

The Era Background, Significance, and Key Paths of Accelerating the Development of New-Quality Productivity

Zhu Chen, Chaomei Xu, Ruping Long

Guizhou University of Engineering Science, Bijie 551170, Guizhou, China

Copyright: © 2026 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: Currently, a new round of technological revolution is shaping the new international pattern. Accelerating the development of new-quality productivity is the key to addressing the dilemmas faced by global development, promoting the transformation of productivity, accelerating scientific and technological innovation, advancing high-quality economic development, and driving an overall leap in China's social productivity level. Generally speaking, the proposal of new-quality productivity further enriches and expands Marxist productivity theory; drives the innovation of economic development theories; demonstrates the global significance of Chinese discourse and Chinese theories; provides theoretical and practical guidance for promoting high-quality development; and offers driving support for forging new advantages in international competition. To accelerate the development of new-quality productivity, it is necessary to take scientific and technological innovation as the driver to provide a strong engine for high-quality development; take industrial innovation as the support to stimulate new kinetic energy for industrial carriers in high-quality development; take the innovation of development models as the starting point to highlight the characteristics of high-quality development; take the innovation of institutional mechanisms as the guide to provide institutional guarantees for high-quality development; and take the innovation of talent work mechanisms as the breakthrough to consolidate the talent foundation for high-quality development.

Keywords: New-quality productivity; Era background; Significance; Paths

Online publication: January 30, 2026

1. The era background of developing new-quality productivity

Productivity serves as the foundation and support for the continuous development and progress of humanity, and is the decisive factor driving social development. Different from traditional productivity, new-quality productivity represents a leap forward from traditional productivity in the new context and a new form and manifestation of high-quality development. Its proposal is rooted in profound era and practical backgrounds^[1].

1.1. The international pattern is evolving rapidly, and global development lacks momentum

At present, the world is undergoing a major transformation unseen in a century at an accelerated pace. The modern technological revolution and industrial revolution have driven more specialized and diversified international division of labor, and scientific and technological innovation has become a key variable affecting and reshaping the world economic landscape. A new round of technological and industrial revolutions has accelerated the improvement of productivity in developed countries, while the cost advantages of developing countries in the global industrial pattern have been gradually weakened. This has prompted all countries to accelerate their efforts to find their positions in global science, technology and industrial development to adapt to changes in the global production structure. In this new round of technological and industrial revolutions, whoever seizes this critical historical opportunity will stand at the forefront of leading global development. At the same time, global development is facing a series of challenges: undercurrents of “de-globalization” are surging, unilateralism and trade protectionism are taking shape at an accelerated pace, and local conflicts occur frequently, leading to a sluggish world economic recovery and a predicament in development. Among these challenges, insufficient production capacity is an important root cause of the global crisis; sluggish economic growth or even worsening situations may particularly exacerbate global risks. To break free from the predicament of global development, it is necessary to promote changes in productivity development and inject new impetus into the development of all countries in the world.

1.2. The competitiveness of traditional productivity is gradually declining, urgently requiring a transition to new forms of productivity

The basic form of traditional productivity mainly relies on the simple aggregation of production factors, driven primarily by factors such as material resources, investment, labor, and land. It features low technological content, labor intensiveness, and repetitive production, often accompanied by problems such as high costs, low efficiency, excessive resource consumption, and severe environmental pollution, which can no longer provide adequate support for sustainable and green development ^[2]. On the other hand, traditional productivity is often associated with the disorderly expansion of traditional production capacity, leading to backward and excess capacity. To effectively respond to various new domestic and foreign challenges, it is urgent to adjust the productivity structure in accordance with the direction and trend of current technological and industrial changes, promote a leap in productivity, accelerate the transformation of productivity from quantitative to qualitative improvement, and achieve a shift from scale expansion to sustainable, coordinated, and high-quality development.

1.3. Scientific and technological innovation has become a key factor driving the development and transformation of productivity

In recent years, with the accelerated advancement of the scientific and technological revolution and industrial economic transformation, cutting-edge technologies led by scientific and technological innovation—such as artificial intelligence, high-end equipment manufacturing, new energy, future manufacturing, future information technology, quantum computing, and biotechnology—have risen rapidly. They have become new engines for world economic growth, driving the transformation and upgrading of traditional industries while fostering the rapid development of new industries, new formats, and new tracks, which have become new growth points of the world economy and the most important growth drivers in the future. The progress and application of these technologies have provided broad development space and markets for the growth of new-quality productivity, giving productivity a different outlook from traditional productivity and laying a foundational support for the

cultivation and development of new-quality productivity^[3].

