## Study on the Influence of Network Economy on International Economy and Trade

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**Abstract:** Research and development and popularization of the internet and other information technologies have accelerated the development rate of Chinese e-commerce industry while at the same time, bringing forward the arrival of the network economy era. Therefore, a study on the economy and trade model under the network economy era shall be conducted for a higher level of Chinese international economy and trade. In view of this, this paper mainly provides a brief overview of the network economy, and deeply analyzes both the positive and negative impacts of the network economy on the international economy and trade. Thus, on this basis, a deep study on specific ways of optimizing the international economy and trade under the background of the network economy has been carried out to further raise the development level of Chinese international economy and trade with the development guarantee for Chinese national economy.

Keywords: Network economy; International economy and trade; E-Commerce

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The rapid economic development has greatly promoted the research and development of advanced information technologies. Under such environment, the world economic model also changes virtually. At present, the e-commerce, based on the internet and various network techniques, has gradually turned into a main model of the economy and trade under the current era. Nowadays, a large part of volume of transaction of Chinese international trade has been achieved through e-commerce. Accordingly, under the era of network economy, the Internet has become an indispensable part among people's daily life and trade transactions. In most cases, people are more inclined to use e-commerce, a convenient and fast trading mode, to obtain various resources necessary in living and production, which makes a great impact on traditional economy and trade model while giving it a new era characteristics on account of the existence of the network economy. Therefore, a further research on the impact of network economy on the international economy and trade has a fundamental practical significance.

### 1. Overview of the Network Economy

The informatization of the national economy is the basic

guarantee of the survival and development of the network economy. From this point of view, the network economy is not a single type of economic model. The network economy means that the Internet and various advanced network technique are the main means for the firms to obtain necessary economic information resources. In the network economy, specific business activities still depend on the information network inside and outside the firms<sup>[1]</sup>. For example, research and development of new products, product sales and product line management, etc. In addition, the network economy relies on not only the network, but also certain logistics, capital flow and information flow. So far as the status, the emergence and development of the network economy make a great impact on the traditional economy. While on the whole point of view, the essence of the network economy is an industrial group as its basic elements still telecommunications, electricity, energy and other traditional industries; in terms of the actual situation, the network economy is also an industry group around network, computer and a variety of information resources. With a relatively high development level of network technique, the network economy during actual development process is beyond the nation and embedded in the international economy and trade areas. Specifically, the network economy is composed of the relationship between economic behaviors and the subjects. In other words, economic subjects and economic behaviors, due to a common purpose, form an economic link as the realization foundation of the network economy. Compared to the traditional economic model, the network economy owns stronger openness and freedom. It is noteworthy that the various economic entities of the network economy not always necessarily belong to the same area as it can also be cross-sectoral economic subjects.

## 2. Positive Effects of Network Economy on International Economy and Trade

## 2.1 Promote the Emergence of a New Economic Model

The popularization of the internet as well as the R&D and application of various advanced information technologies gives a huge transformation of the ways of people's production and lifestyle. Under the influence of such change, the traditional economy and trade mode are gradually being eliminated and replaced by the new economic model of more energy and innovation. For example, the emergence of flexible firms. A flexible firm is a product brought about in modern economic mode, and even a new mode for people to pursue and perfect the active marketing. By aiming at the demands of the consumers, some firms package the products with advanced science and technologies and organize a flexible firm restructuring in order to integrate excellent human, financial and information resources under the premise of the market dynamic detection. This is the main reason of the formation of flexible firms. As it were, owing to the impact of the network economy on international economy and trade, more firms, under the background of e-commerce, change ideas and innovate thoughts while turning the rigid traditional economic mode into a more flexible and positive mode so as to promote the firm development.

### **2.2 Improve the International Economy and Trade Efficiency and Cost Reduction**

The emergence of network economy has greatly reduced the production cost of the international trade. A product in traditional international trade circulates through a number of links starting from the manufacturer, resulting in a higher cost of trade. In this case, consumers at the end of the circulation chain will be in an extremely passive situation as the capital consumption can be cut down only by reducing the measure of consumption. It can be seen that the traditional international trade is not only of a high cost, but also with relatively low efficiency. The emergence and popularity of the network economy allows direct communication between firms as well as firms and consumers through the e-commerce platform and in turn, changes the trade chain into a "two-point" form by reducing the intermediate links and the trade costs, achieving mutual benefits of both sides of the trade.

