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A Study on the Implications of Schumpeter's Innovation Theory for China's Innovation-Driven Development Strategy

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Abstract: The global technological competition landscape is undergoing profound adjustments, and China's economy is transitioning from factor-driven to innovation-driven growth, with traditional development models facing bottlenecks. Core concepts in Schumpeter's innovation theory—such as “new combinations of production factors” and “creative destruction”—provide crucial theoretical support for addressing China's challenges of insufficient innovation coordination and sluggish momentum conversion. This paper systematically examines the core tenets and theoretical characteristics of Schumpeter’s innovation theory. By integrating the implementation status and practical challenges of China's innovation-driven development strategy, it explores the theory's implications for deepening the strategy across dimensions such as nurturing innovation entities, optimizing factor allocation, and improving the institutional environment. This analysis provides theoretical references and practical pathways for China to overcome innovation bottlenecks, establish an independent innovation system, and achieve high-quality development.

Keywords: Schumpeter’s innovation theory, innovation-driven development strategy, creative destruction, independent innovation, high-quality development

Introduction

Amid intensifying global technological competition and at a critical juncture for China's economic transformation and upgrading, implementing an innovation-driven development strategy has become the core pillar for overcoming developmental challenges and cultivating new growth momentum. In his work Theory of Economic Development, Schumpeter first defined innovation as “new combinations of production factors.” This theory encompasses multiple dimensions including products, technologies, markets, and organizations, as well as raw material supply. Its core concepts of “creative destruction” and “entrepreneurship” hold profound implications for the modern innovation economy.

1. Core Elements of Schumpeter's Innovation Theory

Schumpeter's innovation theory centers on “creative destruction.” He defined innovation as a novel combination of production factors, encompassing five primary dimensions: products, technology, markets, resource allocation, and organizational forms. This theoretical breakthrough transcended traditional economics' limitation of treating technological progress as an exogenous variable, emphasizing innovation as an endogenous driver of economic development that promotes cyclical fluctuations by disrupting equilibrium states (Zhang & Zhang, 2021). Schumpeter posits that entrepreneurs, as the primary agents of innovation, integrate resources through foresight, organizational skills, and persuasive abilities, supported by credit

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systems to forge new combinations. For instance, when introducing new technologies or expanding into new markets, entrepreneurs eliminate outdated technologies, positions, or even entire enterprises. Yet this process generates fresh growth opportunities, forming a dynamic cycle of "destruction-creation." This theory also reveals a connection between innovation and economic cycles: innovation spurs imitation and investment expansion, driving economic prosperity. When innovation permeates an entire industry, profit opportunities diminish, leading the economy into a recessionary phase until the next wave of innovation emerges.

2. Objectives of China's Innovation-Driven Development Strategy

2.1 Strengthening the aggregation of innovation factors

China's innovation-driven development strategy emphasizes forming synergistic innovation capabilities by concentrating core elements such as talent, capital, and technology (Zhao et al., 2021). Schumpeter's perspective underscores that innovation is a process of factor recombination, and the concentration of factors serves as the foundation for this restructuring. China optimizes factor allocation efficiency through a "dual-engine" mechanism integrating scientific and technological innovation with institutional innovation. For instance, in talent development, the "Special Support Program for High-Level Talents" attracts world-class scientists. Regarding capital, by 2025, R&D investments from large tech companies will exceed 40% of national total investment, providing sustained funding for frontier technologies like AI. Technologically, China is building a national laboratory system focused on quantum computing and biotechnology while advancing strategic fields for breakthroughs in key common technologies. By optimizing regional innovation layouts, China has formed innovation growth poles in the Beijing-Tianjin-Hebei region, the Yangtze River Delta, and the Guangdong-Hong Kong-Macao Greater Bay Area, facilitating cross-regional factor mobility. Taking the Yangtze River Delta as an example, initiatives like the G60 Science and Technology Innovation Corridor connect nine cities, fostering highly efficient coordination in technology, talent, and capital. This model of factor aggregation aligns closely with Schumpeter's concept of "new combinations," enhancing total factor productivity and promoting high-quality economic development through deep integration and reconfiguration of resources.