1.4. The need to achieve economic transformation and upgrading and promote high-quality economic development

On one hand, the world is currently in a period of intensive scientific and technological innovation; disruptive technologies in fields such as new-generation information technology, biology, energy, and materials are emerging on an unprecedented scale. While exerting a profound impact on and transforming the social, economic, and political structures of all countries in the world, they are also reshaping the economic competitiveness of each country. As the largest developing country, China is faced with major historical opportunities and challenges brought by the new round of technological revolution. How to seize this strategic opportunity, fully tap into and release the growth dividends it brings, and gain the initiative in future development will be a crucial factor in realizing Chinese-style modernization. On the other hand, after entering the new development stage, China has fully implemented the new development concept, and its economy is transitioning from high-speed growth to high-quality development, with high-quality development becoming the main theme. The report of the 20th National Congress of the Communist Party of China emphasizes that “high-quality development is the primary task for building a modern socialist country in an all-round way”^[4]. High-quality development cannot rely solely on the input of resources, capital, and labor; its core lies in relying on scientific and technological innovation to drive an exponential leap in productivity, thereby achieving sustainable and high-quality development. In recent years, China has made continuous progress in scientific and technological innovation, and the effectiveness of innovation-driven development has become increasingly evident, placing China in a leading position in the global process of informatization and intelligentization. However, factors restricting high-quality development still exist, requiring new productivity theories to guide high-quality development and promote and support new development practices.

2. The significant theoretical and practical significance of developing new-quality productivity

2.1. New-quality productivity enriches and expands Marxist productivity theory

The theory of productivity is an important foundation of Marxist political economy. Since the reform and opening-up, China has gradually explored and formed the theory of socialist political economy with Chinese characteristics, pointing out that the fundamental task of social development is to liberate and develop productive forces, and putting forward the important assertion that “science and technology is the primary productive force”^[5]. Centering on the main line of liberating and developing social productive forces, new-quality productivity responds to the principal contradictions in current social and economic development, summarizes the achievements of China’s reform practice, focuses on China’s disruptive and cutting-edge technologies, and proposes promoting industrial innovation through scientific and technological innovation to develop new-quality productivity. This enriches and expands Marxist productivity theory, providing a scientific theoretical support for promoting high-quality development.

2.2. New-quality productivity drives the innovation of economic development theories

Traditional economic development theories mainly focus on the role of traditional production factors such as capital, labor, land, and natural resources, holding that economic growth mainly relies on the input of

production factors and total factor productivity. In contrast, new-quality productivity incorporates new factors such as scientific and technological innovation, knowledge accumulation, data resources, and human capital improvement into the economic growth model, endowing the production function and growth model with brand-new connotations. It also emphasizes the optimal combination of various production factors and technological empowerment, making the driving forces of economic growth more diversified and providing a new direction for the transformation of social production methods and production relations.

2.3. New-quality productivity demonstrates the global significance of Chinese discourse and Chinese theories

The proposal of new-quality productivity deconstructs and reorganizes the traditional knowledge system of productivity, adding new conceptual and discourse elements. It features the integration of political nature, academic nature, popularity, and globality, making it easy for the international community to understand and accept ^[6]. It constructs an original iconic concept of Chinese discourse for analyzing China's economic development, innovates the concepts, categories, and expression forms of Chinese discourse, represents the sublimation of productivity-related "Chinese discourse" in the new era, expands China's discourse influence in the global knowledge system of economic development, and demonstrates Chinese wisdom and Chinese strength ^[7].

2.4. New-quality productivity provides theoretical and practical guidance for promoting high-quality development

Currently, achieving high-quality economic development requires maximizing the potential of productive forces to bring about an overall leap in social productivity in the new era. The proposal of new-quality productivity provides theoretical and practical guidance for fully, accurately, and comprehensively implementing the new development concept, accelerating the construction of a modern economic system, advancing high-level scientific and technological self-reliance and self-improvement, and accelerating the construction of a new development pattern, laying a solid foundation for promoting high-quality development.

