

## Chinese debates on economic development in the 1920s – 1940s

Olga Borokh

Institute of Far Eastern Studies,  
 Russian Academy of Sciences  
 borokh@hotmail.com

The paper focuses on the thoughts on economic development in China in the Republican period in of the 1920s – 1940s. A discussion on relationship between agrarian-based and industrial-based types of economy of the 1920s was initiated by the supporters of traditional reliance on agriculture who proposed to move towards industrialization via rural reconstruction and increasing purchasing power of the peasants. However the mainstream economic thought unhesitatingly supported the path of industrial development of China. During the second wave of this discussion in 1934 – 1935 they pointed to the urgent need to build defense industry and criticized the idea of development of rural industries as transition stage to the industrial economy. By the mid-1930s mainstream intellectuals shared the conviction that China's development should take into consideration cultural tradition and existing institutions.

After the war Chinese economists unanimously rallied around the task of industrialization. They debated the problems of relations between industry and agriculture, balanced development of heavy and light industry, rational location of industries. Liu Dajun's concept of industrialization proposed to use state planning to ensure people's welfare while avoiding copying the Soviet model and one-sided concentration on the defense industry.

In the late 1940s overseas Chinese doctorate students produced first theoretical works on economic development. Zhang Peigang's *Agriculture and Industrialization* (Harvard University, 1949) discussed general patterns of industrialization in agrarian countries. Development economics became prominent again in China in the 1990s. An important role then was played by Zhang Peigang who emphasized the importance of industrialization theories of non-Western developing and socialist countries.

### **“Agrarian-based nation” or “industry-based nation”: early stage of the debate**

In the early 1920s Chinese intellectuals started a dispute about the choice between the paths of “agriculture-based nation” (*yi nong li guo*) and “industry-based nation” (*yi gong li guo*) that lasted till the 1940s. These discussions have contributed to the searches for national path of economic development.

The ideas of industrial development emerged in Chinese socio-political thought in the second half of the nineteenth century. The “Western Affairs Movement” (*yangwu yundong*) (1860-1895) embraced the tasks of exploration of natural resources, construction of factories and railroads. The leader of the 1898 Reform Movement Kang Youwei called “to establish China as an industrial country” (*ding wei gong guo*). After the victory of the Xinhai revolution (1911-1912) the “Industrial plan” of Sun Yat-sen was published in 1919. It noted that “the central link on which the life or death of China depend is the cause of industrial development (*shiye*)” (see Luo Rongqu 2009: 389).

Until the 1920s the idea of industrialization occupied the leading place in China, attention to the problems of the agrarian economy was rather insignificant. The First World War which led Chinese intellectuals to disappointment with Western industrial civilization stimulated positive reassessment of the value of agriculture. Many Chinese thinkers shared the idea of superiority of Eastern civilization and they recognized that its moral foundations were rooted in agrarian

society. The dispute between the proponents of the New Culture and traditional Chinese culture has led to a division between the supporters of industrial and agrarian civilizations. Due to complex interplay of the issues of politics, culture and economy the defenders of the agrarian path of development were identified as “conservatives” and “feudal forces”. This simplified identification made it difficult to assess the economic content of the arguments of the supporters of the idea of “agriculture-based nation” (*yi nong li guo*).

Contemporary scholar of history of Chinese economic thought Zhong Xiangcai (Shanghai Academy of Social Sciences) pointed out that during the First World War the imperialism for some time eased its pressure upon China. This gave a chance for rapid progress of national capitalism, subsequently the development of industry and trade led to weakening and decline of Chinese agriculture (Zhong Xiangcai 2016: 157). After the end of the war the economic situation in China deteriorated. In the post-war period national enterprises were unable to compete with industries invested by foreign powers. Chinese enterprises lost their market share that was gained during the wartime, many factories went bankrupt, unemployment soared and social tensions increased. These were the main reasons for rethinking the necessity of industrialization (see Zou Jinwen 2014: 279). The Great Depression of 1929 gave additional momentum to doubts about the stability of the Western industrial economy. Global economic downturn dealt a severe blow to the Chinese economy and prompted the Chinese intellectuals to reconsider the positive aspects of agricultural path of development.

### ***Zhang Shizhao: ideology of the traditional agrarian state***

Discussion started in August, 1923 from publication in Shanghai newspaper “Xinwen bao” of an article by minister of education in Beiyang Government Zhang Shizhao. He proclaimed that in China “the state must rely upon agriculture (*yi nong li guo*), governance should be practiced through culture (*wenhua zhi zhi*), the agriculture is the foundation of everything” (Xing Yan [1923] 1990: 681).

In 1921-1922 Zhang Shizhao traveled to Europe and met with influential intellectuals like writers Bernard Shaw and Herbert Wells, sociologist Arthur Pentty who criticized Western society and culture. Their arguments have strengthened Zhang’s confidence in the advantages of agricultural path of development. In November 1923 he wrote that after the eighteenth century industry and commerce in Europe flourished every day, however the agriculture in these countries decayed and deformed; morality, habits, politics and laws were mired in vice. Copying the path of industrial development by other states led to intense competition and to the World war. For China in order to live in peace and avoid spoiling social mores the state must be based on agriculture (Gu Tong [1923] 1990).

Zhang Shizhao was not an economist. His suggestion to “return to agriculture and calm the root of state first” (*fan qiu zhu nong, xian an guo ben*) (Gu Tong [1923] 1990: 718) was a continuation of disputes of that time about the “spiritual culture” of China and “material culture” of the West. The support for the idea of agrarian state was focused on the protection of specific spiritual virtues of Chinese culture like harmony and following the Golden Mean, frugality and asceticism, calm and tranquility of the people, restriction of human desires and absence of strive (Gu Tong [1923] 1990: 714). The spirits of industrial state were not welcomed because it was filled with desire, activity and strive for riches (Gu Tong [1923] 1990: 714-715).

There were worries that this path of development would pose a danger to China, as it was evidenced by the economic decline of post-war Europe. The economic argument in favor of the agrarian state was its low exposure to the shocks of the world market and its self-sufficiency. In the industrial state the sources of raw materials and the markets for their products depend on foreign countries. Moreover, the industrial path leads to aggravation of social tensions; the concentration of capital in the West was accompanied by widening gap between poverty and wealth, increasing confrontation between labor and capital.

The early supporters of the “agriculture-based state” like Zhang Shizhao and Gong Zhangfu underlined the advantages of traditional Chinese culture and belittled the achievements of Western industrial civilization. Their opponents Yang Mingzhai, Yun Daiying and Yang Quan explained the necessity of industrialization by the laws of social development. Some of them (Yang Mingzhai) shared the principles of Marxist ideology. They underlined that morals, norms and habits of agrarian society could not be preserved in the industrial society. Yang Mingzhai explained that the growth of class contradictions in the industrial nations were “the decrease in the field of distribution and property right system, and not the decrease of industrial production” (Yang Mingzhai 1924: 720).

In the mid – 1920s the ideas of “industry-based state” dominated in the debate. Sun Zhuozhang who had just returned from France after establishing there the Chinese social democratic party, wrote in 1923 that agriculture was conservative and it evolved little, it did not correspond to the course of evolution of modern society, while the industry evolved rapidly and it corresponded to the course of evolution of modern society (Sun Zhuozhang [1923] 1990: 688). Referring to the “law of diminishing returns” and Malthusian population theory he argued for the need to move China’s population from agriculture to industry. As a result of industrialization numerous Chinese peasants will become workers, their income and standard of living will increase. On the other hand, the development of industry will stimulate the growth in agriculture (Sun Zhuozhang [1923] 1990: 695-696).

Proponents of industrialization pointed to the threat of enslavement of agricultural China by the industrially developed West. Sun Zhuozhang called to halt foreign economic aggression against China represented by inflow of imported manufactured goods. To save the nation it was necessary to develop industry and to produce more domestic industrial products to substitute imports (Sun Zhuozhang [1923] 1990: 693). In October 1923 Yang Quan (Yang Xingfo) warned that if the Chinese did not want to develop the industry themselves, others would do it instead of them. He pointed out that industrialists from Europe and the United States were already investing their capital and building factories in key regions of China (Yang Quan [1923] 1990: 708-709).

Supporters of the agrarian path believed that industrial countries were dependent on suppliers of raw materials. Yun Daiying objected that the industrial countries possessed advanced technologies and large factories, the cost of their products was low and the quality was high. If China cannot provide itself with everything it needs, it will need to turn to foreign countries. In this situation, agricultural states that provide foreign industries with raw materials and markets will inevitably fall under control of the industrial countries. As a result, the population of metropolitan nations will be in superior economic position, while the residents of the colonies will be forced to work hard and will not be able to feed themselves. Although industrial countries will be dependent on agrarian countries, this dependence does not bode well for agricultural countries (Dai Ying [1923] 1990: 710-712).

### ***Dong Shijin: proponent of “an ideal big agricultural Asian state”***

Dong Shijin (1900-1984) was an influential and professional theorist of China’s agricultural development model. In 1924 he received doctorate degree in agricultural economics from Cornell University. He believed that Chinese agriculture had comparative advantages that could be used to build in China “an ideal big agricultural Asian state”. At the beginning stage of the discussion in 1923-1924 Dong Shijin observed the crisis in the industrial capitalist countries and made a conclusion on the advantages of economic independence of agrarian country.