2.2 Building an Independent Innovation System

In Schumpeter's theory, sustained economic development centers on innovation, and an independent innovation system is key to ensuring the sustainability of innovation. China's innovation-driven development strategy clearly outlines a three-step goal: to join the ranks of innovative nations by 2020, to stand at the forefront by 2030, and to become a world-leading scientific and technological power by 2050 (Xu, 2025). This goal system requires establishing an innovation ecosystem centered on enterprises, supported by the market, and featuring deep integration of industry, academia, and research. For instance, in basic research, China is increasing emphasis on original innovation, with funding for basic research projected to reach 15% by 2025 and key projects planned in foundational disciplines like mathematics and physics. In applied technology, the "challenge-based competition" mechanism incentivizes enterprises to collaborate with universities and research institutes to overcome bottleneck technologies in chips and high-end equipment. Amendments to the Anti-Monopoly Law aim to prevent platform companies from abusing market dominance and protect innovation space for SMEs, fostering a dynamic competitive environment aligned with Schumpeter's concept of "creative destruction." Through building an independent innovation system, China is transitioning from "following and imitating" to "running in parallel and leading," thereby injecting sustained momentum into driving high-quality economic development.

3. Implications of Schumpeter's Innovation Theory for China's Innovation-Driven Development Strategy

3.1 Cultivating an innovative talent pipeline to strengthen intellectual foundations

Schumpeter's innovation perspective emphasizes the central role of "new combinations of production factors." Talented individuals with innovative thinking serve as the key to achieving such combinations, providing robust support for innovation-driven development strategies. To cultivate a talent pool with innovative capabilities, it is essential to deeply understand the theoretical implications and establish a comprehensive talent development process encompassing "recruitment—cultivation—utilization—retention." This approach fundamentally strengthens the foundation of innovative thinking (Zhan & Zhang, 2024). In talent cultivation, we must transcend traditional educational models to deepen the alignment between higher education and industrial demands. This involves optimizing university curricula by incorporating disciplines such as artificial intelligence, quantum technology, biomedicine, and other interdisciplinary frontiers. While strengthening foundational STEM disciplines, we must prioritize interdisciplinary talent development by encouraging students to take cross-disciplinary courses and participate in multidisciplinary research projects. This approach cultivates versatile professionals equipped with cross-domain knowledge and innovative thinking. Deepening basic education reform requires integrating innovation thinking and scientific literacy into primary and secondary school curricula. Utilizing science inventions and innovation competitions as platforms will stimulate young people's interest in innovation, establishing a talent cultivation chain from basic education to higher education (Li, 2025). In talent recruitment, implement more open policies to address critical bottlenecks in core technologies. Focus on attracting top-tier domestic and international leaders, outstanding young talents, and innovative teams. Streamline approval procedures for talent recruitment and provide one-stop support services for housing, healthcare, and children's education, creating internationally competitive talent hubs. Regarding talent utilization and retention, establish an evaluation system oriented toward innovation value, capability, and contribution. Break away from the single-dimensional evaluation model focused solely on publications, professional titles, and academic credentials. Grant researchers greater autonomy over personnel, finances, and resources, as well as decision-making authority over technical approaches, to fully mobilize their innovative potential. Improve talent incentive mechanisms by directing research commercialization revenues to researchers. Establish special innovation talent reward funds to generously recognize outstanding contributors. By fostering a culture that respects talent and tolerates failure, we enable diverse innovators to focus on their work and deepen their research. This cultivates a well-structured, high-caliber, and dynamic innovative talent pipeline, providing continuous intellectual support for China's innovation-driven development strategy.

3.2 Refine the error tolerance incentive mechanism to invigorate micro-level entities

Schumpeter's innovation theory emphasizes that innovation is a journey fraught with uncertainty, requiring micro-level entities like entrepreneurs to challenge conventions and embrace risks. Refining the error tolerance incentive mechanism essentially involves "unshackling and lightening the burden" on micro-level innovation activities, alleviating concerns about innovation, and fully unleashing the vitality of diverse innovation entities such as enterprises, research institutions, and researchers (Zheng & Chen, 2025). When establishing such mechanisms, it is crucial to clarify the scope of error tolerance, recognition criteria, and operational procedures. Distinctions must be drawn between "acceptable" and "unacceptable" errors, differentiating mistakes made due to inexperience or pioneering attempts from deliberate violations of laws and regulations for personal gain. Similarly,

