

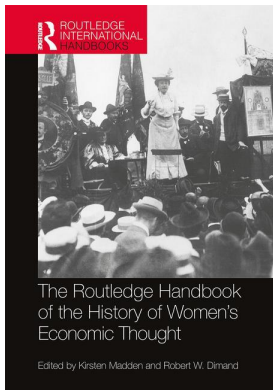
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CHINESE ECONOMIC DEVELOPMENT AND CHINESE WOMEN ECONOMISTS

A study of overseas doctoral dissertations

*Yue Xiao*¹

Introduction

Modern China refers to the time period from the beginning of the First Opium War in 1840 to the establishment of the People's Republic of China in 1949. During this turbulent one hundred years, the Chinese economy experienced sharp reform with the collapse of feudalism and the introduction of western capitalism. Centered on the opening of foreign trade in China, Chinese economists searched for policies around which to build economic reforms. Among them, three women economists played a significant part. They offered novel insights on the most pressing changes that China should make in order to survive the impact of western economics on the traditional Chinese structure. And these three inserted women's voices in an area formerly dominated by men. However, they have received almost no attention from the history of economic thought.

This chapter explores these three women's doctoral dissertations chronologically. Mabel Ping-hua Lee's² doctoral dissertation "The Economic History of China: With Special Reference to Agriculture," was the first modern survey of Chinese agricultural economic history. Facing the unprecedented political and economic changes caused by the expansion of foreign trade, Lee emphasized the importance of learning from agricultural adjustments and policy reforms in the past. Chung-ying Kuo's³ "British Trade in China, 1894–1914" focused on China's imports from Britain in Sino-British⁴ trade. Britain was one of the pioneer western countries to build a trade relationship with China, and had a primary influence on the development of modern China's economy. By carefully reviewing the history of British trade in China, Kuo's study served as an excellent example of foreign trade analysis. Yu-pu Pan's⁵ doctoral research, "International Capital Movements and Capital Formation," studied the theory of international capital flows, a major topic of international economics, and its relation to China's economic development. These three pioneering women offered important economic proposals aimed at coping with Chinese new reality.⁶

Under reform, many changes were involved in the process of economic development. It is understandable that these three women did not focus on the same topic. However, all their works discussed economic changes associated with modernization and industrialization.

Furthermore, their economic thought was a reflection of different levels of their Chinese heritage and experience of study abroad. Mabel Lee incorporated a balance of Chinese and western economic thought, while Chung-ying Kuo and Yu-pu Pan were much more influenced by western thought.

The structure of this paper is as follows. The next section introduces the historical background of this study. The following sections, present Mabel Lee, Chung-ying Kuo and Yu-pu Pan and their respective dissertations. The chapter ends with a conclusion.

Historical background

Women's education in modern China

The origin of modern women's education in China was closely related to foreign missionaries and missionary schools. When Robert Morrison⁷ founded the Anglo-Chinese College in Malacca in 1818, he brought church schools into China (Morrison 1839, 355). After the First Opium War⁸ (1840–1842), the scale of missionary schools expanded due to the treaties signed by the Qing government as the defeated nation. In addition to creating unequal trading rights for foreign powers, these treaties granted those countries with privileges to Christian missionaries and to open schools in China. In just 13 years from 1847 to 1860, foreign missionaries established 12 women church schools in the five treaty ports with foreign trade (He 1996, 235). From the mid-nineteenth century to the early twentieth century, most of the missionary schools founded in China were owned by American churches. By the year 1914, American Christian churches opened nearly 2,000 primary missionary schools: 45,000 students were enrolled, and 208 schools opened for higher learning with 25,000 students (Wang 1998, 190). These missionary schools not only promoted the development of women's education in modern China, but also made possible women's overseas education.

In fact, before missionary schools there were no other educational institutions that offered women the opportunity to pursue higher education in China. The reason why China did not have higher education for women was mainly a result of the long dominant feudal ethical code. In imperial China, the traditional thought of "male superiority" remained unshakable for more than 2,000 years. Women were confined to the domestic sphere and socially disadvantaged. Their thought and morality were restrained by the "three obediences and the four virtues"⁹ of the feudal Confucian ideas. The Chinese proverb "a woman without talent is virtuous" suggested the standard of value and the principal life creed designed for women. For thousands of years, women were purposely refused education and deliberately kept in the dark, so that they would be contented with their domestic lives and not question patriarchy. The right of receiving education from schools was exclusively for men in ancient China. Only a few women from scholarly families or official families had the opportunity to receive education from home tutors, for the purpose of better serving their future husbands in the household and serving their children in education. Most Chinese women were illiterate and unschooled. Therefore, modern women's higher education was not a product of China's own traditional development, but the outcome of the introduction of western culture. The church schools played the significant "maternal role" in the growing process of the first generation of Chinese intellectual women (Wang 1996, 65).

The Qing government issued a constitution for women's schools in 1907 and eventually recognized women's education as part of the official education system. The primary education of women has been promoted nationwide ever since. However, it was not until the establishment

of the Republic of China that the Chinese set up their own school for women's higher education. The first women's university of China was the Beijing Female Higher Normal College, officially named in 1919.

Karl Marx once said, "Social progress can be measured exactly by the social position of the fair sex." With the collapsing feudal system and the introduction of the capitalist system in China, social reforms improved the development of women's liberation and women enjoyed more opportunities to receive education.

The trend of studying abroad

The First Opium War fundamentally changed the social nature of China. The Qing Dynasty was rocked by the outside world and a tide of revolution started in all areas of ideology in China. The self-sufficient natural economy that had dominated China for so long was violently impacted by western capitalism as China became involved in the world market. This revolution forced the Chinese to learn from the strengths of the western world, thus stimulating a great interest in western higher learning. In Yuan Wei's "Illustrated Treatise on the Maritime Kingdoms," he put forward the famous proposition: "Learn from the advanced technologies of the foreigners in order to compete with them" (1999 [1847], 67). Most of the patriots of the period drew useful lessons from the painful failure of the war, and accepted Wei's idea of striving for self-improvement. The nationwide tide of the study abroad movement is one of the main results of this thought: "To learn from the foreigners."