2.5. New-quality productivity provides driving support for forging new advantages in international competition

In the new round of technological and industrial revolutions, whoever masters key core technologies will hold the initiative in economic development. Faced with the containment, suppression, technological blockade, and decoupling efforts led by Western countries such as the United States, new-quality productivity focuses on scientific and technological innovation—the "key" to shaping national competitiveness. It helps China improve the new nationwide system, fully promote high-level scientific and technological self-reliance and self-improvement, break through key core technologies, strengthen the empowerment of industrial innovation by scientific and technological innovation, and gain strategic initiative and competitive advantages amid the major changes unseen in a century.

3. Key paths to accelerate the development of new-quality productivity

Innovation is the primary driving force for development, a strategic support for building a modern economic system, and the core of developing new-quality productivity. The President of the CPC emphasized that "a prominent feature of new-quality productivity is innovation, which includes not only innovation at the

technological and industrial model levels but also innovation at the management and institutional levels. We must continue to make good efforts in innovation to promote the accelerated development of new-quality productivity”^[8].

3.1. Take scientific and technological innovation as the driver to provide a strong engine for high-quality development

Scientific and technological innovation is the core element of developing new-quality productivity, a key link in opening up new industries, developing new fields, and forging advantages in international competition, and a catalyst for promoting the organic integration of production factors and realizing exponential growth in productivity. To this end, people must accelerate the improvement of China’s scientific and technological innovation capabilities, enhance national core competitiveness, and occupy a high-end position in the global industrial and innovation chains. People should vigorously promote original and basic research, strengthen original innovation oriented towards the frontiers of science, and accumulate original resources and technological reserves for high-quality development. People need to intensify breakthroughs in key core technologies, give full play to the advantages of the new nationwide system, implement key core technology research around national strategies and long-term “bottleneck” issues, and provide key scientific and technological competitiveness for high-quality development. People must strengthen the transformation of scientific and technological achievements, give play to the main role of enterprises in scientific and technological innovation, promote the integrated development of scientific and technological innovation and industrial innovation, and accelerate the transformation of scientific and technological achievements into the actual productivity of enterprises, releasing the supporting role and contribution of scientific and technological innovation^[9].

3.2. Take industrial innovation as the support to stimulate new kinetic energy for industrial carriers in high-quality development

A modern industrial system is an important carrier of a modern economic system and a key symbol of modernization. People must strengthen the guidance of scientific and technological innovation to drive industrial innovation and accelerate the formation of a modern industrial system. Continuously promote the transformation and upgrading of traditional industries: use new technologies, new methods, and new models to upgrade and transform traditional industries, promote their high-end, digital, intelligent, and green development, improve production efficiency, enhance product value, and cultivate new industries, new formats, new advantages, and new growth drivers. Accelerate the layout and expansion of emerging industries: as an important carrier for the in-depth integration of the innovation chain, industrial chain, capital chain, and talent chain, emerging industries should be guided by science and technology, continuously promote the demonstration and application of typical scenarios such as big data, new energy, artificial intelligence, intelligent manufacturing, high-end equipment, and modern medicine, promote the integrated development of the digital economy and the real economy, and optimize and upgrade the economic structure. Layout and build future industries: strengthen forward-looking planning and layout, focus on future leading industries such as future manufacturing, future information, and future materials, create iconic products, open up new tracks, gradually realize industrialization, build a world-leading future industrial cluster, enhance future global competitiveness, and seize the commanding heights of future competition.

3.3. Take the innovation of development models as the starting point to highlight the characteristics of high-quality development

High-quality development requires transforming the production model from an extensive model featuring high

energy consumption, high emissions, and high pollution to a green, low-carbon, sustainable, and eco-friendly model, realizing the economical, intensive, and circular utilization of resources. People should strengthen the optimal combination of green technology and productivity factors, promote the accelerated transformation and application of green and low-carbon technologies, realize industrialization and large-scale application, build green industrial chains and supply chains, establish green manufacturing and service systems, accelerate the formation of a green, low-carbon, and circular economic system, and cultivate truly green and low-carbon new-quality productivity. People need to continuously improve the policy support system for green transformation, develop green financial tools such as green equity financing, green trusts, and green insurance, optimize investment mechanisms, price policies, and market-oriented mechanisms for green development, and ensure the comprehensive green transformation of development ^[10]. People should promote the transformation of green and healthy lifestyles, actively advocate green living concepts, cultivate and promote green culture, advocate a simple, moderate, green, and low-carbon lifestyle, establish firm production and living concepts of green development, make green a growth point and support for people's happiness, and promote high-quality economic development through a high-quality ecological environment.

