

# China's Grain Trade Networks in the Interwar Years, 1918-1936\*

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## Abstract

This paper uses the case of grain trade networks to re-assess the role of the foreign sector in China's economy in the interwar years (1918-1936). Previous studies have debated over the issue and mainly dichotomize the Sino-foreign business relationship in terms of competition. This paper attempts to explore

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\* In this paper, major Chinese cities and places, organizations, publications and public figures appear, wherever possible, under the English names by which they were/are regularly known. In cases where their English names are not known, their names in Chinese are transliterated in *pinyin* spelling.

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the complex relationship between the two by reconstructing both the domestic and foreign trade networks in the China grain market (mainly rice and paddy, wheat and flour). It also examines the relationship between foreign and domestic grains at the trading port level. To further explore the factors affecting the movements of both domestic and foreign grain imports into Chinese ports, this paper also examines the relationship between the movements of rice and flour during the period under review.

Our analysis demonstrates that China's economy in the interwar years was full of complex relationships between different sectors. The case of principal food grains has illustrated that the performance of one kind of grains was not simply determined by its foreign rivals. It was also affected by other sectors of the domestic market and depended remarkably on the scale of that market. Larger markets, by virtue of their size, seem to attract competition more easily than smaller ones. Yet, competition might come not just from foreign rivals; domestic ones, including those of different kinds but substitutable, should be of no lesser importance. Besides, the "competition analysis" fails to recognize the very nature of the China grain trade networks. As this paper has shown, overseas Chinese imported rice and paddy into the country, showing an extension of Chinese business networks, while Chinese flour-mill owners used foreign wheat imports to compete with foreign flour. In short, the dichotomy between "China and the world" simply fails to provide a satisfactory analytical framework. Further research would benefit from leaving this framework for other fundamental changes in modern Chinese economy and society.

**Key words:** Grain Trade Networks, Sino-foreign business relationship, rice and paddy, wheat, flour

## I. Introduction

It has been said that China's interwar years (1918-1936)<sup>1</sup> witnessed the "return of foreign imperialism" into the country's market, interrupting its embryonic industrial capitalism, as well as intensifying its rural destruction by launching keen competition to its agrarian economy. In contrast, according to this view, the wartime (1914-1918) period and the immediate postwar years are described as the "golden age of the Chinese bourgeoisie" (and "capitalism"), in which much of the "foreign influence" in the economy was temporarily reduced.<sup>2</sup>

Important though this perspective may be, it overlooks other basic

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<sup>1</sup> It must be pointed out here the "interwar years" has different meaning to both Chinese and European history. Europe's interwar years means 1918-1939 but China's is 1918-1936. Moreover, although China declared war on Germany and Austria, it did not actually have much involvement in the military operations of the First World War. Therefore, its meaning of "interwar years" should doubtlessly differ from that of the Europeans.

<sup>2</sup> Marie-Claire Bergère, trans. by Janet Lloyd, *The Golden Age of the Chinese Bourgeoisie 1911-1937* (Cambridge: Cambridge University Press, 1989); Zhou Xiuluan (周秀鸞), *Diyici shijie dazhan shiqi Zhongguo minzu gongye de fazhan* (第一次世界大戰時期中國民族工業的發展 *Development of the Chinese native industry during the First World War*) (Shanghai: Shanghai renmin chubanshe 上海: 上海人民出版社, 1958); Xu Dixin (許滌新) and Wu Chengming (吳承明) ed., *Zhongguo zibenzhuyi fazhanshi, dierjuan* (中國資本主義發展史, 第2卷 *History of development of China's capitalism, Vol. 2*) (Beijing: Renmin chubanshe 北京: 人民出版社, 1990), pp. 848-900; Quan Weitian (全慰天), *Zhongguo minzu zibenzhuyi de fazhan* (中國民族資本主義的發展 *Development of China's native capitalism*) (Xinxiang: Henan renmin chubanshe 新鄉: 河南人民出版社, 1982), p. 93; Jiang Peiyu (姜培玉), *Zhongguo haigang jingmao fengyun* (中國海港經貿風雲 *History of economics and trade of Chinese sea ports*) (Beijing: Haiyang chubanshe 海洋出版社, 1992), pp. 526-912; Chen Zhengping (陳爭平), *1895-1936 nian zhongguo guoji shouzhì yanjiu* (1895-1936年中國國際收支研究 *China's balance of payments, 1895-1936*) (Beijing: Zhongguo shehui kexue chubanshe 中國社會科學出版社, 1996); and chapters in Wang Jingyu (汪敬虞) ed., *Zhongguo jindai jingjishi, 1895-1927* (中國近代經濟史, 1895-1927 *Modern Chinese economic history, 1895-1937*), 3 vols. (Beijing: Renmin chubanshe, 2000).

questions in the country's economic fundamentals. It also simply views the Sino-foreign business relationship in terms of competition and substitution between the *two*, dichotomizing the historical reality without precisely locating the possible arena for competition. We do not deny the possibility of competition between native and foreign produces in the China market but we also acknowledge the complexity of that market.<sup>3</sup> Without knowing much about that market, especially the trading situation within the realm, it is difficult to justify any generalizations on the Chinese economy in the interwar years. This question is important as it requires not only a re-examination of the nature of the China market in which both the Chinese and foreign sectors played a part, but also an exploration in the country's social and economic history beyond the simple dichotomy of "China and the world."

In this paper, we propose to analysis the structure of China's grain trade networks, both international and domestic, in hope of reconstructing, with some degree of precision, the history of grain circulation and its significance to the country's social and economic history. This analysis of both domestic and international networks also provides a precise qualification for "competition"

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<sup>3</sup> In fact, some scholars have explored part of the complexity of the China market in which the foreign sector had probably "catalytic effects" to encourage further trade and development. See Chi-ming Hou, *Foreign Investment and Economic Development in China, 1840-1937* (Cambridge, Mass.: Harvard University Press, 1965); Robert F. Dernberger, "The Role of the Foreigner in China's Economic Development," in Dwight H. Perkins ed., *China's Modern Economy in Historical Perspective* (Stanford, Calif.: Stanford University Press, 1975), pp. 19-47; Thomas G. Rawski, *Economic Growth in Prewar China* (Berkeley: University of California Press, 1989); Ding Richu (丁日初), "Duiwai jingji jiaowang yu jindai Zhongguo zibenzhuyi xiandaihua de guangxi" (對外經濟交往與近代中國資本主義現代化的關係 Relationship between foreign trading and capitalistic modernization in modern China), in Zhongguo renmin zhengzhi xieshang huiyi Shanghaishi weiyuanhui wenshi ziliao gongzuo weiyuanhui (中國人民政治協商會議上海市委員會文史資料工作委員會) comp., *Jiu Shanghai de waishang yu maiban* (舊上海的外商與買辦 *Foreign merchants and compradores in old Shanghai*) (Shanghai: Shanghai renmin chubanshe, 1987), pp. 1-34.

and the China market beyond that theme. The grain trade networks provide a case for examination because as a daily necessity, food grain and its trade marked a significant tie between China and other countries. Any major change in that trade certainly means a remarkable shift in the economic and social orientation of any of its participants. By delineating the changes of China's grain trade networks, therefore, we would be able to critically examine the factors behind these changes in the context of interwar years' economic fluctuations.

This study also aims at providing a supplement to the study of China's domestic market. It must be noted that although the country's foreign trade has been thoroughly studied for decades,<sup>4</sup> we know relatively little about its domestic market. Since the 1960s, scholars such as Han-sheng Chuan, Wu Chengming, Yeh-chien Wang, among others, have emphasized that the country's domestic trade (or internal, inter-port trade) provides another important dimension to understand market development and other related issues in the country.<sup>5</sup>

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<sup>4</sup> Besides works by Jiang Peiyu and Chen Zhengping, see also Hsiao Liang-lin, *China's Foreign Trade Statistics, 1864-1949* (Cambridge, Mass.: Harvard University East Asian Research Centre, 1974); Yu-kwei Cheng, *Foreign Trade and Industrial Development of China: An Historical and Integrated Analysis through 1948* (Washington, D.C.: University Press of Washington, c1956); Wang Liangxing (王良行 Jerry L.S. Wang), *Jindai Zhongguo duiwai maoyishi lunji* (近代中國對外貿易史論集 *Collected essays on modern Chinese trade history*) (Taipei County, Chungho City: Zhishufang 中和市: 知書房, 1997); Lou Xiangzhe (婁向哲), *Minchu Zhongguo dui Ri maoyilun* (民初中國對日貿易論 *Sino-Japanese Trade in the Early Republican period*) (Tianjin: Nankai daxue chubanshe 天津: 南開大學出版社, 1994).

<sup>5</sup> Han-sheng Chuan and Richard A. Kraus, *Mid-Ch'ing Rice Markets and Trade: An Essay in Price History* (Cambridge, Mass.: East Asian Research Center, 1975); Dwight H. Perkins, *Agricultural Development in China, 1368-1968* (Chicago: Aldine Publishing Co., 1969), Appendix I, pp. 345-365; Yeh-chien Wang, "Secular Trends of Rice Prices in the Yangzi Delta, 1638-1935," in Thomas G. Rawski and Lillian Li, eds., *Chinese History in Economic Perspective* (Berkeley, California: University of California Press, 1992), pp. 35-68; Wu

In this paper, therefore, we specifically include the domestic trade in our analysis and assessment. In this respect, we benefit from a variety of sources and statistics for the modern era. The most well-known material, of course, is the trade statistics of the Chinese Maritime Customs, which provides a solid source for our investigation on both foreign and domestic trade.<sup>6</sup> The Customs records provide ample evidence for articulating the volume of that trade. Indeed, as Dwight H. Perkins remarks, the Customs records' coverage on China's internal trade reached its peak in the first decade of the twentieth century and declined gradually "in the 1910s and thereafter" as railway transportation

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Chengming (吳承明), *Zhongguo zibenzhuyi yu guonei shichang* (中國資本主義與國內市場 *China's capitalism and domestic market*) (Beijing: Zhongguo shehui kexue chubanshe, 1985), particularly pp. 266-296; Wu Chengming, *Shichang, jindaihua, jingjishilun* (市場·現代化·經濟史論 *Market, modernization and economic history*) (Kunming: Yunnan daxue chubanshe 昆明: 雲南大學出版社, 1996); Wu Chengming, *Zhongguo de xiandaihua: shichang yu shehui* (中國的現代化: 市場與社會 *China's modernization: market and society*) (Beijing: Sanlian shudian, 2001); Wang Shui(王水), "Zhongguo jindai guonei maoyi tongji" (中國近代國內貿易統計 "Statistics of domestic trade in modern China"), *Zhongguo jingjishi yanjiu* (中國經濟史研究 *Research in Chinese economic history*), 1987, No. 1, pp. 147-152; Shen Zuwei (沈祖煒), "1895-1927 nian Zhongguo guonei shichang shangpin liutong guimo de kuoda" (1895-1927 年中國國內市場商品流通規模的擴大 "The enlargement of scale in commodity circulation in China's domestic market, 1895-1927"), in *Jindai Zhongguo* (近代中國 *Modern China*) (Shanghai), No. 4 (1994), pp. 331-354.

<sup>6</sup> Besides the Customs' publications, contemporary Chinese scholars also based on those publications to compile simplified statistical data. See C. Yang (Yang Duanliu 楊端六), H.B. Hau (Hao Houpei 侯厚培) and others (comp.), *Liushiwu nianlai Zhongguo guoji maoyi tongji* (六十五年來中國國際貿易統計 *Statistics of China's foreign trade during the last sixty-five years*) (National Research Institute of Social Sciences, Academia Sinica, Monograph No. IV) (Nanjing: Academia Sinica, 1931); Y.S. Chun (Chen Bozhuang 陳伯莊) and Y.L. Huang (Huang Yinlai 黃蔭萊) comp., *Zhongguo haiguan tielu zhuyao shangpin liutong gaikuang* (中國海關鐵路主要商品流通概況 *Statistics of commodity flow of Chinese maritime customs and railways [1912-36]*) (Shanghai: Chaio-Tung University Research Institute, 1937); Shiyebu guoji maoyiju (實業部國際貿易局 Bureau of Foreign Trade, Ministry of Industry) comp., *Zuijin sanshiwu nianlai Zhongguo tongshang kouan duiwai maoyi tongji* (最近三十四年來中國通商口岸對外貿易統計 *Statistics of China's foreign trade by ports, 1900-1933*) (Shanghai: The Commercial Press, 1935).

gained its significance.<sup>7</sup> Yet, before we have a more comprehensive study based on archival materials concerning the railway, the limited and scattered publications from various railroad authorities currently available do not provide a solution either.<sup>8</sup> Moreover, trade that did not go through the customs stations, intentionally or not, had never been accurately recorded. Therefore, in this paper, we use the Customs data to present the picture as possibly the lowest estimates of the actual situation.

We must admit that the Customs' statistical publications also have several other shortcomings which need to be addressed.<sup>9</sup> To begin with, because of a change in tabulation method, trading figures for each port were not reported in

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<sup>7</sup> Perkins, *Agricultural Development in China, 1368-1968*, pp. 351-354.

<sup>8</sup> Several of the railroad surveys focus on the economic conditions of those localities along the railway. For example, see Longhai tielu chewuchu shangwuke (隴海鐵路車務處商務課 Commercial department, Train-affairs Bureau, Longhai Railway), *Longhai tielu quanlu diaocha baogao* (隴海鐵路全路調查報告 *Report on surveys along the Longhai Railway*) (Zhengzhou 鄭州: Longhai tielu chewuchu shangwuke, 1933); and Wu Xiangxiang (吳湘湘) and Liu Shaotang (劉紹唐) eds., *Yue-Han tielu Zhu-Shaoduan tongche jiniankan* (粵漢鐵路株韶段通車紀念刊 *Commemorative volume for the opening of the Zhu-Shao section of the Yue-Han Railway*) (Taipei: Zhuanji wenxue chubanshe [傳記文學出版社]reprinted 1936 edition, 1971). We thank Professor Stephen Morgan for pointing out the existence of some national level statistics from the railway authorities. However, no systematic tabulation or analysis of that information has been carried out so far and made available.