The first Chinese student who studied abroad in America was Yung Wing.¹⁰ He was brought to America by Reverend Samuel Robbins Brown in 1847. When Yung Wing returned to China after graduation, he tried with endless effort to encourage authorities to send more students abroad for study. Eventually persuaded by Yung Wing and starting in 1872, the Qing government launched the Chinese Educational Mission, sending young Chinese students to study in America.¹¹ Many students of this program later made significant contributions to the reform of China in engineering and the social sciences. The success of these early students laid a strong foundation for future study abroad programs. The number of students studying abroad grew each year under the government's support.

Gender differences

As missionaries laid the foundation of women's education, the study abroad trend pushed forward the progress of women's higher education in foreign countries. In 1885 China's first woman student, Yamei Kin¹² (1864–1934), earned a doctorate of medicine from the Women's Medical College of the New York Infirmary. The first female student came nearly four decades later than the earliest male student. Besides Kin, three other women students obtained medical degrees in American universities. These three women were King-eng Hn¹³ (1865–1929), Mary Stone¹⁴ (1873–1954), and Ida Kahn¹⁵ (1873–1931). The four women students' chances to study abroad were all somehow related to the missionary influence, and their choice of medicine was strongly influenced by the missionary schools. Caring, self-sacrifice and empathy traits required by medical service were believed to match feminine qualities, impacted by religious doctrine. After these four women students returned to China, they made a great contribution in the medical service industry.¹⁶ When Qichao Liang, an influential reformist in the late Qing Dynasty, saw the momentous accomplishments by these women students, he praised their achievements

and set them as role models. In the Hundred Days' Reform launched by Qichao Liang, he vigorously promoted the idea of women's education. Liang believed that Chinese women should be educated so that they could support the country in time of need (Ye 1994, 318–321). Early women's education was not promoted for the purpose of individual development, but for the well-being of the nation.

After the feudal autocratic rule of the Qing Dynasty was overthrown by the bourgeois democratic revolution in 1911, the number of women students increased. The social climate for women to be educated was more open than ever before. From the beginning of this trend for studying abroad to the end of the later period of Nanjing Nationalist Government, the number of women students rose continuously; the imbalanced ratio between men and women improved; though there were always more men students, the growth rate of female students was higher than for male students.¹⁷ Nonetheless, a gender difference continued in overseas students from modern China.

It is clear that in modern China, missionaries started the trend of opening formal educational opportunities to women and created opportunities for Chinese students to study abroad. In the early stages, the American schools that Chinese students went to were recommended by missionaries. Later, impressed by early Chinese students' performances, more schools opened to Chinese students.

Gradually, western economic thought was introduced into China by overseas students. Nationalism, pragmatism and effectiveness are three prominent traits of Chinese economists in modern China. They fought to save their deeply troubled country from economic break down and played an essential part in the development of modern China's economy. Women economists shared the same traits as their male colleagues. They sought solutions to their country's most urgent economic problems. However, their efforts did not receive the same level of serious attention.

Mabel Lee

Introduction to Mabel Lee

Mabel Ping-hua Lee (1897–1966) was the first Chinese woman student graduating from Columbia University with a doctoral degree. Being an overseas student in America was rare among the large population of modern China; being a doctoral student in economics was even rarer; and being a woman economics student was a singularity. Her work on the economic history of China's agriculture was unprecedented in China's economic studies.

Mabel Lee was born in Guangzhou in 1897. Like most of the early female overseas students, Mabel Lee's chance to go to America was connected with missionaries. As the only child of a Baptist minister, Towe Lee, who worked in the American Baptist Home Mission Society, Mabel Lee went to America with her mother, reuniting with her father in the summer of 1900 at the age of four. Lee showed her interest in politics at an early age by joining in social reform. She participated in the demonstration of the "Feminist Movement" in New York on horseback when she was 16 years old. Influenced by the liberal democratic environment, Lee gained feminist consciousness at a young age. After earning her master's degree, Lee received a scholarship from the "Boxer Indemnity Scholarship Program" to go on with her studies at Columbia University. The Chinese government stated that Lee excelled in research on the agricultural economy, and hence was willing to grant her the scholarship. She was the first woman student to win this scholarship (Cai 2008, 35).

Mabel Lee's student life

Before entering Columbia University, Lee studied history and philosophy at Barnard College. Then she transferred to education administration and earned her master's degree of education at Barnard College. Lee was active among the Chinese overseas students. She published several articles in *The Chinese Students' Monthly*,¹⁸ including "The Meaning of Women's Suffrage." In 1914, she gave an English speech at the Eastern Conference on the topic of "Chinese Patriotism." Her speech was so successful that it won her a wide reputation among Chinese overseas students. In 1915, she became the English secretary of the Chinese Students' Alliance in America. In a photo¹⁹ of the members of the Alliance, Mabel Lee was the only woman student, sitting middle-front among the other 36 male students. "A single red flower in the midst of thick foliage" describes the photo well. In autumn of 1916, Lee campaigned for president of the Chinese Students' Alliance with Tse-ven Soong,²⁰ who came from one of the four most wealthy and powerful families²¹ in China and later became the finance minister of the national government. Lee narrowly lost to Soong after three rounds of competitions. She was fearless in the face of a strong rival. Lee made a potent statement to the Chinese on both sides of the Pacific Ocean that women's intelligence and social competence were equal to men's. In an age when most Chinese women were housewives, it was astonishing to picture Lee's vigorous and social life.

In 1917, Lee became a Ph.D. student in economics at Columbia University. Then she shouldered the responsibility of vice president of the Columbia Chinese Club and the associate editor of *The Chinese Students' Monthly*. Lee graduated from Columbia University in 1921 with high academic credentials. She was selected by the Board of Council of Columbia University as the University Scholar in Economics for her excellent research work in agricultural economy. Lee was the first Chinese student to receive this honor (Bieler 2004, 185–186).

In 1923 Lee went to Europe to investigate postwar economics. She was offered a job at Xiamen University as the department head that year (Zou 2016, 542). Everything seemed promising until she received the news of her father's sudden death in 1924. She threw everything aside, returned for her father's funeral and decided to stay in New York. She declined the other employment offers, inherited her father's career in the Baptist church, and became the chairman of the Morning Star Mission. In memory of her father, Lee built a memorial hall in 1936.

