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Modern road transport market in China

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Abstract

An important part of the domestic volume of Chinese cargo transportation is cars. Just like in the United States and the European Union, trucks in China travel on high-speed highways. To accommodate such a large amount of cargo, China's highway network has been improving year by year. The development of road links is an essential part of the work for municipalities and provincial governments. Related services are also gradually improving (a network of gas stations, service stations, motels on the highway) due to fierce competition in the logistics market. Many transnational corporations, for example, a number of American concerns, use the services of local trucking companies. Despite the popularity and growing demand for trucking, costs in this industry remain very high. Rail transport in China is 20-30% cheaper than road transport. River transportation by barges – 50% cheaper. For this reason, many logisticians are convinced that the comprehensive development of the road transportation network throughout China should become the dominant development of the country's road industry. The Chinese logistics industry is facing enormous opportunities and challenges. Despite the strong and comprehensive support of the Chinese government, it must adopt new ways of development in order to more effectively compete with traditional market players not only within the state, but throughout the world.

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Keywords

Road transport, highways, road industry, China, hauliers, logistics.

Introduction

China is one of the few countries in the world that showed positive economic GDP growth in 2020. Since 2021, the logistics industry in China has been developing steadily. This is evidenced by many economic indicators: the efficiency index is an indicator that reflects employment, business volumes, and the number of new orders. Its value in 2021 increased by 2.4% and in April 2022 amounted to 57.3%. If the logistics efficiency index is more than 50%, this indicates the expansion of the market; China's foreign trade volumes are actively growing [Za poslednie…, www]. Since 2022, the volume of exported and imported cargo has increased by 28.5%; many global enterprises in 2021 will not be able to restore sufficient production volumes. Today, there is a growing demand for "Made in China" products. One of the reasons for the rapid recovery of domestic and international cargo transportation in China after the pandemic is investment in digital technology and maximum automation of processes. The pandemic has forced logistics executives to look towards digitalization and implement high-tech solutions in just a few months. To improve competitiveness, large Chinese logistics organizations are buying small and medium-sized companies that are not able to survive on their own in a crisis. Another point of growth for the Chinese logistics industry is the strengthening of regional economic cooperation. In 2020, the Association of Southeast Asian Nations became China's largest trading partner, surpassing the EU and the US. Experts note that this is due to the constant improvement of the economy and foreign trade mechanisms [Romenkova, 2012]. China is actively innovating, improving service, and working to create technological products and international brands. The rapid introduction of innovations has helped China quickly restore the freight sector and take a leading position in the market. It can be assumed that this trend will continue in the next few years, and the logistics sector will continue to develop rapidly.

China is a strong market for transport services, with Chinese companies participating in many overseas markets. As a result, in China, transport services account for 19% of the export of commercial services [Tovarooborot…, www].

But the domestic market of China is also an attractive consumer market for transport services with high-quality logistics and infrastructure conditions. Logistics costs account for 18% of China's GDP (import and export of services). 9 of the 50 largest container ports in the world are located in China [Krupneishie logisticheskie kompanii Kitaya, www]. China ranks second in terms of imports of transport services after the United States ahead of Germany and India [5].

Traffic flows between China and Russia are constantly growing thanks to joint infrastructure projects. For example, in 2020, the first international road bridge from Russia to China "Blagoveshchensk-Heihe" was opened. The bridge is designed for a passenger flow of 5.5 thousand people, for the daily passage of 630 trucks, 164 buses and 68 cars [V Blagoveshchenske otkryli pervyi avtomobil'nyi most mezhdu Rossiei i Kitaem, www]. Construction began on December 24, 2016, and was completed in December 2020. Work was carried out around the clock, in any weather. The bridge was built simultaneously on both sides. Russia and China built exactly half each, that is, 540 meters each. The units were built synchronously from both sides, their docking took place on May 31, 2019 [Doroga v Kitai, www].

The opening of the bridge will reduce the costs and terms of transportation of goods in foreign trade.