<sup>9</sup> On the issues related to the compilation of Customs Statistics, see Zheng Youkui (Yu-kwei Cheng 鄭友揆), "Woguo haiguan maoyi tongji bianzhi fangfa jiqi neirong zhi yangekao" (我國海關貿易統計編製方法及其內容之沿革攷 "An investigation on the evolution of compilation method and contents of our country's maritime customs trade statistics"), in *Shehui kexue zazhi* (社會科學雜誌 *Journal of Social Sciences*), pp. 264-296; reprinted in Zheng Youkui, *Zhongguo de duiwai maoyi he gongye fazhan (1840-1948) -- Shishi de zonghe fenxi* (中國的對外貿易和工業發展 (1840-1948年) — 史實的綜合分析 *Chinese trans. of Foreign Trade and Industrial Development of China: An Historical and Integrated Analysis through 1948*) (Shanghai: Shanghai shehui kexueyuan chubanshe, 1984), Appendix I, pp. 298-333; Li Taichu(李泰初), "Youguan Zhongguo jingdai duiwai maoyi ruogan wenti zhi shangque" (有關中國近代對外貿易若干問題之商榷 "An examination of certain problems in China's foreign trade in the modern era"), *Zhuhai xuebao* (珠海學報 *Chu-hai College Journal*), 1964, pp. 174-287.

1935 and thereafter. An examination on the years 1935 and 1936 must rely on other sources, or excluded temporarily for the sake of consistence. In the following analysis, we will stick to the second principle. Moreover, the Customs' records were not designed for presenting the detailed trading-port-based data. In particular, they do not indicate the precise flow of the produce in both domestic and foreign contexts. In this respect, we have to rely on other contemporary scholars' tabulations, which based on the more primary data from the Customs. These include those compiled by Cai Qian and Zheng Youkuei (Yu-kwei Cheng) in the 1930s on individual ports' foreign trade, and those by Han Qitong in 1950 on the "inter-port" trade between 1936 and 1940.<sup>10</sup> These two sets of data allow us to outline the scale of marketing hierarchies and the scope of trade networks. As they also based on the same source as the Customs' statistical publications, it would be reasonable to expect a considerable degree of consistence between them and the Customs' publications.

In addition, the Customs' records do not cover the trade volume in localities outside those ports opening to foreign trade and being under the Customs' control. These areas could be hinterland of trading centres or a whole region for the market. In this respect, contemporary surveys conducted by banks, government agents, and academic institutions contain important information to supplement the Customs' records at both local and provincial levels. Based on these materials, we are able to outline in the following sections the impression of the complicated picture of China's grain trade

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<sup>10</sup> Chien Tsai (Cai Qian 蔡謙) and Yu-kwei Cheng comp., *Zhongguo ge tongshang kouan dui geguo jinchkou maoyi tongji* (中國各通商口岸對各國進出口貿易統計 *Statistics of foreign trade of different Chinese ports with various countries*) (Shanghai: The Commercial Press, 1936); Han Qitong (韓啓桐) comp., *Zhongguo buji maoyi tongji, 1936-1940* (中國埠際貿易統計 *Statistics of inter-port trade in China, 1936-1940*) (Beijing: Zhongguo kexueyuan 中國科學院, 1951).



networks during the period concerned.

It must also be said that studies of China's grain market itself have yet been unknown. However, previous studies focus either on cases of local trading centres, such as Wuhu, and other major city-ports of the country's rice-growing regions, or provincial and regional markets, such as Guangdong or Hunan.<sup>11</sup> No specific attempt has been made on the national scale. Moreover, many of these studies concern the Qing period (1644-1911) and treat the interwar years as a merely extension of past developments. Most of these studies also focus solely on rice and paddy trade, without paying much attention to the potential supply-and-demand correlation between rice and flour, in which the flour trade experienced dramatic change in the early twentieth century. Therefore, we will focus on two groups of principal food grains -- rice (and paddy) and flour (and wheat) in order to clarify the complexity of the grain market in China.

In the following sections, we will first analyze the general patterns of

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<sup>11</sup> Besides Han-sheng Chuan and Yeh-chien Wang whose works focus on the Qing period, examples can also be found in the following scholarly works: I-chun Fan, "The Rice Trade of Modern China: A Case Study of Anhwei and Its Entrepot Wuhu, 1977-1937," in *The Second Conference on Modern Chinese Economic History* (II) (Taipei: Institute of Economics, Academia Sinica, 1989), pp. 687-739; Chen Chunsheng (陳春聲), *Shichang jizhi yu shehui bianqian -- 18 shiji Guangdong mijia fenxi* (市場機制與社會變遷——18世紀廣東米價分析 *Market mechanism and social change -- analysis of rice price in 18<sup>th</sup> century Guangdong*) (Guangzhou: Zhongshan daxue chubanshe, 1992); Lu Shaoli (呂紹理), *Jindai Guangdong de mianliang maoyi (1866-1931)* (近代廣東的米糧貿易 1866-1931 *Grain trade in modern Guangdong, 1866-1931*), M.A. Thesis (Taipei: Guoli Zhengzhi daxue lishi yanjiusuo 國立政治大學歷史研究所, 1990); Zhang Lifen (張麗芬), *Hunansheng mianliang shichang chanxiao yanjiu (1644-1937)* (湖南省米糧市場產銷研究 *A study of production and sales of the grain market in the Hunan Province, 1644-1937*), M.A. Thesis (Taipei: Guoli Taiwan daxue lishixue yanjiusuo 國立臺灣大學歷史研究所, 1990); Wong Wing-ho (黃永豪), *Shichang yu guojia: Hunansheng Xiangtan yu Changsha migu shichang ge'an yanjiu, 1894-1919* (市場與國家：湖南省湘潭與長沙米穀市場個案研究, 1894-1919 *Markets and the state: A case-study of the grain markets of Xiangtan and Changsha in the Hunan Province, 1894-1919*), Ph.D. dissertation (Division of Humanities) (Hong Kong: Hong Kong University of Science and Technology, 2001).

China's grain trade of the "interwar years," which will be followed by a thorough reconstruction on the structure of grain trade networks in this period. Afterwards, we will examine the market structure at the regional ("trading port") level in order to re-assess the relationship between international and domestic markets. In this section, we will particularly focus on reconstructing and locating the possible arenas for "Sino-foreign" rivalry, if any. Finally, we will assess the role played by flour in the country's grain trade, vis-à-vis rice, in order to explore the relationship between the two food grains and its implications.

## II. Trade Pattern in the Interwar Years

Having clarified our method of re-interpreting the Customs records, let us first look into the general pattern of grain trade in the interwar years. Yet, any analysis of this pattern must trace back to the prewar and wartime situations, from where one can obtain a base for comparison.

Prior to 1914, China's grain market was fundamentally "integrating" with the international economy, as price movement (such as rice) of one place or country in East Asia, such as China or Japan, was affected by other Asian neighbours, and *vice versa*. Asian prices were affected, as some scholars further suggested, by prices in Western countries. India furnished as a linkage between the Asian and European markets. Accordingly, the market of East Asia "integrated" with that of the world; China's market became part of the modern world market; its trade networks interlocked with those of the international market.<sup>12</sup>

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<sup>12</sup> A.J.H. Latham and Larry Neal, "The International Market in Rice and Wheat, 1868-1914," *Economic History Review*, 36:2 (1983), pp. 260-280; Loren Brandt, "Chinese Agriculture and the International Economy, 1870-1930s: A Reassessment," *Explorations in Economic History*, No.22 (1985), pp. 168-193; A.J.H. Latham, "The International Trade in Rice and

The country's grain trade statistics from 1912 to 1934 (when the sources stop reporting figures of "inter-port trade") are summarized in Tables 1, 2 and 3. Overall speaking, as war broke out in summer 1914, thereafter warfare accelerated in the European front, and international oceanic freight charges escalated.<sup>13</sup> Disruption and dislocation in wartime foreign trade seem to be expected. However, despite the seemingly urgent need for food, the First World War seems to have an unexpected impact in the market of these three crops in China, especially during the first couple years.

To begin with, though domestic supplies returned in 1915 to its pre-war level and exceeded it thereafter, the war practically did not stop the influx of foreign rice and paddy. Nor did it discourage foreign wheat to increase its import into the country before 1917. The East Asian grain market, particularly for rice and paddy, continued to operate without much disruption as Europe experienced. On the other hand, the "Great War" discouraged foreign flour imports, which dropped from 2,162,424 piculs in 1914 to 157,652 piculs in the next year. Although it recovered quickly afterwards, foreign flour imports never attained its pre-war level again. Chinese flour export to both domestic ports and foreign countries was greatly encouraged. The increase of domestic wheat trade simply means more domestic wheat for domestic flour -- the other side of the same token. The war also does not seem to have remarkably affected China's wheat export abroad, except in 1916. On the whole, except for foreign

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Wheat since 1868: A Study in Market Integration," in C. Knick Harley ed., *The Integration of the World Economy 1850-1914* (Cheltenham: Edward Elgar, 1996), Vol. I, pp. 341-359; Kaoru Sugihara, "Patterns of Asia's Integration into the World Economy, 1880-1913," *ibid.*, Vol. II, pp. 700-719.

<sup>13</sup> Inspectorate General of the Chinese Maritime Customs, *Decennial Reports on the Trade, Industries, etc., of the Ports Open to Foreign Commerce, and on the Condition and Development of the Treaty Port Provinces, 1912-21*, Vol. II -- *Southern and Frontier Ports* (Shanghai: Office of the Inspectorate General of the Chinese Maritime Customs, 1924), "Shanghai," pp. 4-5. Hereafter abbreviated as *Decennial Reports*.

flour and wheat, China's grain market must be expanding in those years up to 1917, as much of both domestic and foreign grains continued to move into and circulate in the country.

The real sharp impact on China's (as well as East Asia's) grain market came rather after the end of the war in 1918, particularly to rice and paddy. Earlier in 1918, fluctuations in rice prices had already hit Japan, causing a series of "rice riots" in the country.<sup>14</sup> In 1919, when both Siam and French Indo-China imposed restrictions on rice exports, following the policy of India imposed earlier in late 1918, a shortage of rice prevailed in Hong Kong and other East Asian places. Like in Japan, it caused some social unrest ("rice riots") in some of these places.<sup>15</sup> The Hong Kong government, for example, had to take emergency measures to handle the crisis.<sup>16</sup> Accordingly, foreign

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<sup>14</sup> Nakamura Takahusa (中村隆英) and Odaka Kōnosuke (尾高煌之助) eds., *Nihon keizai shi* 日本經濟史 (trans. into Chinese by Xu Xiangdong 許向東 and Zhang Xue 張雪, *Riben jingjishi* 日本經濟史) (Beijing: Sanlian shudian 三聯書店, 1997), Vol. 6, pp. 310-312; Kawahigashi Yasuhiro (川東崢弘), *Senzen Nihon no beika seisakushi kenkyū* (戰前日本の米價政策史研究 *Study of the history of the rice price policy in prewar Japan*) (Kyōto: Mineruva shobō ミネルヴァ書房, 1990), pp. 68-77; Ōmameuda Minoru (大豆生田稔), *Kindai Nihon no shokuryō seisaku -- Taigai ison beikoku kyōkyū kōzō no henyō* (近代日本の食糧政策——對外依存米穀供給構造の變容 *Food grain policy of modern Japan -- Transformation of the structure of foreign-dependent rice demand and supply*) (Kyōto: Mineruva shobō ミネルヴァ書房, 1993), pp. 143-176.

<sup>15</sup> Nōshōmushō 農商務省, *Gaimai ni kansuru chōsa* (外米ニ關スル調査 *Survey on foreign rice*) (Tokyo: Nōshōmushō, 1920), pp. 80-83, 130-131; "Preliminary Report on the Purchase and Sale of Rice by the Government of Hong Kong during the Year 1919," *Sessional Papers (Papers Laid before the Legislative Council of Hong Kong)* (Hong Kong: Annual), 1920, pp. 1-6; reprinted in David Faure ed., *A Documentary History of Hong Kong: Society* (Hong Kong: Hong Kong University Press, 1997), pp. 151-156.

<sup>16</sup> For example, the Hong Kong government approached the Straits Settlements government to resell its Saigon rice to Hong Kong. The former also tried, though in vain, to purchase rice from the Hunan Province. See David Faure ed., pp. 153-155. The Japanese government, having already imposed restrictions on rice trade, continued the measures throughout the late 1910s. See Kawahigashi, pp. 68-77; Ōmameuda, pp. 143-176.

rice and paddy imports into China went down greatly in that year and the next. The crisis died down in 1921. By then, the position of China's domestic rice and paddy exports had already been strengthened. This crisis, however, was due to a regional crisis, not the postwar worldwide fluctuations as people might expect.

In contrast to the shortage crisis of rice and paddy, China's domestic wheat trade continued to experience exceptional years of growth. In those two years (1919-20), the country's wheat exports doubled the 1918 level. Foreign imports remained shrunken at low level, while domestic wheat trade continued to gain much of the market. Domestic wheat trade experienced a short setback in 1919 by reducing its volume by nearly 1 million piculs but quickly recovered and increased to more than 6 million in the next year, much higher than the peak in 1918.

The expanded wheat exports abroad did not affect flour trade, however. China's flour exports abroad in 1919 also increased by nearly five times; although it went down by nearly 60 per cent in the next year, that was still much higher than the previous level. On the other hand, domestic flour continued to remain at a high level, 3.7 million and 3.6 million piculs for 1919 and 1920 respectively. It must be said that during the same years, foreign flour imports also increased, though in a comparatively weak position (less than 1/6 of domestic flour imports).

In brief, it would seem that China's domestic grain trade had been basically "dominated" by native suppliers during the short period of "postwar years" in 1918-1920. The war did not alter the position of foreign wheat and flour imports in China. It only strengthened the country's export of those grains domestically and abroad. It would also seem that due to some occasional factors, all kinds of principal grains from China enjoyed exceptional years of prosperity. Their circulation must be enlarged, though we are not sure about the extent of that enlargement. For the rest of the "interwar years," trends in the

trading of these grains seem running to different courses again.

First of all, rice and paddy trade returned to its prewar trend of gradually growing foreign dominance in the market. Throughout the 1920s and early 1930s, China's rice and paddy market was on a whole expanding. In particular, foreign rice and paddy took the lead in the market from 1921 on; these foreign supplies contributed much to growth of the trade in China. Thereafter, although the degree of fluctuation of these foreign supplies could be as large as 40-50%,<sup>17</sup> their import volume was still moving upward. Even in 1931 when foreign imports came to another low level, and domestic supplies regained part of their lost market, the former still exceeded the latter by nearly two times. The market for domestic supplies seems to be circumscribed.