## **2.3 Boost the Development of Chinese Trade in Services**

In the context of the network economy, Chinese e-commerce industry, with a rapid development, has tremendously boosted the development Chinese trade in services industry. Especially in recent years, Chinese firms actively and flexibly take advantage of the network economy under continuous innovation while reducing the trade costs and the economic losses caused by geographical problems as much as possible and enhancing the efficiency of cross-regional, cross-industry cooperation trade as well as the competitiveness of Chinese trade in services firms in the international market in a real sense<sup>[2]</sup>. Precisely because of the significant technological advantage of the e-commerce, most of Chinese commercial and trade firms have been actively integrated internet technologies to expand the scope of application of the e-commerce in firms containing large industries and tourism services. Meanwhile, they promote further generalization of innovative firms including network purchasing and sales and further put the rapid development of Chinese trade in services in motion.

# **3. Negative Effects of Network Economy on International Economy and Trade**

#### 3.1 Increase Security Risks in International Trade

The popularity of the internet and the development of network technique, bringing convenience in the international trade and economy development, also expose a lot of hidden loopholes at the same time. In recent years, on the basis of the Internet, the network attacks against international economy and trade have become increasingly frequent, making the current transactions of international economy and trade faced with serious threat of security. In case of some flaws, this will lead to irreparable economic loss. Many criminals use the Internet to intercept the financial fund in the various transactions of economy and trade, and commit crimes on counterfeiting in terms of transaction mode, payment method, and quality of products. As a result, international trade transactions are faced with great risks of security.

#### **3.2 The Lack of Logistics Development in China**

The logistics industry, which is strong and reliable, represents not only the basis for sustained development of economy and trade in various countries, but also the fundamental guarantee for business expansion. At present, under the influence of the rapid development of the trade industry, China's logistics industry has made great progress. However, compared with the logistics industry in the developed countries and the practical reality of the current domestic market circulation, China's logistics industry at this stage remains at a low level, which cannot fully meet the need of the domestic market, and also limits the full development of international economy and trade. This has greatly limited the advance of e-commerce. It can be concluded that on the one hand, network economy has exerted positive influence on the international economy and trade, and on the other hand, China's logistics industry is still plagued by the lack of driving force.

## **3.3** The Shortage of Professionally Trained Personnel in E-Commerce in China

In order to ensure that e-commerce activities in various enterprises are carried out in a more orderly and efficient manner, the related operational personnel, proficient in the Internet information technologies, should be armed with rich knowledge on market-economy operating, in order to, in the process of actual operation, constantly well integrate information technologies and business-trade theories, and to optimize the actual operation of e-commerce<sup>[3]</sup>. However, currently, the rate of college graduates employment in China is about 50%, while the rate in terms of e-commerce is only 18%. A conclusion can be made that China's e-commerce industry at this stage, which is plagued by the lack of professionals, cannot meet the current need of the development of the network economy.

### 4. In the Context of Network Economy, the Specific Methods to Optimize the International Economy and Trade

### 4.1 Promote the Huge Popularity of the Internet-Related Knowledge

At present, China's economic entities are still dominated by private enterprises. However, private enterprises have neither fostered a scientific awareness of nor recognized the importance of e-commerce, and besides, they often have a low sensitivity of market demand. As a result, e-commerce among private enterprises is far from developed. In order to improve this situation, governments at all levels and the related departments, from the macro perspective, must take some controlling measures, and coordinate various publicity activities of the Internet-related knowledge, in order to enhance the people's awareness of the Internet. Besides, something should be done to create a favorable environment where more private enterprises participate in the competition of network economy, and come to realize the shortcomings of the traditional business and trade model.

