

## Comparative Study of Historical Factors in the Development of Chinese and American Pharmaceutical Industry

Lu Yu\*

*School of economics and management, Beijing Jiaotong University, Beijing, China*

**\*Corresponding Author:** Lu Yu, School of economics and management, Beijing Jiaotong University, Beijing, China.

**Received:** December 22, 2021; **Published:** December 30, 2021

### Abstract

This thesis mainly studies the social environment of pharmaceutical industry development in China and the United States in the early days of the founding of the People's Republic of China. By analyzing various factors of social development, this paper points out that historical factors greatly affect the development mode of national industry on the basis of combining industrial characteristics.

**Keywords:** Pharmaceutical industry; Historical factors; Industry characteristics

### Introduction

It tends to elicit a wry smile from academics, which is to compare the regulatory of the pharmaceutical industry between China and the United States. In conclusion, China's pharmaceutical industry tends to develop medium-sized and mall-sized companies [1], with an emphasis on distributing pharmaceutical companies across the country; And American pharmaceutical industry is the pinnacle of the world's pharmaceutical industry, three of the top ten international pharmaceutical groups in the United States. At the same time, the American pharmaceutical industry is also known for the world's most sophisticated scientific research technology and research teams. There are few similarities between the two. In addition, there are few similarities between the two countries' political systems, economic models, industrial scale and relevant legal and policy content. It makes no sense compare two completely different "objects" side by side. However, when we review history, we can find that the background and conditions in the early development of the pharmaceutical industry in the history of the two countries are very similar. The purpose of this paper is to analyze what factors cause the different development model between China and the United States through a holistic perspective.

### The basic situation of pharmaceutical industry in the two countries

Before reviewing history, it needs to be emphasized that the "moment of founding" mentioned in this article is the time demarcation point between the Independence Day (1776.7.4) of America and the National Day of the People's Republic of China (1949.10.1). Instead of making a horizontal comparison between the two countries in the same historical period, this paper will discuss the situation and development of the two countries in a historical period before and after the founding of the People's Republic of China.

If from the founding of China and the United States of historical background comparison, we will find that for a long time after the founding of China, the social situation was very similar to United States when it was founded, including:

### Outdated technology

Before the War of Independence, the United States mainly served as the raw material origin for developed countries in Europe. His

local economic development mainly relies on agricultural production. The most famous production is tobacco cultivation. In terms of labor composition, it is mostly a gathering place for low-level workers such as adventurous speculators, religious frustrated people and pioneers. High-level talent in tech doesn't favor the United States. During the founding of the People's Republic of China, the domestic industrial base was extremely weak, and a few industrial areas often faced production stoppage because of war. At the same time, the social unrest brought about by war is also not suitable for advanced scientific work.

### *Isolated international environment*

After the War of independence, in addition, the Second War of Independence came soon after the founding of the United States, so both Britain and western European countries resisted the mainstream direction of The Development of the United States. At the same time, after the founding of the United States, President Washington's "isolation foreign policy" established non-intervention in European disputes, which made the United States to some extent reduce its contact with Europe. In the case of China, after the founding of the People's Republic of China, due to various problems left over from World War II and the War of Liberation, such as the illegal government organized by the Kuomintang in Taiwan, China failed to establish diplomatic relations with other countries immediately. It is also isolated in the world [2].

### *Poor infrastructure*

Generally speaking, from an economic point of view, the main industries of the founding of both countries were agriculture, and the industrial development model was extensive development, and there was no complete industrial system.

To sum up, based on the economic foundation and international environment when the two countries were founded, China and the United States, the same extensive development model, the same lack of talent and technology, industrial prospects are not particularly good, too. But there are two non-economic reasons for the United States to create a huge space for development, but also caused the two countries' pharmaceutical industry development path is completely different:

1. As an immigrant country, the United States has attracted a large number of immigrants and investment from Europe for a long time with its fully open economic market and loose economic policies. Although it does not intervene in European disputes in political and military terms, it is very attractive to European investors in business, especially domestic production under slavery [3].
2. The second point is that in the long colonial historical background, at least for the History of the United States at that time, there was no huge phenomenon of "civilization conflict or culture conflict" between the United States and The United Kingdom or even the developed areas of Western Europe [4]. So western European capitalists are more inclined to put their money into the United States. We can speculate that within a generation or two of the founding of the United States, even after independence, the developed Countries of Europe still regarded the United States as subservient to Britain or other Western European countries. Therefore, for the developed countries of Europe at that time, the United States was still the best place to settle or invest. Therefore, although after the War of Independence (including the first and second wars of Independence), Britain also imposed economic sanctions on the United States through some means, these policies were soon cancelled and it recognized the status of the United States as an ally [5]. Of course, from the other perspective, investors are not for the development of the United States but for their own economic interests, so the direct result is an increasing number of "investment model investment" and a small number of "long-term development investment" [6]. So the early United States economy is still to specialty export as the main economic model [5]. Until the United States experienced two world wars, world War I stimulated the independent development of American science and technology, and World War II enabled Uncle Sam to complete the accumulation and become one of the world's strongest countries.

## Differences in development due to chance factors

From the above analysis, there are many similarities between the Chinese and American pharmaceutical industries in their early stages of development: the same technical environment is backward; the same one is a weak industrial foundation; the same international environment is bad.

Therefore, in the above context, the solution to the problem of industrial development is as follows:

First, the state gives play to its own characteristics and completes the accumulation of resources through various means. China's various economic reforms can be seen as such work, and have achieved remarkable results, resulting in the establishment of a complete industrial system on a nationwide scale.

Second, the country attracts talent and technology from advanced countries in international alliances [7].