If the growing importance of foreign supplies in rice and paddy was gradual, its position in wheat trade can be regarded as dramatic. As shown in Table 2, despite the downturn between 1918 and 1920, China's foreign wheat imports surpassed the prewar and wartime level, up to more than 80,000 piculs in 1921. Thereafter, the volume of foreign wheat imports increased by leaps and bounds, reaching its peak in 1931 of more than 22.8 million piculs. In contrast, the country's wheat exports for both domestic and foreign markets practically "contracted." Domestic wheat imports dropped from 2.5 million piculs in 1921 (the lowest level between 1917 and 1920) to less than 2 million (except in 1925) throughout the 1920s and early 1930s. Wheat export abroad also began to contract in 1922. Throughout the following years, except for 1928, that trade reduced to less than a million a year. As if China's rice and paddy export was circumscribed, the wheat export must be going towards "being eliminated" from both domestic and international markets.

The only item which enjoyed prosperity during the interwar years was

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<sup>17</sup> Such as 1921-22, 1923-24, 1927-28, 1929-30, 1931-32 and 1933-34.

flour. Although foreign imports also enjoyed part of the fruits of the growing market, China's domestic flour trade continued to flourish in the post-1920 period. Such a development, however, did not come from the country's flour export abroad, as it did not substantially change in those years. The real source of growth came from the domestic sector: the country's domestic flour imports increased by nearly three times from 1921 to 1934. Indeed, foreign imports exceeded domestic imports on several occasions (as in 1923-24 and 1929) but for most of the 1920s and early 1930s, native flour still gained the upper hand. In 1931, it even reached its peak of more than 10 million piculs, 5 million more than foreign imports. This shows the particular strength of the domestic sector, i.e. the native flour-milling industry, most of which were Chinese-owned. The opposite development of wheat and flour seems to be difficult to find a comparison with paddy and rice because of our lack of adequate knowledge about rice-milling industry. Yet, the strength of China's flour milling, and the economies that technology could have brought to both industries may make a difference. We will come back to this point later.

Despite the conflict and competition between the domestic and foreign sources of food grains that we can infer from the above analysis, the interwar years witnessed a period of growth, instead of diminishing, in the market as a whole. Such a growth also continued throughout the 1920s and early 1930s, as shown in the total volume of imports (domestic and foreign altogether) of these produces; they tripled (or more) during the period 1918-1934. Besides, there was a growing, not contracting, connection between China and the international grain markets, though in the form that the country exported less of its produce abroad, allowing more of the foreign sources to supply its needs. In other words, China continued to be part of the international economy during the 1920s and 1930s; it did not detach from its former links in grain trade after the First

World War.<sup>18</sup> This pattern of trade may perfectly fit into the framework of “foreign dominance” in the interwar Chinese economy. However, before one can accept this argument, one has to examine the networks and structure of the grain market and to locate the places where the impact of international grain market mostly felt.

### III. Networks of the Grain Trade

To reconstruct the history of China’s grain trade networks, it is necessary to reorganize the sources already available to historians in a new perspective. As the Customs’ statistical publications have several shortcomings which have been discussed above, the following analysis will be based on not only the Customs’ records but also the tabulations of Cai and Zheng, Han Qitong, as well as other surveys and reports available.

However, before going into the details of the analysis, it should be pointed out that Cai’s and Zheng’s data mainly covers the Chinese imports of foreign products by trading ports, while Han’s covers “inter-port” trade. Although China did export food grains abroad, these grains were not regarded as “principal” export items in Cai’s and Zheng’s tabulations. Without more detailed materials from the Customs records, we have to temporarily exclude them from our analysis. Moreover, as China’s food grains basically served the domestic market, the networks of grain exports overseas would undoubtedly be of secondary importance. The only exception is the wheat export in Manchuria, which can be analyzed by some other literary materials. These sources allow us to reconstruct the networks in Manchuria, which were not recorded in Han’s tabulations. They also let us include several other non-trading ports into our analysis: Beijing (Peking 北京), Zhengzhou (Chengchou 鄭州), Ji’nan (Chinan

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<sup>18</sup> A.J.H. Latham, pp. 654-655; Brandt, pp. 168-193.



濟南), Xuzhou (Hsuchou 徐州) and Wuxi (Wushih 無錫). The political, economic or transportation importance of these places lead one not to ignore their significance.<sup>19</sup>

The trade networks in our analysis, therefore, basically refer to the *trading relations* between those ports and foreign countries and among themselves. These ports were mostly under the monitor of the Maritime Customs authorities, except Beijing, Wuxi and other places mentioned above. These trade networks also represent “nation-wide long-distance” trade, not local trade simply for several towns or villages. Some of them, such as those covering Manchurian ports or that between “Lingnan” and “Middle Yangzi” regions, are also included despite their incomplete time factor. In addition, as the Customs and other records show *almost exclusively* direct trade between ports, these networks do not represent entrepot trade in China, which should be handled by another paper. On the other hand, the “direct” nature of the trade allows us to simplify the trade routes by taking away the geographical map of China. In the following analysis, therefore, the trade networks do not represent “trade routes” as one might expect.

In the following analysis, we count only the major trade networks, excluding those with *less* than 1,000 piculs in trade volume. We count only the *volume* (not *value*) of the grain trade in order to reduce the price and exchange

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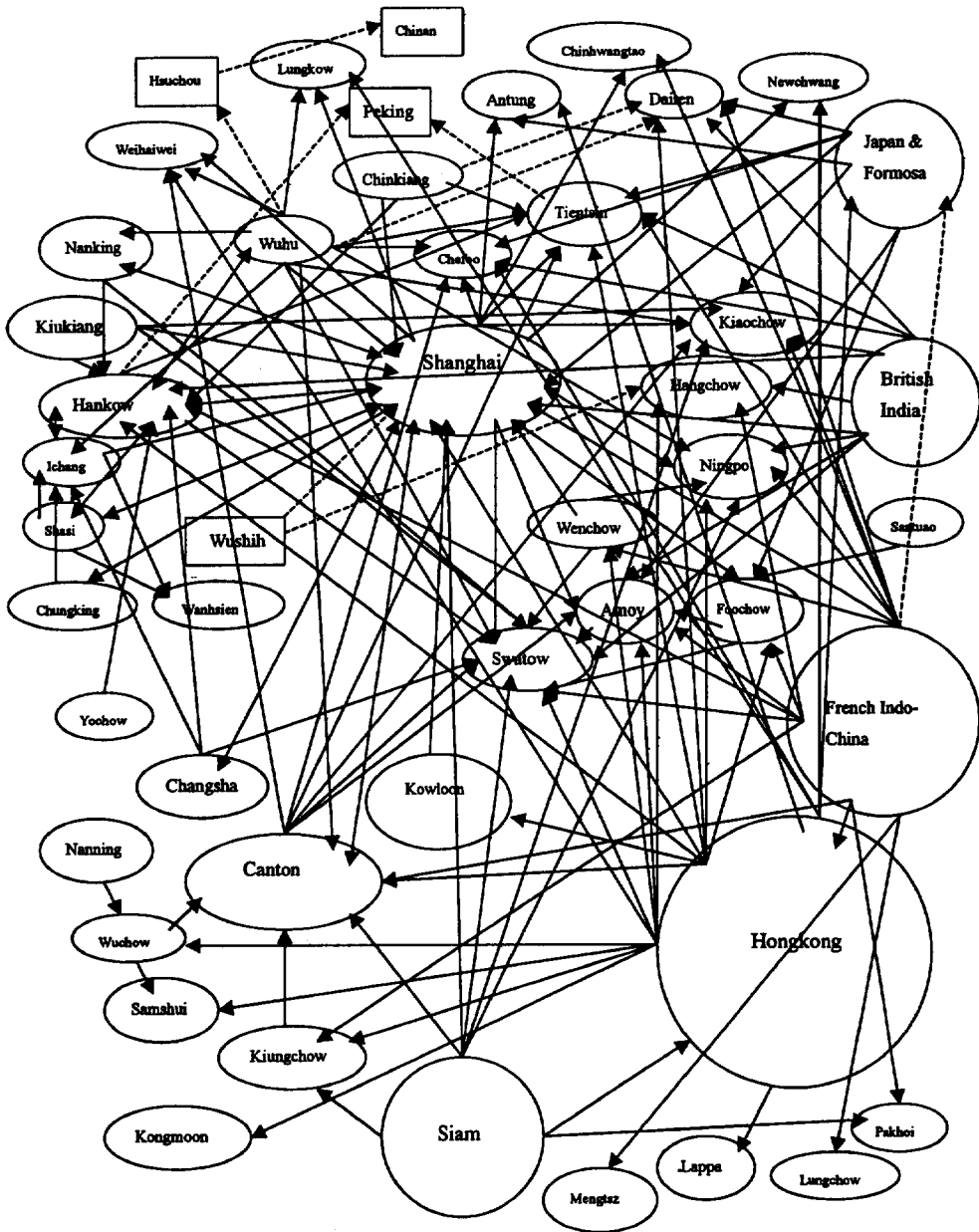
<sup>19</sup> Ernest P. Liang, *Railways and Agricultural Development 1875-1935* (Chicago: University of Chicago Department of Geography, 1982), p. 37; Zhongguo kexueyuan jingji yanjiusuo 中國科學院經濟研究所, Zhongyang gongshang xingzheng guanliju 中央工商行政管理局 Zibenzhuyi jingji gaizao yanjiushi 資本主義經濟改革研究室 comp., *Jiu Zhongguo jizhi mianfen gongye tongji ziliao* (舊中國機製麵粉工業統計資料 *Statistical materials on mechanized flour-milling industry in old China*) (Beijing: Zhonghua shuju 中華書局, 1966); Shehui jingji diaochasuo (社會經濟調查所 Institute of Social and Economic Research) comp., “Wuxi mishi diaocha” (無錫米市調查“Survey on Wuxi rice market”), *Shehui jingji yuebao*, Vol. 3, No. 7 (July 1936), pp. 43-66 and No. 8 (Aug. 1936), pp. 21-61; Nōshōmushō 農商務省, *Shina no kome ni kansuru chōsa* (支那ノ米ニ關スル調査 *Survey on China's rice*) (Tokyo: Nōshōmushō, 1917), particularly map in front page.

rate factors on trade. In obtaining this “trade volume,” we basically adopt the gross figures from the Customs reports, in which a minor proportion of re-export trade is allowed. Such a calculation must arouse objection, indeed. Yet, as the volume of re-export usually counts for less than one percent of the gross trade volume and since the Customs records do not provide precise figures at all levels, it certainly serves our need of preliminary analysis. In addition, on several occasions we put together all import and export volumes of each trading port, including those for domestic use (as indicated in the Customs records). In doing so, we count the *transaction volume* (that means both in and out) of the port. However, such an analysis certainly involves double-counting problems when we come up with the national total.

Last but not least, in the following sections, we will analyze the transaction volume of three kinds of principal food grains -- rice (and paddy), wheat and flour separately because of their difference in nature. Therefore, we have no attempt to estimate the *total* volume of the grain trade. To have chosen them for analysis, besides the shortcoming of current research as outlined above, we mainly view their importance to the daily diet of the Chinese population. We do agree the importance of other cereals as well, but their importance in relation to these three kinds of grain would need another paper to handle. Lastly, throughout our analysis, rice and paddy are put into one category as the sources do, though we notice the potential problem to our investigation. In this sense, it certainly leaves more questions for us to pursue than those we would have solved in this given space.

The major trade networks of the three groups of grains are summarized in Diagrams 1, 2 and 3. For those based on Han's, Cai's and Zheng's records, they are represented in solid lines, and otherwise, dotted. The multifarious outlook of these lines may confuse readers but a general analysis will clarify the obscurity. Let us first focus on the changes in rice and paddy trade. (See Diagram 1)

Diagram 1. Trade Networks of Rice and Paddy in China (mainly through Maritime Customs), 1919-1936



As known to historians, China's rice and paddy trade networks in the years enjoyed various sources from abroad, mainly French Indo-China, Siam, Hong Kong, British India and Japan (with a small fraction of rice from Formosa) represented by the rounded-shape circles. Although the Southeast Asian countries and places mainly supplied for what G. William Skinner<sup>20</sup> calls "Lingnan" and "Southeastern" regions, their export networks also extended to other ports in the northern regions, such as Hankou (Hankow 漢口), Shanghai, Longkou (Lungkow 龍口) or even Andong (Antung 安東) and Qinhuangdao (Chinwangtao 秦皇島) in North China and Manchuria.

Among these "foreign" countries exporting rice to China, Hong Kong (a British island-colony at the Pearl River Delta) emerged as the principal re-exporter, trading Southeast Asian rice into the country. It enjoyed a wide distribution network over the country. This network ran from nearly all the ports in southern, southeastern and southwestern China, even to North China ports such as Dalian (Dairen 大連), Yantai (Chefoo 煙臺), Andong, Niuzhuang, Longkou and Weihaiwei (威海衛) and Tianjin, and such Yangzi ports as Shanghai, Ningbo (Ningpo 寧波) and Hankou. Besides the scope of the colony's network, its trading scale was perhaps equally impressive. Throughout the 1910s and 1920s, despite its significant decline in conducting re-export

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<sup>20</sup> G. William Skinner, "Marketing and Social Structure in Rural China," *Journal of Asian Studies*, 24:1 (1964), pp. 3-43, 24:2 (1965), pp. 195-228, and 24:3 (1965), pp. 363-399; "Urban Development in Imperial China," "Regional Urbanization in Nineteenth-century China," "Urban and Rural in Chinese Society," "Cities and the Hierarchy of Local Systems," and "Urban Social Structure in Ch'ing China," all in Skinner ed., *The City in Late Imperial China* (Stanford: Stanford University Press, 1977), pp. 3-31, 211-249, 253-273, 275-351, 521-553; also see "Marketing Systems and Regional Economies: Their Structure and Development," paper prepared for the Symposium on Social and Economic History in China from the Song Dynasty to 1900, Chinese Academy of Social Sciences (Beijing, 26 Oct.-1 Nov. 1980).

trade,<sup>21</sup> it exported (re-exported) annually no less than 2 million piculs of rice and paddy into China (except in 1919 and 1920). At its peak, Hong Kong brought more than 14 million piculs into the country.<sup>22</sup> Because the Customs' records began to trace the origins of Hong Kong's rice exports in the early 1930s<sup>23</sup> and as China began to impose protective tariff on rice in December 1933,<sup>24</sup> the statistical volume of the British colony's rice exports into China

<sup>21</sup> T. R. Banister, "A History of the External Trade of China, 1834-31," in *Decennial Reports, 1922-1931*, Vol. I (1933), pp. 1-193, particularly pp.163-164.

