Research on the Construction of a Trade-Strong Country under the Background of Digital Economy

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Abstract. Digital economy has become an increasingly hot topic in recent years that relies on digital technology as its core and data resources as its key to achieving economic activities. With the continuous development of communication technologies, modern information networks, digitization profoundly empowers various industries, especially in the fields of international commerce. In the era of a booming digital economy, empowering trade powers with a digital economy is a necessary development path. Existing literature mainly emphasizes the theoretical system, path, dilemma, integration with different industries, opportunities, and challenges faced by digitalization in the digital economy, as well as discusses the importance, barriers, and strategic priorities of trade powerhouses and high-quality development of international commerce. Based on this, this article focuses on trade powerhouses in the context of the digital economy, with a particular emphasis on the development trends of international trade within the framework of the digital economy. The study focuses on the positive endogenous casual association between the digital economy and the construction of a trade powerhouse and also proposes a path for digitalization to empower the development of international trade.

Keywords: Digital economy, trade power, international trade.

1. Introduction

China is currently in a critical period of comprehensively building a socialist modernized country. Building a strong trading nation will help enhance China's economic strength, rank among the forefront of innovative countries, and thus achieve socialist modernization. In terms of trade scale, China's goods trade reached 6.05 trillion US dollars in 2021, contributing 14.9% to the global trade volume and accounting for 13.5% of the global trade volume [1]. From the perspective of goods import and export, in 2009, The world's largest exporter and importer is Chinas, with the total import and export of goods accounting for 8.7% of the international import and export volume. In 2013, the proportion of China's total import and export of goods in the international market further increased to 11.0%, surpassing the United States for the first time and becoming the world's largest country in goods trade [2]. However, there were still several years between 2010 and 2020 when China's imports and exports of goods experienced negative growth. Therefore, China's foreign trade presents a "large but not strong" characteristic.

Now have entered the Internet era, big data, cloud computing, artificial intelligence, and blockchain technology grow rapidly, the digital economy has begun to inject fresh vitality into the market. In 2023, the added value of China's digital economy core industry will account for 10% of GDP, and the level of China's cloud computing market will reach 616.5 billion yuan, an increase of 35.5% [2]. This shows that the digital economy has a huge market size in today's era. From the market perspective, with the continuous emergence of new formats and models, digital technology has gradually become the core driving force in international trade. From a product-level perspective, digital technology makes trade products more diverse and can better meet diverse market demands. From the perspective of trade processes, digital technology has effectively simplified the trade process, greatly improved the efficiency of trade, and promoted economic growth through various digital technology means [2]. Therefore, by combining the two, it is very important to combine digital technology with the construction of a trading power. This not only enhances China's economic strength but also helps to improve its international status and achieve socialist modernization.

Previous studies have analyzed the development of a strong trading nation in the context of the digital economy. Xia Jiechang and Li Luangeng discussed how digitalization can empower the high-quality development of international trade [3]. Cheng Shixiong and Chen Wanyi said the importance and challenges of the digital economy in promoting the construction of a strong trading nation [4]. Zhang Xiaheng summarized the evolution logic of digital trade power in the context of the Chinese path to modernization [5]. However, for the following two reasons, it is necessary to summarize, restate, and study the existing reviews mentioned above. Firstly, the construction of a strong trading nation and the development of the digital economy are both hot topics in today's era and are increasingly valued by decision-makers. The reports of the 20th National Congresses of the Communist Party of China pointed out the need to grasp the digital economy and accelerate the construction of a strong trading nation. For example, in September 2023, President Xi reiterated the need to accelerate the construction of a strong trading nation, upgrade goods trade, innovate service trade, and develop digital trade [6]. Secondly, in the current era where economic globalization is hindered and unilateralism and protectionism are on the rise, it is extremely important to clarify how to better develop foreign trade and achieve economic development in the digital economy era to cope with unprecedented changes. However, the above literature focuses less on these perspectives. Especially after COVID-19 and the crisis in Ukraine, it is particularly important to accelerate the construction of a trade power [7].

