# An Empirical Study on the Impact of the China–United States trade war on Enterprise R& D Investment

Wang Jiashuo Partner of Inner Mongolia Jianzhong Law Firm Beijin Branch, 100010

**Abstract**: The China–United States trade war that began in 2018 has pressed the pause button, but it has a profound impact on China's economic development, not only making China's exports face considerable pressure, but also to a certain extent promoting export enterprises to the United States to avoid tariff barriers by transferring investment, especially labour-intensive export enterprises are more vulnerable. In addition to direct investment in the United States, they can also transfer investment to alternative countries that are not affected by trade wars. As well as the problems from 2015 to 2017 exposed by the China–United States trade war, we propose corresponding solutions in combination with the financial strategy matrix. Through the analysis of the case, this paper explores the feasibility of the financial strategy matrix in optimizing the financial strategy of enterprises and puts forward some suggestions for ZTE's financial strategy adjustment in the extreme environment of the China–United States trade war.

#### Keywords: Empirical Study, China-United States, trade war, R& D Investment

### **1. INTRODUCTION**

Since the establishment of diplomatic relations and the restoration of normal trade between China and the United States in 1979, trade between China and the United States has developed rapidly. By 2017, the bilateral trade volume had increased by more than 230 times, with a total trade volume of 633.97 billion US dollars, of which China's exports to the United States reached 505.6 billion US dollars. At the same time, bilateral trade frictions have also been ongoing, but they can be effectively controlled, belonging to normal local small frictions. In 2018, trade frictions between China and the United States intensified, negotiations between the two sides failed, and a comprehensive trade war officially broke out in July 2018. It was not until the first phase of the trade agreement was reached in December 2019 that the pause button was pressed.

The United States has gone through three rounds of tariff increases on Chinese products, from 50 billion to 200 billion and then to 300 billion A, which took effect. The original plan was to impose tariffs on 550 billion products, but the 300 billion B list was later cancelled due to an agreement between the two parties. Enterprise resources refer to all the elements that a company has control over and can benefit the company. Enterprise resource analysis aims to analyze the company's own resource situation, understand the advantages and disadvantages of the company's resources, and how these advantages and disadvantages affect future financial strategies. The effective allocation of resources is the guarantee for the company to enhance its own value The interaction between resource allocation and performance evaluation management can generate more value than individual.

Although China's GDP has ranked second in the world, its GDP is not completely equal to a country's Comprehensive National Power. China's per capita GDP is far lower than that of the United States. Meanwhile, despite the large scale of China's manufacturing industry, its technological level cannot be compared to that of the United States. Although the economic growth mode is constantly improving, it is still in a development mode of high energy consumption and high pollution. In recent years, China has vigorously promoted industrial upgrading, proposed the Industrial 4.0 Plan and "Made in China 2025", and tried to develop the technology industry and enhance its Hard power.

The United States is concerned that China's industrial upgrading and transformation of its economic development model will lead to intensified competition between China and itself, affecting the United States' leading position in the high-tech field and ultimately its own hegemonic position. Although the China–United States trade war has pressed the pause button, the high tariffs imposed by the United States on Chinese products have not been lifted. Even if Trump, the leader of the trade war, steps down, the Biden government will not easily lift the tariffs already imposed. The impact of the trade war on China's economy seems to have a long-term trend. From this point of view, the China–United States trade war has a far-reaching impact. In terms of economy, it will undoubtedly bring losses to both sides. For China, which has a huge trade surplus, it will also bring obvious economic losses.

#### 2. THE PROPOSED METHODOLOGY

# 2.1 The Impact of Trade Friction on Enterprise Innovation

A trade war will not only affect China's exports, but also its investment. Especially if long-term expectations are formed about the impact of a trade war, enterprises that mainly rely on exports to the United States will accelerate the pace of investment transfer. The growth rate of the company's operating revenue has significantly decreased, but it grew rapidly in 2019. In 2019, the company continued to deepen cooperation in the upstream and downstream supply chain of the industry, accurately grasped market development, and actively expanded overseas.

The market share and demand for domestic storage chips have also significantly increased. Although the outbreak of the China–United States trade war has made the company's overseas business environment worse in the short term, it has also made the company's domestic market development environment better. The state has vigorously supported the semiconductor industry, and the pace of domestic semiconductor substitution in China has accelerated. The trade war unilaterally initiated by the United States in the short term has some negative impacts on the development of China's semiconductor enterprises, but the long-term trend is improving.

The impact of the China–United States trade war on interest rates is not so direct, but the United States has prepared for a long-term trade war. The continuation of this war will lead to the tightening of domestic liquidity, which will raise interest rates. The main reasons are: on the one hand, the main means of the current trade war between China and the United States is to impose tariffs, and the United States has also imposed restrictions on China's investment in the United States, reducing China's capital account deficit. On the other hand, the China–United States trade war reduced China's current account surplus, thus further reducing the capital account deficit.