<sup>22</sup> Hong Kong's rice exports into China between 1910 and 1934 are as follows:

<u>Year</u>	<u>Volume</u>	<u>Year</u>	<u>Volume</u>	<u>Year</u>	<u>Volume (piculs)</u>
1910	7,425,922	1921	9,141,813	1932	1,147,815
1911	4,209,746	1922	14,289,537	1933	190,315
1912	2,129,965	1923	14,656,160	1934	217,534
1913	4,782,986	1924	10,255,705		
1914	6,193,830	1925	8,321,360		
1915	7,493,983	1926	3,385,168		
1916	9,364,542	1927	11,847,371		
1917	8,706,813	1928	9,386,823		
1918	6,333,647	1929	7,992,261		
1919	1,569,533	1930	6,022,992		
1920	904,515	1931	6,865,659		

Sources: Inspectorate General of the Chinese Maritime Customs, *Foreign Trade of China, 1913-1934* (Shanghai: Office of the Inspectorate General of the Chinese Maritime Customs, 1914-35), Imports, see the entry "Rice and Paddy," or in some years, "Rice." No single entry for "Paddy" in the records we studied for China's national trade.

<sup>23</sup> Li Tao (李濤), "Zhong-Xian maoyi zhong xianmi zhi yanjiu" (中暹貿易中暹米之研究 "A study of Siamese rice in Sino-Siamese trade"), *Shehui jingji yuebao*, Vol. 2, No. 11-12 (Nov.-Dec. 1935), pp. 30-51, particularly pp. 45-46.

<sup>24</sup> Li Quanshi (李權時), *Zhongguo guanshui wenti* (中國關稅問題 *The problems of China's tariff*), 2 vols. (Shanghai: The Commercial Press, 1936), Vol. 1, pp. 157-196, particularly p. 179. On the background of this new policy, see Jiubao Heng (Kubo Tōru 久保亨), "Ershi shiji sanshi niandai Zhongguo de guanshui zhengce yu zichan jieji" (二十世紀三十年代中國的關稅政策與資產階級 "Chinese tariff policy and the capitalist class in the 1930s") (trans. by Cheng Linsun 程麟蓀 and Qian Xiaoming 錢小明), in Zhang Zhongli (張仲禮) ed., *Zhongguo jindai jingjishi lunzhu xuanyi* (中國近代經濟史論著選譯 *Selected*

dropped dramatically. Yet, Hong Kong continued to function as the hub for Southeast Asian rice well until the late 1930s.<sup>25</sup> It was an integral part of China's economic networks after all.<sup>26</sup>

Regarding China's imports of Japanese and Formosan (Taiwanese) rice, particularly in the 1910s and 1920s, although it is well-known that Japan imported enormous amount of rice from abroad and its colonies to solve its dearth of food grains,<sup>27</sup> the country did export a remarkable amount of rice to some Chinese ports (such as Shanghai, Dalian and Fuzhou [Fuzhou 福州]) in the early twentieth century. These were, however, probably not transferred from other Japanese colonies such as Formosa and Korea. To begin with, the Maritime Customs' records have a separate column for Korean rice exports into China, and that had been incorporated into "other countries" in Cai's and

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*translations of writings in modern Chinese economic history*) (Shanghai: Shanghai shehui kexueyuan chubanshe, 1987), pp. 252-271.

25 Chen Qihui (陳啓輝), n.d. (written in the late 1930s), *Guangdong tudi liyong yu liangshi chanxiao* (廣東土地利用與糧食產銷 *Land use and the production and distribution of food in Guangdong*), in Xiao Zheng (蕭錚) ed., *Minguo ershi niandai Zhongguo dalu tudi wenti ziliao* (民國二十年大陸土地問題資料 *Source materials on land problems in Mainland China in the 1930s*) (Taipei: Chengwen chubanshe 成文出版社, 1977), Vol. 51, pp. 26107-26113.

26 Hamashita Takeshi(濱下武志), *Chūgoku kindai keizaishi kenkyū -- Shinmatsu kaikan zaisei to kaikōjō shijōken* (中國近代經濟史研究——清末海關財政と開港場市場圈 *Economic history of modern China -- maritime customs finance and open port market zones in late Ch'ing China*) (Tokyo: University of Tokyo Institute of Oriental Culture, 1989), pp. 248-267; *Kindai Chūgoku no kokusai teki keiki -- chōkō bōeki shisutemu to kindai ajia* (近代中國の國際的契機——朝貢貿易システムと近代アジア *Turning point in international relations of modern China -- tribute trade system and modern Asia*) (Tokyo: Tokyo University Press, 1990), pp. 177-216.

27 Kawahigashi, pp. 68-77; Ōmameuda, pp. 143-176; Nakajima Kōichi (中嶋航一), "Kome no Nihon teikokunai bungyō to gaimai ison no kōzō" (米の日本帝國內分業と外米依存の構造 "The Asian rice market and the division of rice production in the Japanese empire"), in *Shakai-keizai shigaku* (社會經濟史學 *Socio-economic history*), Vol. 64, No. 6 (Feb./Mar. 1999), pp. 777-807.

Zheng's tabulations. Therefore, if a line is to be drawn, that should be a separate one. Regarding Formosan rice, trade statistics from the island colony are found to be inconsistent in the compilation methods, thus affecting our analysis throughout the years. Yet, in the first two decades of its colonial rule in Formosa, Japan even exported a certain amount of rice from the Kansai region to the colony, meanwhile importing from the colony via Yokohama in the Kantō area.<sup>28</sup> It would seem rather unprofitable for Japanese merchants to re-export the bulky and cheap commodity back and forth the colony. In addition, the Taiwan Governor-General government encouraged Formosan rice exported to Japan by introducing new seeds,<sup>29</sup> and that probably caused further impact on Formosan rice exports into China. In the early 1930s, China's rice imports from the island colony continued to be smaller than that from Japan itself, and in 1934, even became nil.<sup>30</sup> In short, the Japanese rice exports into China

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<sup>28</sup> Office of the Governor General of Taiwan (later the government of Taiwan), *Annual Return of the Foreign Trade of Taiwan (Formosa) (1901-1915)* (Taihoku [Taipei]: Office of the Governor General of Taiwan, 1902-1916).

<sup>29</sup> Kawano Shigeto (川野重任), *Taiwan beikoku keizai ron (臺灣米穀論 Rice economy of Taiwan)* (Tokyo: Yūhikaku 有斐閣, 1941), trans. into Chinese by Lin Yingyan (林英彥), *Riju shidai Taiwan migu jingji lun (日據時代臺灣米穀經濟論 A treatise on Taiwan's rice grain economy during the Japanese occupation period)* (Taipei: Bank of Taiwan 臺灣銀行, 1969).

<sup>30</sup> Although the Customs' records do not separate the two in pre-1931 statistics, China's rice import from both Japan and Formosa in the early 1930s seems to suggest that Japan rather than Taiwan was the major exporter to the Chinese market within the category of "Japan (including Formosa)." The post-1931 trading figures for both Japanese and Formosan rice are tabulated as follows:

<u>Year</u>	<u>Japan</u>	<u>Formosa</u> (unit piculs)
1931	798,348	16,221
1932	39,720	16,757
1933	28,982	23
1934	32,468	---

Source: Inspectorate General of the Chinese Maritime Customs, *Foreign Trade of China, 1931, 1932, 1933, 1934* (Shanghai: Office of the Inspectorate General of the

obviously came mainly directly from Japan, not from the “Japanese Empire.” These exports probably came to serve some particular customers of the produce, such as the huge Japanese emigrant and expatriate population in China.<sup>31</sup>

The oval-shaped areas represent the Chinese ports open to foreign trade and under the Maritime Customs’ jurisdiction. It would seem that these ports were not only engaging in regional trade, supplying to or buying from their neighbourhood, but also actively involved in cross regional “long-distance trade.” For instance, Wuhu rice was shipped to not only the “Lower Yangzi” region, such as Shanghai and Nanjing, but also to Hankou of the “Middle Yangzi,” Yantai, Jiaochow, Longkou and Weihaiwei in “North China” and Guangzhou in “Lingnan.” Hankou traded not just with its “Middle Yangzi” neighbours (such as Yichang [Ichang 宜昌], Jiujiang and Yuezhou [Yochow 岳州]), but also supplied Beijing and Tianjin (Tientsin 天津) in “North China” region. Some Cantonese rice was exported to the “North China” region, such as Yantai, Tianjin and Jiaozhou.

Some of the networks, however, were really unprecedented. They probably had overcome the centuries-old obstacles for trade between two regions. The trade between Changsha and Guangzhou can further illustrate such kind of real breakthrough. Trade routes had been established between the two places in the eighteenth century but of secondary importance to Changsha’s rice exports.<sup>32</sup>

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Chinese Maritime Customs, 1932-35), Imports, “Rice and Paddy” or “Rice.”

<sup>31</sup> Up to 1928, Japan had more than 239,000 heads registered as residents in China, while the total registered foreign residents amounted only to less than 350,000 persons. See Yang, Hau and others comp., pp. 143-148.

<sup>32</sup> Wang Yejian and Huang Guoshu (黃國樞), “Shiba shiji Zhongguo liangshi gongxu de kaocha” (十八世紀中國糧食供需的考察 “A survey on the demand and supply of foodstuff in eighteenth-century China”), in Zhongyang yanjiuyuan jindaishi yanjiusuo (Institute of Modern History, Academia Sinica) comp., *Jindai Zhongguo nongcun jingjishi lunwenji* (近代中國農村經濟史論文集 *Proceedings of the conference on the agricultural economic history of modern China*) (Taipei: Institute of Modern History, Academia Sinica, 1989), pp.



In 1936, the last section of the Guangzhou-Hankou Railway (Yue-Han tielu 粵漢鐵路) was completed, which brought enormous impact on Guangzhou by greatly reducing imports of other kinds of domestic rice, such as Wuhu and Wuzhou (Wuchow 梧州), in the city's rice market.<sup>33</sup>

On the whole, China in the interwar years witnessed the rise of several centres for the rice and paddy export trade, including Wuhu, Jiujiang, Changsha, Wuxi and Zhenjiang. All of them, except Wuhu, had been active well before the mid-nineteenth century but their activities extended across the country in the twentieth.<sup>34</sup> In these places, it would be less likely that we find strong foreign produce's presence. Meanwhile, we can find the rise of several rice importing centres, including Shanghai, Tianjin, Yantai, Shantou (Swatow 汕頭), Xiamen (Amoy 廈門), Ningbo, Jiaozhou, Nanjing, Hankou and Guangzhou, enjoying ample supplies from *both* domestic and foreign sources. It should be in these places where the relationship between native and foreign produces can be examined.

Further still, together with Hong Kong as a centre for Southeast Asian rice re-export, these trading ports formed a complex and sometimes overlapping network with the countries of supply. Most of these ports, except Shantou, Jiaozhou and Yantai, also exported a minor volume of rice to other Chinese ports. This phenomenon still needs further investigation but attractive factors such as market accessibility of these ports must have served both local (exporting) and "cross-regional" (importing) trade simultaneously.

Nonetheless, most of the rice import networks outlined above should not

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271-289, particularly p. 280.

<sup>33</sup> Chen Qihui, pp. 26097-26099. This had actually been expected on the eve of the railway's completion, see Wu and Liu comp.

<sup>34</sup> Wang Yong (王涌) ed., *Zhongguo sida mishi* (中國四大米市 *The four great rice market of China*) (Guilin: Lijiang chubanshe 桂林: 漓江出版社, 1990).

be seen as totally “foreign.” Especially those from Southeast Asia were under the control of Chinese merchant houses abroad.<sup>35</sup> These merchants owned most of the rice mills in Southeast Asia, traded directly with their counterparts in China, and after the First World War, even collected grains directly from the farmers.<sup>36</sup> Some of them, such as the Chaozhou (潮州) merchants who opened Kin Tye Lung (乾泰隆) and Yuanfahang (元發行), even owned rice mills, shops, warehouses and ships inside and outside China, and maintained close relationship with their native places.<sup>37</sup> In other words, most of the country’s rice import trade in the interwar years can be regarded as an extension of the Chinese business networks overseas.

Let us now consider the wheat trade networks. (See Diagram 2) At first glance, it differs from “rice and paddy” because of its simplicity as a factor market for flour. Its networks may also look less complex than rice and paddy as we have just seen above.

China’s wheat market in the interwar years to a large extent linked up with the international market. As mentioned earlier, the country had been exporting wheat in the 1910s. Large-scale foreign imports did not become significant until the 1920s, mostly from the U.S.A., Canada, Australia (and New Zealand) and Russia. In the early 1930s, networks of China’s wheat foreign imports even

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<sup>35</sup> Latham and Neal, p. 274; Latham, pp. 348-350.

<sup>36</sup> James C. Ingram, “Thailand’s Rice Trade and the Allocation of Resources,” in C.D. Cowan ed., *The Economic Development of Southeast Asia: Studies in Economic History and Political Economy* (N.Y.: Frederick A. Praeger, 1964), pp. 102-126, particularly p.104.

<sup>37</sup> David Faure, “The Rice Trade in Hong Kong Before the Second World War,” in Elizabeth Sinn ed., *Between East and West: Aspects of Social and Political Development in Hong Kong* (Hong Kong: Centre of Asian Studies, University of Hong Kong, 1990), pp. 216-225; Choi Chi-cheung, “Competition among Brothers: the KinTyeLung Company and its Lianhaos [Associate Companies],” in Rajeswary A. Brown, ed., *Chinese Business Enterprise in Asia* (London: Routledge, 1996), pp. 96-114; *idem*, “Kinship and Business: Paternal and Maternal Kin in Chaozhou Chinese Family Firms,” *Business History*, Vol. 40, No. 1 (January 1998), pp. 26-49.

extended to other countries such as Argentina and Hungary, which are not included in Cai's and Zheng's records.<sup>38</sup> These imports supplied not the whole country but only some trading ports along the Middle and Lower Yangzi, and North China (Shanghai, Tianjin, Hankou, Nanjing and Jiaozhou). Shanghai stood as the leader amongst these ports; it alone absorbed the lion share of wheat imports in the 1920s and 1930s (see Table 4). As will be discussed later, most of these ports, except Jiaozhou<sup>39</sup>, were also centres for China's flour-milling industry.

