.18 (O) 159
			1.28 (O) 172
			0.98 (O) 132
			1.38 (O) 186
			1.01 (P) 136
			0.60 (P) 81
			1.52 (O) 205
			1.14 (O) 153
			1.30 (O) 175
			1.05 (G) 141
			1.12 (O) 151
	I-hsing		0.94 (O) 126
			0.77 (O) 103
			0.78 (O) 105
			0.84 (O) 113
			0.78 (O) 105
			0.71 (O) 95
			0.63 (G) 85
			0.61 (O) 82
	Chiang-yin		0.81 (O) 109
			0.80 (P) 108
			0.70 (O) 94
			0.90 (O) 121
			0.55 (O) 74
			0.61 (P) 82
			0.76 (P) 102
			1.00 (O) 135
			1.02 (O) 137
			1.29 (O) 174
Ching-chiang Hsien			0.59 (P) 79
			1.17 (O) 157
			1.70 (P) 229
			1.72 (P) 232
			1.03 (P) 139
			1.23 (P) 166
			0.87 (P) 117
		mean	137
		s.d.	40
Buck (1930)	Wu-chin		6.98 quintal/
			hectare 76 catt/mou

Buck (1937)	Wu-hsi	8.28 quintal/	91 catt/mou	
		9.17 hectare	100	
	Wu-chin	10.35	113	
		10.70	117	
		11.27	123	
		mean	108	
	s.d.	11		
<i>Chen-chiang fu</i>				
Oxenham (1888)		1.2 picul/mou	120 catt/mou	
Chang Han-lin (1930)	Tan-yang	0.90 shih/mou	121 catt/mou	
		1.11	149	
		1.20	162	
		0.80	108	
		0.75	101	
		0.70	94	
		0.75	101	
		0.80	108	
		0.60	81	
		0.60	81	
		0.60	81	
			mean	108
			s.d.	25
<i>Huai-an fu</i>				
Buck (1937)	Fou-ning	5.51 quintal/	60 catt/mou	
		6.64 hectare	73	
		18.20	200	
		mean	110	
		s.d.	63	
<i>Yang-chou fu</i>				
Buck (1937)	Chiang-tu	15.21 quintal/	167 catt/mou	
		11.82 hectare	130	
		mean	148	
	T'ai	s.d.	18	
<i>Hsu-chou fu</i>				
Ku Shou-p'eng (1930)		In 1927	0.6 shih/mou	90 catt/mou
		In 1928	0.7	105
		In 1929	0.6	90
		mean	95	
		s.d.	7	
<i>Hai-men Chih-li t'ing</i>				
<i>Chih-li T'ai-ts'ang chou</i>				
not available				
<i>Chih-li Hai chou</i>				
Buck (1937)	Kuan-yün	6.46 quintal/	71 catt/mou	
		hectare		

Chih-li Tung chou			
Tung-nan ta-hsüeh	Nan-t'ung	1.89 (P) shih/mou	187 catt/mou
		0.83 (O)	112
		1.31 (O)	176
		0.89 (G)	120
		0.73 (G)	98
	Ju-kao	1.08 (O)	145
		0.98 (O)	132
		1.00 (O)	135
		0.12 (O)	16
		0.63 (P)	81
		0.60 (O)	81
		1.28 (O)	172
		0.76 (P)	102
		0.84 (P)	113
		0.89 (O)	120
0.76 (O)	102		
T'ai-hsing	0.81 (P)	109	
	1.10 (P)	148	
	0.98 (P)	132	
	1.15 (P)	155	
	1.06 (P)	143	
	1.44 (O)	194	
	1.12 (O)	151	
	1.02 (O)	137	
	1.21 (P)	163	
	1.57 (P)	211	
1.17 (P)	157		
1.32 (P)	178		
	mean	135	
	s.d.	39	

Conversion ratios: 1 quintal/hectare = 11 catties/mou; 1 shih-shih/shih-mou = 128 catties/mou; 1 shih/mou in Hsü-chou fu = 150 catties/mou; 1 shih/mou (except in Hsü-chou fu) =  $\frac{1}{5}$  catties per mou. Weight of 1 shih/mou calculated from Wu Shou-p'eng (1930).

P = Poor harvest; O = Ordinary harvest; G = Good harvest.

TABLE A-3. YIELD OF KAOLIANG PER mou

Huai-an fu	Fou-ning	5.96 quintal/	65 catt/mou
	Huai-yin	3.50 hectare	38
		mean	52
		s.d.	13
Yang-chou fu	T'ai	12.09 quintal/	132 catt/mou
Chih-li Hai chou	Kuan-yün	7.42 quintal/	81 catt/mou
		hectare	

Source: Buck (1937)

Conversion ratio: 1 quintal/hectare = 11 catties/mou.