unintentional errors in advancing reform and innovation should be distinguished from dereliction of duty or misconduct. Establishing a linked error-correction mechanism requires timely rectification of errors in innovation while strengthening guidance and support for innovation entities. This involves thoroughly summarizing experiences and lessons to prevent recurrence of similar issues, thereby providing essential backing for innovation practices. To refine incentive mechanisms, differentiated policies should be implemented for various innovation entities. For enterprises, increase fiscal subsidies and tax incentives. Provide tax reductions and additional deductions for R&D expenses to companies engaged in core technology R&D and innovation commercialization. Establish innovation funds to support SME innovation development and encourage increased R&D investment. For research institutions and universities, improve scientific research funding management, expand autonomy in fund usage, and permit institutions to allocate portions of innovation commercialization revenues as rewards for researchers to boost their innovation motivation. For individual researchers, refine the revenue distribution mechanism for evaluating and commercializing scientific achievements. Support researchers in obtaining reasonable returns through equity participation and technology transfer. Directly link innovation outcomes to professional title promotions, commendations, and performance evaluations, ensuring researchers with outstanding contributions receive tangible recognition. By synergizing error tolerance and incentive mechanisms, institutional barriers hindering innovation should be dismantled to foster an ecosystem that "encourages innovation and tolerates failure." This will empower diverse micro-level entities to boldly engage in innovative practices and actively participate in the "new combinations of production factors," thereby providing sustained momentum for the innovation-driven development strategy.

3.3 Building Cross-Boundary Innovation Platforms to Promote the Free Flow of Factors

The core idea of Schumpeter's innovation theory is the "new combination of production factors," and the free flow and efficient allocation of these factors are key prerequisites for achieving such combinations. Building cross-boundary innovation platforms essentially means creating resource integration vehicles and fertile ground for innovation activities that break through industrial, regional, and institutional barriers, promoting the cross-sectoral flow and deep integration of innovation factors such as technology, capital, talent, and information. During platform development, focus should be placed on addressing national strategic needs and pain points in industrial development to create a diversified cross-boundary innovation platform system. On one hand, establish industry-academia-research collaborative innovation platforms to foster deep cooperation among universities, research institutions, and enterprises. Jointly build laboratories, engineering technology research centers, and industrial technology innovation alliances. Collaborate around two critical links: core technology R&D and innovation commercialization. This integrates the scientific strengths of universities and research institutions with enterprises' market advantages and industrialization capabilities, accelerating the transformation of scientific achievements from laboratories to the market. On the other hand, cross-regional innovation cooperation platforms should be established to overcome the fragmentation of regional innovation resources. This will promote complementary sharing of innovation resources between developed eastern regions and central-western areas, establish cross-regional innovation collaboration mechanisms, and facilitate the free flow and optimized allocation of innovation factors nationwide. This approach will foster an innovation development pattern characterized by "eastern leadership and coordinated development in central-western regions." Simultaneously, keeping pace with the digital economy trend, we will develop digital cross-border innovation platforms. Leveraging big data, artificial intelligence, and blockchain as

digital technology foundations, we will build integrated online-offline innovation resource sharing platforms. These platforms will consolidate global innovation resources, providing one-stop services for technology matching, talent exchange, capital integration, and information sharing among diverse innovation entities. The platform must establish and improve mechanisms for factor mobility, remove institutional barriers to factor flow, and enhance supporting service systems for intellectual property transactions, technology transfer, and talent mobility to reduce the costs of factor movement. By establishing cross-border innovation platforms, we can achieve efficient allocation and deep integration of innovation factors, continuously generate "new combinations of production factors," and thereby provide robust platform support for implementing the innovation-driven development strategy.

3.4 Strengthen intellectual property protection to build institutional barriers for innovation

Schumpeter emphasized in his innovation theory that the driving force behind innovation stems from rational expectations of innovation returns. Intellectual property protection is a core institutional arrangement ensuring the legitimate rights and interests of innovators and safeguarding their returns. Enhancing intellectual property protection provides innovators with stable institutional expectations, stimulates innovation enthusiasm, and prevents infringement or misappropriation of innovation outcomes—crucial measures for constructing institutional barriers for the innovation-driven development strategy. Legislatively, China's intellectual property legal framework must continue evolving to keep pace with technological advancements. Timely revisions to relevant provisions in the Patent Law, Trademark Law, and Copyright Law are necessary. To enhance protection, the scope of intellectual property rights should be expanded, compensation standards for infringement increased, and penalties for malicious and repeated infringements strengthened. This will establish a legal system characterized by "rigorous, comprehensive, swift, and unified protection." Regarding enforcement, efforts should focus on strengthening the intellectual property enforcement team, enhancing enforcement capabilities and standards, establishing cross-departmental and cross-regional enforcement cooperation mechanisms, and intensifying specific enforcement actions to combat all forms of intellectual property infringement and violations, thereby creating a powerful deterrent effect. Judicial protection mechanisms should be improved by establishing specialized intellectual property courts and tribunals, optimizing litigation procedures, enhancing trial efficiency, and reducing the costs of rights enforcement to provide innovative entities with effective judicial remedies. At the service level, a diversified public intellectual property service system should be developed. This includes establishing public intellectual property information service platforms for innovation entities, offering patent search and analysis, early warning, and other services to help them avoid infringement risks and achieve rational intellectual property portfolio planning. Efforts must be intensified to promote awareness and education on intellectual property protection, enhancing societal understanding of its importance. This will foster a positive social environment that "respects knowledge, innovation, and intellectual property."