In the article “China should not carry out industrialization” he wrote that industrial states were “parasites” reliant on raw materials and food supplies from the agricultural states (Dong Shijin [1923] 1990: 705). In the earlier period these raw materials and foodstuff were sufficient for development of the industrial countries, however in the recent years the situation has changed. In the industrial countries factories are closed, the number of the unemployed grows, and that creates political and economic instability in these countries and in the world. Each day the life of

“parasite” nations becomes more and more difficult. On the contrary, focus on development of agriculture will secure independence and stability without reliance upon the industrial countries and without exposure to political and economic crisis caused by overproduction. The weak spot of agrarian states is their inability to generate big riches. However this disadvantage turns into advantage thanks to narrowing of the income gap (Dong Shijin [1923] 1990: 706). “China has a long agricultural history, extensive agricultural land and good farmers. China needs to show its strengths and should not compete with the people of the West to occupy a disadvantaged position” (Dong Shijin [1923] 1990: 707). Dong Shijin cited an example of Denmark, which became rich and civilized in the modern world on the basis of agriculture (Dong Shijin [1923] 1990: 707).

Comparison of potentials of different countries led Dong Shijin to the conclusion that an agricultural state is not weaker than an industrial one (Dong Shijin 1923: 29). He explained evident superiority of might of the industrial countries of that time by the fact that earlier these countries were already strong and therefore gained the upper hand in competition for raw materials and markets for their own industry. Other countries that did not have an armed force were unable to secure the sources of raw materials. Therefore, the main reason for the success of current industrial leaders was their might, and their industrialization was the result of this victory. Dong Shijin acknowledged that industrialization could allow the state to become strong, but for this it must be small, it should manufacture products based on foreign raw materials and sell them in the outside world using the trade profits to strengthen the state and its armed power (Dong Shijin 1923: 29).

According to the scholar, due to the peculiarities of national character China should not carry out industrialization. The Chinese tend to live in peace and they are attached to their land, they are not fit to the way of life of industrial society, independent life in isolation from the family does not meet traditional family values and can provoke disturbance (Dong Shijin 1923: 31). In addition, from the point of view of the world economy China’s industrialization will be untimely. There is an overabundance of industrial states in the world, and if the largest agricultural state also wants to become industrial, it will increase the number of excess industrial states. “In reality the desire to industrialize China is not the requirement of the time, it will bring no benefit to China and also will cause losses to the world” (Dong Shijin 1923: 32).

Dong Shijin strongly opposed the use of foreign capital. He said that it was better to have no industry in China, but he did not want to see in the country any industry built by foreign capital (Dong Shijin 1923: 33). In the article “China should not exploit rich resources by using foreign capital” (Dong Shijin 1924) he admitted the necessity to use foreign capital to exploit the resources in process of industrialization. But in this partnership China will be the weak side, and it will be difficult to prevent plundering of resources by foreigners. Factor of political corruption will make it even more difficult to avoid the outflow of rich resources. Therefore, China should not sacrifice resources blindly for the sake of industrialization (see Ye Shichang et al. 2017: 351-352).

In the second half of the 1920s Dong Shijin came to the conclusion that the development of industry and agriculture supported each other. One can simultaneously build an agrarian and industrial state, and “profitable agriculture does not differ in nature from industry, the difference is that the types of production are different” (Dong Shijin 1927: 2).

He saw the task in transforming the agriculture from family business supplying farmers with food for their own consumption into a profitable enterprise. As an “ideal big agrarian state of East Asia” China can get rid of poverty and backwardness, since there would be enough raw materials and food not only for self-sufficiency but also for export.

Dong Shijin noted that the advantage of Chinese agriculture was the careful cultivation of land. But the farmers do not have knowledge, this self-sustaining agriculture can not make profit. At the present stage of development it is necessary to have profitable agriculture with large volume of production and high productivity, so a part of the production or its entire volume can be diverted for sale. He raised the question how to transform Chinese agriculture into a profitable

production and turn the farmers into entrepreneurs (*shiyejia*). First of all, efforts should be made to develop rural education. Farmers should get the freedom to export their products, the state should help by imposing protective duties on imports and providing subsidies on exports. It is necessary to increase the productivity of farmers, to improve the life in the countryside, to develop new lands and build rural roads. It is important to provide villages with bank loans, to develop co-operation, to encourage the people return to the countryside (Dong Shijin 1927: 3-5).

In the early 1930s Dong Shijin treated the increase of peasants income as the primary objective. To attain this goal he proposed to concentrate effort on the development of urban industry and trade. Due to this prices of agricultural products will rise and the demand for vegetables, fruits and eggs will increase, and these products will not be a luxury anymore. The production of these foodstuffs will create opportunities for employment and absorb excessive rural population. Reducing the number of unemployed in the countryside while increasing the purchasing power of the urban population are the important preconditions for modernization of agriculture (Dong Shijin 1933: 10).

During the War of Resistance to Japan the awareness of the importance of industrialization spread in Chinese society and the attention to the role of agriculture relatively declined. In the early 1940s Dong Shijin published a series of articles in which he pointed out that agriculture could improve people's lives, improve their nutrition and make them healthier. In addition, the supply of raw materials to the industry is also the task of agriculture. Therefore, its importance for the state in the course of industrialization or modernization does not diminish, it is increasingly rising (see Ye Shichang et al.: 353).

In 1944 in the article "Industry should keep pace with people, agriculture should outpace people" Dong Shijin called to treat agriculture as priority sector (*youshi chanye*) in the strategy of industrialization. China has a large territory, good climate and soil, farm animals and plants, the world's largest number of hard-working peasants, and experience and heritage of agriculture accumulated over millennia. So the country has all the possibility to build an agricultural power capable to "outpace" (*gan de guo*) other nations. He urged to ensure that Chinese agriculture could take a leading position in the world and bring fame for the Chinese nation, so that different nations would send people to China to study agricultural science, examine rural economy, purchase plant samples. To achieve these goals, the industry should provide help by "keeping the pace" (*gen de shang*), and only then will agriculture be able to "outpace the people" (see Ye Shichang et al.: 353).

From the 1920s to the 1940s Dong Shijin moved from criticizing industrialization to recognizing the importance of industry as a tool of support for "outpacing" agrarian development. His recognition of comparative advantage of Chinese agriculture and calls for the construction of a modern agrarian power remained unchanged. The emphasis on the development of Chinese agriculture and quasi-utopian descriptions of future rural life were combined with a good knowledge of Western economic theory. The program of his course in agricultural economics at Beijing University combined the presentation of key theoretical principles of agricultural economics with the analysis of China's agrarian economy. However, all books recommended for reading were of the Western origin - James E. Boyle, *Agricultural Economics*, 3<sup>rd</sup> ed., 1928; Thomas Nixon Carver, *Principles of Rural Economics*, 2<sup>nd</sup> ed., 1932; Edwin G. Nourse, *Agricultural Economics*, 1923; Henry C. Taylor, *Agricultural Economics*, 1921 (see Trescott 2007: 233). In the 1930s in his book "Rural economy" he referred to agricultural development of other nations. Therefore Dong Shijin's slogan of "agrarian-based nation" was founded on studying foreign economic experience and can not be reduced to Chinese culture conservatism.

### Debates of the 1930s

In the 1930s under the influence of the global economic crisis the situation in Chinese countryside deteriorated. Various groups of the rural reconstruction movement (*xiangcun jianshe pai*) became the main proponents of agrarian-based model of economic development.

### ***Liang Shuming: ideas of rural reconstruction***

Philosopher and comparative culture scholar Liang Shuming was the most prominent figure of pro-agriculture group that advocated the theory “agriculture is the root” (*nong ben lun*). Although he was not an economist, his approaches to rural problems combined practical work with theoretical studies. Other actors in the agriculture group mainly came from practice with no significant contribution to the theory (Luo Rongqu 2009: 392).

On the basis of comparison of civilizations of East and West Liang Shuming concluded that the construction of “modern state” (*jindai guojia*) can not be the goal of China’s development. In his opinion, the problem is not that Chinese industry has not risen (during the First World War it has grown significantly), but that after this rise it was destroyed (Liang Shuming 1935: 814).

Once the true nature of capitalist imperialist states has been “exposed”, the essence of the “Europeanized” (*ouhua*) or “modern” (*jindai*) countries became clear. In the article “Final awakening of the National self-salvation movement of the Chinese people” (Liang Shuming [1930] 1992) Liang Shuming wrote: “Europeanization is not necessarily good, Europeans should not be taken as example – this conclusion reflects a great progress in Chinese mind at the recent stage of the national self-salvation movement of the Chinese people” (see Luo Rongqu 2009: 392). He assumed that in the sphere of agriculture there was less oppression by foreign powers than in the industry, so China should liberate itself starting from the agriculture (see Zou Jinwen 2014: 279-280).

Liang Shuming admitted that Chinese society needed industrialization being understood as the progress of production techniques. However from the point of view of practice “the rural reconstruction is the only possible way of China’s industrialization” (Liang Shuming 1935: 814).

He believed that agriculture was easier to develop in China than industry. Within the country there was land for agriculture but there was lack of capital for industrial development. China had rural labor force to carry out rural labor but it was not prepared to work in the industry. It will be harder for China’s industrial products to find markets comparing with agricultural products due to international competition, low purchasing power of the population and the dumping of foreign goods on the domestic market. In the future the revival and development of agriculture will lead to the rise of agricultural production and consumption of peasants, which will contribute to the development of industry (Liang Shuming [1937] 1992: 504).

In the 1930s the supporters of the “agrarian-based nation” assumed that the rise of rural economy would provide foundation for industrial development, they proposed “agriculture first and industry later” (*xian nong hou gong*) strategy. They no more called to return to agricultural past due to the understanding that “China’s rise and decline are linked to China’s ability to industrialize” (Liang Shuming [1934] 1992: 579).

During this period the supporters of agriculture were looking for the best ratio between the development of agriculture and industry to suit Chinese conditions. Liang Shuming believed that the rise of the countryside would naturally lead to prosperity of the cities. In Chinese conditions the attempt to “follow the path of borrowing urban civilization of modern time that is focused on the extraction of capitalist profits and one-sided development of industry and trade, will certainly destroy the agriculture” (Liang Shuming 1935: 817). Collapse in the countryside will lead to destruction of the cities, therefore in order to save the cities one must first save the countryside. The increase in agricultural production and the increase in the purchasing power of the peasants will contribute to the rise of industry.