In compiling Table 3, I have not depended mechanically on the averages. Instead, I have relied on the yield of Su-chou as a benchmark, and have tried to equate yields in other prefectures to Su-chou, taking into consideration the effect of climate and soil conditions. Thus, Sung-chiang, Ch'ang-chou, and Chen-chiang probably had yields

which were similar. Chiang-pei would have lower yields towards the north, but Yang-chou would be similar. Chiang-ning might vary somewhat, but would have yields similar to Su-chou in places. These rough guesses were then checked against the observations to see if they were within a plausible range.

TABLE A-4. COMPARISON OF VARIOUS YIELD ESTIMATES

	J.L. Buck (1937)	Tung-nan ta-hsüeh (1923)	Others	Faure
<b>A. Paddy</b>				
Chiang-ning			269 (s.d. 102) <sup>a</sup> 290 (s.d. 25.7) <sup>b</sup>	370
Su-chou	405 (s.d. 125)	306 (s.d. 77.5)	440 (s.d. 23.5) <sup>c</sup>	320-420
Sung-chiang		249 (s.d. 76.8)	253-485 <sup>d</sup>	300-450
Ch'ang-chou	293 (s.d. 63)	428 (s.d. 92.8)	393 <sup>a</sup>	400-450
Chen-chiang			300-400 <sup>e</sup> 267 (s.d. 57.8) <sup>f</sup>	300-400
Huai-an	255 (s.d. 83)			250
Yang-chou	369			370
Hsü-chou			90 (s.d. 11) <sup>g</sup>	(250)
Hai-men				(300-450)
T'ai-ts'ang		193 (s.d. 55)		(300-450)
Hai chou				(250)
T'ung chou		223 (s.d. 90)		270-300
<b>B. Wheat</b>				
Chiang-ning			81 (s.d. 6) <sup>a</sup> 68 (s.d. 10) <sup>b</sup>	80
Su-chou	118 (s.d. 9)	95 (s.d. 67)		80
Sung-chiang				
Ch'ang-chou	108 (s.d. 11)	137 (s.d. 40)	76 <sup>a</sup>	100-150
Chen-chiang			120 <sup>e</sup> 108 (s.d. 25) <sup>f</sup>	120
Huai-an	110 (s.d. 63)			90
Yang-chou	148 (s.d. 18)			120
Hsü-chou			95 (s.d. 7) <sup>g</sup>	90
Hai-men				
T'ai-ts'ang				
Hai chou	71			80
T'ung chou		135 (s.d. 39)		90
<b>C. Kaoliang</b>				
Huai-an	52 (s.d. 13)			50
Yang-chou	132			132
Hai chou	81			80

(All figures in catties per mou)

a = J. L. Buck (1930); b = Chang Hsin-i (1934); c = Fei Hsiao-tung (1945, 1946); d = Shang-hai shih she-hui-chu (1933); e = E. L. Oxenham (1888); f = Chang Han-lin (1930); g = Wu Shou-p'eng (1933). Figures in brackets in last column are estimated by comparison with prefectures that might have similar geographical conditions, i.e. Hsü-chou and Hai chou figures are taken from Huai-an, and Hai-men and T'ai-ts'ang are from Sung-chiang.

Table A-4 presents a comparison of these estimates in Table 3 with the averages obtained from the survey material presented in Tables A-1 to A-3. It should be obvious that the yield estimates for wheat and kaoliang follow these averages very closely, but there are some major differences in the estimates for paddy. For Su-chow, Sung-chiang, Ch'ang-chou, Chen-chiang, and Huai-an, the estimates are clearly within the ranges provided by observation. The estimate for Yang-chou is somewhat worrying, because it is principally derived from one report. However, Yang-chou was well-known as a food-supplying district, and hence a yield that was mid-range for estimates of Su-chou may not be far-fetched. As an overall average, the Chiang-ning figure provided by J. L. Buck (1930) seems too low. I prefer an estimate closer to Yang-chou. The observation for T'ung-chou likewise seems low. The southern reaches of this area probably approached Su-chou lower yields, although the yield would vary in the more calcareous portions of the district.