Remaining single her whole life, Lee passed away in 1966. She did not pursue her career in economics after she devoted herself to Christ. Lee's thesis, "The Economic History of China: With Special Reference to Agriculture" (1921) was her first and last economics book.

Mabel Lee's economic thought

Mabel Lee's doctoral dissertation was the first modern survey of Chinese agricultural economic history. It was included in the series of "Studies in History, Economics, and Public Law" (Volume 99) published by Columbia University in 1921. Her thesis consisted of three main parts: History; selection from sources; and special topics. It covered the history of Chinese agriculture from Huangdi²² in 2697 BC to the Qing Dynasty (1644–1911), divided into 16 time periods. Lee's motivation for carrying out this survey was inspired by her supervisor Professor Vladimir G. Simkhovitch. In Professor Simkhovitch's "Rome's Fall Reconsidered,"²³ he analyzed the close relationship between land deterioration and the progressive disintegration of the ancient Roman Empire. That history prompted Lee to consider the mysterious situation in China: How did China survive soil exhaustion, while the other ancient civilizations of Egypt,

Babylonia and Rome all declined because of soil depletion? The people in ancient China must have expended a great deal of effort to avoid land deterioration. The emperors must have formulated policies and laws, and the farmers must have conducted aggressive management measures. Lee searched the classical Chinese canon to find data related to this subject. In her dissertation, Lee made a clear division of the source materials, placing quotations under each dynasty, emperor and specific event. She made abundant references to 117 ancient books²⁴ concerning agriculture and economic governance, skillfully translated by her from Chinese to English. Most of these books had never been translated before. In this way, Lee introduced ancient Chinese economic thought to the west.

Lee noted that ancient Chinese history was closely related to emperors and dynasties, while modern Chinese history was mainly shaped by foreign relations, revolutions, and civil strife. After studying the classical books, she found that Chinese economists generally fell into two schools of thought: the traditional school and the practical school. Lee explained the traditional school are the ones “who looked back upon the time of Yao and Shun and the sages for precepts to remedy every situation,” and the practical school are those “who disregarded all authority of classical times and set out to solve each new individual problem as they themselves understood it.”²⁵ Under the influence of western economic thought, the practical school was in fierce combat with the classical school. In the face of the sudden prodigious change, Lee argued that it was crucial to take ideas from both these schools into consideration. As she wrote in her thesis:

As the classical school erred when it did not fully appreciate the new situations, so too the practical school could only succeed insofar as it was correct in its comprehension of the conditions presented, and the extent of its success was in accordance with the degree to which it took into consideration all the elements in the case. The writings of both schools, however, are valuable in helping us to a better understanding of the historical conditions. In every case they have been found to concur in the description of facts and the recording of events, thereby giving us more definite knowledge of the general conditions of the times.

Lee 1921, 15–16

Lee’s middle-ground opinion on these two schools’ thought was a reflection of the “doctrine of the mean.”²⁶ This attitude turned out to be more helpful in times of reform, when no one knew what method would suit China’s actual conditions the best. Lee’s thesis clearly brought together both the influences of being raised in China and nurturing China-specific thought along with the influences of the experience of study in the west.

In the semi-colonial and semi-feudal society (1840–1919), uncritical acceptance of western economic thought was unpractical and irresponsible. By taking both advantages and disadvantages of the two schools into consideration, Lee cherished the wisdom of the ancient sages and embraced the new ideas of the west. Lee (1921, 17) stated that: “We must search the old records for data, but the facts thus ascertained can be valuable only as we interpret them in the light of modern science.”

Even though the disturbances of the Xinhai Revolution²⁷ (1911) ended, economic reform remained ahead. With the introduction of technology and machinery, China would need to adapt to survive. Adjustments in agriculture had to be made, but how would this impact the farmers? Since the majority of China’s people were farmers, the implications of agricultural readjustment would affect the lives of millions. Lee’s work on historical Chinese agricultural policy had implications for Chinese transition to a capitalist world order.

Changes of policy and land protection

Lee elaborated the changes of agricultural policy from the Tsing Tien system²⁸ (started in Shang Dynasty, 1600BC–1046BC) to the early years of the Republic of China. The Tsing Tien system of slave agriculture marked the beginning of land tenure, land distribution and land taxation. In the Spring and Autumn Period (770BC–221BC), the creation of the iron plough and the oxen-yoke increased productivity. After the Reforms of Shong Yang,²⁹ the Tsing Tien system was abolished, and individual private ownership of land was now protected by law. However, the private ownership of land aggravated the situation of large-scale land holdings. It further caused a decrease in national tax revenue and an increase in the gap between rich and poor, intensifying social conflicts. From the Northern Wei Dynasty (368–534) to the Tang Dynasty (618–907), the modified Tsing Tien system³⁰ was carried out to prevent the big landlords, bureaucrats and nobles devouring the lands. Both small-scale peasant agriculture and tenantry were very common in the Song Dynasty (960–1279), and became the main mode of rural land management in the Qing Dynasty (1636–1912).³¹

The course of change and development of land taxation interacted with land policy. The heavy tax on land per “mu”³² in the Spring and Autumn Period accelerated the collapse of the Tsing Tien system. A legal subject system was created in the Qin Dynasty (221 BC–207 BC) to levy the land tax, adult poll tax, juvenile poll tax, corvée and military service on farmers. The heavy tax soon roused a people’s rebellion. After the Qin Dynasty, the idea of reducing the burden of taxation and cost was adopted by the emperors in the Han Dynasty (202–220). In coordination with the modified Tsing Tien system, a corvée and household tax was levied to reduce the heavy tax burdens of the farmers. Government collected grain, piece goods, instead of currency. In the later Tang Dynasty, the Bi-Annual Tax (780) was enacted. It unified taxes of various kinds, and was mainly based on a land tax and household tax. It was called the Bi-Annual Tax because the government collected taxes twice a year in summer and autumn. The single tax in silver issued in the Ming Dynasty greatly simplified the tax system by combining the land tax, corvée and sundry taxes together. The System of Assessment According to Farmland launched in the Qing Dynasty was the last significant tax reform in Chinese feudal society. It abolished the poll tax which had lasted for 2,000 years. It is clear that the reforms in the land system and tax policy, which protected the interests of the broad masses of farmers and reduced their burden, improved productivity and developed the economy.