### ***The concept of the industrialization in a broad sense***

In the 1930s Chen Xujing, Wu Jingchao and other members of pro-westernization group that rallied around the “Duli pinglun” magazine raised their voice in favor of industrialization. In 1936 Chen Xujing wrote that although the name “rural reconstruction movement” sounded new

and original, in theory it had a tendency towards “restoration of the past” (Chen Xujing [1936] 2014: 286). He set his task to pick faults of this trend and to criticize it. Chen Xujing compared practical experience of Liang Shuming and his followers with failed social experiment of Robert Owen in New Larnak and failed attempt to build a commune in the state of Indiana in the USA. He noted that in order to carry out experiments in China first of all it was necessary to have a good theory (Chen Xujing [1936] 2014: 291).

In 1934 sociologist Wu Jingchao called “dangerous bias” the inclination of the Chinese intellectuals “to pay attention to agriculture and to neglect industry, to praise the countryside and to curse the cities” (Wu Jingchao 1934: 10). He said that “collapse of Chinese countryside became an evident fact”. Unlike Liang Shuming who suggested reviving the agriculture to lead the industry, Wu Jingchao recommended to “develop cities to save the countryside” (Wu Jingchao 1934a). Without expressing doubt in the necessity of industrialization, Liang Shuming and Wu Jingchao debated about the first step – was it better to start from rural reconstruction for the sake of the industrial rise or to begin from urban development and industrialization to promote the revival of the countryside.

Wu Jingchao outlined four groups of opponents of industrialization of China.

The “exaggeration group” (*kuada pai*) overstates the superiority of Chinese culture over foreign cultures, it rejects the need to learn from the foreigners and advocates the founding of the state on the basis of agriculture, the ideas of this group are conservative. According to Wu Jingchao among the two paths – one is mechanized production which leads to wealth, intelligence, and longevity, and the other is manual labor which leads to poverty, ignorance and a short life – this group choose the latter (Wu Jingchao 1934b: 2-3).

The “desire restriction group” (*jin yu pai*) believes that agricultural production can not fully meet the needs of people in clothing, food, shelter and transportation. Instead of increasing production they recommend to limit desires and give up luxury, promote asceticism, tranquility and inaction (Wu Jingchao 1934b: 4).

The group of those who “refuse to eat for fear of choking” (*yin ye fei shi pai*) is inactive for fear of making a mistake. Its supporters see both the benefits of industrialization and serious problems of unemployment, conflicts of labor and capital, social instability in the European industrial civilization. The shortcomings of Western civilization gave rise to their doubts as to the needs for industrialization (Wu Jingchao 1934b: 5-6).

The group of “retreat in face of danger” (*weinan tuisuo pai*) believes that under the yoke of the imperialists and their monopolization of Chinese market the national industry has no perspectives. From this point of view one can only put the countryside in order and lead the old peasant life.

Wu Jingchao insisted that China had only one workable method. In spite of numerous difficulties, one should not hesitate in indecision at the crossroads (Wu Jingchao 1934b: 7). If China wants to turn from poor and weak nation into a rich and strong one, it needs to industrialize (Wu Jingchao [1938] 2010: 230).

However, the theme of China’s agrarian development path has not left the intellectual scene. In 1935 Qi Qisheng who received education in Japan elaborated a set of arguments in favor of agriculture-centered economic development in China (Qi Qisheng [135] 1990). Agricultural production is the basis of subsistence of most Chinese peasants, many of whom live in poverty. Agriculture remains the main production sector of Chinese economy, and the economy as a whole depends on its development. The prosperity of countryside and the rise of incomes of the peasants will enable the development of industry and trade. Under Chinese conditions, it is easier to uplift the agriculture and revive the countryside than to industrialize; the international situation and the structural features of the national economy give more hope for the development of capitalism in agriculture than in industry. The rise of agriculture and the improvement in farming will help to increase the export of agricultural products and thereby to solve the problem of passive balance of trade. In addition, the rural development will solve the

problem of employment of tens of millions of surplus population, that will bring social peace and political stability to the nation (Qi Qisheng [135] 1990: 807-808).

Yuan Pinzhi (1903-1940) criticized the above-mentioned views in August, 1935. "The crisis in China's economy consists not only in the decline of agriculture, but also in the fact that the entire structure (*jigou*) of China's economy is colonial" (Yuan Pinzhi [1935] 1990: 836). To save China it is necessary to develop the national industry, only in this way can the structural shortcomings of the Chinese economy be corrected to diminish its vulnerability to external pressure. First of all, in a wartime environment, China must be able to provide itself with the necessary means to defeat the powerful enemy. Industrialization will protect Chinese economy from imperialist intervention, it will improve the material conditions of ordinary people, it will stop cash outflow and provide financial stability, it will stop the inflow of imperialist goods and will solve the problem of passive balance in international trade (Yuan Pinzhi [1935] 1990: 843-844). Active development of national industry will increase the demand for raw materials, it will create markets for agricultural industry and absorb the rural unemployed population.

Among the consistent supporters of industrialization was Liu Dajun (1891-1962) who graduated from the University of Michigan in 1915 with a bachelor degree in economics. In January 1937, he wrote that the key link in the construction of the national economy is the industry. He saw the reasons of the poverty of peasants and rural collapse in excessive employment in agriculture. Peasants cultivate their fields for too long time, their income decrease, the peasant population continues to grow and per capita incomes go down every day. Only by developing other branches of economy that rely on industry and absorb surplus population the pressure of peasants on land can be reduced (see Zou Jinwen 2014: 282).

Against the backdrop of increased tension in relations with Japan many advocates of industrialization have focused on the development of heavy industry. In 1935 Zhou Xianwen noted that without modern independent industry Chinese economy would have only a colonial perspective. If China can not develop a heavy industry, it will not be able to have a modern defense, and without this it is impossible to found the state (*li guo*) (see Zou Jinwen 2014: 283). Xu Tingyao believed that heavy industry was the mother of industry and the foundation of industrialization. In a difficult international environment the core of founding of the state (*li guo*) should be heavy industry, that is the defense industry (see Zou Jinwen 2014: 283).

In early 1935 Zhen Linzhuang proposed the idea of the "third path" of China's development (Zhen Linzhuang 1935). He assumed that China could not immediately leapfrog from several millennia of agricultural economy to a new industrial economy, so it was necessary to find a way to create an industrial economy within the existing agricultural economy. He proposed to establish small-scale rural industries to lay the foundations for the urban industry (Zhen Linzhuang 1935: 17). Zhen Linzhuang hoped to move step by step through the transition period, thus departing from the stage of backward society by the "third path".

This point of view was criticized by young researcher Zhang Peigang who later became known as the most influential Chinese specialist in economic development of the twentieth century. He argued that rural industry could not serve as a "bridge" for the transition from agrarian society to modern industrial society (Zhang Peigang 1935: 15). Although China can not emulate the USSR by completing industrialization of the whole country in five years, it is necessary for the country to embark on this main road (Zhang Peigang 1935: 17). At the same time, Zhang Peigang recognized the concept of industrialization in a broad sense: "To carry out industrialization, it is necessary not only to build industrialized cities, but at the same time an industrialized countryside" (Zhang Peigang 1935: 18).

Wang Zijian proposed the idea of industrialization in a broad sense in the end of 1934. "We believe that three characters – gong ye hua [industrialization] – should be explained in a broad sense. It is necessary to build not only the industrialized cities, but also the industrialized countryside, that is to carry out industrialization of agriculture. Thus, the cities will be developed, the rural population will decrease, but thanks to the rural industrialization the land will not be



abandoned and there will be hope for an increase in production. This is the real meaning of industrialization.” (Wang Zijian [1934] 1990: 756-757).

With the emergence of an expanded interpretation of industrialization the opposition of agricultural and industrial development was abandoned. At the new stage of debate many supporters of agriculture spoke about the importance of industry, but proposed to develop agriculture first. Among the proponents of industry, some advocated the primary development of heavy industry, while others favored rural industry. There was also a group that supported equal attention to agriculture and industry. Among the participants of the discussion there were many officials, scholars and persons with connections in the government, their views had an impact on the decision-making. The dispute gave prominence to the idea of “industry-based state”. This outcome has influenced the ideological circles and also encouraged the national government to embark on the path of industrial development (see Zou Jinwen 2014: 282).

### **Wartime debates on agriculture and industry**

After the outbreak of the full-scale war with Japan in 1937 the disputes between the supporters of agrarian economy and of industrial economy have subsided. Japanese aggression forced Chinese intellectuals and society to understand the urgent need for industrialization. In 1939 Zhou Xianwen from the department of agriculture of the Ministry of economic affairs argued that China could not “found the state on the basis of agriculture”. He wrote that “agricultural states can only have a colonial perspective, they will not be able to embark on the path of independence”. He explained that due to this reason Japanese scholars of that time advocated “Japanese industry, Chinese agriculture, co-existence and prosperity”. Chinese compatriots should know that the enemy wants to turn the Chinese into slaves (Zhou Xianwen [1939] 1990: 890).

Zhou Xianwen noted that all strong powers of the world like England, the United States, France, the USSR, Italy, Germany were industrial nations. As for the often mentioned example of agrarian Denmark, it can exist independently only in conditions of favorable international environment, it is easy to imagine what will happen in case of an armed attack on it by another country (Zhou Xianwen [1939] 1990: 890). Weighty facts prove that all strong powers rely upon industry, agrarian-based countries turn into colonies.