Diagram 2 also shows the rise of Manchuria as another important wheat trade area in China. With its rich agricultural resources, the whole area was not only one of the earliest places for development of the flour-milling industry. It was also China's major wheat-exporting region to foreign countries.<sup>40</sup> On the

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<sup>38</sup> Trade volume of wheat from Argentina and Hungary are summarized as follows:

<u>Year</u>	<u>Argentina</u>	<u>Hungary</u>
1931	---	---
1932	125,752	---
1933	2,222,459	---
1934	1,598,653	125,511

Unit: picul

Source: Inspectorate-General of the Chinese Maritime Customs, *Foreign Trade of China, 1931, 1932, 1933, 1934*, Imports, "Wheat."

<sup>39</sup> From other contemporary sources we learned that Jiaozhou was the major port in Shandong for foreign wheat imports. Its connection with the railways (Jiaozhou-Ji'nan Railway) provided a means for the city to redistribute the imported produce to other flour-milling centres in the province. See Lu Guoxiang (陸國香), "Shandong zhi mianfenye" (山東之麵粉業 "Flour-milling industry in Shandong"), in *Guoji maoyi daobao* (國際貿易導報 *Journal of International Trade*), Vol. 6, No. 5 (10 May 1934), pp. 209-222, particularly p. 212.

<sup>40</sup> Although the Maritime Customs' records do not explicitly show the direction of Chinese wheat exports abroad, Suifenho's trade statistics do demonstrate that the port's wheat exports were identical to that China exported to Russia's Pacific Ports. As Haerbin (Harbin) and Dalian (Dairen) also exported substantial amount of wheat, we therefore believe that these ports equally exported wheat to Russia. Meanwhile, as Japan possessed enormous economic interest in Manchuria, particular along the South Manchurian Railway down to Dalian, we also include the port into our analysis.

eve of the First World War, there were already 46 flour mills in the area, most of which were foreign-(Russian)owned. Throughout the 1920s and 1930s, the number of mills increased to 68, with mainly Chinese capital.<sup>41</sup> Most of these mills located at Haerbin where, similar to Shanghai, conducted both import and export businesses for the produce. Other cities, such as Tianjin and Hankou, also experienced similar path of development.

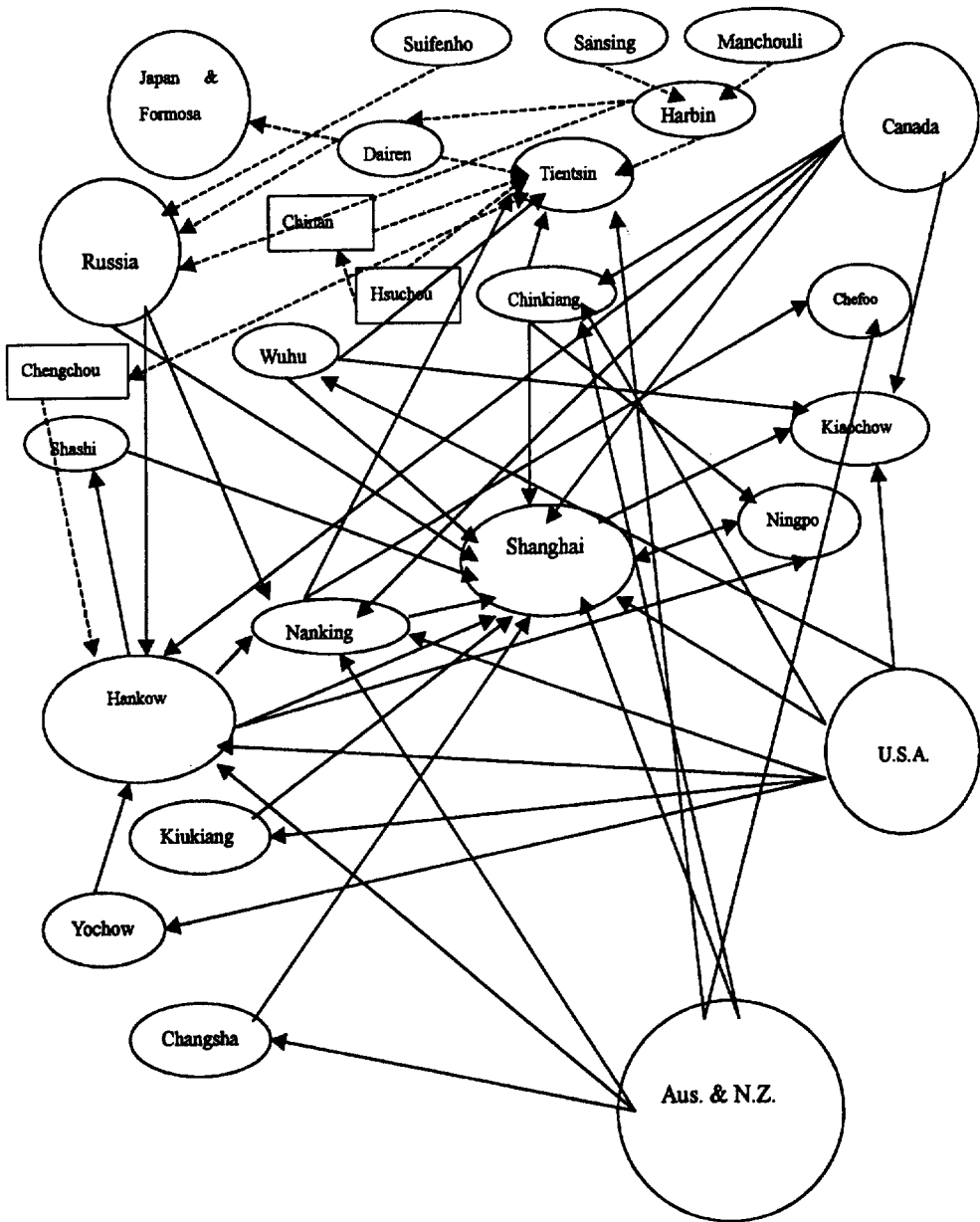
Another development of the wheat trade in this period is the rise of a nation-wide market for the produce, at least among the wheat-growing areas -- North China, Manchuria, and Middle and Lower Yangzi regions. No major ports from the Lingnan and Southeastern regions participated in the trade to any significant extent, as wheat was almost not grown there.<sup>42</sup> This contrasts with the rice and paddy networks as rice-growing regions (such as Guangdong and Hunan) traded with non-rice-growing ones (such as North China and Manchuria). This is so probably because of the factor product nature of wheat -- the produce would be sent to the flour mills first before distributing nation-wide.

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<sup>41</sup> Shanghaishi liangshiju 上海市糧食局, Shanghaishi gongshang xingzheng guangliju 上海市工商行政管理局, Shanghai shehui kexueyuan jingji yanjiusuo jingjishi yanjiushi 上海社會科學院經濟研究所經濟史研究室 comp., *Zhongguo jindai mianfen gongyeshi* (中國近代麵粉工業史 *Flour-milling industry in modern China*) (Beijing: Zhonghua shuju, 1987), pp. 33-35, 48-51, 66-69.

<sup>42</sup> For the distribution of wheat-growing areas in China, see Shen Zonghan( 沈宗瀚 ), *Zhongguo nongye ziyuan* (中國農業資源 *Agricultural resources in China*) (Taipei: Zhonghua wenhua chubanshiye weiyuanhui 中華文化出版事業委員會, 1953), Vol. 2, p. 86, Map 24.

Diagram 2. Trade Networks of Wheat in China (mainly through Maritime Customs), 1919-1934



Among these wheat trade networks, the railway had played a significant role. In particular, wheat-growing areas in North China had long lacked the effective and efficient transport systems such as waterways in the south. The railway promoted movement of grains in North China, linking such wheat-growing areas as Zhengzhou and Xuzhou with the transport and commercial centres but wheat-deficit areas such as Hankou, Ji'nan and Tianjin.

Overall speaking, unlike the rice-import trade business networks, China's foreign wheat imports were conducted mainly by foreign trading agencies or Western or Japanese general trading companies in the country. For instance, in the 1930s, the Fuxin Flour Mills purchased wheat from the New York Exchange via several American firms and two Japanese firms (*Mitsui Bussan Kaisha* and *Mitsubishi Bussan Kaisha*).<sup>43</sup> Chinese merchants seldom engaged themselves in this trade.<sup>44</sup> As these foreign firms would be directly competing with Chinese merchants on domestic wheat trade, one may therefore expect competition in those places.

Nevertheless, the issue of wheat trade networks is complicated by the fact that Chinese flour-mill owners had the advantage of comparing the prices of different sources by establishing their own wheat purchasing offices. The famous entrepreneurs the "Rong brothers (榮氏兄弟)" from Wuxi, who owned a dozen flour mills in Shanghai, Wuxi, Hankou and Ji'nan, is a case in point. They not only chartered the service of some Japanese firms to procure international supplies, as mentioned above, but also possessed a nation-wide wheat-purchasing and flour-distributing network, working side-by-side with

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43 Shanghai shehui kexueyuan jingji yanjiusuo comp., *Rongjia qiye shiliao* (榮家企業史料 *Historical materials of the Rong family business enterprises*) (Shanghai: Shanghai renmin chubanshe, 1980), Vol. 1, pp. 230, 235-237.

44 Shehui jingji diaochasuo comp., *Shanghai maifen shichang diaocha* (上海麥粉市場調查 *The Shanghai wheat and flour market*) (Shanghai: Shehui jingji diaochasuo, 1935), pp. 2-3.

purchasing from grain dealers.<sup>45</sup> In this respect, one may agree with the compilers of the historical sources on the “Rong family enterprises” that they enjoyed success and survival with the influx of foreign wheat.<sup>46</sup> At that level, the nature of competition cannot be simplified by a dichotomy of “Sino-foreign business rivalry” -- Chinese flour-mill owners might be effectively competing with foreign flour at the expense of domestic wheat trade.

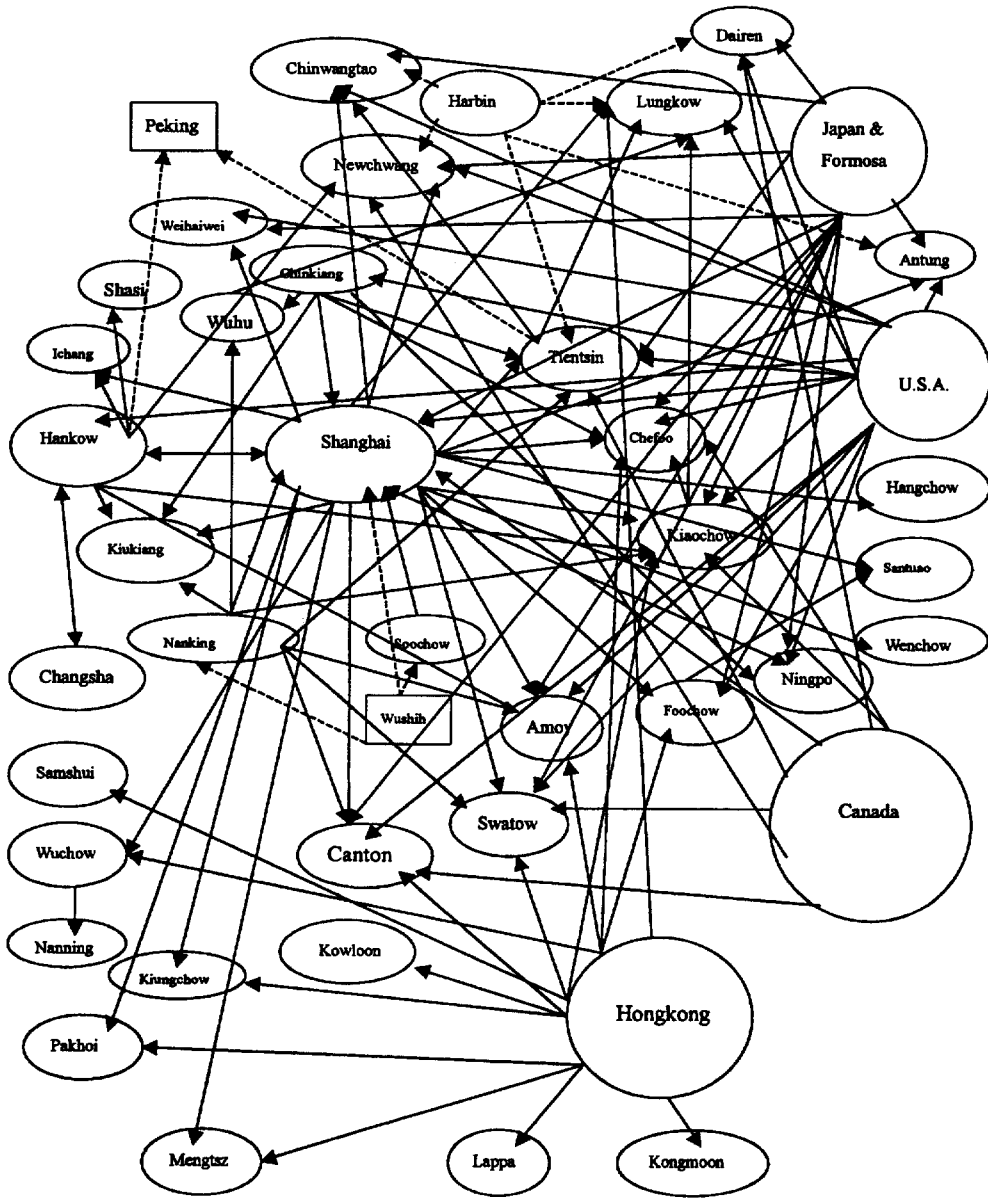
The rise of the wheat trade centres in China, as mentioned above, represents the emergence of flour-milling industry in those places. This can considerably be observed in Diagram 3 which shows that Shanghai was undoubtedly *the* centre of China's flour trade, particularly in domestic exports. The city's trade networks extended to many major ports around the country, even including Qinhuangdao in the north, Yichang (Ichang) in Middle Yangzi and Mengzi (Mengtsz) in the southwest. It also put most of the coastal ports under its trade networks. Tianjin, Jiaozhou, Fuzhou, Xiamen and Guangzhou can all be regarded as Shanghai's markets. With the city's huge imports of foreign and domestic wheat, plus its flour milling giants' (such as Fuxin's and Maoxin's) distributing networks, this pattern seems quite predictable.