Beyond providing a detailed explanation of land taxation history, the stories Lee told demonstrated that throughout Chinese history, land protection was deeply rooted in Chinese people’s minds. The idea to “adjust measures to local conditions”³³ that came from an ancient sage had a profound influence. Farming should be based on geographical environment, climate and natural resources. The Twenty-Four Solar Terms invented by farmers manifested the wisdom of ancient Chinese people on how and when to cultivate land. Chinese farmers regarded land as a living organism and believed that land had its “rhythm.” The doctrine of Taoism³⁴ told people to follow the rules of nature. Every living thing depends on each other for existence in a cycle. What mankind obtained from the earth must be returned. The use of organic fertilizer benefited the ecological system. From generation to generation, China’s agriculture was based on sustainable farming. The ancient wisdom on land protection greatly slowed down the natural speed of soil degradation. In modern times, population control and improvement of mechanization are vital to sustainable agriculture.

Lee’s coverage of Chinese thought here is obviously reflecting China-specific elements, fused with the western-driven question of sustainability arising from her supervisor Professor Simkhovitch.

Summary

As the first woman Ph.D. economist in China, Lee engaged in religious service after her graduation. Choosing not to marry, and supporting herself on her own salary were privileges for women in that time period. Only a few women receiving higher education and achieving economic independence were able to enjoy the liberty of staying single. In the mission founded by her, Lee helped thousands of new immigrants to learn English and supported many people spiritually.

Lee's doctoral dissertation was the first book on agricultural economics written by overseas students from modern China. It illustrated the changes of policies in agriculture and explained sustainable land use in ancient Chinese agriculture. To address agricultural reform in modern times, Lee emphasized a balanced view between Chinese traditional economic thought and contemporary western economic thought. Of the three women economists discussed in this chapter, Lee was the one who went beyond studying the Chinese economy from a western perspective to being reflective of a China-historic approach. Particularly she found a middle ground between the classics and the practical school. Her economic thought reflected Chinese classic philosophy.

Chung-ying Kuo

Chung-ying Kuo³⁵ was born in 1912 and died in 1965.³⁶ Kuo's biography is nearly a blank page. The only evidence of her existence in the history of overseas women students is her doctoral dissertation. Kuo studied with Professor Paul Knaplund in the history and political science department of the University of Wisconsin. After Kuo finished her dissertation, titled "British Trade in China, 1894–1914," she received her doctoral degree in 1947.

Chung-ying Kuo's economic thought

As a beneficiary of the trend for studying abroad initiated by missionaries, Kuo recognized the revitalizing effects of cultural contact between the east and the west, and realized the importance of carrying out reforms in social and economic development. In her dissertation preface, Kuo stated: "Free thinking, adequate environment and convenient working conditions in a secure society are prerequisite for the development of a person's knowledge and, eventually, for his or her accomplishment."³⁷ This idea of free thinking illustrates the influence western thought had on Kuo. As an overseas student in the US, she embraced the idea of liberal thought. Kuo's dissertation focused on the first western country forcing China to open markets. Her detailed study on British trade in China served as a historical review and provided a reference point for future foreign trade relations.

When Kuo collected materials for her thesis, both Britain and China were at war against common enemies. In this time of great difficulty, the British government supported China by abolishing the privileges that Britain had enjoyed. Kuo thought this abolition of British extra-territoriality in China reflected continuously changing British policy. Her study dealt with the changes of policies and Sino-British relations, from the First Sino-Japanese War (1894) to the eve of the First World War (1914).

The earliest attempt made by Britain to establish a trade relationship with China was in the 1600s. When Captain John Weddell landed on Macao in 1637, he intended to develop trade with the Chinese government. He failed because the Portuguese were standing in the way. In 1670, the British East India Company opened trade in Xiamen and Taiwan. In order to cope with the expanding trade business of the British East India Company, a

private organization, Gong-Hang,³⁸ was formed by the merchants group in Guangdong in 1720. This monopolistic organization ruled foreign trade on the Chinese side for more than a century, even after Britain stopped hiring the East India Company to trade with China in 1834. Little by little, conflicts accumulated between Britain and China. In addition, Britain had trade deficits since the beginning of Sino-British trade. As a result, the First Opium War broke out in 1840. The treaties signed after the war fundamentally changed China's social nature. China turned from a feudal society to a semi-colonial and semi-feudal society. The Treaty of Nanjing laid the foundation of British trade in China by instituting the treaty port system.

Kuo analyzed the development of the trade policies, dividing them into five periods. In the first period, 1894 to 1898, British trade flourished in both value and quantity. In 1894, China was defeated by Japanese invaders. The Treaty of Shimonoseki extended the scope of foreign investment of capital to railways and mining enterprises. The incompetent Qing government lost the integrity of its territory. Britain determined to protect its commercial supremacy in China, and constantly tried to block other countries such as Russia, France and Germany. Britain kept its dominant right in the Yangtze valley, railway construction, and mining. In the second period, 1899 to 1901, British trade fluctuated extensively because China was suffering from the wars initiated by the Boxer Rebellion and the invasion of the Siege of the International Legations. In 1899, an English man A. E. Hippisley suggested the American government maintain the "Open Door Policy" in China, along with other countries. In the third period, British trade boomed from 1902 to 1905. After the Boxer Rebellion, there was a new feature of British policy in China called the "Balance of Power." At this time, Russia occupied a large territory in the north of China. Britain was eager to gain an ally against Russia. The Anglo-Japanese alliance was formed in 1902. In the fourth period, from 1906 to 1911, Sino-British trade was strained. After the defeat of Russia, Japan became the new threat to the British "Balance of Power." Britain renewed the alliance with Japan to restrain Japan's power in China. In the fifth period, from 1912 to 1914, British trade recovered again. After the Chinese revolution, the Chinese Republic was founded in 1911. Britain supported the new government by offering a reorganization loan, in order to create a stable economic environment for trade. When the First World War broke out in 1914, all policies that Britain had made in the past were subordinated to the purpose of winning the war.