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## Appendix II:

## ESTIMATES FOR TENANCY DISTRIBUTIONS

In Tables 6 and 7, an attempt was made to represent in statistical form the tenancy distributions of the various prefectures in Kiangsu. Moreover, with data from J. L. Buck (1937) on the amount of land owned and rented by households of different tenancy status, some simple calculations were made to arrive at an estimate of the proportion of cultivated land that was rented. As with statistics on yield, the figures that were presented were taken from numerous series of observations that were available. The reader should be aware that with a different series, sometimes quite different conclusions may be drawn, depending on one's interpretation of the available statistics. Some comparison with other series of statistics is thus necessary to provide a fair and balanced picture of the different arguments that are possible, and this is the object of this appendix.

Table A-5 gives the raw material that I have been able to find on tenancy distributions from the various surveys on Kiangsu, and Table A-6 is the comparison of tenancy estimates presented in Tables 6 and 7 with averages of these values. One of the most obvious features from Table A-5 is the great variation in distribution in any prefecture, as can be seen by comparing any series of the statistics presented that includes a fair number of reports. A second feature that emerges from both tables is the apparent arbitrariness by which interviewers determined whether a farming household was a part-owner. The Tung-nan ta-hsüeh figures for Su-chou in Table A-5, for instance, give fairly constant reports for the proportion of owners, whereas the figures of, for instance, Wu-chiang, when contrasted with Ch'ang-shu, show that the difference between these two *hsien* was primarily in the proportion of tenants and

part-tenants. One likely explanation of this is that even the household described as tenant probably did not wholly rent the land that was farmed, and hence whether a household counted as a part-tenant in the survey was probably decided as a matter of degree. If this interpretation is correct, the figures that we have include a fairly high subjective element derived from what the interviewer at the time considered to be the limit of any household that was *predominantly* of one type or another.

The variations in the different reports in Tables A-6 have thus to be interpreted in the light of some degree of arbitrariness with which a farming household was assigned a tenancy status. It should also be clear that except for Su-chou, the figures used in Tables 6 and 7 are generally the ones with the highest reports for the proportion of tenant households in the prefecture. In the case of Su-chou, however, as with most of our reports on this prefecture, I believe the Tung-nan ta-hsüeh series, that yields a much higher proportion of tenants, is biased in the direction of the districts in the immediate surroundings of Soochow City. It is general knowledge that tenancy was high in the city surroundings. However, the situation might be quite different for the rest of the prefecture. In fact, farther away from the city, as the effect of the city declined, one would expect conditions to resemble more closely those of Wu-chin, where even Tung-nan ta-hsüeh reports show that there was a higher proportion of owners and part-tenants. In terms of the districts within Su-chou Fu, it would seem that only the three *hsien* in which Soochow City was located (i.e. Wu, Ch'ang-chou, and Yüan-ho) would count as the immediate surroundings of the city, and six *hsien* would fall outside this area. As

for Tung-nan ta-hsüeh's reports, Wu Hsien would be within this area, Ch'ang-shu and K'un-shan both conflict with Buck's reports, and Wu-chiang shows the pattern I would expect of the area away from the City.

Tables A-7, A-8, and A-9 provide other data on the proportion of land rented and the sizes of farms by ownership. In Table A-7, the proportion of land rented is derived entirely from Buck's own data for the particular locality for which information

on size of farm is given. One major discrepancy is between Buck's report on Chiang-ning, in Table A-7, and Chang Hsin-i's on the same prefecture, in Table A-8. In Table 6, a value much closer to Chang's is adopted. J. B. Taylor's figures in Table A-9 on the whole show a higher proportion of land rented than may be concluded from Buck's figures. However, Taylor does not seem to have taken into consideration the land held by part-owners.

TABLE A-5. DISTRIBUTION OF OWNERSHIP AND TENANCY

		<i>Owner</i>	<i>Pt. Owner</i>	<i>Tenant</i>
<i>Chiang-ning fu</i>				
Chang Hsin-i (1929)	Chiang-ning	50.3%	26.5%	23.2%
		67.2	19.2	13.6
		41.5	25.5	33.0
		29.0	26.3	44.7
		33.2	19.4	47.4
		60.0	26.4	13.6
		63.7	13.9	22.4
		33.5	28.1	38.4
		35.0	36.0	29.6
		33.6	43.6	22.8
		22.8	46.1	31.1
		33.1	35.6	31.3
		19.3	43.3	37.4
		16.4	23.5	60.1
		19.8	38.9	41.3
Average quoted by Chang:		35.4	33.5	31.1
J.L. Buck (1930)	Chiang-ning	63.0	29.6	7.4
		30.4	21.2	48.4
J.L. Buck (1937)	Chiang-ning	72.2	16.7	11.1
Chang Hsin-i (1934)	Chu-jung	57.2	27.0	15.8
<i>Su-chou fu</i>				
Nung-ts'un fu-hsing wei-yuan-hui (1934)	Ch'ang-shu	3.5	19.8	76.8
J.L. Buck (1937)	Ch'ang-shu, K'un-shan	2.0	40.6	57.4
Tung-nan ta-hsüeh (1923)	Wu	18.1	47.0	34.9
		—	20.0	80.0
		2.0	2.0	96.0
		40.0	10.0	50.0
		6.0	4.0	90.0
		5.0	50.0	45.0
		20.0	10.0	70.0
		20.0	10.0	70.0
		2.0	8.0	90.0
		—	5.0	95.0

