

Jiaozhou-Jinan Railway and Demographic Change

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Abstract. As a symbol for the modern industrial civilization, Jiao-Ji Railway (shorted for Jiaozhou-Jinan Railway) is the first railway of Shandong Province, and exerts an influence on the demographic change. The influence manifests in migration craze, demographic change and distribution, and people's identity, social status and career choice. With the demographic change undergoing dynamically, we can further interpret the status of Jiao-Ji railway and the role it plays in the social development of modernization of Shandong province.

Keywords: Jiao-Ji railway, population, change.

1. Introduction

As the first railway of Shandong province, Jiao-Ji Railway was inaugurated by Germans in 1899 and was open to traffic through the whole line in 1904. As the reflection of modern industrial revolution, Jiao-Ji railway promoted the transformation from traditional agricultural civilization to modern industry. This paper takes the case in point Jiao-Ji Railway and approaches how railway exerts an influence on the demographic change of Shandong Province.

2. Jiao-Ji Railway and the Craze of Migration

Migration from Shandong province to Hei Longjiang, Jilin and Liaoning provinces (shorted as the three northeastern provinces) soared in number in the late Qing Dynasty when the Qing government abolished the Prohibition of Sea Trade policy. The number of migrations gradually reached its peak in the Republic of China (1912-1949). Due to the warlordism and natural calamities and man-made misfortunes, the first migration craze burst out between 1926 to 1930 during the period when Zhang Zongchang was in charge of Shandong province. To some degree, the development of Jiao-Ji Railway facilitated the migration, which manifested in the turnover of passenger transport migration.

Table 1. turnover after migration between 1923 and 1936

year	Turnover of passenger transport
1923	2,426,369 (yuan)
1924	2,676,782
1925	2,511,081
1926	2,821,439
1927	3,872,659
1928	3,900,286
1929	4,299,946
1930	4,256,390
1931	3,803,639
1932	3,848,123
1933	3,795,435
1934	3,464,031
1935	3,233,436
1936	4,426,567

The data of Jiao-Ji Railway Bureau suggested that about 3000 farmers migrated from Qingdao to the three northeastern provinces per day in 1927. This was really a striking amount. In 1928, Jiao-Ji railway was available to more than 2000 migrants per day. Moreover, a gallery of people from

Qingdao, Jinan, and Gaomi set off to the three northeastern provinces on foot. The Jiao-Ji Railway Bureau added special train and connected the fourth estate couch bus after the train with the aim of strengthening the traffic capacity. However, the supply of trains and buses could hardly meet the demand. Only in February, there were 39876 people taking the train. According to the Jiao-Ji Railway Bureau, The Jiao-Ji Railway transported more than 90 thousand refugees from November 1927 to the middle of April 1928. The rapid increase of migration during the Republic of China had a clear tie with the development of railway.

During the 20s and 30s of the 20th century, Shandong province experienced frequent transfer of political power and natural calamities and man-made misfortune, which deprived a large number of people of their homes. Therefore, people struggled to make a living through braving the journey to northeast China. Railway made it easier to reach their destination. In addition, due to the rapid growth of population and increasingly serious land annexation, the conflict between rapid growth of population and comparatively reduction of per capita area of cultivated farmland became more and more grave. The migration, to some extent, relieved this conflict, partly solving the unemployment of rural surplus labor.

3. Jiao-Ji Railway and Population Mobility and Distribution

The expansion and direction of railway shaped the mobility and distribution of population. On the one hand, the transport of railway promoted the population mobility. On the other hand, railway accelerated economic development because more people and resources converged in the cities and towns alongside railway, therefore facilitating the urbanization. The rural economy flourished because of the convenience provided by railway, for a part of urban enterprises were transferred to rural areas.

As a modern means for transportation, railway was opposed when it was built. People who took the train were open-minded ones. The uneducated masses rarely took the train. With the social development undergoing, railway gradually enjoyed popularity among the uneducated masses, and the number of passengers who took the train began to increase year by year. In 1905, 803000 passengers took the Jiao-Ji railway. The number became 1317000 in 1913. The passengers increased to 3451165 in 1921. Note that the passengers increased by three times in number during the 16 years. The growth of passengers boosted the demographic mobility.