Firstly, this article summarizes and evaluates the profound connotations of the digital economy and the development of a strong trading nation, as well as the positive endogenous relationship between the two, and studies how digital empowerment can promote the construction of a strong trading nation. Secondly, this article delves into the strategies and paths for more effectively utilizing the digital economy to promote the construction of a trading powerhouse in the current complex and ever-changing international situation. Finally, the article summarizes the entire text and proposes specific suggestions, aiming to better leverage the promoting importance of the digital economy in building a strong trading nation.

2. Exploration of the Path and Theoretical Logic of Digitalization Empowering the Construction of a Strong Trade Nation

2.1. The Connotation of Digital Economy and Building a Strong Trade Country

2.1.1 Connotation and characteristics of digital economy

Don Tapscott firstly brougt up what was digital economy in his 1996 article "Digital Economy". He pointed out that the digital economy is a brandnew knowledge that emerges during the transition from a traditional economy to a new economy [8]. In traditional economic concepts, information is tangible and touchable, in the new economic concept, information becomes intangible and exists and manifests in digital form [8]. Therefore, the digital economy can be understood as a new economy or a knowledge economy [8]. In 1998 and 1999, the US Department of Commerce further elaborated on the important core of digital economy in relevant reports. After entering the 21st century, big data, cloud computing, the Internet and other technologies have developed unprecedentedly, and scholars have defined the connotation of digital economy more widely [9]. At the 2016 G20 Summit, Chinese concept of digital economy was first came up, which pointed out that the digital economy refers to the occurrence of economic activities in a series of forms that use various information data as production factors, networks as carriers, and technology to improve economic efficiency and adjust economic structure [9]. Internationally, in 2002, Brynjolfsson and Kahin proposed that the digital economy includes e-commerce, digital information and communication technology, software infrastructure, and delivery services from a technical and application perspective [10].

2.1.2 Factors affecting the development of the digital economy

The industrial structure refers to the proportion of various production factors within a region, what can make good impact on the development of the digital economy [11]. A good industrial structure

means that a large proportion of people are engaged in high-tech professions such as scientific research, finance, and education in the industry, with obvious advantages in human resources, capital reserves, geographical location, and other factors [11]. Moreover, the industries are mostly high-tech industries and the tertiary industry [11]. City level refers to the public resources that a city can access, which is good to the digital economy [11]. A high city level means that the city itself is economically developed and has abundant resources, with low difficulty in obtaining information and resources [11]. The level of informatization refers to the level of information infrastructure will impact on the development of the digital economy as well [11]. A high level of informatization means that the region has high efficiency in the use of energy, materials, services, etc., thereby optimizing the industrial and employment structure and promoting the progress of the digital economy.

2.1.3 Connotation and characteristics of a trade strong country

China has gone through the process of transitioning from a trading power to a trading powerhouse. Foreign scholars believe that a strong trading nation needs to have products and services with comparative advantages or the ability to produce on a large scale [11]. Domestic scholars believe that a strong trading nation should have the characteristics of high product-added value, strong ability of enterprises to cope with market risks, high brand awareness, being at the top of the industrial value chain, high content of advanced production factors in exported goods and services, being able to obtain major benefits in international trade, high currency hardness of the country, and good product quality [12]. From a national perspective, trading powers place greater emphasis on their position and discourse power as sovereign states in international economics and trade, especially whether a country can to some extent dominate trade rules and policymaking in the international market [13]. From the micro, meso, and macro levels, trade powers have the following three main characteristics: possessing advanced elements and participating in the international division of labor and cooperation based on them. Being in a leading statement in the international industrial division of labor, having a voice in the international trade system or economic cooperation system [14].

2.2. Exploration of the Impact of Digital Economy on International Trade Paths

2.2.1 Deepening the opening-up strategy of the digital economy and further opening up the international trade development pattern

The competitiveness gap between countries is determined by their innovation and technological research and development capabilities, with countries with stronger core technologies having greater dominance in international trade [15]. The development of the digital economy contributes to technological innovation, and high-tech research, promotes the development of foreign trade, achieves higher levels of openness, helps China seize the high ground of international competition in new fields, drives high-quality economic development, actively participates in formulation of international trade rules, and further deepens the pattern of international trade development [15].