	<i>Owner</i>	<i>Pt. Owner</i>	<i>Tenant</i>
<b>Ch'ang-shu</b>	10.0	10.0	80.0
	20.0	5.0	75.0
	5.0	5.0	90.0
	10.0	5.0	85.0
	10.0	15.0	75.0
	5.0	5.0	90.0
	5.0	5.0	90.0
	10.0	10.0	80.0
	15.0	15.0	70.0
	5.0	5.0	90.0
	20.0	15.0	65.0
<b>K'un-shan</b>	15.0	15.0	70.0
	5.0	5.0	90.0
	10.0	10.0	80.0
	15.0	15.0	70.0
	4.0	4.0	92.0
	—	30.0	70.0
<b>Wu-chiang</b>	10.0	10.0	80.0
	15.0	15.0	70.0
	5.0	65.0	30.0
	10.0	30.0	60.0
	2.0	48.0	50.0
	2.0	48.0	50.0
	10.0	70.0	20.0
	50.0	45.0	5.0
<b>Mean</b>	10.7	18.4	71.0
<i>Sung-chiang fu</i>	<b>No direct information</b>		
<i>Ch'ang-chou fu</i>	<b>Wu-chin</b>	95.0	4.0
<i>Tung-nan ta-hsüeh (1923)</i>		15.0	60.0
		90.0	8.0
		60.0	34.0
		20.0	50.0
		85.0	10.0
		50.0	40.0
		20.0	70.0
		60.0	30.0
	<b>Wu-hsi</b>	10.0	88.0
		20.0	30.0
		10.0	20.0
		10.0	60.0
		5.0	10.0
		10.0	50.0
		15.0	35.0
		10.0	50.0
		—	20.0
		10.0	80.0
		15.0	60.0
		10.0	30.0
	<b>I-hsing</b>	10.0	70.0
		10.0	50.0
		15.0	50.0
		15.0	50.0
		10.0	55.0
		20.0	50.0

			Owner	Pt. Owner	Tenant
			10.0	50.0	40.0
			30.0	40.0	30.0
	Chiang-yin		30.0	50.0	20.0
			40.0	20.0	40.0
			70.0	20.0	10.0
			15.0	45.0	40.0
			10.0	80.0	10.0
			40.0	10.0	50.0
			20.0	60.0	20.0
			25.0	75.0	—
			40.0	50.0	10.0
	Ching-chiang		90.0	5.0	5.0
			40.0	57.0	3.0
			50.0	40.0	10.0
			10.0	30.0	60.0
			20.0	20.0	60.0
			50.0	20.0	30.0
			15.0	15.0	70.0
			15.0	25.0	60.0
		Mean	28.7	40.8	30.5
Chiang-su sheng nung-min yin-hang (1931)	Wu-hsi		59.3	—	40.7
J.L. Buck (1930)	Wu-chin		72.3	13.4	14.3
J.L. Buck (1937)	I-hsing		52.0	29.0	19.0
	Wu-hsi		47.5	44.3	8.2
			—	32.1	67.9
	Wu-chin		47.7	49.6	2.7
			15.0	46.0	39.0
			48.0	35.0	17.0
		Mean	35.0	39.3	25.6
Chen-chiang fu					
Chang Han-lin (1930)	Tan-yang		90.0	5.0	5.0
			40.0	40.0	20.0
			35.0	40.0	25.0
			40.0	45.0	15.0
			80.0	15.0	5.0
			50.0	40.0	10.0
			70.0	20.0	10.0
			90.0	8.0	2.0
			90.0	5.0	5.0
			90.0	5.0	5.0
			70.0	20.0	10.0
		Mean	67.8	22.1	10.2
Huai-an fu					
Nung-ts'un fu-hsing wei-yüan-hui (1934)	Yen-ch'eng		69.4	15.3	15.3
J.L. Buck (1937)	Yen-ch'eng		42.0	20.0	38.0
			75.0	18.0	7.0
			59.0	36.0	5.0
			83.3	6.3	10.4
	Fou-ning		29.3	17.4	53.3
	Huai-yin		48.0	40.2	11.8
		Mean	56.1	23.0	20.9