The average cumulative abnormal return in the [-10, 20] interval is 23.7%, the t value is 11.89, and it is significantly greater than 0 under the confidence condition of 1%. The China-United States trade war has a significant positive impact on the stock prices of China's semiconductor enterprises. The average cumulative abnormal return rate in the [-10,60] interval is 2.8%, with a t-value of 0.72, so it is not significant. The average cumulative abnormal return in the [-10,90] interval is 13.6%, the t value is 2.59%, and it is significantly greater than 0 when the confidence condition is 5%. The China-United States trade war has a significant positive impact on the stock prices of China's semiconductor enterprises. The results of investment transfer are mainly reflected in two aspects. One is that the growth rate of China's absorption of foreign direct investment has declined, and the other is that those countries benefiting from the China-United States trade war have significantly increased the speed of absorbing FDI. According to data released by the Ministry of Commerce of China, China's actual utilization of foreign investment in 2018 was \$138.3 billion, while in 2019, the actual utilization of foreign investment decreased slightly to \$138.14 billion.

# **2.2** Analysis of the Regulatory Effect of Industry Competition Degree

The Latin American region, which is close to the United States, saw a positive increase in foreign investment absorption in 2019, with FDI inflows transitioning from a negative growth rate of 6% in 2018 to a growth rate of 16%. Southeast Asia, which is close to China, achieved even more astonishing growth in 2019, with FDI inflows increasing from 3% in 2018 to 19%. South Asia's FDI inflows also increased from 4% in 2018 to 10%, while India achieved a high-speed growth of 21%. Since the China–United States trade war, the central bank has adopted a relatively loose policy to maintain liquidity in response to the trade war, forming a good bond market in terms of fundamentals and liquidity.

If the interest rate difference between China and the United States remains at a low level for a long time or falls further, China will face the risk of capital outflow. Faced with the escalation of trade frictions, the business risk of enterprises has increased, the production efficiency has declined, the liquidation risk of equity pledge has increased, and the Liquidity risk of enterprises has increased, which will further lead to the occurrence of credit default and affect the credit bond market in China. In the credit bond market, as trade frictions continue to escalate, China's economic growth rate is gradually decreasing, and corporate risks are significantly increasing. In terms of sales expenses, the sales expenses in 2018 increased by 6.54% compared to 2017, and in 2019, the sales expenses were 125 million yuan, a year-on-year increase

Good market effect. There are two main reasons for the increase of sales expenses: first, the increase of labor remuneration; second, the outbreak of the China-United States trade war reduced the company's income from its business in the United States. The company needs to invest more funds to expand its sales channels and stabilize its market share. Enterprises can also develop their core capabilities through external learning and absorption of knowledge from other enterprises. External resources of enterprises can also be classified as industry resources, industry resources, market resources, and external environmental resources. These types of resources are not owned or controlled by the enterprise itself but can be obtained and used by the enterprise through business strategies or network of relationships, analyzing ZTE's external resources from the perspective of forming core capabilities, mainly analyzing the various external factors that ZTE can obtain to help form its core products.

From the above analysis, it can be seen that the outbreak of a trade war not only dealt a blow to China's exports to the United States, but also caused operational pressure and uncertainty for enterprises in China, including domestic export enterprises, especially foreign-funded enterprises, resulting in a certain degree of investment transfer effect. Next, further theoretical analysis will be conducted on the reasons for investment transfer. The reasons for foreign direct investment by multinational corporations are multifaceted, and bypassing trade barriers is one of the important reasons for foreign direct investment. Mondale, the father of the euro, first proposed that there is an alternative between international trade and international investment. Obstacles to capital flow will lead to trade, and barriers to trade will also lead to capital flows, that is, foreign direct investment.

Financial strategy is mainly related to the financial nature of the strategy, mainly considering the use and management of funds. Enterprise executives can choose appropriate financial strategies from different perspectives after analyzing the financial situation of the enterprise, such as the most common financial strategy selection based on the product lifecycle.

## 3. CONCLUSION

Starting from the background of the trade war, this paper analyzes the high-tech enterprises that have received wide attention based on the financial strategy matrix analysis tool. Its innovation points are reflected in two aspects: first, based on the financial strategy selection idea of value creation and growth rate, this paper uses the financial strategy matrix to analyze the effect of financial strategy adjustment and the remaining shortcomings of enterprises in the new environment, in response to the China–United States trade war, The company can increase personnel allocation in overseas business, create efficient business development and expansion teams, expand sales channels, and ensure the continuous growth of overseas business in the future, as well as prepare for other domestic and international uncertain factors.

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