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<sup>45</sup> For example, both Fuxin (福新) and Maoxin (茂新) Flour Mills owned 14 wheat-purchasing offices, established from 1903 to 1930, and spread over four provinces in North and East China; meanwhile, the same enterprises owned or shared with the Rong brothers' Shenxin Cotton Mills 25 offices for marketing in 10 provinces. See Kai Yiu Chan, *Big Business Financing in Modern China: A Case Study of the Flour Milling and Cotton Textile Enterprises of the Rong Brothers, 1901-1936* (Hong Kong, M.Phil. Thesis, Chinese University of Hong Kong, 1992), pp. 25-26.

<sup>46</sup> *Rongjia qiye shiliao*, Vol. 1, pp. 168-170.

Diagram 3. Trade Networks of Flour in China (mainly through Maritime Customs), 1919-1934





Shanghai's model of processing wheat for flour and exporting it to other Chinese ports can also be observed in the cases of Haerbin, Hankou, Zhenjiang (Chinkiang) and Nanjing. Though to a much smaller extent than Shanghai, these ports imported both domestic and foreign wheat for their flour mills and exported to other cities, including Shanghai itself. If the sources allow us for such an exercise, it would be interesting to investigate into the comparative and competitive advantages of these cities against Shanghai.

What may seem quite striking from Diagram 3 is the fact that several major centres of wheat imports (both domestic and foreign) also imported a large amount of flour from the country and abroad. These include Tianjin, Yantai (Chefoo) and Jiaozhou. It is well-known that Tianjin was a major city for the flour-milling industry.<sup>47</sup> Its huge wheat imports seem naturally to be used for local processing. Meanwhile, its huge flour imports imply the existence of a huge demand to the produce, or a strong re-export trade from the city to the neighbourhood. Anyhow, some cities like Tianjin (also Yantai and Jiaozhou) imported both wheat and flour in great amount instead of processing wheat for flour export like that in Shanghai.

Diagram 3 also shows that similar to the case in rice and paddy trade, Hong Kong played an important role in distributing foreign flour into the country, particularly in South China. Meanwhile, the U.S.A., Canada and Japan also exported their flour directly into Chinese ports, particularly in North China. In a sense, there seems to have a division of labour between Hong Kong and these foreign countries, though the former also representing the latter. As foreign trading firms in China specialized in flour import business,<sup>48</sup> it was

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<sup>47</sup> *Zhongguo jindai mianfen gongyeshi*, pp.277-284; H.D. Fong, "Grain Trade and Milling in Tientsin," in *The Chinese Social and Political Review*, Vol. XVII, No. 3 (Oct. 1933), pp. 367-429, Vol. 17, No. 4 (Jan. 1934), pp. 553-631.

<sup>48</sup> Guomin zhengfu xinan zhengwu weiyuanhui guowai maoyi weiyuanhui 國民政府西南政務

probably in this trade which the idea of “Sino-foreign business rivalry” can find its most obvious arena to work.

Having reviewed the development of flour and wheat trade networks in the interwar years, it seems that the scope of flour distribution seems no narrower than that of rice and paddy. Its networks are no less complicated either, supplying the customers from various international and domestic sources. More strikingly, this development resulted only from efforts of a generation or two. The trade networks outlined above also reveal the complexity of the reality behind the simple dichotomy of “Sino-foreign business rivalry.” On the one hand, overseas Chinese merchants were conducting most of the importing trade of rice and paddy, bringing the produce into China. On the other hand, Chinese flour-mill owners benefitted from competitive price of wheat in order to gain dominance over foreign flour in the China market. The complexity of the market mechanism in grain trade is equally evident at the trading port (i.e. regional and local) level, as will be discussed in the next section.

#### IV. Competition At Trading-Port Level?

In this section, we will examine the “Sino-foreign business relationship” by testing the possibility of substitution (competition) effect between native and foreign sources in each trading port’s imports of the produce. In doing so, we wish to examine the substitution/competition thesis by locating the potential arenas of the so-called “commercial rivalry,” if any. “Substitution effect” here refers to the movement of grain imports of different sources opposite to each other and the replacement of one kind of grains by the other over time.

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委員會國外貿易委員會 comp., *Guangdong gongshangye (qi) maifen* (廣東工商業[七]麥粉 Industry and commerce of Guangdong [7] wheat flour) (Guangzhou: Guomin zhengfu xinan zhengwu weiyuanhui guowai maoyi weiyuanhui, 1934), pp. 2-3; also see H.D. Fong, p. 408.

However, in many cases, the gap between trade volume was not eminent, and thus less the degree of substitution between native and foreign sources. We will also classify these ports' total volume of import of the respective food grains for further discussion. Accordingly, these ports are classified into six groups, ranging from 1-1,000 piculs of import volume to more than 2 million. The main characteristics of each port are also briefly noted in the remarks column. The results are summarized in Tables 5, 6 and 7.

Let us first examine the case of rice and paddy. At first glance, there were 18 out of 51 ports with an apparent substitution/competition between native and foreign produces. Among them, when the scale of the import trade goes higher up, it seems to be more likely for these ports to have competition. When it reaches the level of more than 1 million piculs, the substitution effect between foreign and native produces seems to be more apparent. Large trading ports, including Tianjin, Ningbo, Shanghai, Shantou and Guangzhou, all seem to have followed a similar pattern as in the national trade analysis: foreign rice dominated the import market since the early 1920s. Only Lappa and Kowloon do not fit into this category, where foreign rice and paddy was predominant. Yet, among those smaller ports in which competition still seems to be apparent, native produce did not loose the market altogether: only Dalian, Jiaozhou, Hangzhou, Xiamen can we see foreign dominance. In both Niuzhuang and Hankou, native and foreign produces were close to each other, suggesting much keener competition between the two.

In fact, the picture of substitution between the two sources went hand in hand with the fact that the majority of the trading ports -- 32 out of 51 ports under review -- except for Dadonggou (Tatungkow 大東溝) which did not have related records -- did not have clear competition between them. In these ports, there could be several situations: either native or foreign grains enjoyed the lion's share of the market; both kinds of grains went up and down

simultaneously; or their importation into the city was only occasional, disconnecting with one another. In other words, there must be some other factors affecting the movement of the grains instead of simply affected by foreign competition. To generalize the situation would only be risky.

Regarding the case of wheat trade, there are several similarities and dissimilarities with rice and paddy. Unlike rice and paddy, there were only three trading ports for wheat -- Jiaozhou, Tianjin and Shanghai -- that we can observe substitution effect between native and foreign sources. These places commanded wheat import volume from 100,000 piculs to over 2 million and the latter two are well-known centres for flour-milling. It seems to suggest that foreign wheat could follow the same pattern as foreign rice and paddy did: It came to assume leadership in the market when the scale of import volume grew larger.

Yet, in some other places, including Hankou and Haerbin, the two other large ports of over 1 million piculs of import volume, substitution cannot be clearly observed, except that some of these other ports turned to foreign wheat in the early 1920s, and again in the early 1930s. The correlation between scale and substitution seems to be unclear and weak and in these places. For other smaller places, despite the presence of foreign imports, native produce continued to gain their dominance, mostly at the levels of 1,000-10,000 piculs and 10,000-100,000. At the bottom of the scale, more than half of the ports of small wheat trading volume imported mainly from foreign sources, but only occasionally. In other words, foreign wheat must have the least impact in those places, except probably for emergency.

When we look into the flour trade, it would seem that the "competition" thesis goes with large scale, too. Amongst the two large trading ports of over 1 million piculs, Dalian and Tianjin, competition/substitution was in general obvious. Yet, the two ports differ from each other in the degree of foreign

dominance: Dalian was mainly dominated by foreign flour, while Tianjin mainly domestic flour. Among the smallest ranks of ports, similar to other kinds of grain trade, flour did not witness much of the competition between native and foreign sources. Generally, Northern ports consumed native flour, while southern ports, foreign.

Competition, however, seems to be frequent among the medium rank cities, which handled between 100,000 and 1 million piculs of flour imports. In these cities, furthermore, native flour triumphed over foreign sources, particularly from the early 1920s on. Shanghai is an exception. First of all, it seems to be "dominated" by foreign flour. Yet, as it was the largest flour production and exporting centre during the interwar years, its flour import was probably supplementary to the already huge local production. Local situation still played an important role in affecting the performance of native flour vis-à-vis foreign sources.

To sum up, we tend to suggest that competition/substitution between native and foreign principal food grains in interwar China seems to be rather limited in number: 18 ports in rice and paddy, 3 in wheat and 13 in flour can be observed to have. Moreover, it took place mainly among those ports of large import volume, at least not less than 100,000 piculs. Only three ports, namely Shanghai, Tianjin and Jiaozhou, can one observe competition/substitution in all three kinds of grain. The first two are well-known centres for flour-milling, while Jiaozhou a major port connecting other flour milling centres in Shandong. Beyond these places, there were still many local and regional markets, especially in North China where foreign supply was almost non-existent. In short, competition, if any, between native and foreign produces must be limited to big cities, especially along the coast, where the latter could, at most, reach.

## V. Rice and Flour

What is intriguing about the import patterns of these food grains is that the above analyses exclude the influence of other factors besides the “foreign-native” dichotomy. In fact, for some of the ports, we found to a considerable extent the casual relationship between rice and flour import trends. Causal relationship here we mean substitution as we have discussed above: substitution between rice and flour. These questions are certainly crucial to our understanding of the nature of their networks. It is, therefore, our purpose in this section to explore this relationship in order to understand the country’s grain market development.

To compare the two produces, we put together their respective trade movements in Table 8. This table only preliminarily looks into the total import volumes of *both* produces among China’s trading ports. In this sense, we are trying to bring in the larger picture of the society (and *the* market) as a whole. Yet, as our figures on “rice and paddy” do not distinguish the two kinds, our analysis will certainly be subject to further adjustment once sources allow.

In this table, we identify that 13 ports out of 51 had experienced an apparent causal relationship between rice and flour during the period 1912-1934. Amongst these 13 ports, only four of them located south of the Yangzi River. As North China grew more wheat than flour, it would lead one to take this pattern as “natural” *per se*. Among the other ports without causal relationship, 13 have shown the dominance of flour over rice imports. Indeed, most of these ports (8 of them) came from south of the Yangzi River.

Indeed, one can well suggest that these flour imports were simply supplementary to the population’s diet in rice. However, it would be revealing if one looks into the trends of flour and rice trade in these ports. As pointed out at the remarks column, Andong, Yantai, Dalian, Hunchun, Jiaozhou,

Longjingcun, Niuzhuang and Tianjin experienced a dramatic growth in flour's importance in the market around the same period of 1921-1925. More importantly, we found that among these ports, the trade volume of rice and flour had been quite close to each other prior to flour's "take-off." In other words, we are suggesting that there could well be a shift in flour's comparative strength vis-à-vis rice in the early 1920s. To put that into the context of the period, huge foreign wheat imports from 1922 on, plus continued inflow of domestic wheat, we can further suggest that the growth of China's flour milling industry successfully altered part of the food import pattern of the North China population. To look further south into those rice-consuming areas we found Ningbo, Xiamen, Guangzhou, Fuzhou, Beihai (Pakhoi 北海), Qiongzhou (Kiungchow 瓊州) and Shantou experienced a continual but gradual growth in flour imports. In these places, the increasing amount of flour could still be supplementary to rice. Yet, one may also argue that local flour consumption might well be rising. In this sense, the early 1920s may seem to still be less decisive to southern ports as to the north.

Having said that flour seems to have enjoyed advantageous comparative strength over rice may be observed from the long-term import price movement of the two grains, as shown in Table 9. From this table, it is observable that from 1882 to 1931, the import price of rice per picul as provided by the Maritime Customs rose from 1.12 Haikwan Taels to 5.54, nearly five times in five decades. Yet, the import price of flour per picul rose only from HK. Tls. 3.26 to 5.52 in the same period, only 1.69 times. In other words, in the long-run it would *relatively* cost more for a rice-consumer than for a flour-consumer. Even within the period more relevant to our discussion, 1917-1931, the difference was still visible: 1.43 times of increase for rice, 1.20 times for flour. The slow price rises in flour most probably attributed to its decline in relative costing after mechanization and this process was not particular to the interwar

period. However, although the data does not provide a clue about domestic prices, the enlargement of raw material supply by huge and continual foreign imports by the 1920s and 1930s most likely sustained the process by cutting the cost on the source supply.

Such a growth would be extremely important to those rapidly growing cities which, due to industrialization, experienced demographic expansion during the decades before the outbreak of the Second Sino-Japanese War.<sup>49</sup> Although we do not have the means to consider the role of taste in individual choice, we suggest that the following scenario could be quite true in the trading-port areas in the interwar period: For a city-dweller in the 1920s and early 1930s, who was cautious about family budget, given a choice by the market, he might turn to the relatively cheaper produce.

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<sup>49</sup> Tianjin, Shanghai, Guangzhou, Xiamen, Wuhan, Chongqing, to name just a few, can be observed with dramatic population growth. On in Tianjin, see Li Jingneng (李竟能) ed., *Tianjin renkoushi* (天津人口史 *History of demography in Tianjin*) (Tianjin: Nankai daxue chubanshe, 1990), pp. 288-289; on Shanghai, see Zou Yiren (鄒依仁), *Jiu Shanghai renkou bianqian de yanjiu* (舊上海人口變遷的研究 *A study of population change in old Shanghai*) (Shanghai: Shanghai renmin chubanshe, 1980), pp. 90-91; on Guangzhou, see Chen Daiguang (陳代光), *Guangzhou chengshi fazhanshi* (廣州城市發展史 *History of urban development in Guangzhou*) (Guangzhou: Ji'nán daxue chubanshe 暨南大學出版社, 1996), pp. 176-177; on Xiamen, see Xiamenshi liangshiju xiamen liangshi zhi bianzuan weiyuanhui 廈門市糧食局《廈門糧食志》編纂委員會, *Xiamen liangshi zhi* (廈門糧食志 *Gazette of Xiamen's food grains*) (Xiamen: Lujiang chubanshe 鹭江出版社, 1989), pp. 130-131; on Chongqing, see Wei Yingtao (隗瀛濤) ed., *Jindai Chongqing chengshi shi* (近代重慶城市史 *Modern urban history of Chongqing*) (Chengdu: Sichuan daxue chubanshe 四川大學出版社, 1991), p. 398; on Wuhan, see Pi Mingxiu (皮明麻) ed., *Jindai Wuhan chengshi shi* (近代武漢城市史 *Urban history of modern Wuhan*) (Beijing: Zhongguo shehui kexue chubanshe, 1993), pp. 659-660; also Zhang Zhongli ed., *Dongnan yanhai chengshi yu Zhongguo jindaihua* (東南沿海城市與中國近代化 *China's coastal cities and China's modernization*) (Shanghai: Shanghai renmin chubanshe, 1996), pp. 656-696.