2.2.2 Digital economy promotes supply side and demand side structural transformation and upgrading, better meeting market demand

By playing the role of the market, the digital economy develops and understands the market needs, which providing better power and direction for the supply side, solving demand side problems, accelerating the flow of global factors, providing more accurate job positions for workers [15]. Digitization empowers product quality, and the introduction of technology and innovation improves supply-side quality and efficiency, further promoting high-quality development of international trade [15].

2.2.3 The digital economy reduces various trade costs and improves international trade efficiency

The digital economy can use digital empowerment to expand the scale of trade [15]. Unlike traditional economic formats, the digital economy has virtuality and replicability, which can to some extent reduce trade costs, integrate production factors, and achieve economic growth [15]. On the

other hand, the digital economy has spurred the emergence of high-tech industries such as robotics and artificial intelligence, which can effectively reduce labor costs and promote trade quality and efficiency improvement [15]. The digital payment methods and digital finance promoted in our country can reduce trade payment costs and exchange rate risks [15].

3. Analysis of Countermeasures for Promoting the Construction of a Strong Trade Country through China's Digital Economy

3.1. Macro Level

Firstly, people should attach importance to the development and cooperation of globalization and shift the governance of the digital economy from development to security [3]. The digitization of trade has provided a breakthrough for global economic growth, but it has also inevitably led to issues of digital economic security. Need to focus on the construction of laws and regulations related to privacy protection, platform operation governance, data security, and other issues to ensure economic and national security [3]. Secondly, reshape the digital trade structure [4]. The trade structure and division of labor position of China's digital products in the global industrial chain need to be improved, which reflects China's excessive dependence on the import of key intermediate products [4]. In recent years, the transformation of the global trade structure and industrial chain has led to the transfer of labor to Southeast Asia and other regions. China's labor costs have increased, and its role in exporting finished products has become a crisis. Therefore, it is necessary to solve the problem of excessive dependence on advanced countries for intermediate products, improve its own discourse power and bargaining power in international trade, expand the trade scale, and thus increase the revenue of digital products [4].

3.2. Microscopic Level

Firstly, the focus on building digital infrastructure has greatly improved the quality and efficiency of traded products [4]. The development of digital trade heavily relies on the level of digital infrastructure construction. A sufficiently complete digital infrastructure construction is conducive to the expansion of the foreign trade transaction scale [4]. The construction of digital economic infrastructure still requires scientific planning and high-tech investment to improve the quality of trade products. Secondly, by investing in the research and development of key core technologies, the state can solve the situation of being subject to others in the field of technology [4]. At present, although technologies such as cloud computing, big data, artificial intelligence, and blockchain are flourishing, China's key core technologies are still relatively backward compared to economically developed countries. The government should attach importance to the research and development of key core technologies in China, increase the exploration and investment of high-tech talents, gradually reduce the dependence on key technologies, and enhance China's discourse power and influence in the fields of digital economy and foreign trade [4].

4. Conclusion

Firstly, the digital economy is the trend of development in today's era, and it can stimulate market vitality. Secondly, there is a great endogenous connection between developing the digital economy and building a strong trading nation. The digital economy can not only expand the foreign trade market and improve the quality of foreign trade but also reduce foreign trade costs and help improve the quality and efficiency of international trade in multiple aspects. Thirdly, in the complex post-pandemic era of the current international situation, the incentive effects brought about by the digital economy are significant. The digital economy solves the problem of poor circulation of production factors and promotes the formation and improvement of a new development pattern. Finally, the article proposes paths and suggestions from both macro and micro levels to promote the digital

economy and build a strong trading nation, aiming to address issues such as insufficient digital innovation capabilities, inadequate infrastructure, and key technologies being constrained by others.

In summary, future research on building a strong trading nation in the context of the digital economy will place greater emphasis on technology-driven continuous innovation, improvement, and internationalization of trade rules, deep integration of industry and trade, trade security and risk prevention, as well as international cooperation and win-win outcomes. In-depth research in these areas will provide strong theoretical support and practical guidance for the construction of a strong trading nation.

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