3.5 Promoting cross-industry integration and cultivating new business models

In Schumpeter's innovation theory, the core concept of "new combinations of production factors" manifests in the industrial sector primarily through cross-sector integration, which drives business model innovation and enhances growth momentum. This constitutes a key pathway for supporting innovation-driven development strategies. Advancing cross-industry integration requires breaking through the boundaries of traditional industries, leveraging technological innovation to foster deep intertwined development among primary, secondary, and tertiary industries, as well as between the digital economy and the real economy. Taking next-generation information technology, artificial intelligence, and

biomedicine as frontiers, we should promote deep integration with manufacturing, agriculture, and services to incubate new business models like smart manufacturing, intelligent agriculture, and digital services. For instance, industrial internet platforms can optimize resource allocation efficiency by opening up full-chain data across production, distribution, and consumption. Leveraging digital technology, we can restructure agricultural production, processing, and sales methods, vigorously developing new models such as contract farming and smart cold chain logistics. While building platforms for industrial convergence and innovation, we will form cross-industry innovation alliances and industrial parks to facilitate the cross-border flow of technology, talent, and capital among different sectors and promote collaborative innovation. We will establish an institutional environment conducive to industrial convergence, break down industry entry barriers, and improve cross-border standards, regulations, and oversight systems to provide growth space for emerging business models. Through cross-sectoral integration, optimize and restructure production factors to continuously cultivate new industries, business models, and patterns. This will inject powerful momentum into innovation-driven development, propelling economic restructuring toward high-end, intelligent, and green directions.

Conclusion

Schumpeter's innovation theory serves as the cornerstone of modern innovation economics. His profound insights into the nature of innovation, innovation agents, and innovation environments provide crucial theoretical guidance for deepening China's innovation-driven development strategy. China's implementation of this strategy must critically assimilate theoretical essence based on its developmental stage and institutional strengths. Key focus should be placed on nurturing innovation agents, building collaborative mechanisms, and optimizing the institutional environment. The concept of “creative destruction” must be integrated into innovation practices to fully unleash entrepreneurial spirit and societal innovation vitality. By deeply integrating theory and practice to overcome core technological bottlenecks and strengthen the independent innovation system, China can elevate its innovation-driven development strategy from “quantitative accumulation” to “qualitative leap,” thereby laying a solid foundation for high-quality development and building an innovation-driven nation.

Conflict of Interest

The authors declare that they have no conflicts of interest to this work.

References

Zhang, M., & Zhang, S. C. (2021). Theoretical and practical foundations of China's innovation-driven development strategy. *Enterprise Science and Technology Development,* (03), 9–11.

Zhao, X., Zhang, R. W., Li, Y. C., & Gao, J. H. (2021). Pathways for integrating China's rural primary, secondary, and tertiary industries in the context of rural revitalization: Based on Schumpeter's innovation theory framework. *Rural Science and Technology, 12*(19), 46–48.

Xu, F. (2025). New quality productivity and strategic management transformation: From factor leap to paradigm reconstruction. *Journal of Chengdu University of Technology (Social Sciences Edition), 33*(02), 34–43.

Zhan, H. W., & Zhang, X. (2024). On the fundamental contradiction in innovation-driven development—With a discussion on China's advantages in resolving this contradiction. *Chongqing Social Sciences,* (08), 97–110.

Li, J. X. (2025). Research on green innovation-driven development of resource-based enterprises in Henan from the perspective of the Central Plains urban cluster. *Business Observer, 11*(07), 104–107.

He, Z. Q. (2025). Analysis of the safeguarding role of economic law in innovation-driven development of science and technology. **China-Arab Science*

and Technology Forum (Chinese-English), (03)*, 143–147.

Zheng, J. H., & Chen, X. (2025). Necessity, challenges, and recommendations for China's innovation-driven development. *China Development Review,* (03), 28–33.

Sun, F. Q., Zhang, J. F., Shi, C. H., Zhang, W. X., & Su, M. (2024). Implementation status, key issues, and policy recommendations for China's 14th Five-Year Plan innovation-driven development goals. *Science and Technology China,* (01), 1–4.

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