## VI. Conclusion

In the above analysis, it is clearly demonstrated that China's economy in the interwar years was full of complex relationships between different sectors. The case of principal food grains has demonstrated that performance of one kind of grains was not simply determined by foreign rivals. It was also affected by other sectors of the domestic market and depended remarkably on the scale of that market. Larger markets, by virtue of their size, seem to attract competition more easily than smaller ones. Yet, competition might come not just from foreign rivals; domestic ones, including those of different kinds but substitutable, should be of no lesser importance. Besides, the "competition analysis" fails to recognize the very nature of the China grain trade networks: overseas Chinese importing rice and paddy into the country and Chinese flour-mill owners using foreign wheat imports. In short, the dichotomy between "China and the world" simply fails to provide a satisfactory analytical framework.

Nor does the "China and the world" dichotomy recognize the undeniable fact of the vitality of market development in early twentieth-century China. Though both domestic rice (and paddy) and wheat circulation seem to be on a relatively losing ground in the interwar years, they still have no fundamental contraction in absolute terms. Moreover, domestic flour distributed around the country as widely as rice and paddy, though perhaps at the expense of domestic wheat market development. Together with the inflow of huge foreign imports, one cannot refuse the notion that China's market size (by volume, not value) was expanding in those years.

In fact, no one can deny the growing importance of the foreign sector, especially the importation of foreign grains into the market. Such grains had been continuing their importation for nearly three centuries, became

increasingly important since the several decades before WWI, and essential in the interwar years. They were particularly important to the urban population which, due to industrialization, grew rapidly during the prewar (1937) years. They allowed the country to have enjoyed ever growing stability in food supply, perfectly fulfilling the original purpose of the government's intention -- to stabilize the society by stabilizing food supply and prices. Such a development had been criticized by some opinions in the early 1930s as destructive to the country's peasant livelihood and rural economy, and thus asked for introducing a protective tariff. Without going into the details of examining the market function at the regional or sub-regional levels, it is difficult for us to fully evaluate the impact of foreign produce to the rural economy.<sup>50</sup> However, it is quite certain that without such foreign supplies, the country might turn into even more turmoil even within the city walls.

Besides social security, these foreign supplies also provided more varieties of grains to the Chinese population. New kinds of rice or wheat, or even machine-processed flour, were introduced into the country. The expanded volume of imports of the food grain certainly reached an extent that the trading-port population must be greatly affected, or, to be more precise, they must greatly benefit from such an expansion of food. Who, other than the final consumers, would benefit from the constantly growing influx of food after all? In other words, these grains provided more options for the Chinese people in the 1920s and 1930s. They might have further helped the people form new diets or eating habits.

Perhaps equally important and profound was the development of China's flour-milling industry. It not only stimulated the growth of the wheat market at

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<sup>50</sup> On further discussion on the issue of foreign trade and peasant livelihood, see David Faure, *The Rural Economy of Pre-liberation China: Trade Expansion and Peasant Livelihood in Jiangsu and Guangdong, 1870-1937* (Hong Kong: Oxford University Press, 1989).

the “national” level, it also changed the landscape of the country’s flour-consuming areas, spreading the produce to almost all the major trading ports in the country. In fact, one may even attribute the growth of China’s industrial development because of such a dramatic change in food processing industry. Together with rice-milling, China’s modern food processing industry should have provided ample food for its urban population, particularly the growing number of the working population, whether in modern factory, wharves or warehouses. Once again, modern Chinese population, especially those in the urban areas, would have quite a different diet to their ancestors.

Table 1. Rice and Paddy Trade in China, 1912-1934

Year	Foreign Imports	Domestic Imports	Export (D & F, by Ports)	Export (by Country)	Total Import Volume***
1912	2,700,274	6,221,043	6,647,538**	37,051	8,921,317
1913	5,411,939	4,058,183	3,946,011**	84,428	9,470,122
1914	6,830,437	3,025,469	3,128,863	27,939	9,855,906
1915	8,485,969	3,088,823	3,161,016	22,263	11,574,792
1916	11,289,365	4,508,236	4,696,689	22,515	15,797,601
1917	9,840,758	4,155,008	4,114,179	37,912	13,995,766
1918	6,986,511	3,613,317	3,878,930	33,281	10,599,828
1919	1,810,166	10,643,243	12,413,368	1,227,692	12,181,409
1920	1,164,164	9,312,733	9,476,549	311,834	10,476,897
1921	10,644,583	3,450,100**	3,374,932	34,714	14,094,683
1922	19,421,794	1,763,732	2,112,714	45,117	21,185,526
1923	22,447,762	3,442,530	3,677,808	63,089	25,890,292
1924	13,194,103	7,820,892	7,984,142	41,935	21,014,995
1925	12,639,440	7,810,056**	7,747,424	35,260	20,449,496
1926	18,536,534	2,145,690	2,047,787	29,139	20,682,224
1927	21,069,330	2,023,056	2,345,189	86,286	23,092,386
1928	12,636,950	6,199,763	6,027,878	29,769	18,836,713
1929	10,820,950	3,876,817	3,893,726	28,453	14,697,767
1930	19,921,918	1,985,017	2,455,329	27,431	21,906,935
1931	9,213,643	3,230,049	3,029,652	30,207	12,443,692
1932	22,491,949	1,506,373	1,861,567	36,060	24,008,322
1933	21,423,091	7,856,019	8,134,809	103,661	29,279,110
1934	12,699,829	6,885,108	7,365,210	112,476	19,584,941

Note: From 1934, the unit of account changed into "Quintals," 1 Quintal = 1.6470588 piculs, all figures below are converted into picul;

\*\* : figures shown in the following year of the annual reports which is different from the original figure of the previous year.

\*\*\* : the sum of columns 1 & 2.

Table 2. Wheat Trade in China, 1912-1934

Year	Imports of Foreign Wheat	Imports of Domestic Wheat	Export (D & F, by Ports)	Export (by Country)	Total Imports***
1912	2,497	1,230,512	2,127,083	1,376,689	1,233,009
1913	2,019	1,973,088	2,196,363	1,848,071	1,975,107
1914	1,003	903,487	2,486,665	1,969,048	904,490
1915	2,586	2,175,502	3,091,260	1,514,536	2,178,088
1916	59,555	2,396,246	2,930,536	1,155,179	2,455,801
1917	37,108	3,271,149	4,150,146	1,557,601	3,308,257
1918	14	4,742,954	4,874,448	1,815,461	4,742,968
1919	24	3,777,607	6,995,104	4,453,471	3,777,631
1920	5,425	6,453,018	11,684,505	8,431,520	6,458,443
1921	81,346	2,534,120	6,702,465	5,194,022	2,615,466
1922	878,281	553,468	1,695,026	1,151,014	1,431,749
1923	2,582,665	200,102	814,724	639,919	2,782,767
1924	5,167,234	1,524,045	1,715,623	140,185	6,691,279
1925	700,205	2,085,449**	1,925,926	207,403	2,785,654
1926	4,156,378	597,047	612,202	4,971	4,753,425
1927	1,690,155	1,156,017	1,636,899	495,982	2,846,172
1928	903,088	1,519,389	3,242,279	1,801,402	2,422,477
1929	5,676,144	1,083,487	1,880,823	802,185	6,759,631
1930	2,762,324	1,084,177	1,078,828	19,881	3,846,501
1931	22,835,996	590,859	672,728	7,499	23,426,855
1932	15,095,698	1,107,741	749,803	416,825	16,203,439
1933	17,716,296	831,333	879,005	39,215**	18,547,629
1934	7,657,866	1,384,585	1,573,858	218,505	9,042,451

Note: From 1934, the unit of account changed into "Quintals," 1 Quintal = 1.6470588 piculs, all figures below are converted into picul;

\*\* : figures showing in the following year of the annual reports which is different from the original figure of the previous year.

\*\*\* : the sum of columns 1 & 2.

Table 3. Flour Trade in China, 1912-1934

Year	Foreign Imports	Domestic Imports	Exports (D & F, by Ports)	Exports (by Country)	Total Imports***
1912	3,207,921	1,293,604	1,990,046	617,004	4,501,525
1913	2,597,198	2,066,987**	2,220,489	119,451	4,664,185
1914	2,162,424**	2,145,361**	2,384,667	69,932	4,307,785
1915	157,652	3,324,802	3,723,600	196,596	3,482,454
1916	226,321@	3,091,900	3,671,974	289,747	3,318,221
1917	675,346@	3,439,799	4,375,517	798,031	4,115,145
1918	113,080@	3,348,717	5,591,696	2,011,899	3,461,797
1919	271,283@	3,773,754	6,432,377	10,872,318	4,045,037
1920	510,665@	3,652,856	7,540,616	3,960,779	4,163,521
1921	747,375@	3,962,780	5,933,299	2,047,004	4,710,155
1922	3,629,895@	2,930,422	3,388,436	593,255	6,560,317
1923	5,959,573	3,045,188	3,188,380	131,553	9,004,761
1924	6,622,736	5,850,682	6,188,108	157,285	12,473,418
1925	2,782,718	7,366,556	7,255,453	288,060	10,149,274
1926	4,268,093	7,478,812	7,877,171	118,421	11,746,905
1927	3,828,181	6,377,282	6,449,338	118,099	10,205,463
1928	5,977,746	7,109,500	7,223,289	85,633	13,087,246
1929	11,951,743	7,858,658	7,718,518	26,748	19,810,401
1930	5,150,307	6,287,637	6,513,892	4,685	11,437,944
1931	4,746,912	10,295,421	10,619,257	25,014	15,042,333
1932	6,855,041	8,580,943	9,801,907	541,322	15,435,984
1933	3,236,321	9,243,349	12,132,848	654,554**	12,479,670
1934	981,275	8,920,088	10,199,593	106,354	9,901,365

Note: From 1934, the unit of account changed into "Quintals," 1 Quintal = 1.6470588 piculs, all figures below are converted into picul;

\*\* : figures shown in the following year of the annual reports which is different from the original figure of the previous year.

\*\*\* : the sum of columns 1 & 2.

@ : figures including a minor fraction of flour of other kinds.

Table 4. Shanghai in China's Wheat Market, 1912-1934

Year	Exports Abroad	Imports from Abroad	Shanghai's Import
1912	1,376,689	2,497	31
1913	1,848,071	2,019	---
1914	1,969,048	1,003	56
1915	1,514,536	2,586	41
1916	1,155,179	59,555	187
1917	1,557,601	37,108	4,943
1918	1,815,461	14	9
1919	4,453,471	24	13
1920	8,431,520	5,425	7
1921	5,194,022	81,346	67,971
1922	1,151,014	878,281	831,954
1923	639,919	2,582,665	2,212,939
1924	140,185	5,167,234	4,663,222
1925	207,403	700,205	587,347
1926	4,971	4,156,378	4,065,655
1927	495,982	1,690,155	1,646,451
1928	1,801,402	903,088	789,806
1929	802,185	5,676,144	5,464,079
1930	19,881	2,762,324	2,391,154
1931	7,499	22,835,996	19,419,099
1932	416,825	15,095,698	11,021,392
1933	39,215**	17,716,296	14,186,758
1934	218,505	7,657,866	6,723,758

Note: Unit: picul. From 1934, the unit of account changed into "Quintals," 1 Quintal = 1.6470588 piculs, all figures below are converted into picul;

\*\* : figures shown in the following year of the annual reports which is different from the original figure of the previous year.

Source: Inspectorate General of the Chinese Maritime Customs, *Foreign Trade of China, 1913-1934* (Shanghai, Office of the Inspectorate General of the Chinese Maritime Customs, 1914-35), "Imports," "Exports," "Wheat."

Table 5. Relationship between Native and Foreign Imports of Rice and Paddy among China's Trading Ports (1912-1934)

Volume of Imports	Trading Ports		Remarks
	Substitution Effect		
	Yes	No	
1-1,000 piculs		Sansing	Except 1916, all native rice
		Tengyueh	Imports only on several occasions, all foreign rice
		Wuhu	Imports only on several occasions, mainly foreign rice (import exceeded 180,000 piculs in 1930)
		Hunchun	Mainly foreign rice (import exceeded 1,000 piculs in 1914-18)
		Harbin	Except 1929, all foreign rice (import exceeded 1,000 piculs in 1923)
		Szemaio	Only once, foreign
		Soochow	No connection
1,000-10,000 piculs	Chinwangtao		First mainly foreign rice, after 1932, mainly native
	Aigun		Between 1913 and 1917, mainly foreign; thereafter, mainly native rice
	Manchouli		Before 1915, mainly domestic; thereafter, foreign; but the movements did not correspondent to each other
	Lungchow		Mainly foreign rice
		Changsha	No connection, except 1925-26
		Chinkiang	Imports only on several occasions, mainly foreign rice
		Suifenho	Mainly foreign rice
		Lungchingsun	Mainly foreign rice
		Santuaio	Native and foreign rice moved simultaneously; mainly native
		Nanning	Except in 1914-16 and 1933 that has substitution effects, others, no connection
		Yochow	No connection
10,000-100,000 piculs	Weihaiwei		Before 1930, no record because of foreign concession; thereafter, under Customs' control; no obvious substitution before 1931, thereafter, obvious, mainly native rice
	Lungkow		Before 1925, only native rice; thereafter, some foreign but still mainly native



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		Newchwang	Native and foreign rice moving roughly the same, except 1916-18, 1920-21, 1925-27
		Shasi	Mainly native rice
		Ichang	Mainly native rice
		Wuchow	Mainly foreign rice
		Pakhoi	Mainly foreign rice
		C-K Railway	Mainly foreign rice
		Nanking	No connection
		Wanhsien	Native and foreign rice moved simultaneously
100,000 to 1,000,000 piculs	Amoy		Substitution became obvious since 1916; but mainly foreign rice, except 1920
	Hankow		Before 1924, unclear, thereafter, obvious; both mounted roughly the same in volume (exceeded 1 million piculs in 1925-6)
	Hangchow		Before 1921, unclear, thereafter, obvious; mainly foreign rice after then as well
	Kiaochow		More obvious from 1919 on, mainly foreign rice until 1933
	Dairen		Mainly foreign rice, except 1918-20, 1924 and 1932
	Chefoo		Mainly native rice, except 1922, 1926-27 and 1932
	Antung		First foreign rice; after 1917, both competing with each other; after 1927, mainly native
		Foochow	Both moved together; the two sometimes dominated the other but sometimes being dominated
		Samshui	Mainly foreign rice
		Mengtsz	Mainly foreign rice
		Kongmoon	Mainly foreign rice
		Kiungchow	Mainly foreign rice (only in 1919-20 to have substitution)
		Wenchow	Sometimes moved to the same direction; except 1927-30; sometimes no connection
1,000,000-2,000,000 piculs	Ningpo		Unclear before 1920, mainly native rice; thereafter, obvious, but mainly foreign
	Tientsin		First mainly native rice, 1925-33 mainly foreign, thereafter, mainly native again.
		Lappa	Mainly foreign rice
Over 2,000,000 piculs	Swatow		First mainly native rice, after 1921, mainly foreign
	Canton		Substitution except for 1913, 1916-17, & 1928-30; after 1921, mainly foreign rice
	Shanghai		First mainly native rice, after 1921, mainly foreign
		Kowloon	Mainly foreign rice

Tatungkow has no relevant record.