Yang Kaidao criticized this position. He studied in the United States, in 1927 he received the doctoral degree in sociology from the University of Michigan. In 1940, Yang Kaidao said that China have founded, was founding and would found the state upon agriculture. However, this was more a call to pay attention to agriculture, and not the expression of support for the traditional rural society.

Yang Kaidao believed that China could not follow the footsteps of England and Japan by fully relying on imported foreign raw materials and agricultural products and by selling industrial products to other countries. Instead of that it is necessary use China’s own raw materials and to absorb domestic industrial products. He also noted that the degree of industrialization of China leaves no possibility to catch up with England and Japan. China will not be able to compete with them on the world market, such competition is possible only on the domestic market (see Yan Shuqin 2010: 141-142).

Representative figures from competing political parties – the CCP and the Kuomintang - have joined the discussion. On June 4, 1940 in Chongqing newspaper “Xinhua ribao” Communist party member Marxist economist Xu Dixin criticized the concept of Yang Kaidao. He noted that in the past under feudalism in China, as in England, France and Germany, agriculture was the basis of the state. However, under the new conditions it is a mistake to praise the Chinese nation that stalled at the stage of feudalism as the “greatest” and “most outstanding agrarian nation” (Xu Dixin [1940] 1990).

In December 1940 Zhou Xianwen had gathered the materials of discussion into the collection of articles that was published in early 1941. In his foreword to the book Kuomintang

party elder Wu Zhihui (Wu Jingheng) called “self-deprecating” and strange reasonings by Yang Kaidao and his supporters that England and Japan were industrial nations by nature, and China was by nature an agrarian nation and therefore could not compete with them (see Yan Suqin 2010: 147-148).

In 1940 Weng Wenhao proposed a reconciling approach in his article “To base the state on agriculture, to build the state with the help of industry” published in “Zhongyang ribao” newspaper (Weng Wenhao [1940] 1990).

Weng Wenhao sought to combine the advantages of agricultural and industrial development, stressing that both paths depend on each other and they can not be separated. He divided Chinese agricultural products into three groups – food, industrial raw materials and exports. Industrial raw materials are the basis for the development of industry, the export of agricultural products provides an important material resource to be exchanged for foreign ammunition and building materials, which are necessary for the conduct of war and the national reconstruction. In a large agrarian nation during the period of war and national construction agricultural production becomes particularly important. Only when there is enough food and troops, when a strong rear is secured it is possible to strengthen the foundations of the state and maintain independence. The increase in agricultural production will relieve the people from worry about clothes and food; they will be able to concentrate on construction work. In this sense, the phrase “agriculture is the foundation of the state” is very correct.

On the other hand, this thesis can not be understood as one-sided attention to agriculture at the expense of industry. Moreover, it is not about the conservation of existing methods of production and technology, which will hamper China’s efforts to overcome backwardness of agriculture. Only industrialization will make China rich and powerful. Weng Wenhao noted that the industrialization movement was not limited to cities and industrial areas, it should move to the countryside so that agriculture gradually becomes mechanized.

To achieve standards of living of the USA and Europe, China must follow the path of industrialization. In the USA one farmer can feed more than ten people, and in China eight peasants are able to feed ten. If this proportion does not change, there will never be a day when life in China will be improved. Therefore, the state can rely on agriculture, and the national reconstruction should be based on industry. Weng Wenhao stressed that Japan committed aggression because it has industry but no raw materials, and China has raw materials and no industry. There is a steel industry in Japan, but no ore deposits, there is a textile industry, but no cotton, so Japan wants to take over the Chinese natural resources. In order to use these resources in the interests of China it is necessary to introduce modern technologies and new equipment.

Weng Wenhao noted that during the war the Nationalist government made great efforts to industrialize the rear, but because of transport difficulties in wartime and a shortage of capital, these measures could only be regarded as the beginning of the road towards industrialization. “The war of resistance is a difficult job, but the industrial reconstruction of the state is even more complicated than the war” (Weng Wenhao [1940] 1990: 912). Weng Wenhao believed that “the development of agriculture should be combined with industrialization, only then can we talk about the long term perspective (*yuanda qiantu*)” (Weng Wenhao [1940] 1990: 911).

During the war it was generally accepted that “agriculture and industry are equally important” (*gong nong bing zhong*). At the same time the theoretical criticism of the arguments in favor of the priority of agricultural economy (*nong ben lun*) was continued. After the end of the war there was a common understanding that industrialization means the transformation of the whole economic system and it leads to the emergence of industrial society (see Yan Suqin 2010: 184-185).

The debate about the paths of agrarian and industrial development had impact on political leaders. Chiang Kai-shek in the “Chinese economic theory” (1943) pointed out that for the industrial development of China it was first necessary to explore the vast interior areas, change the rural economy, improve the lives of peasants, so that industrial products could have sales markets. In order to develop the interior, it was necessary to build railways and waterways

throughout the country with the help of state capital. For China's industry to be developed, it was necessary to develop agriculture and mineral deposits as the main sources of raw materials for industry. When the extractive industries are developed, the machines will get raw materials. If agriculture goes up, industry will have resources. If transport, agriculture and extractive industries are developed, the industry will have both the sales market and source of raw materials, the economy will naturally be able to become developed (see Zhong Xiangcai 2015: 161).

The leaders of the Communist Party of China supported the idea of industrialization. In 1944 Mao Zedong said that the main reason of China's backwardness was the absence of the industry of a new type. Japan dared to oppress China because the latter had no strong industry. Overcoming of this backwardness Mao Zedong treated as the task of the whole nation. In his view, in order to overthrow Japanese imperialism, it was necessary to have industry to ensure the strengthening of the Chinese nation. Industrialization is needed, so the CPC must make efforts to industrialize China (see Zhong Xiangcai 2015: 161).

### **Rethinking the goal of industrialization in the late 1930s and 1940s**

In the initial period of the War of Resistance against Japan the vision of industrialization was based mainly on the idea of protection of national independence. Initially the main topic for discussion was the survival during the conflict. In the summer of 1942 began the discussion on the post-war industrial development of China. Since the second half of 1942 the theme of gaining wealth and power in the post-war period came to the center stage. There was also a change in understanding of industrialization from its interpretation as mechanization to the concept of profound change of the entire economy (see Yan Shuqin 2010: 179).

### ***Wu Jingchao: industrialization for defense***

In the middle of the 1930s Wu Jingchao started research in the problems of industrialization of China. Then he suggested to improve the quality of national industry and to increase the degree of market openness. After the beginning of the war his views have changed, he called for greater attention to the place of defense in economic construction. "In our future construction we must first strive for power and then talk about wealth, we must consider the defense industry as more important than the industries related to people's livelihood (*minsheng*). Our financial and human resources should be diverted to the defense industry for the most part." (Wu Jingchao 1943: 140; quoted after Zhong Xiangcai 2012: 154).

In his book "The path of industrialization of China" published in 1938 Wu Jingchao acknowledged that in his previous publications he paid special attention to the relationship between industrialization and the standard of living of the people (Wu Jingchao [1938] 2010: 229). His views changed after his visit to some foreign countries in 1937. The most profound impression was left by the USSR and Germany. Wu Jingchao discovered that in process of industrialization these two countries were not seeking to improve people's living standards and focused on strengthening the defense. After the incident on Lugouqiao (Marco Polo) bridge in July 1937 which became a pretext for Japanese aggression, the development of defense industry and related industries became the priority for China, problems of industries related to people livelihood retreated to a secondary position. The task of turning China from weak to strong became more important than transition from poverty to prosperity.

At the initial stage of the war the Chinese people showed patriotism and the army demonstrated courage, that was recognized by foreign observers. China has the will and the outstanding leaders that the enemy does not possess. In these favorable conditions the Chinese cannot win every battle and drive the enemy beyond its borders because their arms are worse than the enemy weapons. The problem is not the lack of courage, discipline, favorable geographical conditions, people and so on, but the shortage of mechanized equipment - aircraft, guns, tanks. If China's military technology and weapons were like those of the enemy, the war

with Japan would have ended long ago with China's ultimate victory. The following question can then be asked about the reasons for the shortage of equipment and armaments. The answer is that it is impossible to produce planes and guns without basic industries, most aircraft and guns are produced by the countries where industrialization was carried out (Wu Jingchao [1938] 2010: 231).

Wu Jingchao pointed out that industrialized countries were able to strike a balance between wealth and power, between improving people's living standards and building defense capabilities. In England and America the standard of living is much higher than in China, international position of these countries is also high and no one dares to offend them. If, in terms of industrialization level, China once overtakes the USA and England, it will be able to gain a comparable level of wealth and similar international status (Wu Jingchao [1938] 2010: 231).

However a country that is only stepping on the path of industrialization must weigh the importance of each of these goals and determine the priority. If China decides that raising the standard of living is more important than strengthening defense, then it will be necessary to develop the industries related to national welfare and to build factories that produce consumer goods. If we assume that in the modern world where the strong eats the weak the top priority is the defense, then it is necessary to develop defense industries, to build steel plants and aircraft manufacturing plants, factories for the production of guns, gunpowder, cars, copper, gas and oil. They are needed to supply the army. Their products cannot improve the quality of life of people but can strengthen the defense.

Wu Jingchao rebuked the proponents of China's industrialization for striving to achieve both goals without distinguishing between the primary and the secondary. The policy of simultaneous development of civil and military industries is good when sufficient financial and human resources are available. In reality China will have to make a choice before embarking on the path of industrialization in the light of the experience gained in the War of resistance against Japan.