According to Kuo, the fluctuations that Britain experienced through the years in trade with China were mainly caused by:

[D]islocation of domestic affairs and international complications in China; the competition of other traders with Britain, like Japan, Russia, Germany, France, U.S. and even the growth of domestic Chinese industries; and the change of the monetary unit from silver to sterling.

Kuo 1947, 198

Kuo regarded the influence of British trade in China as a remarkably beneficial event in a historical perspective. Before 1800, western products were insignificant to the Chinese people, and the Chinese market was unimportant to westerners. After 1800, British manufacturing goods such as cottons, woolens and metals swarmed onto the Chinese market. These three kinds of products were the leading exports of British trade in China. Machinery, another article imported from Britain, was significant in the process of China's modernization. By opening trade ports, cities such as Shanghai, Tianjin, Guangdong, Wuhan, Beijing and Shenzhen prospered. Open trade brought huge changes in communication technology, railways, customs administration, education, medical science and factory-based manufacturing. China was both used as an extractive country, with

Britain benefiting, but also obtained British technology for mass production and increased material standard of living for those in China. As Kuo summarized, “China was on the way of being modernized and having better relations with other members of the family of nations.”³⁹

Unlike Mabel Lee, Kuo’s thesis had a more explicitly western character. Kuo advocated “free” trade following norms of western economics that she likely would have learned through graduate training in the US. Kuo’s thesis ignored the historical problems that British trade imposed on China, such as the lost tariff autonomy, serious outflow of silver and unfavorable balance of trade. Because there is a limited biographical record, we do not know whether western thought shaped her in China. Her free trade stance makes it reasonable to conjecture that western influences (such as missionaries) might have had an effect on Kuo during her youth in China. We assume that her thesis was certainly informed by the influence of her study abroad.

Summary

Kuo’s dissertation, divides Sino-British trade from 1894 to 1914 into five time periods. Kuo generalized the features of British trade in each period and assessed the impact of British trade policy changes on China’s economy. She was a firm advocate of free markets and the open trade and she highlighted the benefits of this trade for China.

Kuo had a promising start in this field. Her work was certainly comparable to her male colleagues.⁴⁰ As one of a small number of doctorates with cross-cultural experiences, Kuo could have made substantial contributions to the study of foreign trade if she had carried on with her research. We have no records of her subsequent work. Perhaps this is because she was a woman.

Yu-pu Pan

Introduction to Yu-pu Pan

Yu-pu Pan (1914–1997) was the first woman Ph.D. of Shenyang.⁴¹ From 1925 to 1928, Pan received her high school education in Fengtian Provincial Women’s Normal School. She entered the National Northeastern University in 1934 and gained her Bachelor of Science degree in 1938. After two years teaching at the university, she became a graduate student in statistics at Nankai Institute of Economics. In 1943, Pan translated an article “Revenue Policy of Britain in War Times” written by Walter Hill, which was published in *Time and Tide*.⁴² In China, Pan married Gengnian Hu, a famous politician, but after he fell in love with another woman, Pan divorced him.

In her early 30s, Pan went abroad to study at the University of Illinois in 1945. One year later, she earned her master’s degree with a thesis entitled, “A Comparative Study of the Theory of Interest.” Pan received her doctoral degree under the guidance of Professor Ralph H. Blodgett at the University of Illinois in 1948 (Zou 2016, 212).

Sometime after graduating, Pan became the supervisor of the statistical department in the United Nations, specializing in statistics of life indices. Pan was granted U.S. permanent residence in 1957. After 27 years of service, she retired from the United Nations and returned to China. In May 1978, Pan was hired by the world economy department of the Chinese academy of social sciences as a special researcher. The next year, she was selected as the director of the first council of the Statistical Society of China.

Pan’s ex-husband, Gengnian Hu, had a daughter named Yinmeng Hu from his second marriage. Yinmeng Hu was a popular actress in Taiwan in the 1970s. When Yinmeng Hu went to study in America, she was treated as family by Pan. Hu wrote of Pan in her autobiography *The Journal of the Soul*:

This woman used to bind her feet is now standing on her own full feet in America. Her independence and generosity impressed me deeply. I think a woman's feet are not so much fettered by tradition, but wrapped by her own fear living inside her heart. As one of the women from the last generation, she did not give up on herself and deny her potential ability after her husband's abandonment. Instead, she became a strong independent woman and made the most of her life.

Hu 2006, 101

The *New York Times* printed an obituary of Yu-pu Pan on September 24, 1997. It stated: "She will be greatly missed by her family and friends for her warmth, strength and loving spirit."⁴³

Yu-pu Pan's economic thought

Pan started her studies at the University of Illinois in 1945, the same year China won the second Sino-Japanese War (1931–1945). At that time, industrialization was a major concern of Chinese economists. Available capital was needed desperately in the postwar period. Pan's doctoral dissertation was timely, dealing with international capital movements. Particularly relevant are the last two chapters which discuss the relation between capital and economic development.

In the theory of marginal productivity, factors of production are valued by their marginal products. In the theoretical context of long-term equilibrium, factors of production used in different firms, industries and regions should eventually be equal. Pan stated in the preface to her dissertation that "[a]s the world is bound together more and more by the facilities of communication and transportation, international equilibrium becomes as important as interregional equilibrium from the long-run point of view."

Among the factors of production, capital is the most mobile. Pan regarded the study of international capital movements as part of international trade theory, and thought that the relationship between international capital movements and the formation of domestic capital required systematic study within a general equilibrium framework.

The causes of international capital movements

Different interest rates in two countries were the main cause of international capital movements. Knut Wicksell (1954) stated that the rise of interest rates in one country could attract large capital inflows from foreign countries and prevent the outflow of domestic capital. However, in the classical theory of interest, economists mainly focused on equilibrium between international capital movements and short-term interest rates. Pan's idea on capital movements belonged to new classical theory. She believed that the differences in countries' interest rates were caused by differences in their productivity of capital. She also indicated, "International lending does not necessarily mean a reduction of productive power in the remitting country; nor does borrowing mean definitely an increase of it in the receiving country" (1948, 218). Although the costs involved in international capital movements were higher than domestic capital movements, both lending and borrowing countries would benefit from the capital movements in the long run.