		<i>Owner</i>	<i>Pt. Owner</i>	<i>Tenant</i>
<i>Yang-chou fu</i>				
J.L. Buck (1937)	Chiang-tu	43.9	29.9	26.2
		87.1	7.5	5.4
	T'ai	70.7	23.2	6.1
	T'ung-t'ai	45.6	26.1	28.3
	<b>Mean</b>	61.8	21.7	16.5
<i>Hsü-chou fu</i>				
Chiang-su sheng nung-min				
yin-hang (1931)		81.6	6.7	11.9
Nung-ts'un fu-hsing	P'ei	70.7	7.1	22.3
wei-yüan-hui (1934)				
<i>Chih-li T'ai-ts'ang chou</i>				
Nung-ts'un fu-hsing	Ch'i-tung	20.5	7.2	72.3
wei-yüan-hui				
<i>Chih-li Hai chou</i>				
J.L. Buck (1937)	Kuan-yün	68.7	7.1	24.2
<i>Chih-li T'ung chou</i>				
Tung-nan ta-hsüeh (1923)	T'ung	20.0	10.0	70.0
		50.0	25.0	25.0
		15.0	15.0	70.0
		—	—	100.0
		60.0	10.0	30.0
		80.0	15.0	5.0
		30.0	10.0	60.0
		10.0	10.0	80.0
		30.0	20.0	50.0
		20.0	20.0	60.0
		20.0	20.0	60.0
	Ju-kao	20.0	5.0	75.0
		20.0	—	80.0
		6.0	4.0	90.0
		30.0	—	70.0
		20.0	20.0	60.0
		15.0	5.0	80.0
		20.0	10.0	70.0
		10.0	15.0	75.0
		35.0	5.0	60.0
		20.0	10.0	70.0
		15.0	15.0	70.0
		3.0	2.0	95.0
		15.0	60.0	25.0
	T'ai-hsing	15.0	60.0	25.0
		20.0	30.0	50.0
		50.0	35.0	15.0
		20.0	40.0	40.0
		20.0	50.0	30.0
		20.0	30.0	50.0
		30.0	40.0	30.0
		60.0	30.0	10.0
		20.0	70.0	10.0
	<b>Mean</b>	24.8	20.9	54.2

TABLE A-6. OWNERSHIP AND TENANCY: COMPARISON OF SOURCES

	<i>Owners</i>	<i>Part-owners</i>	<i>Tenants</i>
<b>Chiang-ning</b>			
Chang Hsin-i (1929) . . . . .	35.4	33.5	31.1 (Table 6)
Chang Hsin-i (1934) . . . . .	57.2	27.0	15.8
J.L. Buck (1930) . . . . .	46.7	25.4	27.9
J.L. Buck (1937) . . . . .	72.2	16.7	11.1
<b>Su-chou</b>			
J.L. Buck (1937) for K'un-shan . . . . .	18.1	47.0	34.9 (Table 6)
Nung-ts'un fu-hsing wei-yüan-hui (1934) . . . . .	3.5	19.8	76.8
J.L. Buck (1937) ave. . . . .	10.1	43.8	46.2
Tung-nan ta hsüeh (1923) . . . . .	10.7	18.4	71.0
<b>Ch'ang-chou</b>			
J.L. Buck (1937) for Wu-chin (II) . . . . .	15.0	46.0	39.0 (Table 6)
Tung-nan ta-hsüeh (1923) . . . . .	28.7	40.8	30.5
Chiang-su sheng nung-min yin-hang (1931) . . . . .	59.3	—	40.7
J.L. Buck (1930) . . . . .	72.3	13.4	14.3
J.L. Buck (1937) ave. . . . .	35.0	39.3	35.6
<b>Chen-chiang</b>			
Chang Han-lin (1930) . . . . .	67.8	22.1	10.2 (Table 6)
<b>Huai-an</b>			
J.L. Buck (1937) for Yen-ch'eng (I) . . . . .	42.0	20.0	38.0 (Table 7)
Nung-ts'un fu-hsing wei-yüan-hui (1934) . . . . .	69.4	15.3	15.3
J.L. Buck (1937) ave. . . . .	56.1	23.0	20.9
<b>Yang-chou</b>			
J.L. Buck (1937) for Tai chou . . . . .	70.7	23.2	6.1 (Table 7)
J.L. Buck (1937) ave. . . . .	61.8	21.7	16.5
<b>Hsü-chou</b>			
Nung-ts'un fu-hsing wei-yüan-hui (1934) . . . . .	70.7	7.1	22.3 (Table 7)
Chiang-su sheng nung-min yin-hang (1931) . . . . .	81.6	6.7	11.9
<b>T'ai-ts'ang</b>			
Nung-ts'un fu-hsing wei-yüan-hui . . . . .	20.5	7.2	72.3 (Table 6)
<b>Hai Chou</b>			
J.L. Buck (1937) . . . . .	68.7	7.1	24.2 (Table 7)
<b>Tung Chou</b>			
Tung-nan ta-hsüeh (1923) . . . . .	24.8	20.9	54.2 (Table 7)