Factories established in the pre-war period in the coastal areas of China mostly produced consumer goods. If one looks at the list of factories in Shanghai and Tianjin these were mainly the industries that produced consumer goods and not the defense industries. Earlier Chinese industries tended to focus on wealth and neglected the tasks of gaining national strength. As a result, under enemy fire most of these enterprises were ruined into dust. From this we can conclude: if the wealth of the state is not based on power then this wealth has no guarantee. Previously when China spoke on the goal of "wealth and power" (*fuqiang*) priority was given to the character "wealth"-*fu*. In the future it is necessary to change the sequence: first to become strong and then talk about wealth, to consider defense industries as more important than industries related to people's livelihood. Most of the financial and human resources should be transferred to defense industries (Wu Jingchao [1938] 2010: 233).

Wu Jingchao acknowledged that this definition of national priorities would require a willingness to endure the hardships of life in the next 10 to 20 years. This time is needed to strengthen the defense, only after that there will be conditions for improving the standard of living. The scholar stressed that the perspectives of the USSR were based on the development of heavy industries without which the USSR had no hope of being an independent state. The level of provision of people with clothing, food and housing there is lower than in the United States and England, but the heavy industries, especially the defense, over the past ten years has received a huge boost. Over a short period of time the USSR became one of the strongest countries in the world. Therefore people living in Siberia do not have stockings and shoes, but Soviet planes can fly around the North Pole and land in San Francisco. In Moscow there may be not enough houses for living but there are many tanks on the Red Square at the military parade. Developing this idea, Wu Jingchao noted that Germany under Hitler in a similar way "has turned from an oppressed state into an independent one" (Wu Jingchao [1938] 2010: 235).

The researcher noted that China should not copy from the United States and England the experience of the role of governments of these countries in carrying out industrialization.

Reproduction of this model will slow down the industrialization of China, without a plan it will not be able to catch up with advanced industrial countries. But China also cannot go to another extreme and take as an example the Soviet Russia where all things are in the hands of the government. The Chinese government does not have the capacity to monopolize everything; it must actively engage in public management and help private entrepreneurs. The defense industry requires large capital, high-level technology, and this cannot be done by private capital. As for the industries that produce consumer goods, private capital has already made progress in this area (Wu Jingchao [1938] 2010: 253). Wu Jingchao pointed out that the government should carry out industrialization together with the people, it can not stay aside, but it should not assume all the responsibilities (Wu Jingchao [1938] 2010: 254).

Wu Jingchao paid a lot of attention to the impact of war on economic reconstruction. The proposed project of economic development considered the defense industry as the core of industrialization. He recommended mainly developing heavy industries and only after that light industries related to people's livelihood. He stressed that although the modernized state should have light industries, from the point of view of the sequence of reconstruction of the state it was necessary to determine the priority sequence of heavy and light industries (Wu Jingchao 1946: 2: see Zou Jinwen 2014: 318).

### ***Liu Dajun: strategy of industrialization for well-being***

Liu Dajun introduced a different concept of relations between civil and military objectives of modernization in China. It should be noted that it was put forward after the end of the war when the task of developing defense industry at any cost was no longer as pressing as in the period when Wu Jingchao was writing his book.

In the book "Industrialization and industrial development of China" (1946) Liu Dajun proceeded from the fact that the war has led to fundamental changes in China, on this basis it is necessary to think about future development from the standpoint of the state interests. He opposed the one-sided understanding of industrialization reduced solely to the development of industry. Liu Dajun defined industrialization as "mechanization and scientific approach in all branches of production, as well as a scientific approach to organization and management of production and their rationalization" (Liu Dajun 1946: 3). Under this definition industrialization was no longer equal to industrial development and embraced other aspects like the mechanization and introduction of science into the industry, mining, mechanization of transport, widespread use of energy, large-scale production, standardization of products, rationalization of organization and management, raising capital for the development of large-scale industries, formation of industrial cities (Liu Dajun 1946: 3-6).

The scholar stressed that industrialization was a common trend of the modern world, its effect was manifested in strengthening of defense and improvement of living standards. If China does not want to lag behind, it must catch up (*yingtou ganshang*). The problems generated by industrialization such as unemployment should be addressed. If the government has a plan, it can exercise economic control (*tongzhi*) and guidance (*zhidao*), the problems will not become inevitable (Liu Dajun 1946: 6).

Liu Dajun pointed to defense and people's livelihood as two important goals of industrialization. He urged fellow countrymen to understand clearly and to decide whether it was necessary for China to produce more products related to people's livelihood or more planes and guns? He stressed that at the moment both were necessary, but there was no single standard. It is impossible to say that people's livelihood will increase to this level and defense will strengthen to that level. Nor can it be said that when the demands of people's livelihood are satisfied to some extent, then the efforts will be spent on strengthening the defense - or, when defense is strengthened to some extent, the efforts can be spent on improving people's livelihood.

The economist explained that in the advanced countries the standard of living of people was higher than in China. These countries are committed to raising the standard of living and

they also update the tools of war every day. Because in China both spheres are backward and the available capital and labor force are not sufficient to develop both simultaneously, the issue of development deserves further consideration (Liu Dajun 1946: 8).

In his opinion, people's livelihood is an "active" initiative goal, and the defense is a passive goal (Liu Dajun 1946: 8). The goal of industrialization is to meet people's needs and improve their lives, it can never be abandoned. However the degree of improvement in the people's livelihood is constrained by economic capacities of the state, whereas the strengthening of defense depends on the international situation. During the war the state should shift the focus on the military industry and in peacetime efforts in this area can be reduced, this is the "passive" nature of the defensive goals of industrialization. If peace comes and Japan renounces aggressive intentions, then strong states will disarm and there will be no need for China to strengthen its defense. Liu Dajun stressed that China has no decisive influence on the development of these trends and therefore it is in a passive position.

On the contrary, the improvement of people's livelihood is an active goal which should be pursued in any situation even during the war. There is an ancient Chinese saying "when food is sufficient, people know about the benefit and the duty". To unite the will of the people in the wartime, the care about people's livelihood should not weaken. Intellectuals should understand the necessity to be ready to sacrifice their own happiness and to reduce the needs for clothing and food for the sake of victory in the war. If it would be possible to awaken the feeling of patriotism among ordinary people, they will be able to share these ideas. Liu Dajun underlined that the reasoning about improving the standard of living is sometimes misunderstood as justification of luxury lifestyle. In China it must mean that the standard of living of the majority of people should be improved in a balanced manner (Liu Dajun 1946: 9).

Liu Dajun sought for a specific Chinese way of industrialization that will avoid the shortcomings of the Soviet planned economy and the Western liberal economy. In Soviet Russia the five-year plan was an instrument of industrialization. To repeat this experience in China it will be necessary to establish centralized control over all economic activities as well as to transform radically the political system and the society. According to Liu Dajun, China will not be able to copy these aspects of the Soviet model. On the other hand, it is also unrealistic to hope for the self-adjustment (*tiaozheng*) under the so-called policy of non-interference (*fangren*) that is based on the prerequisite of non-existent perfect free competition, there are no such examples in history (Liu Dajun 1946: 11).

Therefore in China the plan is not intended to be fully comprehensive, people do not want to get extreme control but they also have no expectations of perfect freedom and perfect competition. Liu Dajun noted that the main issue was the nature and the scope of application of control. China has numerous economic problems and limited resources, industrialization without an appropriate plan will lead to the inevitable waste of human and financial resources. That should not happen, therefore it is necessary to identify urgent steps and the tasks that can be postponed for the future (Liu Dajun 1946: 11).

In the process of industrialization China will need new norms and new system of control. With the exception of key industries administered by the government, there are industries with partial control. The contacts of private enterprises with the public sector are also needed. If the production is not in accordance with the instructions of the government, sanctions may be applied (Liu Dajun 1946: 12).

Liu Dajun did not support the calls for the development of regional economies after the destruction of industrial areas during the war. China lacks capital and resources, so it is unrealistic to strive to ensure that each region becomes self-sufficient. Such policy would encourage production that did not conform to economic principles. In China it is necessary to take the state as a whole as the foundation, the interests of the state should be taken as precondition (Liu Dajun 1946: 13-14).

When discussing the choice between revolutionary and evolutionary paths of development, Liu Dajun indicated that the gradual path allowed easing imbalances, avoiding

waste of resources and preventing extra social tensions. However, the plans must be implemented. China's earlier plans of industrialization have remained on paper; although the attempts of industrialization began in China at about the same time as in Japan, slower speed of actions led to a big difference. Industrialization was delayed for a long time and the people are dissatisfied with it (Liu Dajun 1946: 15).

The international situation also does not allow postponing the industrialization anymore. During the war Japanese aggressors impeded China's industrialization by all means to ensure that agricultural China will fall under the rule of industrial Japan. According to Liu Dajun, this is the lesson learned from the War of resistance against Japan. He underlined that during the industrialization the state must be taken as the basic unit (*yi guojia wei danwei*). The time of industrialization should be determined according to the needs of the state, but it is better to shorten this time. The ultimate goal of industrialization is to increase the happiness of the majority of the people (Liu Dajun 1946: 16).

The problem of relations between industry and agriculture raised in the pre-war period retained its importance after the war. Liu Dajun wrote that it was wrong to ignore agriculture and to treat some sectors of economy (*chanye*) as appendages to industry. Industrialization needs to take into account the pros and cons (benefits and losses – *li hai*) of each sector, and especially of agriculture. Industry and agriculture should complement each other (Liu Dajun 1946: 87-88).

### **Zhang Peigang's theory of economic development**

Zhang Peigang (1913-2011) was a prominent figure in the history of Chinese development economics of the twentieth century. His academic experience in the Republican period combined field researches of Chinese countryside, studies in the United States and successful publication of theoretical work on agriculture and industrial development in English language. In the 1980s-1990s during the reform period he made a notable contribution to advancement of development economics in China.

In 1934 after graduating from the Department of Economics of Wuhan University Zhang Peigang joined the Institute of Social Studies of the Academia Sinica. For eight years he was engaged in surveys of agriculture in the provinces of Hubei, Zhejiang and Guangxi. This work allowed the young scholar to build his own understanding of the prospects of China's agrarian economy.