3.4 Take the innovation of institutional mechanisms as the guide to provide institutional guarantees for high-quality development people must continue to deepen reforms, strengthen guidance and policy support for the development of new-quality productivity, eliminate institutional drawbacks incompatible with its development, establish a policy system adapting to the development of new-type productivity, strengthen the reform, coordination, and management of the market and scientific and technological systems, increase policy support for the new nationwide system, national strategic scientific and technological forces, and future strategic fields, smooth the optimal combination and flow of various production factors, and provide strong policy support for the development of new-quality productivity. Focusing on the development of new-quality productivity, people should establish and improve relevant assessment, incentive, and evaluation systems to guide local governments, markets, enterprises, and industries to increase investment in scientific and technological innovation and better promote high-quality economic development. People need to continue to implement the opening-up strategy, formulate a global development strategy for new-quality productivity, optimize the layout to absorb global advanced productivity factors, strengthen productivity cooperation and sharing, and guide and promote the accelerated formation of global new-quality productivity.

3.5. Take the innovation of talent work mechanisms as the breakthrough to consolidate the talent foundation for high-quality development

People should promote the integrated reform of the education, science and technology, and talent systems, implement the strategies of rejuvenating the country through science and education, strengthening the country through talent, and driving development through innovation, promote a virtuous cycle of education, science and technology, and talent, realize the complementary advantages of education, science and technology, and talent, and achieve a “synergistic multiplier effect.” People should give full play to the leading role of higher education, promote comprehensive reforms in higher education, strengthen organized scientific research in accordance with national strategies and technological development trends, optimize discipline settings and talent training models, and provide talent and technological support for the development of new-quality productivity. Centering on the high-quality factors of new-quality productivity, people should cultivate high-quality talents in various fields, focus on cultivating top scientific and technological innovation talents, skilled talents, industrial talents, and

management talents, and promote the more efficient development of new-quality productivity. People need to deepen the reform of talent evaluation, establish and improve a talent evaluation system centered on scientific and technological innovation and substantive contributions, encourage innovative talents, and promote the sustainable development of new-quality productivity.

Funding

Guizhou Provincial Education Science Planning Project and Guangdong-Guizhou Special Project (Project No.: 2025C063); Guizhou Provincial University Humanities and Social Sciences Research Project (Project No.: 25GZGXRWJD0335); Bijie Social Science Association Fund Project (Project No.: BSLY-202412).

Disclosure statement

The authors declare no conflict of interest.

References

- [1] Zhou Y, 2023, Why to Accelerate the Formation of New Quality Production Capacity. *New Xiang Review*, 2023(20): 11.
- [2] Xu ZH, Zhou SC, 2024, Grasp the Major Relationships in Developing New Quality Production Capacity. *Liaoning Daily*, April 9, 2024, 1.
- [3] Han WL, Gai KC, 2024, New Quality Productivity. *China Social Sciences Press*, Beijing, 1–5
- [4] President of the CPC, 2022, Highly Upholding the Great Banner of Socialism with Chinese Characteristics and Uniting to Strive for the Comprehensive Construction of a Socialist Modernized Country, Report at the 20th National Congress of the Communist Party of China. *People's Daily*, November 1, 2022, 1.
- [5] Zhang DG, 2024, New Quality Productivity: Theoretical Innovation, Formation Mechanism and Future Prospects. *Applied Economics Review*, 2024(1): 3–15.
- [6] Xie ZQ, Cheng WY, 2024, Promoting the Construction of the Chinese Discourse System through the Theoretical Interpretation of New Quality Productivity. *Economic Horizons*, 2024(10): 57.
- [7] Wei CG, 2024, New Quality Productivity Theory and the Construction of China's Autonomous Knowledge System. *China Social Sciences Daily*, August 12, 2024.
- [8] President of the CPC, 2023, Speech Delivered at the 11th Collective Study Session of the 20th Central Political Bureau, *People's Daily*, January 16, 2023, Page 1.
- [9] Liang SR, Luo LW, 2024, Focus, Challenges and Key Paths for Accelerating the Formation of New Quality Production Capacity in the New Era. *Contemporary Economic Management*, 2024(46): 10–17.
- [10] The CPC Central Committee and the State Council, 2024, Opinions of the Central Committee of the Communist Party of China and the State Council on Accelerating the Comprehensive Green Transformation of Economic and Social Development. *Government Website of the National Forestry and Grassland Administration*, July 31, 2024. <https://www.forestry.gov.cn/lyj/1/mrtt/20240811/580359.html>

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.