TABLE A-7. PROPORTION OF LAND RENTED: FROM J. L. BUCK (1937)

	Size of farm by ownership				Cultivated amount rented (percent)
	A	B	C	D	
Chiang-ning . . . . .	1.72	0.59	0.50	0.75 hectare	11
Su-chou					
Ch'ang-shu . . . . .	0.17	0.23	0.37	0.36	79
K'un-shan . . . . .	1.33	0.44	1.11	0.60	62
Ch'ang-chou					
I-hsing . . . . .	2.55	1.04	0.84	2.04	28
Wu-hsi . . . . .	0.56	0.46	0.29	0.43	26
Wu-chin . . . . .	1.08	0.60	0.38	0.51	20
	1.32	1.01	0.75	1.07	53
	1.14	0.63	0.67	0.87	33
Huai-an					
Fou-ning . . . . .	1.22	0.83	1.16	2.42	75
Huai-yin . . . . .	2.23	0.81	0.68	1.37	24
Yen-ch'eng . . . . .	2.73	2.27	1.40	3.83	52
	1.30	1.06	0.92	1.32	18
	2.85	1.98	1.11	2.13	17
	1.30	0.69	0.49	1.87	17
Yang-chou					
Chiang-tu . . . . .	1.53	0.71	0.63	0.89	32
	0.83	0.54	0.38	1.11	10
T'ai-Chou . . . . .	1.14	0.60	0.58	1.26	18
Tung-tai . . . . .	9.07	2.12	1.70	2.03	18
Hai Chou					
Kuan-yün . . . . .	3.35	1.73	1.00	6.64	41

A = owners; B = owned by part-owners; C = rented by part owners; D = tenants. Cultivated amount rented based on assumption that all cultivated land was included in survey and distributed according to pattern in Table A-6. Cultivated amount rented =  $[(TxD) + (P-o \times C)] \div [(TxD) + P-o \times (B + C) + (OxA)]$ , where T is percent of tenants, P-o, percent of part-owners; and O, percent of owner cultivators.

TABLE A-8. PROPORTION OF LAND RENTED: FROM CHANG HSIN-I (1929)

Districts	Irrigated Land			Dry Land		
	A	B	C	A	B	C
1. . . . .	55.0%	20.8%	24.2%	46.7%	21.4%	31.9%
2. . . . .	69.4	16.3	14.3	67.2	23.4	9.4
3. . . . .	37.9	25.5	36.6	41.0	23.0	36.0
4. . . . .	50.0	25.0	25.0	15.7	20.0	82.3
5. . . . .	50.0	22.1	27.9	32.3	48.0	19.7
6. . . . .	62.2	21.4	16.4	48.2	34.0	17.8
7. . . . .	61.4	13.8	24.8	62.3	15.3	22.4
8. . . . .	50.5	27.1	22.4	50.8	27.5	21.7
9. . . . .	33.6	36.7	29.7	46.0	39.0	15.0
10. . . . .	43.8	36.6	19.6	45.0	37.1	18.0
11. . . . .	28.0	45.5	26.5	36.0	39.5	24.5
12. . . . .	40.5	34.3	25.2	69.0	16.7	14.3
13. . . . .	21.5	46.5	32.0	41.7	39.5	18.8
14. . . . .	22.4	22.0	55.4	43.3	27.6	9.2
15. . . . .	27.5	33.4	39.1	39.5	44.7	15.8
Average . . . . .	38.2	32.5	29.3	45.0	28.4	26.6

A = land cultivated by owner; B = land cultivated by part-owners; C = land cultivated by tenants.