In September 1941, Zhang Peigang began his studies at Harvard University. At the end of 1943 he passed the master's exams and started preparing doctoral dissertation "Agriculture and Industrialization. The Adjustments That Take Place as an Agricultural Country Is Industrialized". He received his doctorate degree from Harvard University in December 1945.

In 1946 Zhang Peigang joined the National Resources Commission of the Nationalist government. For three months he worked in the representative office in New York and for another three months in Chinese capital in Nanjing. At that time the well-known economist Simon S. Kuznets was appointed as an adviser to the Commission. He got acquainted with the dissertation of Zhang Peigang and felt that it was too theoretical. Zhang Peigang responded to Kuznets' suggestion and moved the sections on the concept of industrialization and agriculture as an industry into the appendices of his book (Zhang Peigang [2002] 2012: F 43).

In the USA Zhang Peigang's work on agriculture and industrialization was awarded with David A. Wells prize for 1946-1947. During the civil war in autumn of 1947 he returned to China to teach at Wuhan University. In 1948 he went back to the USA to work at the UN, however in February 1949 in the eve of the victory of the Communist Party he returned to Wuhan (Zhang Peigang [2002] 2012: F 46 – F 47).

In 1949 Zhang Peigang's dissertation was published in English in the series Harvard Economic Studies (Volume LXXXV). In 1951 it was translated into Spanish and published in Mexico. In the 1950s it was used as textbook in several universities in Latin America (see Hu Jichuang 1984: 420).

Though since the 1950s the foreigners attempted to contact Zhang Peigang, he was not known in China. For the first time his book was published in Chinese in 1984. The English version was reprinted in China in 2012 (Zhang Peigang [1949] 2012).

### ***“Agriculture and Industrialization”***

Zhang Peigang’s dissertation combined his practical experience of study of Chinese agrarian economy in the 1930s with knowledge of modern Western economic theories. The book used the new concepts developed by the professors of Harvard University where Zhang Peigang studied. In the preface he referred to the ideas of Joseph Schumpeter, Edward H. Chamberlin, Gottfried Haberler, Wassily W. Leontief. He provided detailed arguments on the possibility of application of general equilibrium approach and partial equilibrium approach (he assessed the latter to be more appropriate to the study) along with localization theory to the analysis of relations between industry and agriculture. Zhang Peigang outlined the dynamic relationship between industry and agriculture, described the contribution and the basic role of agriculture in the development of industry and the entire economy.

The book consisted of six parts: explanation of basic concepts, methods, interdependence of agriculture and industry, theory of industrialization, effects of industrialization on agricultural production and farm labor, industrialization in an agricultural country. The appendices explained concepts of an industry and agriculture as an industry.

In the 1990s Zhang Peigang noted that at the center of his book “Agriculture and Industrialization” was the problem of industrialization of agrarian countries, which later became an important topic of the new scholarly discipline - development economics. The book argued for the necessity of carrying out a comprehensive industrialization embracing the city and the countryside in all agrarian or economically backward countries (Zhang Peigang [1994] 2012: F 51).

In the contents of his doctoral dissertation Zhang Peigang put on the first place the research on the interdependence of agriculture and industry, as well as on the contribution and basic role of agriculture in industry and in the economy as a whole. Among the factors of interdependence of agriculture and industry he outlined three linking factors: food, raw materials, and labor force.

In his analysis of dualistic position of farmers as buyers in the market of production factors in agriculture and as sellers in the market of agricultural products Zhang Peigang used the theories of monopolistic competition and oligopsony that appeared shortly before the writing of his doctoral thesis. This made it possible to demonstrate that in the process of exchange with urban industrialists and traders, peasants have an unequal and disadvantageous position (Zhang Peigang [1994] 2012: F 52). Selling of agricultural products (if these are at least partially processed and exported abroad) allows agriculture to play an important role in capital accumulation for the industrialization of agrarian countries.

Chapter III of the book explained Zhang Peigang’s notion of industrialization and its essence. He defined industrialization as a “process in which changes of a series of strategical production functions are taking place” (Zhang Peigang [1949] 2012: 66). Strategic functions are generating and determining the changes of other production functions. Decades later the scholar commented that at that time he started creating his own industrialization theory.

In the 1940s Zhang Peigang noted that his definition of industrialization “was a tentative one”. It was much broader than the definitions of other researchers of that time because it embraced mechanization and modernization not only of the industry but also of agriculture. Earlier in the article “Is the third path possible?” he wrote that the concept of industrialization was very broad and included not only the formation of industrialized cities but also of industrialized countryside (Zhang Peigang 1935: 18). At the end of the twentieth century in 1994 Zhang Peigang concluded that his definition of industrialization of the 1930s surpassed the



understanding of industrialization as a simple development of industry that is a one-sided point of view which ignores agriculture and even sacrifices it (Zhang Peigang [1994] 2012: F 54).

“This one-sided understanding of industrialization still exists in many developing countries with market economies; earlier it existed for a long time in the USSR under the planned economy, it created serious limitations for the development of agriculture and the entire national economy. In China in the past there was a system of centrally planned economy too, it fully copied the Soviet experience. Although later there was slogan “agriculture is the basis”, but for a long time both at the level of ideas and of the policies there was an emphasis on the development of manufacturing industry that ignored agriculture” (Zhang Peigang [1994] 2012: F 54).

Zhang Peigang’s reasoning imply that his concept of industrialization elaborated in 1945 was devoid of shortcomings of the Soviet economic development model and it had also surpassed Western economic theory of these days. He noted that two or three decades after the end of the Second World War Western scholars still used the notion of industrialization in the narrow sense, viewing it as the development of manufacturing industry and juxtaposing industrialization with the development of agriculture. American economist Gerald M. Meier in the 4<sup>th</sup> edition of his book “Leading Issues in Economic Development” (1984) added at the beginning of the Chapter on the modernization strategy an important remark that this Chapter should be read together with the Chapter on agriculture strategy. For Zhang Peigang it indicated that Western understanding of industrialization became closer to his own concept of the 1940s (Zhang Peigang [1994] 2012: F 55).

In the book Zhang Peigang wrote about the advanced role of infrastructure and its projects. He observed that “from the experience of various industrialized countries, changes of such strategic production functions can be best illustrated in the fields of transportation, power industry, machinery industry, iron and steel industry” (Zhang Peigang [1949] 2012: 67). The concept of the advanced role of infrastructure was proved later by the experience of the “four dragons” of East Asia, China since the 1990s also paid attention to the development of infrastructure (Zhang Peigang [1994] 2012: F 56).

Two chapters from Zhang Peigang’s book were focused on the effects of industrialization on agricultural production and farm labor, especially on its effects on surplus labor in the countryside. Later in the development economics this theme was discussed within the context of adjustment and structural change, and also of migration of surplus labor force. Ability to solve this problem determines the final success or failure of industrialization (Zhang Peigang [1994] 2012: F 58 - F 59).

Zhang Peigang believed that the mutual impact of industrial development and agricultural reforms could change. In developed countries before the industrial revolution rural reforms have significantly facilitated industrial and commercial development. “The enclosure and the engrossing of farms resulted in placing the disposal of industry labor resources which made possible for the factory system to develop” (Zhang Peigang [1949] 2012: 115). However, after the industrial revolution, the influence of industrial development on agriculture increased noticeably: without industry it would be impossible to start with mechanization and motorization of agriculture. In the East Asian “dragons” of Korea and Taiwan export of agricultural products contributed to the commencement of industrialization. According to the scholar, this is a manifestation of the general trend: first agriculture supports industry and later industry contributes to agriculture.

In the 1940s Zhang Peigang believed that there were gaps in classical and neoclassical economic theory that needed to be filled. “First, the income effect was neglected. As industrialization gets under way, people’s income will rise to higher level. Products which have a greater elasticity of demand will have greater gains in an expansionist economy. Thus manufactured goods in general have advantage over agricultural products... Secondly, elasticity of supply and elasticity of production adjustments should also be taken into consideration. The greater the elasticity in home production, the more the gains in export abroad... Also the

manufactured goods are generally in a more favorable condition. In a changing economy agricultural products are always in a less advantageous position than manufactured goods”. (Zhang Peigang [1949] 2012: 225-226).

Zhang Peigang claimed that “income-elasticity of the demand” concept that he used in the 1940s for analysis of trade between agrarian and industrial nations was developed later in the international trade theory. It was reflected in unequal exchange theory, Center-Periphery theory, dependency theory (Zhang Peigang [1994] 2012: F 64). He underlined that his book was based on the theories of monopolistic competition and imperfect competition, these theories were new at time and they attracted attention after publication of works J. Robinson and E. Chamberlin in 1933.

Zhang Peigang proudly noted that already in the mid-1940s he suggested that the hypothesis of perfect competition in the agricultural market is not true (Zhang Peigang [1994] 2012: F 64 – F 65). He saw his own merit in stressing in the analysis of industrialization of agricultural countries the spirit of entrepreneurship and managerial skills, treating them together with technology as generating factors of the industrialization (Zhang Peigang [1994] 2012: F 66).

### ***Zhang Peigang on economic development of China***

Problems of Chinese agriculture and industrialization in China were analyzed in the Chapter VI “Industrialization in an agricultural country” (Paragraph A. Agriculture and the industrialization of China) (Zhang Peigang [1949] 2012: 197-207). Zhang Peigang observed that industrialization in China began 30 years ago in the middle of the second decade of the twentieth century, however the effect of the rising of the Chinese standard of living was limited due to several reasons. In sphere of economy for the Western powers and later for Japan China was a market for industrial goods and a source of supply for raw materials. Similar characteristics of colonial economy were present in colonial period in Latin America and later in South Africa and India. China’s difference was in its ability to maintain political independence after the first contact with Western powers and later with Japan till the beginning of full-scale war. At the same time opening of free ports and the establishment of concessions gave foreign industrial goods advantages over Chinese products. These goods were cheaper and dumping policy worsened economic situation in China. After paying only a small amount of custom duties imported goods were able to penetrate easily into the interior market. Zhang Peigang suggested that from theoretical and historical point of view the development of infant industry needed preferential terms and protectionist policy.