For the market of motor transport services in China in recent years are characterized by:

– developed competition in the trucking market, the need to compete for the preference of Chinese consumers;
– planned and actual development of automobile infrastructure in order to enhance economic cooperation and trade between countries;

– high demand for international trucking;
– the demand for the service of road transport of goods;
– high level of digitalization of the road transport market;
– Growth in demand for road transport services against the backdrop of transport restrictions caused by the COVID-19 pandemic.

In the market of transport services in China, on the one hand, there is serious competition, primarily from national companies. It is worth considering that the Chinese market for road transport services is a rather difficult market for companies with a standard set of services to enter in terms of gaining their own audience. According to statistics, there are more than 700 thousand logistics and transport companies in China [Tendentsii razvitiya mirovoi logistiki…, www].

However, according to experts, companies do not provide the full range of services, occupying a very narrow niche or local market, therefore, the largest carriers continue to monopolize some segments of the transport market in the Chinese transport services market.

However, market concentration is typical for complex areas of transport service, while developing areas in connection with new infrastructure projects or the opening of new industries are the most diversified in terms of the number of market participants [Doroga v Kitai, www].

China has two major road transport professional associations.

First, there is the China Road Transport Association (CRTA), an organization founded in 1991 and based on voluntary membership, which includes enterprises, institutions and organizations of road transport in China and related industries. Since its inception, the Association has been striving to protect the legitimate rights and interests of industry representatives and all its members, to promote the economic development of the industry, technological progress, scientific development and academic research in the field of road transport. CRTA is also the only Chinese association that is a member of the International Road Transport Union (IRU) [China Road Transport Association, www].

Secondly, China has the China Highway & Transportation Society (CHTS), an academic non-profit public organization founded in 1978, established on a voluntary basis by scientists and technicians and departments in the field of national road transport and related fields. science [China Highway & Transportation Society, www].

High competition drives the growth of most segments of the road transport market, improving the quality of services and, therefore, increasing consumer demand, which has been severely affected by the COVID-19 pandemic and restrictions on the movement of people (both domestically and abroad), but which should recover as restrictive measures are lifted to fight the coronavirus pandemic.

Carriers operating in China are encouraged to expand their fleet with environmentally friendly vehicles, allowing them to gain a foothold in the Chinese market in the long term.

The largest Chinese road transport companies are: Fujian Xiamen Xiangyu Co., Ltd. (specialization – multimodal, including road, freight transportation; revenue in 2020 – 272.4 billion yuan); S.F. holding company ltd. (specialization – multimodal, including road, freight transportation; revenue in 2020 – 112.19 billion yuan); Sinotrans Limited (specialization – multimodal, including road, freight transportation; revenue in 2020 – 77.65 billion yuan). Russian companies are also widely represented in the Chinese sea freight market. Transportation is carried out by FESCO, START Logistic, Transport company Kamchatka, Port-Trans-Group, Baikal transport company, etc.

Methods

In the study, the authors used some methods such as analysis and synthesis, induction and deduction, historical and logical, abstraction and concretization.

Results

In 2020, the disruption to shipping during the pandemic, especially maritime and air traffic, led to the diversion of cargo to modes of transport that were less affected by the pandemic. In some cases, shippers are also turning to road freight because of fully booked rail freight. Cargo diversion is observed in the shipment of intermediate products of mechanical engineering for sectors with a highly globalized supply chain, especially for the automotive sector.

The door-to-door service for the transportation of goods by road along the China-Europe route appeared back in 2018 after China ratified the Customs Convention on the International Carriage of Goods under the TIR Carnet in 2016. Dutch carriers Albas paired with Ceva Logistics conducted a first trial run in 2018 which took 12 days from Poland to China and now operates weekly with 35 trucks between China and the EU. Door-to-door road transport between China and EU countries takes 2 to 3 weeks, depending on the destination.

Russian carriers are also expanding route networks from China. So, in 2019, the D-Trans group of companies, a full member of the Association of International Road Carriers (ASMAP), carried out transportation from China to Turkey under the TIR system.

Road transportation along the route Shanghai (China) – Istanbul (Turkey) with a length of more than 13,000 km took 19 days and transited through the territories of Russia, Belarus, Ukraine, Romania and Bulgaria.