TABLE A-9. PROPORTION OF LAND RENTED: FROM J. B. TAYLOR (1924)

	Cultivated by owner's family	Cultivated by owner with hired labor	Rented from residents of local village	Rented from absentee landlords
I-cheng . . . . .	41.9%	10.1%	10.0%	38.0%
Chiang-yin . . . . .	28.7	1.4	58.2	11.7
Wu-chiang . . . . .	19.6	4.2	18.8	57.4



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*Chang Chien* 張謇  
*Ch'ang-chou (fu)* 常州  
*Ch'ang-chou (hsien)* 長州  
*Ch'ang-shu* 常熟  
*Chao-wen* 昭文  
*Ch'ang-yin-sha* 常陰沙  
*che-tsu* 折租  
*Chen-chiang* 鎮江  
*Cheng Chou* 鄭州  
*Chia-ting* 嘉定  
*Chiang-nan* 江南  
*Chiang-ning* 江寧  
*Chiang-pei* 江北  
*Chiang-su Shan-yang shou-tsu ch'üan-an*  
 江蘇山陽收租全案  
*Chiang-tu* 江都  
*Chiang-yin* 江陰  
*ch'ien-chuang* 錢莊  
*Chin-shan* 金山  
*Chin-t'an* 金壇  
*Ching-ch'i* 荊溪  
*Ching-chiang* 靖江  
*Ch'ing-chiang-p'u* 清江浦  
*ch'ing-huang pu-chieh* 青黃不接  
*Ch'ing-p'u* 清浦  
*ching-t'ien mou* 京田畝  
*Chü-jung* 句容  
*ch'uan chia* 船家  
*Ch'uan-sha* 川沙  
*Ch'ung-ming* 崇明  
*chung-nung* 中農  
*fen-tsu* 分租  
*Feng Kuei-fen* 馮桂芬  
*Fou-ning* 阜寧  
*fu* 府  
*fu-nung* 富農  
*Hai chou* 海州  
*Hai-men* 海門  
*hsi-liu-so* 棲留所  
*hsiang-shao* 鄉哨  
*Hsiao* 蕭  
*hsien* 縣  
*Hsien-nü-miao* 仙女廟  
*Hsing-hua* 興化  
*Hsü-chou* 徐州  
*Hu-chou* 湖州  
*Hu pu* 戶部  
*Hu sang* 湖桑  
*Hua-t'ing* 華亭  
*Huai-an* 淮安  
*Huai-nan* 淮南  
*Huai-pei* 淮北  
*Huai-yin* 淮陰  
*Hung-tse hu* 洪澤湖  
*I-cheng* 儀徵  
*I-hsing* 宜興  
*i-t'ien liang-chu* 一田兩主  
*Jui-chin* 瑞金  
*Ju-kao* 如皋  
*ku-chien shang-nung* 穀賤傷農  
*Kan-ch'üan* 甘泉  
*k'en-chih kung-ssu* 墾殖公司  
*k'o-sang-chu* 課桑處  
*ku-san-tou, ch'iu-san tou* 穀三斗秋三斗  
*ku-tsu* 穀租  
*Kuan-yün* 灌雲  
*kcan-tu shang-hsiao* 官督商銷  
*K'un-shan* 崑山  
*li-chin* 釐金  
*li-hsia-ho* 裏下河  
*Li-yang* 溧陽  
*Liang-Huai* 兩淮  
*liang-ts'ung tsu-ch'u* 糧從租出  
*mai-tsu* 麥租  
*mi* 米  
*min* 民  
*mou* 畝  
*Nan-shih* 南市  
*Nan-t'ung* 南通  
*nung* 農