But seeking international alliances through cultural identity is mutually beneficial. This is a huge difficulty for China. Japan, a member of the Chinese cultural circle, was not an ally of China at that time.

More importantly, whether it was through importing talent from the World War II or through its own technological development, at least during the period when the industrial safety index was extremely low, the United States never stopped connecting with the developed countries of Europe. To some extent, the developed European countries led by Britain were the reserve base of the US in terms of talent, technology and capital. As a country of immigrants, the United States can do its best to absorb all kinds of high-quality resources and constantly develop its own potential; not to mention the country's abundant natural resources.

But China cannot compare with the new United States in both respects. And more interestingly, because of the federal political system and legal model of the United States, the central government of the United States does not have much political resources to integrate the overall national industry. In other words, it cannot pay the huge administrative cost to meet the adjustment of the national industry. Therefore, no matter from both subjective and objective aspects, the United States at that time should, and could choose a slow development path. In addition to the above inevitable conditions for its development, some accidental factors finally gained the national strength and international status of a superpower.

On the contrary, China's political system is the provincial and municipal system, whatever it is called historical inheritance or path dependence, China's political system is a system of provinces and cities accountable to the central government. This national system causes China to bear huge administrative costs to conduct national-level industrial planning. Therefore, China is bound to choose a completely different industrial development path from that of the United States, and in this development path, the role of legal and regulatory models has caused a number of differences between China and the United States:

First of all, since the overall construction goals of countries are different, and their industrial development plans are also different, the United States can introduce funds to develop the pharmaceutical industry according to its own characteristics; but China must complete economic construction within the period has increased national confidence and cohesion.

Second, in the domestic form, The American states were still divided at the time. The federal system of government was unstable, and its legal authority was not guaranteed. Therefore, in addition to the development path of open market and free economy, the federal government wants to plan its own domestic economic development in a unified mode, but it cannot pay high administrative costs; China's political system is relatively stable and it can choose to make a unified plan for economic development.

Thirdly, in terms of the development pattern of pharmaceutical industry, an accidental factor determines the difference of pharmaceutical industry between China and the United States. This is the military history factor, after the victory of the second war of independence, at least at the time, the American international military environment is safe [8]. A safer environment has helped America's

economy, but it has also kept the country's political elite from paying too much attention to the pharmaceutical industry. Until the First World War I, the United States really does not need to focus on developing its own pharmaceutical industry. However, World War I provided an example to the United States, or even to the world industrial economic research, namely, the development of pharmaceutical production and industry is important for a country's livelihood and economy, even about a country's life and death. If a country cannot guarantee its own medical supplies, national security as a whole cannot be guaranteed, especially after the United States fought Germany, it is difficult to obtain the latest pharmaceutical technology, has a significant impact on its national policy emphasis on "the latest technology". Also because of military factors, for China due to historical reasons, the sensitivity to war and war in the hearts of the people, the layout of China's pharmaceutical industry is mainly designed to ensure military needs. As a result, in China, every province and every key region has mostly established its own manufacturers to ensure the supply of essential drugs.

Finally, it should be mentioned that the different industrial development modes of the two countries are caused by the industrial characteristics of the pharmaceutical industry and the requirements of the national infrastructure construction. Because the technological development of the pharmaceutical industry is highly dependent on senior researchers, and the research work requires huge investment and high risk, only a strong national industrial base can provide support for the research and development of new medical technology. Accordingly, because the finished products of pharmaceutical products belong to small products (not to mention large medical equipment), so under the premise of national logistics transportation guarantee, relying on the perfect industrial system, pharmaceutical companies can quickly produce and transport finished products to all parts of the country. The American pharmaceutical industry in the development to multinational groups and high-tech guidance at this stage, the above two guarantees, complete industrial system and national smooth transportation route, have been met. After the founding of the People's Republic of China, the main development trend is to develop the above two "safeguards", so it is still in the stage of decentralized medium-sized enterprises.

## Conclusion

This paper analyzes the historical reasons for the different development modes of the pharmaceutical industry in China and the United States by reviewing the social background of the initial development of the pharmaceutical industry in both countries. The article points out that the development of the pharmaceutical industry depends highly on senior researchers and a large amount of capital investment due to its own characteristics. Therefore, when a country cannot guarantee these two elements, it can only give priority to the development of basic pharmaceutical production. At the same time, the article also points out that, because the pharmaceutical industry is closely related to military work and national security, the history of war in each country will also affect the development pattern and trend of the pharmaceutical industry.

## References

1. This is compared to the size of world-class companies.
2. Both overseas activities and embargo mark a certain degree of isolation. This "isolation" state is generally speaking. As for the connection between the Soviet Union and China at that time, it is another large-scale subject, which will not be analyzed in detail in this paper.
3. Chen Yongxiang. "The War of 1812 with economic independence from the United States". *Journal of Guangzhou University (Social Sciences Edition)* 08 (2002): 30-34.
4. Chen Ping. "Conflict and Integration of Multicultural". *Journal of Northeastern Normal University* (2004).
5. Xiangzi Chang Hao. "The Second War of Independence and American Economic Independence". *Journal of Xiangtan University (Social Sciences Edition)* 03 (1990): 94-95 + 85.
6. There was even a historic famous economic bubble, the Amtrak investment.
7. In fact, the Soviet Union, China's founding ally, did provide some technical assistance.
8. Shen Xuemin. "Historical Review of the US government economic intervention after the Revolutionary War". *Ideological Front* 06 (1983): 18-22.

**Volume 2 Issue 1 January 2022**

**© All rights are reserved by Lu Yu.**