The convenience provided railway injected new vigor and vitality into the economic development alongside Jiao-Ji railway. Industry and commerce became increasingly prosperous, which attracted migrants taking up residence. This tendency was getting more and more prominent when imperialist invasion was imposed on China. The majority of the migrants are Japanese. There were more than 20 thousand in Qingdao. Alongside the Jiao-Ji railway, there were more than 10 thousand Japanese, among which 60 in Jiaozhou, 225 in Gaomi, 61 in Zuoshan, 897 in Fangzi, 383 in the coal mine of Zichuan, 121 in Weixian, 154 in Qingzhou, 666 in Zhangdian, and 58 in Jin Ling. At the end of 1916, the Japanese in Qingzhou increased to 14241, and there were 69253 Chinese and westerners 491 respectively. At the end of 1917, there were 18576 Japanese, 77076 Chinese and westerners 494 respectively. The figures of Japanese, Chinese and westerners increased to 19260, 78804, and 510 respectively at the end of 1918. Meanwhile, the Japanese who have obtained Chinese nationality increased to 24160 in Shandong province. There were more than 30 thousand Japanese who had obtained the Chinese nationality in Shandong province by the December 1922 when China reclaimed the sovereign of Qingdao. And the 24132 people who resided in Qingdao were included. The constant growth of migrants alongside Jiao-Ji railway enabled the surrounding residents to access to the imported goods, which exerted a profound influence on their lives and the local customs.

Commencing operation of Jiao-Ji railway boosted the prosperity of commerce. Many train stations and their adjacent villages established alongside the railway have developed into cities and towns with certain scale. And they played a much more significant part in promoting economic development. As commerce continued to develop, cities and towns expanded in scale, people grew in number and urbanization further developed. For instance, Yang Jiazhuang of Yidu, was a remote and tiny village

before the operation of Jiao-Ji railway and there were no commercial activities. However, the train station was built in this place, which provided much convenience for tobacco transaction. The yearly turnover for tobacco dealing is 1 million yuan. There were more than 20 large and medium-sized stores and several small businesses with growth in their daily turnover. Huangshan, Zichuan county developed into a comparatively large town since the coal mine excavation. Investigation of the 1930s century suggests that there were 1960 households with the population more than 7600 in Zichuan. Besides, there were about 100 businesses, with 50 being comparatively large ones. Among the rest businesses, there were 15 coal dealers and 35 grocery stores. A large number of vendors shouldering goods converged in this place every market day. Therefore, the market dealing became prosperous. Each year, the turnover of coal industry was 300 thousand yuan, and that of grocery industry about was 160 or 170 thousand yuan. The total turnover was less than 500 thousand yuan. For one thing railway strengthened the urbanization of rural areas. For another, important cities and towns have undergone prosperity and decline due to the influence of Jiao-Ji railway.

4. Jiao-Ji Railway and the Changes of People's Identity, Status and Occupational Choice

As the primary factor for the development of economy and resources, labor force is irreplaceable among all the factors of production. Moreover, economic development injected impetus to demographic mobility because it attracted people to migrate to other places for a better life. This phenomenon was particularly prominent alongside Jiao-Ji railway and its surrounding area. The operation of Jiao-Ji railway benefited goods transportation, therefore expanding the market and promoting the increasingly development of industry, commerce, agriculture and handicraft industry. Fresh industries emerged in large numbers, facilitating local residents and migrants' access for career selection. Accordingly, people's identity and social status undergone changes in accordance with their new careers.

The development of railway stimulated the emergence and prosperity of relevant industries. The number of platelayers, carriers, and merchants engaged in transit industry increased rapidly. There were 270 Chinese workers in Si Fang Machine-manufacturing Factory which was affiliated to the Railway Bureau. These workers mainly consisted of the local carpenters, blacksmiths, and craftsmen who were recruited from Qingdao shipyard. By the year 1936, there were 1669 workers. And the number of carriers also increased, for example, the number of carriers who sent goods to customers by means of manual trolley was about 200 or 300 in Weixian, a county of Weifang. In addition, some industries which were specialized in picking-up transferal of passing passengers emerged in accordance with the operation of railway. Although the number of people engaged in this industry was comparatively small, they relied on it to earn a living and at the same time supported their families. According to the statistics of Railway Bureau, the 1930s has witnessed the distribution of transit industry. There were 9 merchants engaged in transit industry in Weixian, 6 in Yidu, 14 in Boshan, 11 in Changyi, 12 in Gaomi, and 5 in Jimo. Besides, the development of industries as the mining industry which had a clear tie with railway promoted the growth of miners. Due to the large scale of mining area in Boshan, most farmers lived in small and dispersed groups. They were busy with farming in agricultural season and devoted to temporary work in slack season. The industrial record showed that there were 54636 farmers, 14000 workers, and 18000 merchants, constituting 29.67 percent, 7.6 percent and 9.77 percent of the total population respectively.