<i>o-tsu</i> 額租	<i>Tan-t'u</i> 丹徒
<i>Pa-li-t'un nung-ts'un ching-chi tiao-ch'a pao-kao</i> 八里屯農村經濟調查報告	<i>Tan-yang</i> 丹陽
<i>pan-tu-keng</i> 半自耕	<i>Tang-shan</i> 湯山
<i>pao-chia</i> 保甲	<i>tao</i> 稻
<i>Pao-shan</i> 寶山	<i>ti-chu</i> 地主
<i>Pao-ying</i> 寶應	<i>tien</i> 佃
<i>P'ei</i> 邳	<i>t'ing</i> 廳
<i>Pei-t'ang</i> 北塘	<i>ts'ao-tu</i> 漕督
<i>p'in-nung</i> 貧農	<i>tou</i> 斗
<i>pu-che-pu-yang</i> 不折不讓	<i>ts'ui-tsu</i> 催租
<i>pu-wei-tsai</i> 不爲災	<i>tsung-ts'ang-t'ing</i> 總倉廳
<i>Shan-yang</i> 山陽	<i>T'ung chou</i> 通州
<i>Shang-hai</i> 上海	<i>T'ung-li chen</i> 同里鎮
<i>Sheng-tse chen</i> 盛澤鎮	<i>tzu-keng</i> 自耕
<i>shih</i> 石	<i>Wu</i> 吳
<i>shih-mou</i> 市畝	<i>Wu-chiang</i> 吳江
<i>shih-tsu</i> 實租	<i>Wu-chin</i> 武進
<i>Su</i> 宿	<i>Wu-hsi</i> 無錫
<i>Su-chou</i> 蘇州	<i>Wu-sung</i> 吳淞
<i>Sung-chiang</i> 松江	<i>Yang-chou</i> 揚州
<i>t'ao-fang</i> 逃荒	<i>Yang-chung</i> 揚中
<i>T'ai (Chou)</i> 泰	<i>Yang-tzu</i> 揚子
<i>T'ai hu</i> 太湖	<i>Yen-ch'eng</i> 鹽城
<i>T'ai-ts'ang</i> 太倉	<i>yu-min</i> 游民
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# 一八七〇至一九一一年江蘇省之農村經濟

(中文摘要)

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一八七〇至一九一一年四十年間，在中國社會經濟史上是太平天國之後復甦的景象及中外貿易之增進。在這兩方面，江蘇省都首當其衝。本文旨在探求在這段時期中，江蘇省農業經濟之變遷，藉以窺視中國工業化初期的概況。

以農村生產而言，江蘇省之農業，向來以穀類為主（稻米、小麥、高粱），以商品作物及手工業為輔（蠶桑、棉花、棉織等）。至一八七〇年之後，此基本生產形態並無改變，而且農作物畝產量亦未見增減。不過，在人口方面，則於太平天國時期有相當削減之後，每年約有百分之零點五之增長。但是，一方面因為上海及附近城市之發展，另一方面由於外貿引起商品作物及手工業（尤其是棉產棉織）之發達，人口增加對經濟並沒有產生壓力。研究清末經濟的學者，每喜強調清末田土水利衰落，及農村手工業崩潰；但是在江蘇而言，可說無據。

這段時期在租佃關係上可以見到的變遷，亦僅屬於局部的情况。以租佃分配而言，變遷根本不大。江南地區從來就是佃戶多於自耕農，而江北則自耕農多於佃戶。但是，佃戶之多少並不代表田畝分配平均與否。不論在江南之佃戶或江北之自耕農，貧農總是佔大多數；主要原因則是耕地面積細小。因此，清末經濟史論者以佃農和自耕農比例引證清末農村經濟崩潰的論點，本文並不接納。至於租額之增加，則僅見於「折租」盛行之地區，亦即蘇州府城之周圍。租額之增加，絕非江蘇全省之普遍狀況，而「折租」制度及蘇州府城內之租棧，同為太平天國之後僅見於蘇州城附近之地區性發展。

清末農村之經濟恐慌，並不是出於生產之削減，也不是出於租佃之改變。對這個問題，本文嘗試以貨幣貶值去解釋。

清末貨幣之貶值，首先以銀為主。白銀貶值乃一個國際性的問題。白銀價格之低落，雖然影響中外貿易，但是並沒有影響銅幣與貨物之兌換價值。銅幣之貶值，較白銀為後，發生於一八九六年之後，各省政府（連江蘇在內）濫發銅幣，而引致通貨膨脹。至一八九六年以後，物價日見增加，糧食價格尤甚。

物價增長對農村經濟之影響，在乎農村生產品與農村消費品價格增長之相對率。本文比較七項物品之相對價格（米、大豆、蠶繭、生絲、棉花、棉紗、洋布），發現農村

出產品比消費品之相對價格增長快，但外國製成的布匹除外。至於洋布，則因入銷有限，價格上漲的影響不大。至於其他之農業支出，除「折租」外，租和稅皆比米價上漲為慢。由此觀之，清末物價之上漲，在蘇州府「折租」地區之內，影響頗大，但是其他地區反得物價上漲之利。以江蘇省大部份地區而言，得物價上漲之害者，並非農村，而是城市和市集之居民。為引證這一點，本文嘗試描述江蘇省米穀之販運和貿易，和上海米價與鄉區米價之關係。總之，清末的動亂，亦多與物價和稅收有關，亦可見得貨幣貶值為清末經濟恐慌之重要因素。