Early economists tended to think that international capital movements were caused by a single reason. By the late nineteenth century, however, economists believed that international capital movements were not simply caused by interest rate differentials; they also took personal investment preferences and investors' risk aversion into consideration.

After the Second World War, the world's political and economic situation was significantly changed. Economic imbalances between less-developed and developed countries were large. Usually, capital would flow from the less-developed countries with high interest rates to developed countries with low interest rates in order to avoid risk. However, Pan found that in the postwar years, the situation was different. Capital tended to flow from areas of higher marginal productivity to lower ones—that is, from developed to developing countries—instead of the expected flow from low to high. After the war, the imbalance of economic development and the frequent fluctuations of monetary exchange rates of countries in the world accelerated the flow of international capital. The opening up of China facilitated the capital flow from developed countries to developing China.

Pan also addressed the issue of capital flight from developing economies (1948, 82–85). Pan explained that capital flight brought a decline in wealth and exchange rates. Since capital flight normally occurs unexpectedly and suddenly, the country losing capital (developing country) will suffer the consequences of production shrinking and a sharp rise in the interest rate. Therefore, it will further cause imbalance in economics, trade, revenue and expenditure.

Economic development and the utilization of capital

Economic development and accumulation of capital are inseparable with mutual effects on each other. The level of technology and utilization of capital affect economic development, and in turn affect capital formation. A country's progress in industrialization is closely pegged to the accumulation of capital.

As a less-developed country, Pan thought China had two ways to obtain necessary capital for its industrialization and economic development: either raising its domestic capital or borrowing from foreign countries. Pan studied the dissertation of another overseas student, Peigang Zhang.⁴⁴ She agreed with Zhang's argument that the postwar years should become the prime time for China's industrialization. The increased demands of expanding manufacturing required large capital infusions. The introduction of foreign machinery in agriculture was also necessary to feed the growing industrial population. However, the aftermath of eight years of war made it difficult for China to gather capital from domestic savings, and consequently, foreign capital was indispensable. As for the speed of capital inflow, Pan argued that it should match the expansion of the borrowing country's productive power.

A general study would shed some light on this complicated problem, with specific cases requiring more detailed analyses. In general, Pan held that foreign capital should be distributed equally to support domestic industries, export industries and public service. But Pan deemed that China was an "immature borrower" at the time. The efficiency of capital was crucial because borrowing involved problems of repayment. Under these circumstances, and to avoid debt accumulation from loans, she advocated that foreign capital be used in building public utilities to increase the productive power of the nation.

Pan's conclusions on international capital mobility resonated with the ideas in the western development literature of the second half of the twentieth century. Her dissertation builds on important contributors to the understanding of capital flows and its influence on development, including the classical theory and contemporary contributions by economists such as Ragnar Nurkse (1953). Her studies demonstrated a clear influence of the predominant views in US economics programs and of western economic thought of the neoclassical variety.

In terms of the existence of western influence in her childhood, it is clear that her early childhood was one of a traditional upbringing for many girls in China in the early twentieth

century: her feet were bound. Whether she was affected by liberal thought through education or missionary contact in her later education is unclear. It seems reasonable to infer that missionary activity had more influence on the early stage of women's higher education abroad. Later on, as the educational system developed in China, this influence faded.

Summary

Pan's dissertation dealt with the urgent problems of capital in the best time for Chinese industrialization. She analyzed the causes of international capital movements and formation, the relationship between capital and development, and the utilization of capital in the context of China's actual conditions after the war. Pan's cutting-edge studies, as well as her keen sense of economics made her stand out in the field. Pan put forward novel ideas, such as counter-intuitive capital flows and capital accumulation for public investment expenditure to support China's industrial development. Her western-based economic thought was new in the study of the Chinese economy.

Among these three women economists from modern China, Pan was the only one who actually persisted in economic research and made a career of it. The high-quality doctoral dissertation she accomplished was a solid stepping stone to her later contributions in economics.

Conclusion

Three women economists in modern China have been studied in this chapter. First, Mabel Lee thoroughly investigated the history of Chinese agricultural economy. Lee listed the changes in land policy, land tax policy, and land conservation policy of each dynasty. In the China of Lee's time period, the distribution of land was greatly imbalanced. The rent and tax on land were heavy, thus intensifying the poverty of farmers. In order to develop agricultural and industrial production, the outdated land system had to be changed. Lee's suggestions to learn from the thought of ancient sages and to adopt agricultural reform policies for sustainable development continue to be valuable today. Second, Chung-ying Kuo addressed the policy changes in British trade in China. Kuo saw the irresistible historical trend of international trade and embraced the positive side of British trade. Kuo emphasized the advantages of foreign trade brought to social and economic development, such as the improvement of living standards, communication technology, transportation, etc. Third, Yu-pu Pan analyzed international capital movements. Pan pointed out that, for a developing country, it was important to draw foreign capital to construct the nation. A wise utilization of international capital could benefit domestic capital formation and avoid the accumulation of loans. Although Pan's study of capital movements belonged to the early stage of this theory, her insights on the relations between capital movements and formation are still worthy of reference and consideration.

In the study of the Chinese economy, these women merged their knowledge of Chinese society with the economics that they learned in the US. However, deeper reflection finds that only Lee actively considered elements of Chinese thought and Chinese classical philosophy in her analysis of the Chinese economy. By contrast, the economic thought of Kuo and Pan primarily reflected standard economic views of the west. Kuo attached importance to the benefits of trade with Great Britain, and to a certain extent ignored the negative realities of this trade experience during the nineteenth century. Pan's analysis of capital flows in the postwar years of China also shows the influence of western economic thought.