## **4.2 Facilitate the Industrial Upgrading and Speed up the Technological Innovation**

Under the influence of network economy, the international trade model has undergone great changes, which makes most of the enterprises faced with more daunting challenges. In order to get enough market shares in the new market competition, enterprises must carry out the projects of industrial restructuring and upgrade. In particular, as for those products characterized by backward process, complicated and cumbersome structure, heavy pollution, and monotonous function, efforts should be made in R&D of products featuring light pattern, less pollution, multi-function, and vast market potential. At the same time, in the context of network economy, enterprises should pay more attention to advanced network techniques, and give full play to the advantages of such technologies; besides, they should combine their own industrial strength and advanced science and technologies, and, fuelled by cutting-edge technologies, constantly enhance the overall comprehensive strength, thus promoting the optimization and upgrading of industrial structure. In this process, the related government departments, which play a macro-guiding role, should also conduct a reasonable forecast and intervention as for the resource allocation in the network economy, in order to make pioneering efforts in obtaining various knowledge resources beneficial to technological innovation.

## **4.3 Improve the Infrastructure and Optimize the Operating Environment of the Internet**

Due to various objective limitations, the Internet and information technologies, albeit widely used in China, are still plagued by the lack of market competitiveness. What is the most obvious is the underdeveloped IT-application infrastructure. As is known to all, the network environment is based on the Internet and a variety of information technologies. Therefore, in order to strengthen the development of international economy and trade in the era of network information, effective measures should be taken to improve the construction of IT-application infrastructure and to optimize the operating environment of the Internet. To be specific, first, special efforts should be made to integrate various resource advantages, so as to establish a large backbone network; second, as for the entrance and exit of the international network, a reasonable, scientific planning should be conducted, and renewed efforts should

be made to improve the related structure in the future; third, something should be done to make full use of the advantages of the Internet, in order to constantly enhance the capacity of the Internet, and to speed up the network transmission; finally, for a bigger picture, special efforts should be made to increase the coverage of the Internet, and to achieve the full network coverage and service in both urban and rural areas, thus laying a solid foundation for the future progress of the era of network economy.

### 4.4 Eliminate the Monopoly of Telecommunications and Tap the Vast Potential of the Domestic Network Market

With the sustained economic development and the ever-changing market economic system, currently, the monopoly of traditional telecommunication market is incompatible with the era of Internet economy with more emphasis on openness and inclusiveness; the monopoly has greatly hindered the development of network economy in China. In this case, the government sectors must get a truthful and detailed picture of the current situation, advance with the times, and take substantial measures in the light of market changes. Besides, a reasonable system featuring telecommunication reform, which is suitable for China's national conditions, should be established, in order to break the vicious circle of the monopoly of telecommunication market, reduce the access threshold as much as possible, and tighten the enforcement of the concept of three networks combined. At the same time, governments at all levels should also actively coordinate various publicity activities, encourage and guide enterprises in different sectors to invest in the telecommunication market, set forth preferential policies, and facilitate the industrial restructuring with various types of asset, so as to break the traditional monopoly of telecommunication market, and strive for the balance of telecommunication industry in the true sense. All these measures will enhance the quality of telecommunication industry in China, and provide strong guarantee to the rapid development of network economy.

#### **5.** Conclusion

This paper, with a brief introduction of network economy, illustrates the positive impact of network economy on the international economy and trade: to promote the emergence of a new economic model; to improve the efficiency of international economy and trade and to reduce costs; to fuel the development of China's trade services, and the negative impact: to increase the security risk of international trade; to show the shortcomings of the logistics industry and the lack of professionals in e-commerce in China. On this basis, this paper puts forward some specific methods to optimize the international economy and trade in the background of network economy: to promote the huge popularity of the Internet-related knowledge; to promote the industrial upgrading the technological innovation; to improve the infrastructure and to optimize the operating environment of the Internet; to break the monopoly of telecommunication market and to tap the vast potential of the domestic network market. In summary, in order to create favorable conditions for international economy and trade, the opportunities brought by network economy must be seized, and a lot of substantial measures should be taken, in order to continuously improve trade efficiency and reduce costs.

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