Table 6. Relationship between Native and Foreign Imports of Wheat among China's Trading Ports (1912-1934)

Volume of Imports	Trading Ports		Remarks
	Substitution Effect		
	Yes	No	
1-1,000 piculs		Santuaio	Mainly native wheat (only few years)
		Nanning	Mainly native wheat (only few years)
		Yochow	No connection between native and foreign wheat
		Wanh sien	Import only once, native
		Ichang	Mainly native wheat
		Hangchow	Mainly native wheat
		Lungkow	Mainly native wheat
		Samshui	Mainly foreign (only few years)
		Kowloon	Mainly foreign (only few years)
		C-K Railway	Mainly foreign (only few years)
		Suifenho	Mainly foreign (only few years)
		Antung	Mainly foreign
		Kongmoon	Mainly foreign (only one year)
		Kiungchow	Mainly foreign (in only 1 year that native and foreign wheat moved the same direction)
		Tengyueh	Mainly foreign (only 1 year)
		Szemaio	Mainly foreign (only 1 year)
	Mengtsz	Mainly foreign (only 1 year)	
	Chungking	Mainly native (only 1 year)	
	Chinwangtao	Only two years of record, both not connected	
1,000-10,000 piculs		Wuhu	Native and foreign wheat had no substitution, particularly in 1931 we find increase in imports of both kinds of wheat because of food supply problem in Wuhu then.
		Ningpo	Mainly native wheat but in small amount; spectacular growth in 1931-34 for both native and foreign wheat
		Foochow	Mainly native wheat
		Amoy	Mainly native wheat

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		Wenchow	Mainly native wheat
		Shasi	Mainly native wheat
		Changsha	Mainly native wheat
		Sansing	Mainly native wheat
		Newchwang	Mainly native wheat
		Manchouli	Mainly foreign wheat (only few years)
		Wuchow	Mainly native wheat (only two years)
10,000-100,000 piculs		Kiukiang	Mainly native; no apparent substitution effect, except 1931-2
		Dairen	Before 1923, mainly native wheat; thereafter, no connection between native and foreign
		Canton	Before 1928, mainly native; 1928-32, substitution was obvious; thereafter, unclear
		Swatow	Mainly native wheat
		Chefoo	Mainly native wheat
		Aigun	Mainly native wheat
100,000-1,000,000 piculs	Kiaochow		Unclear before 1925; thereafter, obvious and mainly foreign wheat
		Chinkingiang	Only a few years of records, do not firmly see substitution; for those few years, before 1923, only native wheat; after that, only foreign wheat
		Nanking	Mainly foreign wheat; both produces moved up and down together
1,000,000-2,000,000 piculs	Tientsin		Before 1921, mainly native; afterwards, mainly native but sometimes substituted by foreign; 1931-34, mainly foreign
		Hankow	No clear connection except 1931-32; foreign wheat only exceeded native ones in 1922, 1929-30 and 1933
		Harbin	Mainly native; from 1922 on, all imports greatly declined
Over 2,000,000 piculs	Shanghai		Unclear before 1920, mainly native wheat; from 1921 on, clear substitution, mainly foreign

Soochow, Hunchun, Tatungchow, Lungchingsun, Lungchow, Weihaiwei, Lappa and Pakhoi had no relevant record.

Table 7. Relationship between Native and Foreign Imports of Flour among China's Trading Ports (1912-1934)

Volume of Imports	Trading Ports		Remarks
	Substitution Effect		
	Yes	No	
1-1,000 piculs		Soochow	Mainly native (only several times); 1923 exceeded 1,000 piculs
		Chungking	Mainly native (only several times); 1925-26, 1931-32 exceeded 1,000 piculs
		Tengyueh	Mainly foreign
		Szema	Mainly foreign
		Lungchow	Mainly foreign
1,000-10,000 piculs	Nanning		Before 1929, both had their highs and lows, thereafter, mainly foreign flour
		Santua	Mainly native
		Manchouli	No connection
		Wanhsien	Mainly native
		Nanking	Mainly native; foreign flour only mounted high in 1932 (1922, 1928, 1930-32 exceeded 10,000 piculs)
		Chinkiang	Mainly native; only in 1923 appeared substitution; 1931-33 both moved to the same direction (1917, 1922, 1931-32 also exceeded 10,000 piculs)
		Sansing	Mainly native; 1919-21 both moved to the same direction
		Mengtsz	Mainly foreign
		C-K Railway	Mainly foreign
Suifenho	Mainly foreign (extremely low in 1916-19)		
10,000-100,000 piculs	Wuchow		Mainly foreign, except 1915-1919, 1921 and 1926; its dominance became more obvious after 1921
	Weihaiwei		Obvious since 1932, mainly native

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		Shasi	Before 1921, foreign was insignificant; substitution only in 1923-25, afterwards, both moved roughly the same direction; after 1923, mainly native, foreign declined to near extinction
		Yochow	Mainly native
		Wuhu	Mainly native
		Wenchow	Mainly native
		Kiukiang	Mainly native (exceeded 100,000 piculs after 1930)
		Ichang	Mainly native
		Hangchow	Mainly native; 1920-24, both moved to the same direction
		Changsha	Mainly native
		Harbin	Mainly native; only 1923-24, 1927-28 witnessed substitution
		Aigun	Some substitution before 1915; thereafter, no; on the whole, mainly native
		Samshui	Mainly foreign
		Lappa	Mainly foreign
		Kowloon	Mainly foreign
		Lungchingtsun	Mainly foreign (exceeded 10,000 piculs only after 1923)
		Hunchun	Mainly foreign (exceeded 10,000 piculs only after 1923)
		Kiungchow	Mainly foreign, only in 1926 & 1934 witnessed substitution
		Pakhoi	Mainly foreign, only in 1926 & 1934 witnessed substitution
100,000-1,000,000 piculs	Swatow		Mainly native; obvious after 1924
	Foochow		Mainly native; obvious after 1924
	Canton		Both ranked close to each other
	Amoy		Both ranked close to each other; became mainly native since 1930
	Shanghai		Mainly native after 1920

	Ningpo		Mainly native; although foreign flour had once increased in 1923, it continued to decline thereafter; it never surpassed native flour
	Kiaochow		Both ranked close to each other; sometimes both moved to the same direction; on the whole, both competed with each other since 1924
	Newchwang		Mainly native, except 1929; both competed with each other especially after 1923; after 1931, both declined together
	Lungkow		Mainly native; after 1923, substitution and native flour's strength became apparent
		Chefoo	Mainly native; although foreign flour surpassed native one in 1912 & 1923, it never repeated for other years; since 1929 it even declined gradually
		Antung	Mainly native; foreign flour surpassed native one only in 1912-13 & 1932; for the rest of the years, it never did
		Chingwangtao	Mainly native; both moved to the same direction in 1929-31 (before 1924, the import volume was less than 100,000 piculs)
		Hankow	Both roughly moved to the same direction after 1922, native flour triumphed over the market
		Kongmoon	Mainly foreign
1,000,000-2,000,000 piculs	Dairen		Except 1915-1921, mainly foreign; before 1927, native ranked closely with foreign; thereafter, the gap widened
Over 2,000,000 piculs	Tientsin		Both moved to the same direction in 1916-1918, 1926-1930 & 1933-34; basically it was mainly native flour, particularly obvious after 1930

No relevant record from Tatungkow

Table 8. Relationship between Rice and Flour Imports among China's Trading Ports (1912-1934)

Trading Ports		Remarks
Substitution Effect		
Yes	No	
Aigun		Mainly flour
Antung		Mainly flour; it triumphed since 1921; rice declined thereafter
Chefoo		Both moved to the same direction before 1918; substitution thereafter; since 1928, flour gained the upper hand, rice declined
	Chinwangtao	Mainly flour
Dairen		Obscure before 1915, roughly moving to the same direction; thereafter, more obvious substitution; became mainly flour since 1921
	Harbin	Not clear
Hunchun		Flour gained the upper hand since 1922
	Kiaochow	Except 1919-21, 1923-25, 1931-33, both moved to the same direction; although flour prevailed since 1925, rice also continued to grow
Lungchingsun		Before 1923, mainly rice; thereafter, flour predominated; rice nearly extinct
Lungkow		Mainly flour; before 1922, both moved to the same direction; thereafter, mainly flour; rice imports did not change greatly
	Manchouli	No connection; mainly flour
Newchwang		Before 1918, they moved to the same direction; afterwards, substitution; from 1921 on, flour predominated, rice nearly extinct
	Sansing	Both moved to the same direction; mainly flour
	Suifenho	Both roughly moved to the same direction (except 1912-13); mainly rice
	Tatungkow	No rice import record; flour only for 1 year
	Tientsin	Moved similar; mainly flour since 1921
Weihaiwei		Obvious after 1931; mainly rice
	Changsha	Mainly flour
	Chinkiang	Both moved to the same direction; mainly rice
	Chungking	Both moved to the same direction; mainly rice
	Hangchow	Both moved to the same direction; mainly rice
Hankow		Mainly rice, but substitution obvious since 1923
	Ichang	Mainly rice; both moved to the same direction

	Kiukiang	No connection; mainly flour
	Nanking	No connection; mainly rice
	Ningpo	Overall speaking, rice predominated; except in 1931-32, flour imports was stable
	Shanghai	Mainly rice; flour imports was stable except 1923 & 1932
	Shasi	Before 1928, no connection; 1928-32, obvious substitution; mainly flour since 1922, except in 1925-26
	Soochow	No connection, mainly flour
	Wanh sien	Both moved to the same direction; mainly rice
	Wenchow	Flour imports increased gradually; rice only imported on several occasions but in much larger amount than flour
	Wuhu	Except in 1930-31, mostly moved to the same direction
	Yochow	Mainly flour
Amoy		Mainly rice but flour increased gradually
	Canton	Mainly rice, flour increased gradually but overall speaking quite stable
Foochow		Mainly flour for most years except 1913, 1921, 1926-27 & 1933-34 when rice predominated; flour imports continued to increase
	Kiungchow	Mainly rice; flour quite stable
	Kongmoon	Mainly rice; both moved to the same direction
	C-K Railway	Mainly rice; both moved to the same direction
	Kowloon	Mainly rice
	Lappa	Mainly rice
Lungchow		Mainly rice; substitution obvious between 1918 and 1931
	Mengtsz	Mainly rice
	Nanning	Except in 1914-16, very few rice imports; mostly flour
	Pakhoi	No connection; flour gradually grew
	Samshui	Mainly rice
	Santuaio	Mainly flour but both moved to the same direction
	Swatow	Mainly rice, though flour imports grew steadily; their movements, however, do not see influence upon each other
	Szemaio	Mainly flour
	Tengyueh	Except 1920 & 1932, seldom had rice imports; flour increased gradually since 1923
	Wuchow	Mainly flour, especially obvious after 1928



**Table 9. Comparative Price of Imported Rice and Flour, 1882-1931**

Year	Rice/Picul (HK. Tls.)	Flour/Picul (HK. Tls.)
1882-1886	1.12	3.26
1887-1891	1.14	3.04
1892-1896	1.58	2.85
1897-1901	2.11	3.49
1902-1906	2.80	3.75
1907-1911	3.54	4.05
1912-1916	3.39	4.43
1917-1921	3.88	4.59
1922-1926	4.55	4.88
1927-1931	5.54	5.52

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# 兩次世界大戰之間中國糧食貿易網絡， 1918-1936 年

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## 摘要

本文以糧食貿易網絡為中心，重新評估外在部門在兩次世界大戰之間(1918-1936)中國經濟之角色。過去的研究為此曾經進行辯論，並以雙互之競爭為題而把中外商業關係加以二分化。本文試圖透過重建中國糧食市場(主要是米穀、小麥及麵粉)之國內、國外貿易網絡，以展示和釐清兩者之間複雜的關係。本文亦在通商口岸的層次探討兩者的關係。本文亦審視在此一時期米與麵粉進口變動之關聯，以更深入分析中國各通商口岸本、外地糧食進口趨勢背後的原因。

如本文所示，在兩次世界大戰之間的中國經濟充滿複雜的關係。對主要糧食之研究說明，一種糧食的貿易表現並不單單取決於它的外來對手，同時亦受到國內市場其他因素的影響，並取決於該市場的經濟規模。較大的市場以其本身之規模，更容易吸引競爭。可是，競爭並不單單是外來的，其他可替代的糧食作物亦可構成相當的競爭。此外，「中外經濟競爭分析」忽略中國糧食貿易網絡的本質。如本文所示，海外華人把米穀輸入中國，顯示中國商業網絡的擴展，而中國的麵粉工廠廠主又以進口外來小麥，以與外來麵粉一較高下。簡單來說，「中國與世界」的二分法未能提供一個令人滿意的分析架構，未來的研究宜放棄這個架構，以追求瞭解其他在近代中國經濟與社會的根本變化。

**關鍵詞：**糧食貿易網絡、中外商業關係、米穀、小麥、麵粉

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