Overseas students played a significant role in the process of China's social change and modernization. A few women were a part of this movement to study abroad in China. Certainly,

the chaos of the times did not make for an easy transition to professional life. Even for these accomplished women, academic economics remained elusive: The first woman left academia for her own reasons; the second disappeared from the academic field for unknown reasons. Only the third built a solid meaningful career in economic research. However, they all demonstrated the strong side of femininity. As intellectual women, they led by example in breaking the conventional role imposed on women. Their research, which contributed to the study of economic development in modern China, demonstrates the potential of Chinese women in economics.

Of course, the individual initiative of these three women played out against institutional constraints. Their access to early education was influenced by the western missionary movement of the day. Importantly, support for graduate studies also came from the Chinese government, which was willing to support women in higher education. This demonstrated the liberal influence in early twentieth-century China. However, only a few women actually had the opportunities to study abroad, so this also indicated the limitation of the liberal trend in that period.

Notes

- 1 I would like to give special thanks to Professor Joseph Persky, Professor Kirsten Madden, Professor Jinwen Zou and Chuanyi Guo, for their kindly encouragement and endless support to help me finish this chapter. I am also very thankful to the Departments of Economics in both Zhongnan University of Economics and Law and University of Illinois at Chicago. The Ph.D. student exchange program I attended from 2016 to 2017 was very beneficial to my research.
- 2 Mabel Lee's Chinese name is written as 李美步.
- 3 Chung-ying Kuo is written as 郭冲颖 in Chinese.
- 4 Sino refers to China. It means the ancient-to-modern history of China, the culture of China, or the Chinese people.
- 5 Yu-pu Pan is written as 潘玉璞 in Chinese.
- 6 Besides these three women economists, two other women earned their Ph.D.s in economics in the first half of the twentieth century. Meng-ban Wu 吴孟班 graduated from University of Paris in 1931, her dissertation, "The Development of Modern China's Business," was written in French. Shu-chuang Ting Kuan 丁矣淑庄 graduated from Radcliffe College in 1948. Her dissertation was titled "Simple Dynamics of Income, Investment and Consumption." Because of the lack of materials, these two dissertations are not discussed in this chapter. Any further study of these women is welcomed within the field.
- 7 Robert Morrison was the first missionary of the Protestant Church in China. He started his mission in 1807. One of his contributions was that he pioneered translating the Bible into Chinese.
- 8 The First Opium War, or the First Anglo-Chinese War, was launched by Britain to reverse its trade deficit with China. It marked the beginning of China's modern history.
- 9 "Three obediences and four virtues" is written as 三从四德 in Chinese. "Three obediences" means a woman should obey her father before marriage, obey her husband during married life, and obey her son in widowhood; "four virtues" were fidelity, physical charm, propriety in speech and efficiency in needlework. It is a saying that comes from one of the Confucian classic books, *Etiquette, Mourning, and the Story of Zixia*.
- 10 Yung Wing's Chinese name is written as 容闳. After three years of studying at Wilbraham & Monson Academy, he was enrolled in Yale University as the first Chinese student. In 1854, Yung Wing earned his bachelor's degree in literature, and graduated from Yale University with honors.
- 11 According to Yung Wing's book *My Life in China and America*, in total 120 students aged 10 to 16 were sent to study in New England.
- 12 Yamei Kin's Chinese name is written as 金雅梅.
- 13 King-eng Hn's Chinese name is written as 柯金英.
- 14 Mary Stone's Chinese name is written as 石美玉.
- 15 Ida Kahn's Chinese name is written as 康爱德.
- 16 For example: Yamei Kin was the founder of the first nursing school, Beiyang Women's Medical School, and the first Women's Hospital, Beiyang Women's Hospital; King-eng Hn was the director of Woolston Memorial Hospital in Fujian; Mary Stone opened Danforth Hospital at Jiujiang.

- 17 This summary is drawn from the book *A Survey of Chinese Students in American Universities and Colleges in the Past One Hundred Years*, published in 1954 by China Institute in America in New York. Yichi Mei was the chairman of the institute.
- 18 *The Chinese Students' Monthly* (1906–1931) was the first and most influential magazine published by the Chinese students in America. It discussed the important topics in China, included education, society, industry, agriculture, politics and economics.
- 19 This photo was published in *The Chinese Students' Monthly* in 1919, Vol. 3, No. 2, page 1.
- 20 Tse-ven Soong's Chinese name is written as 宋子文.
- 21 Four families controlled China's politics and economy in the first half of the twentieth century. They were Jiang, Song, Kong and Chen families. Tse-ven Soong belonged to the Song family.
- 22 Huangdi was the first leader of the ancient Huaxia tribal league.
- 23 *Political Science Quarterly* 31, no. 2 (1916): 201–243.
- 24 These books include *Shu King* (尚书), *Chow Li* (周礼), *Han Book* (汉书), *Qimin Yaoshu* (齐民要术), *Mengxi Bitan* (梦溪笔谈), *Nongzheng Quanshu* (农政全书), *Shennong Bencaojing* (神农本草经), etc.
- 25 Lee 1921, 15.
- 26 Doctrine of the mean, 中庸, is one the main doctrines of Confucianism. In James Legge's translation of the text, the goal of the mean is to maintain balance and harmony, directing the mind to a state of constant equilibrium. The person who follows the mean is on a path of duty and must never leave it. A superior person is cautious, a gentle teacher and shows no contempt for his or her inferiors. She or he always does what is natural according to her or his status in the world. Even common men and women can carry the mean into their practices, as long as they do not exceed their natural order.
- 27 Xinhai Revolution, or the Chinese Revolution in 1911, was a revolution that overthrew China's last imperial dynasty (the Qing dynasty), and established the Republic of China.
- 28 The Tsing Tien system, 井田制, was a slaveholder-owning land system. This system distributed land. "A square area of land was divided into nine identically-sized sections; the eight outer sections were privately cultivated by serfs and the center section was communally cultivated on behalf of the landowning aristocrat" (Zhufu 1981, 7). The advantages of this system were: It saved expenses; unified customs; improved production; made the exchange of commodities easier; had mutual protection among farmers; closed social relations, and generated cooperation.
- 29 Shong Yang (395BC–338BC) is written as 商鞅 in Chinese. He was a politician, reformist, and thinker during the Spring and Autumn Period. Shang was the most important representative of the legalist school.
- 30 What Lee called modified Tsing Tien system is now known as 均田制. It was a system that declared all land was owned by the nation or the emperor. The free land was assigned by the government to individual farmers according to the population of the area. After farming on the land for a certain number of years, the famers could own the land.
- 31 Lee (1921) made a timetable of the changes in land systems. See chronological table 1, page 11.
- 32 Mu, 亩, is a unit of measurement. One "mu" is approximately 666.667 square meters.
- 33 The saying came from the book "Wu Yue Chun Qiu" (吴越春秋) by Hua Zhao (赵晔) in the Han Dynasty.
- 34 Taoism is a religious or philosophical tradition in China. The central thought of Taoism is to live in harmony with the Tao (道). Tao is the nature of everything, and the orbit of all things. In Taoism, it is "the One, which is natural, spontaneous, eternal, nameless, and indescribable. It is at once the beginning of all things and the way in which all things pursue their course" (Chan 1963, 136).
- 35 Kuo's English name was Margret. Her husband was Justin Yun-Kung Shen (1909–1982). She added her husband's last name "Shen (沈)" in her family name after marriage. In modern China, as a tradition, some women would drop their surname and take that of their husband, or add their husband's name in front of their own surname after the marriage.
- 36 Information about her death remained unknown until now. Ying and Trautwein (2013) stated that Kuo's birth year was 1912. Kuo's death date is on a gravestone in Rock Creek Cemetery (Washington DC (www.findagrave.com/memorial/44383292)). The inscription matches her name and birth year. This is assuming that after Kuo's graduation she moved to Washington DC.
- 37 Kuo 1947, iii.
- 38 Chinese: 公行. Like the British East India Company, Gong-Hang was also a monopoly organization controlling all the foreign trade in China. It worked as the middleman in imports and exports; it set prices of the export goods; and collected customs duties.
- 39 Kuo 1947, 247.

