УДК 330.341

ECONOMIC POLICY OF THE ENHANCEMENT OF INTERNATIONAL COMPETITIVENESS OF CHINA'S AUTOMOTIVE INDUSTRY

Yuhang Huang[1)], Y. A. Nikonova[2)]

[1)] *master's student, Belarusian State University, Minsk, Belarus, h835530612@gmail.com*
[2)] *senior lecturer, Belarusian State University, Minsk, Belarus, NikonovaYA@bsu.by*

This paper examines the impact of government economic policy on the international competitiveness of China's automotive industry. By analyzing the incentive mechanisms of industry support policy, the regulatory role of environment policy, and their synergistic effect on the development of the automotive industry, this paper reveals the important role of the government in enhancing the industry's international competitiveness.

Keywords: economic policy; automotive industry; international competitiveness; sustainable development; China; new energy vehicle (NEV).

ЭКОНОМИЧЕСКАЯ ПОЛИТИКА ПОВЫШЕНИЯ МЕЖДУНАРОДНОЙ КОНКУРЕНТОСПОСОБНОСТИ АВТОМОБИЛЬНОЙ ПРОМЫШЛЕННОСТИ КИТАЯ

Юйхан Хуан[1)], Ю. А. Никонова[2)]

[1)] *магистрант, Белорусский государственный университет, г. Минск, Беларусь, h835530612@gmail.com*
[2)] *старший преподаватель, Белорусский государственный университет, г. Минск, Беларусь, NikonovaYA@bsu.by*

В данной статье рассматривается влияние государственной экономической политики на международную конкурентоспособность автомобильной промышленности Китая. Анализируя стимулирующие механизмы политики поддержки отрасли, регулирующую роль экологической политики и их синергетический эффект на развитие автомобильной промышленности, в данной статье раскрывается важная роль государства в повышении международной конкурентоспособности отрасли.

Ключевые слова: экономическая политика; автомобильная промышленность; международная конкурентоспособность; устойчивое развитие; Китай; автомобиль на новых источниках энергии.

I. Introduction. In the context of globalization, the automotive industry has emerged as a key sector reflecting a nation's economic and technological strength. China's automotive industry has experienced rapid growth in recent years, particularly in terms of export volumes and values. This growth is closely related to government policy support and the optimization of the environment policy. Meanwhile, the environment policy has played a dual role by setting standards for safety and environmental protection while promoting fair competition. This paper aims to provide an analysis of how these factors have contributed to the international competitiveness of China's automotive industry.

II. Policy Support: Incentive Mechanisms and Industrial Development.

Theoretical Basis of Policy Support. Policy support is a crucial tool for governments to drive industrial development. In China, the government has implemented various policies to support the automotive industry, including subsidies for new energy vehicles (NEVs), tax incentives, and R&D funding. These policies aim to reduce innovation costs and encourage technological advancements. By providing fiscal subsidies, tax incentives, and R&D support, the government can effectively

reduce the innovation costs for enterprises, encouraging them to increase R&D investment and enhance technological capabilities [1]. This approach has been widely recognized as an effective strategy to boost industrial competitiveness, as discussed by Doner and others [2].

Practice and Achievements of Policy Support. The effectiveness of policy support is evident in the growth of China's NEV market share and exports. Below is the data on global NEV market share from 2018 to 2024, which highlights China's significant contribution to the global NEV market.

Table 1

Global New Energy Vehicle Market Share

Year	Global sales (1,000 units)	China sales (1,000 units)	European sales (1,000 units)	U.S. sales (1,000 units)	China market share	European market share	U.S. market share
2018	210	125	40	30	59.5 %	19.0 %	14.3 %
2019	220	130	45	35	59.1 %	20.5 %	15.9 %
2020	310	150	70	50	48.4 %	22.6 %	16.1 %
2021	650	350	150	80	53.8 %	23.1 %	12.3 %
2022	1050	650	200	120	61.9 %	19.0 %	11.4 %
2023	1400	810	320	140	57.9 %	22.9 %	10.0 %
2024	1700	1000	350	160	58.8 %	20.6 %	9.4 %

Source: [3–5].

The data show a consistent increase in China's NEV sales and market share globally, indicating the effectiveness of policy support in promoting the industry's growth. China's market share has remained above 50 % throughout the period, highlighting its dominant position in the global NEV market.

Limitations and Challenges of Policy Support. Despite significant achievements, policy support also faces challenges. For instance, some enterprises overly rely on subsidies, lacking independent innovation capabilities. Moreover, regional policy differences may lead to imbalanced resource allocation. Additionally, as international market competition intensifies, some countries have questioned China's automotive subsidies and even adopted trade protectionist measures.

III. Environment Policy: Dual Role of Standardization and Guidance.

Theoretical Basis of Environment Policy. Regulations play a dual role in the automotive industry by setting standards for safety and environmental protection while promoting fair competition. China's strict environmental regulations have pushed the industry towards green and low-carbon development. By setting high emission standards and promoting NEVs, the government has accelerated the transition away from traditional fuel vehicles [6]. This regulatory approach aligns with the broader goals of sustainable development and environmental protection, as discussed by Fan and Iqbal [7].