China-Europe road transport follows the same route as rail transport on this trade route. A truck leaving China for the EU crosses the border between Alashankou in China and Khorgas in Kazakhstan or Manchuria on the border with Russia and then enters the EU via Malashevichi in Poland [China logistics, www].

During the pandemic, road freight transport between China and Europe increased due to cross-border trade in electronic goods and dangerous goods such as lithium batteries. Due to the risks of transport restrictions arising in difficult epidemiological situations, the market for road transport of goods (as "quarantine" alternative to sea and air transportation) is the most promising in terms of exports to China.

A major challenge remains how to reduce the environmental impact of such long-distance transport. Both the EU and China are implementing policy plans for climate neutrality. The Chinese logistics plan, published in 2018, set a goal of significantly reducing long-haul (>500 km) road freight transport by 2025 and shifting to rail and waterways, although this policy mainly focuses on inland logistics. The EU also prioritizes converting 75% of inland road freight transport to rail and inland waterways by 2050. In terms of carbon emissions, road transport sits between rail and air freight. According to a Loadstar article, DSV, which currently offers road freight services between China and Europe, is estimated to have emissions from road freight on this corridor 2.5 times higher than rail, but one-tenth of those from freight air transportation [Zhang Xiaoxue, Yao Yao, 2021].

Recommendations and conclusions

Despite the fact that today China is building up rail and water transport, road routes are still very popular.

This is due to the following factors.

First, close trade links between China and neighboring countries are a precondition for continued market demand for road transport.

Secondly, the flexibility of road transport is compatible with the supply chain strategy of many manufacturers: high frequency transport with low inventory levels.

Starting to implement the task of increasing the competitiveness of automotive products in the world market in every possible way, China is carrying out large-scale technological transformations of production based on foreign experience, including the use of international quality standards. The formation of large integrated enterprises in the automotive industry, which will then be transformed into global automotive concerns, is recognized as the main direction for raising the technical level of production.

At the same time, it should be taken into account that the development of the transport complex and transport infrastructure is one of the key tasks of China's modern economic policy. Its development is aimed at creating conditions for the growth of the quality of transport services provided to the population, as well as at reducing the costs of transporting goods. The ecological safety of the functioning of transport is also important. That is why the requirements for the organization of car production in China will be the highest in the coming years. The latter will be reflected in the need to ensure the growth of reliability, operational, environmental performance, the development of service, the use of energy-saving technologies in the automotive industry.

The Chinese logistics industry is facing enormous opportunities and challenges. Despite the strong and comprehensive support of the Chinese government, it must adopt new ways of development in order to more effectively compete with traditional market players not only within the state, but throughout the world.

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Современный рынок автомобильных перевозок в Китае

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Аннотация

Важную часть внутреннего объема китайских грузоперевозок составляют автомобили. Так же, как в США и Европейском союзе, грузовики в Китае ездят по скоростным автомагистралям. Для размещения такого большого количества грузов сеть автомагистралей Китая совершенствуется с каждым годом. Развитие дорожного сообщения является важной частью работы муниципалитетов и правительств провинций. Сопутствующие услуги также постепенно совершенствуются (сеть АЗС, СТО, мотели на трассе) в связи с жесткой конкуренцией на рынке логистики. Многие транснациональные корпорации, например, ряд американских концернов, пользуются услугами местных автотранспортных компаний. Несмотря на популярность и растущий спрос на грузоперевозки, затраты в этой отрасли остаются очень высокими. Железнодорожный транспорт в Китае на 20-30% дешевле автомобильного. Речные перевозки баржами – на 50% дешевле. По этой причине многие логисты убеждены, что комплексное развитие сети автомобильных перевозок по всему Китаю должно стать главенствующим направлением развития дорожной отрасли страны. Китайская логистическая отрасль сталкивается с огромными возможностями и проблемами. Несмотря на мощную и всестороннюю поддержку китайского правительства, оно должно принять новые пути развития, чтобы более эффективно конкурировать с традиционными игроками рынка не только внутри государства, но и во всем мире.

Для цитирования в научных исследованиях

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Ключевые слова

Автомобильный транспорт, автомагистрали, дорожное хозяйство, Китай, перевозчики, логистика.

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