Interregional barriers within China and poorly developed transport were another obstacle to the free movement of commodities and the factors of production. This for a long time hampered the industrialization of China and made it difficult to introduce agricultural improvements. For example, in big Chinese cities rice was imported from other countries while in the interior provinces there was a surplus of rice. It gave farmers no incentive to develop production, although the payments for the importation of rice could have been saved and used for importation of machinery and fertilizers.

Zhang Peigang paid attention to mutual relation of functions of agriculture and industry. As he noticed, because of the low income-elasticity of the demand for food the role of agriculture will decrease after industrialization will provide the population with a relatively decent living standard. Before that moment the demand for food increases as income grows, but later it will go down. In China that means that the relative share of agriculture in term of national income will tend to decrease. In the early stages of industrialization the demand for food from low-income people will grow and farmers will have to make efforts to increase agricultural production. In process of industrialization there will be a shift in the demand for food, the productivity of the land per unit of area as well as per man will start to increase. Zhang Peigang pointed out that under a fair system of income distribution there will be no need to be afraid of food surpluses.

The scholar called to recognize that in the process of industrialization agriculture would play only a passive role. Theoretically and historically industrial development and transport improvements are capable to create and extent the market for agriculture products. On the other hand, only modern industry can supply agricultural enterprises with the equipment necessary for scientific farming. The experience of Denmark, England and the USA substantiates this thesis. The USSR provides even more striking example, because agricultural improvements appeared there after reaching a certain level of industrial development. The conclusion was that it was important for China to coordinate the development of agriculture and industry.

Agriculture exports could help to start industrialization. In China wood-oil and tea for a long time occupied top positions among the export items. This export could discharge in part the obligation incurred by the import of machinery. Nevertheless the total amount of exports remains much lower than amount required for imports of foreign equipment. In future possibilities of increasing Chinese agricultural exports will remain limited, therefore it is necessary to search for other ways and means of initiating industrialization.

Zhang Peigang addressed the influence of the factor of technology upon the relations between agriculture and the industry. He admitted that agriculture will remain a chief source of China's food supply. The adjustments in agriculture will depend on economic changes. Part of the rural population will relocate to commercial and industrial cities, fewer agricultural workers in the countryside will produce same amount of production. The experience of other countries shows that population growth will accelerate and therefore the demand for food will also increase. Then, in the process of industrialization, there will be the stage at which people's income increase and there will be a demand for better food (e.g. the demand for meat will increase) and there will be reorientation in the types of farming.

Chapter II of the book indicated on the natural growth of population and the rise of people's incomes as the key reasons for increase in demand for food. Industrialization tends to stimulate the shift to a new type of food demand, as was the case in Europe. In China part of the land will be used for poultry raising, etc. However due to the large population there will be no fair balance between agriculture and industry in China like in England.

Agriculture together with mining and forestry will be a major source of supply for raw materials for manufacturing industries. Many types of light industries use the raw materials from agricultural sources; foodstuff industry is also dependent on agriculture. Light industries play an important role at the initial stage of industrialization, in China the cotton textiles industry will retain its great significance in future. Time is needed to develop heavy industries and chemical industries, its duration will depend on the exploitation of China's coal and iron ores. As the development of heavy industries will stimulate the development of light industries, the market for agricultural raw materials will begin to expand. Nevertheless China will depend on the USA, England and Russia. It will have to import equipment for heavy industries and transportation means (cars), to pay for these imports China will export its "speciality goods" produced mainly in light industries.

Agriculture supplies factories with a large amount of labor. This aspect of industrialization is important for China with its big amount of surplus labor that existed under the form of "disguised unemployment". According to Zhang Peigang, on some stage of industrialization the transfer of labor will be very significant, though some factors leave no room for excessive optimism. At the early stage of industrialization the transfer will not be huge, because modern factories will absorb urban handicraft labor first. Some agricultural labor will be used in construction of railways and roads, increasing mechanization of agriculture will generate surplus labor. At the initial stage of industrialization the industry will not be able to absorb effectively the whole surplus of agricultural labor, it will be even more difficult to absorb the surplus that will occur with the introduction of farm machinery.

Zhang Peigang warned that huge rural population makes the introduction of machinery in agriculture in China economically unprofitable and the small size of the farms makes it difficult to use machinery. However some types of machinery could be introduced like pumping

machines in a good irrigation system (Zhang Peigang [1949] 2012: 206). Decades later the scholar admitted that in the past his basic standpoint was that agricultural China had a large surplus of rural population and human labor was much cheaper than machines. He noted that due to the low cost of labor it would be difficult to use machinery in Chinese countryside even with the high level of industrialization. Due to cautious approach to agriculture mechanization in China he foresaw the spread of small-scale mechanization, but not of tractors (Zhang Peigang [1994] 2012: F 62).

The difficulties caused by small scale of Chinese farms can be partially overcome through the consolidation program. Zhang Peigang suggested purchasing land from farmers who have no interest in cultivating them for re-distribution among peasants and agricultural laborers in the form of cooperative management. The state could establish agricultural stations and provide the cooperative farms with machines needed for basic work. He observed that the War with Japan has made land consolidation easier in the occupied areas where the size of the farm was the smallest, the boundaries of many farms have been destroyed during the war, and many landlord and famers have either died or have left their farms. After the end of the war it is necessary to reorganize devastated farms in China's former occupied areas. The scholar wrote that it was a proper moment to start the consolidation of farms and to extent this experience later on the unoccupied areas (Zhang Peigang [1949] 2012: 207).

### *Assessments of Zhang Peigang's views*

In contemporary Chinese scholarly publications Zhang Peigang is usually praised as the founder of development economics in China with a significant contribution to advancement of this branch of knowledge in the West. In this light it is interesting to pay attention to Western assessments of Zhang Peigang's book that was published in English and therefore has been available to broader audience of readers.

Contemporary researcher Paul Trescott observes that the "book was not primarily about China; rather, most of the descriptive data involved the United States and other highly developed economies" (Trescott 2007: 284). This could be true because the book was influenced by stylistic constraints of doctoral thesis prepared in one of the top American universities. Trescott also commented that the book "deals only tangentially with China, and its analytical framework does not seem well adapted to provide insight into China's development" (Trescott 2007: 118). This argument misses the point because any practical advice for economic development of China should have been written in Chinese to address domestic political and economic elites. It is possible to agree that "Zhang's study seems more an academic exercise than a guide to policy" (Trescott 2007: 285). The task of Ph.D. dissertation was to demonstrate the author's knowledge of contemporary economic theory. Probably it was a smart choice to avoid deepening into particular problems of China instead of exhibiting proficiency in methodology and concepts in the paper prepared for the jury of economists from Harvard University. Trescott admitted that the review of the research tools in Zhang Pegang's book was "impressive".

Paul Trescott wrote that microeconomic theory was presented in the book "by production functions, elasticities of demand and of substitution, and, "regrettably" imperfect competition". He underlined that "there was no discussion of optimization in the design and use of capital goods – a critical issue of the Soviet system". As a matter of fact this theme was at least partly presented in the book in the context of analysis of sequence and stages of industrialization, Zhang Peigang also mentioned the "revolutionary type of industrial development in Soviet Russia" (Zhang Peigang [1949] 2012: 98-105). According to Trescott, in Zhang's book "macro-economic theory was represented by business-cycle theory and Keynes's propensity to consume, and there were substantial segments of international trade theory, history of economic thought, and economic history" (Trescott 2007: 285).

Trescott wrote that Zhang Peigang treated industrialization as a "combination of capital formation and technological innovations". Like Sun Yat-sen "whom he never mentioned" Zhang

Peigang underlined the importance of developing internal transportation. Among the missing topics that were not discussed in the book he mentioned “relative roles of public and private sectors, farm credit, land tenure, marketing, research”.

Trescott commented that Zhang Peigang’s conviction that “war is stimulating factor for economic development” was hardly true for China, and his idea that war “helps wash away some of the institutional obstacles standing in the way of social reform” (p. 94) seems ironic in view of China’s subsequent experience” (Trescott 2007: 285). Historical lesson of the First World War showed that China was in process of rapid development when the imperialist powers forgot about it being distracted by mutual confrontation. In this sense the war was a simulating factor for China’s growth. This pattern did not repeat during the Second World War because China was a target for aggression and part of its territory was occupied in Japan. Zhang’s suggestion to redistribute abandoned lands in former occupied areas to promote co-operative farming was a reasonable answer to rising social tensions in the countryside. The Kuomintang failed to implement efficient land reform in the mainland, thus ceding this agenda to the Communist party.

It could be interesting to look into assessments of Zhang Peigang’s dissertation in book reviews published in 1949-1951 by American scholars.

Rural sociologist Samuel Huntington Hobbs (1895-1969) from the University of North Carolina noted that “the central interest is one of speculating over the economics of China as it changes from an almost purely agricultural economy to a better balance between agriculture and industry”. He noted that Zhang Peigang prepared “the first systematic study” focused on understanding of the problem of China’s industrialization at the backstage of expectations of developments in China arising out of the war. Hobbs highlighted three key questions raised in the book: Is industrial development a necessity or a sufficient condition for agricultural reform in a densely populated rural region? Is it possible to maintain a balance between agriculture and industry within a given country? Is it possible to maintain harmonies and mutually beneficial relations between countries primarily agricultural and those essentially industrial? (Hobbs 1950-1951: 97). The reviewer commented that Zhang Peigang’s concept “is dynamic rather than static” and “his new approach does not rely on mathematical treatment” (Hobbs 1950-1951: 98). He praised the Chinese author for detailed bibliography that consisted mostly of the writings of European and American economists and concluded that “the volume is highly theoretical as well as empirical and historical” (Hobbs 1950-1951: 98).