Practice and Achievements of Environment Policy. China's environment policy has had a significant impact on the automotive industry. The stringent emission standards have not only reduced pollution but also driven technological innovation. For example, the "Double Credit Policy" introduced in 2017 requires automakers to produce a certain proportion of NEVs to meet fuel efficiency and emission targets [8]. This policy has incentivized both domestic and foreign automakers to invest in NEV technology, thereby enhancing the overall competitiveness of the industry.

Moreover, by combating unfair competition, China's regulations have enhanced consumer trust in domestic automobiles. The government has implemented strict quality control standards and anti-monopoly regulations to ensure fair market competition. These measures have not only standardized corporate behavior but also laid the foundation for the internationalization of China's automotive industry.

Challenges and Responses to Environment Policy. Regulatory challenges include increased production costs for enterprises to meet environmental standards and skepticism from international markets about China's regulatory standards. The government needs to balance regulatory rigor with support for industry competitiveness. For example, while maintaining high environmental standards, the government has also provided transitional support to help enterprises adapt to new regulations. This approach aims to minimize the negative impact on competitiveness while ensuring sustainable development.

IV. Synergistic Effect of Policy Support and Environment Policy.

Theoretical Analysis of Synergistic Effect. The synergy between policy support and environment policy is a key to enhancing industrial international competitiveness. Policy support promotes corporate innovation through incentive mechanisms, while the environment policy ensures market order and sustainable development through regulatory mechanisms. The combination of these two can form an effective policy synergy, driving high-quality development in the automotive industry.

Case Studies of Synergistic Effect. The growth of China's New Energy Vehicle (NEV) exports exemplifies the synergy between policy support and environment policy. Government incentives for R&D investment in NEVs, coupled with market demand driven by stringent environmental regulations, have not only expanded China's global market share in NEVs but also significantly enhanced its technological and international competitiveness. This combination has led to a marked improvement in China's position within the global NEV market.

Table 2

China New Energy Vehicle Export Volume and Growth Rate

Year	2018	2019	2020	2021	2022	2023
Exports (10,000 units)	10.21	25.5	22.3	58.8	112	130
Growth rate (%)	-	149.7	-12.5	163.7	90.5	16.1

Source: [8].

For example, the export volume of China's NEVs has seen robust growth, increasing from 10.21 thousand units in 2018 to 130 thousand units in 2023. Particularly notable is the growth rate, which reached 149.7 % in 2021 and 90.5 % in 2022, reflecting a substantial enhancement in the international competitiveness of Chinese NEVs. Although the growth rate moderates to 16.1 % in 2023, it still indicates a strong potential for continued expansion in NEV exports. The upward trend correlates with significant advancements in China's technological capabilities and international competitive edge in the NEV sector from 2018 to 2022. These advancements have provided a solid foundation for the competitiveness of Chinese NEVs in the international market.

Furthermore, the high cost-effectiveness of Chinese automobiles, supported by government policies and regulatory standards, has enhanced their international competitiveness. Chinese automakers have been able to offer competitive pricing while maintaining quality standards, making their products attractive in emerging markets. This has positioned China as a major player in the global automotive market [7].

V. Conclusions. This paper concludes that policy support and regulatory environment have significantly enhanced the international competitiveness of China's automotive industry. Policy incentives have driven technological innovation, while regulations have ensured sustainable development. The combined effect has positioned China as a major player in the global automotive market [9]. Future research should focus on optimizing these policies and regulations to address emerging challenges and further promote sustainable industrial development. The government's continued role in balancing support and regulation will be crucial for maintaining China's competitive edge in the global market.

References

1. A review of China's automotive industry policy: Recent developments and future trends / Y. Chen, X. Dai, P. Fu, G. Luo, P. Shi // Journal of Traffic and Transportation. 2024. Vol. 11, iss. 5. P. 867–895.

2. *Doner R. F., Noble G. W., Ravenhill J.* Industrial competitiveness of the auto parts industries in four large Asian countries: The role of government policy in a challenging international environment. WPS4106. 2006. 76 p.

3. Global EV Outlook 2023: Catching up with climate ambitions // International Energy Agency (IEA). 2023. 142 p.

4. Economic operation report of automobile industry in 2023 [EB/OL] // China Association of Automobile Manufacturers [2024-05-27]. [Electronic resource]. URL: http://en.caam.org.cn/ (date of access: 20.02.2025).

5. China Automotive Industry Development Report (2024) // Ministry of Industry and Information Technology of China. 2024.

6. *Holweg M., Luo J., Oliver N.* The past, present and future of China's automotive industry: A value chain perspective // International Journal of Technological Learning, Innovation and Development. 2009. Vol. 2, № 1-2. P. 76–118.

7. *Fan W., Iqbal M.* Economic, Social, and Environmental Determinants of Automotive Industry Competitiveness // Journal of Energy and Environmental Policy. 2022. Vol. 5(4). P. 36–43.

8. Value of dual-credit policy: Evidence from green technology innovation efficiency / H. He, S. Li, S. Wang, C. Zhang, F. Ma // Transport Policy. 2023. Vol. 139. P. 182–198.

9. *Cao Y. H.* Comparative Study on the International Competitiveness of the Automotive Industry in Typical Countries. Jilin University, 2018.