Railway promoted the development of agriculture. The production of economic crops began to enjoy ascendancy. There was a competition between economic crop and food crop in terms of planting area. Driven by economic benefits, farmers changed the traditional planting pattern of crops and decided what to plant according to the relation between supply and demand in market and the profits brought by crops. For example, the area alongside the railway was famous for tobacco cultivation. The number of tobacco grower was about one million. In 1917, the flue-cured tobacco factory which was called the North Factory was founded by British and American tobacco company around the railway station of Ershilipu. Then the South Factory was inaugurated in 1919. Due to the complex

process, highly intensive production and considerable drain on manpower and material resources, the American tobacco cultivation exerted profound influence on the life of farmers. About 20 or 30 percent of the total population in Weixian were engaged in tobacco cultivation when the American tobacco was first introduced in China. By the 1930s, nearly 60 percent of farmers are engaged in the cultivation of American tobacco. The planting area accounted for 13.5 percent of the agricultural acreage. Its output value accounted for 30 percent of the total value in contemporary agriculture. Meanwhile, selling the American tobacco provided the primary channel for cash income for tobacco growers. The American tobacco cultivation has obtained a pivotal position in the agricultural economy in the tobacco cultivation area. Some farmers who were specialized in the tobacco cultivation were referred to as ‘Yannong’, the tobacco growers. The traditional identity of farmers has undergone a striking change.

Among all the handicraft industries, knitting industry was the most prosperous one alongside the railway. Weixian was a well-known center for cloth production along the railway. Before the Republic of China (1912-1949), households taking up weaving were less than 100. The number has increased to 10 thousand, with about 40 thousand looms and 800 or 90 thousand workers throughout the whole county by 1920s. Previously, farmers were engaged in farming in agricultural season and took up weaving in slack season with the aim of achieving self-sufficiency. Driven by economic benefits, however, farmers were devoted to cloth production in farming season even at the expense of agriculture. This gave rise to the fact that machinery industry played an essential role while agriculture played a marginal role in people’s life. Although the phenomenon in which people were engaged in both agricultural and industrial production in Weixian was not universal, it revealed the change of people’s identity alongside the railway. The improvement of women’s social status was particularly striking among these changes.

The railway promoted the development of import-oriented handicraft industries, such as the bristle industry and the hairnet industry. There was an increasingly growth in the number of people who were engaged in these industries. Women were suitable for hairnet making because its process was uncomplicated. A large amount of bristle of Weixian was exported to foreign countries with the operation of railway. Around Yangdian, a small town of Hanting area, a company for bristle production was inaugurated by rich families around villages of Liang Quezhuang, Shuang Yangdian, Bu Touzi, and Xinzheng. By 1927, the bristle company has increased to more than 20. There were 5 bristle companies in the village, Qian Quezhuang which had no more than 200 households. They employed 300 female workers in total. At that time, there were more than 30 spontaneously-formed villages that were specialized in this industry. These villages included Quezhuang, Hujia, Xinzheng, Pangjia, Yang Jiazhang, Hetao, Zhong Xiaohe, Panjia, Bu Touzi, Shuang Yangdian, Gaoli, Qiaoxi, Zhangzhuang, Henan, and Zhuma. Several thousand young boys and women made a living by picking up bristle.

With the development of export-oriented industries, women of rural area played an essential role in production. They became the main force of the emerging industries, thereby promoting the employment of the surplus labor force in rural area. The work of women added to the growth of domestic income, which in turn improved, to some degree, their status in their families. Undoubtedly, the improvement of women’s status in family could not be accomplished in one stroke because of the influence of feudal ethics and traditional values. The development of handicraft industry, however, played an inspiring part in this aspect.

To sum up, the inauguration of Jiao-Ji railway exerted an influence on the migration, demographic mobility and distribution, the change of people’s identity and their social status, and occupational choice in. This promoted the demographic transition and modernization of Shandong Province.

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