Henry G. Aubrey (1906-1970) who specialized on the study of economic development called Zhang Peigang’s book an “interesting addition to the literature on the industrialization of underdeveloped regions”. He observed that its general section on industrialization “retraces familiar developments previously covered by Hoffmann, Colin Clark, and others”. The reviewer praised the chapter on the effects of industrialization on agriculture as “the most valuable contribution of this book” (Aubrey 1950: 366). He lamented on the “all-too-short outline of the beginning of industrialization in China” and blamed the author for “fondness for elaborate definitions and a full exposition of quite peripheral points of theory”. Aubrey also noted that Zhang Peigang neglected the differentiation between self-sufficient subsistence farming, large-scale plantation economy, and industrialized agriculture; the book lacks an analysis of socio-political aspects of the shift of labor to the factories, and of “extra-economic” phenomena of industrialization, such as the effects of urbanization on consumption-and-saving habits.

Nevertheless “the book is more than just an exhibition of his great erudition; at this time, when development has become an issue of global politics, any such brave attempt to gather the innumerable loose ends of theory has its value” (Aubrey 1950: 367). Aubrey wrote: “We cannot blame Chang [Zhang] for not having filled the need for a complete theory of economic development. It may take a generation of economists to complete it”. He suggested that with all its imperfections such books “will be studied carefully for the information they provide”. (Aubrey 1950: 367).

Well-known American agricultural economist William H. Nicholls (1914-1978) from Vanderbilt University also praised Zhang Peigang for summarizing and synthesizing the

academic literature on industrialization and economic progress. Unfortunately, this demonstration of economic knowledge led the author of the book to “an excess of superficiality and pedantry” (Nicholls 1949: 746). Nicholls commented that Zhang could have spend less effort on detailed explanations of concepts of the price and income elasticities of demand and the elasticity of substitution instead of working on integrating theoretical and practical parts of the book. He observed that the empirical data in the book was mostly familiar to American readers “because they describe well-known trends within the United States or because they are from such standard international sources as Colin Clark’s investigations” (Nicholls 1949: 746).

Nicholls stressed that the most original and interesting part of the book was Chapter VI, in which Zhang Peigang “briefly applies his analysis to Chinese industrialization”. He strongly recommended the author “to devote his future research efforts to an expansion of his investigations on industrializing his own important country”. The reviewer predicted that “economists throughout the world would await his findings in this area with great interest and anticipation” (Nicholls 1949: 747).

One can see some common features in remarks of the American reviewers of the middle of the twentieth century. They pointed out that Zhang Peigang’s book said too little about industrialization in China and dedicated too much effort to general presentation of Western concepts and ideas. Expectations that the author will write new books on Chinese development did not materialize because of drastic changes in Chinese economic policy and ideology after 1949. Only in the 1980s Zhang Peigang resumed writing on the problems of Chinese industrialization, none of these texts was published in English outside China thus limiting the possible impact of his works on global economic debates.

Contemporary Chinese researchers assess Zhang Peigang’s doctorate thesis from the angle of his role and place in the development of Chinese economic thought of Republican period. Sun Daquan observed that in the first half of the twentieth century Zhang Peigang was a young scholar, he was less influential than Dong Shijin, Liu Dajun and other famous economists of that time. He was considered an authoritative scholar only in the years of reforms when he became known as one of the founders of development economics.

Zhang Peigang strived for following strictly the academic norms (*guifan*). In the doctorate dissertation he relied on the achievements of the contemporary economics and his research methods “were more normative and international than of other Chinese scholars of that time.” He was an economist of “scholarly type” (*xuezhe xing*) different from Chinese economists of “thinker type” (*sixiangjia xing*) like Ma Yinchu and Wang Yanan. He did not take part in the political struggle and was concerned about how to effectively develop the economy under the existing political system. In the intellectual environment of Republican China filled with competition of diverse ideological currents, Zhang Peigang rarely participated in major academic discussions and never initiated the debates (Ye Shichang et al. 2017: 420-421).

### **Concluding remarks**

Contemporary Chinese researchers claim that by the middle of the twentieth century China was one of the countries which contributed to the early stage of formation of development economics. This was possible because before the Second World War China had the highest level of education compared to other colonial and semi-colonial countries. China’s education system of that time was modeled after advanced Western universities. A large number of Chinese students went to the USA and Europe to study economics, they brought back to China new theories and advanced methods of research of the problems of Chinese economy. The historical process of industrialization began in China at the end of the 1860s simultaneously with Japan. This has helped to accumulate abundant practical experience and in this regard China has also outpaced other colonial and semi-colonial countries. The complexity of agrarian China’s movement towards industrialization and modernization gave Chinese scholars both intellectual

stimulus and unique working atmosphere for in-depth study on the problems of development (Zou Jinwen 2014: 317).

Nowadays in China special value is attached to the thoughts on economic development of the second half of the 1940s which were formulated after the end of the Second World War and prior to the establishing of the PRC. The undisputed paramount figure is Zhang Peigang, his economic ideas are treated with exceptional reverence. In the later period of his life Zhang himself made efforts to emphasize China's contribution to development economics (see Ye Shichang ([2000] 2008: 351-352). In 1994, he acknowledged that Chinese scholarly achievements in this area were largely forgotten by Chinese and foreign economists. However, the Chinese should not improperly belittle themselves and therefore should not forget the early ideas of Chinese scholars who sought to find the path to prosperity, wealth and power for the Chinese nation (see Ye Shichang ([2000] 2008: 352).

Such a "discovery" in the sphere of history of Chinese economic thought became possible only in the period of reforms.

Well-known researcher of the history of Chinese economic thought Ye Shichang (Fudan University) explained that this change in the interpretation of the economic ideas of the Republican period was associated with the change in national priorities. In the past the focus on class struggle made "economic ideas of thirty years before the establishment of the PRC" ideologically alien and unclaimed. "Now economic construction is in the center, so we need to look at the value of the historical heritage from the point of view of economic construction" (Ye Shichang [1990] 2008: 331). Ye Shichang noted that before 1949 Chinese Marxist and non-Marxist economists had published a lot of books on economic development. Many high-level works on post-war economic construction were published after the end of the War with Japan. "These books are not only the treasure of the Chinese; these are important works in the world history of development economics. Since we do not explore them, do not pay attention to them, people mistakenly believe that development economics is an imported good" (Ye Shichang [1990] 2008: 331).

Ye Shichang said that the series of books published in the second half of the 1940s on industrialization and industrial development at the Institute of National Economy (edited by Liu Dajun) and the series on industrialization of China (edited by Weng Wenhao) "were not inferior to the early works of Western pioneers of development economics" (Ye Shichang [1990] 2008: 332). Since these works were published in Chinese in the last years of the existence of the Republic of China, they remained unknown in the West, and they were very soon forgotten in China after the change of political power and drastic shift in economic policy.

Only Zhang Peigang's dissertation got some fame in the international scholarly community, but China learned about this book three decades after its publication in the USA. According to Ye Shichang, the study of the history of Chinese economic thought before the establishing of the PRC will help to eliminate "national nihilism (*minzu xuwuzhuyi*)" in the field of economics. This will happen when the Chinese realize that the level of study of economics in China at that time was not lower than that of foreigners (Ye Shichang [1990] 2008: 332).

On the other hand, it is impossible to understand the roots of the ideas of the second half of the 1940s without addressing the economic disputes of Chinese intellectuals since the 1920s. The arguments of supporters of the agrarian way of development about the ability of the raw material producing nation to secure economic sovereignty and political independence from the world's industrial leaders look naive. However, their experience of comprehensive understanding of economic and cultural specifics of China's development is of obvious interest.

According to Luo Rongqu, assessments of the international situation by the Chinese supporters of agriculture-focused development had some similarities with those put forward in the 1970s by the followers of theories of dependency and of the world-system approach. Liang Shuming opposed modernization and the dependence theory opposed modernization according to the Western model. Proponents of the theory of dependence suggested breaking ties with world capitalism and put forward a strategy of self-reliant industrialization. Liang Shuming and

his supporters advocated a return to a closed self-sustaining rural economy. Luo Rongqu noted that the views of supporters of the “third way” of development of rural industry had a tinge of import-substituting industrialization. According to the researcher, such comparisons demonstrate the similarity of the problems faced by agricultural countries of the third world in the process of modernization in a similar international environment (Luo Rongqu 2009: 393).

No less important are the subsequent discussions about maintaining in process of industrialization a proper balance between strengthening of the defense and raising the standard of living of the people, between the development of heavy industries and light industries, between the agriculture and the industry. Participants of these disputes constantly raised questions about the role of the state in economic development; they aspired to combine effective development planning mechanisms with the flexibility of markets.

Luo Rongqu concluded that many ideas of the 1920s -1940s did not lose their relevance. The development of the discussion demonstrated a growing understanding that for the success of national economic development it was necessary to look for the path of industrialization corresponding to Chinese conditions (Luo Rongqu 2009: 394).

Contemporary Chinese scholarly publications tend to emphasize the achievements in the study of industrialization and development problems in China in the first half of the twentieth century. This approach looks quite natural as a reaction to the previous decades of negative attitude to this segment of national intellectual heritage. The next task is to maintain balanced and objective approach to the history of Chinese ideas of economic development that gives consideration both to its merits and disadvantages.

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