- 40 Other works on foreign trade by male overseas students are the following dissertations: Chong-Su See's *Chinese Foreign Trade* (1919), Shu-Lun Pan's *The Trade of the United States with China* (1924) and Chee-Hsien Wu's *Two Decades of Soviet Foreign Trade* (1947).
- 41 Fan, Hua. "People of Shenyang." *Shenyang Evening News*, May 23, 2008.
- 42 *Time and Tide* was a semimonthly journal that started publication in Wuhan in 1938 and ended in 1949. It was a comprehensive political publication during the Second Sino-Japanese War. The aim of publication was to unite Chinese people to build the confidence to win the war.
- 43 Paid Notice: Deaths PAN, YUPU, DR., *The New York Times*, September 28, 1997.
- 44 Peigang Zhang, 张培刚, was the father of development economics in China. Zhang graduated from Harvard University in 1945. His influential doctoral dissertation was "Agriculture and Industrialization."

References

- Bieler, Stacey. "Patriots" or "Traitors"? *A History of American-Educated Chinese Students*. New York: M.E. Sharpe, Inc., 2004.
- Cai, Dengshan. "The Saint Lady in Hu Shi's Heart." *Book Town* 1 (2008): 35–37.
- Chan, Wing-tsit. *A Source Book in Chinese Philosophy*. Princeton University Press, 1963.
- Fan, Hua. "People of Shenyang." *Shenyang Evening News*, May 23, 2008.
- He, Xiaoxia. *Church Schools and the Modernization of Education in China*. Guangzhou: Guangdong Education Publishing House, 1996.
- Hu, Yimeng. *The Journal of the Soul*. Shanghai: Orient Publishing Center, 2006.
- Kuo, Chung-ying. "British Trade in China, 1894–1914." Madison: University of Wisconsin, 1947.
- Lee, Mabel Ping-hua. *The Economic History of China: With Special Reference to Agriculture*. New York: Columbia University Press, 1921.
- Legge, James. *The Chinese Classics: The Life and Works of Mencius*. Vol. 2. London: Trübner & Company, 1875.
- Mei, Yichi. *A Survey of Chinese Students in American Universities and Colleges in the Past One Hundred Years*. New York: China Institute in America, 1954.
- Morrison, Elisa A. *Memoirs of the Life and Labours of Robert Morrison*. London: Longman, Orme, Brown, and Longmans, 1839.
- Nurkse, Ragnar. *Problems of Capital Formation in Underdeveloped Countries*. London: Oxford University Press, 1953.
- Pan, Shu-Lun. "The Trade of the United States with China, 1784–1923." New York: Columbia University, 1924.
- Pan, Yu-pu. *International Capital Movements and Capital Formation*. University of Illinois, 1948.
- See, Chong-Su. *The Foreign Trade of China*. New York: Columbia University Press, 1919.
- Wang, Daozhi. *The History of Chinese and Foreign Educational Exchanges*. Hunan: Hunan Education Press, 1998.
- Wang, Qisheng. "The Historical Evolution of Women's Higher Education in Church School." *Journal of Central China Normal University* 2 (1996): 65.
- Wei, Yuan. *Illustrated Treatise on the Maritime Kingdoms*. Zhengzhou: Zhongzhou Guji, 1999. No publisher available for 1847 edition.
- Wicksell, Knut. *Value, Capital, and Rent*. Translated by S. H. Frowein. London: George Allen and Unwin Ltd., 1954.
- Wing, Yung. *My Life in China and America*. Shanghai: The Commercial Press, 1915.
- Wu, Chee Hsien. "Two Decades of Soviet Foreign Trade." Cambridge, MA: Harvard University, 1947.
- Ye, Weili. "'Nü Liuxuesheng': The Story of American-Educated Chinese Women, 1880s–1920s." *Modern China* 20 (1994): 321.
- Ying, Ma, and Hans-Michael Trautwein, eds. *Thoughts on Economic Development in China*. London: Routledge, 2013.
- Zhufu, Fu. "The Economic History of China: Some Special Problems." *Modern China* 7 (1981): 7.
- Zou, Jinwen. *The Development of Economics in Modern China: Centered on Overseas Students' Doctoral Dissertations*. Beijing: China Renmin University Press, 2016.