

The inheritance and innovation of productivity theory from the perspective of Marxism: From the classical pioneers to the sublimation of new-quality productive forces

Yingying XU

Marxism College, Anhui University of Finance & Economics, Bengbu 233030, China

Abstract: As a fundamental driver of social development, the theory of productive forces evolved via critical inheritance from classical economics to Marxism. Adam Smith stressed the division of labour and markets for productivity growth, while Liszt proposed the concept of national productivity involving material and spiritual capital. From the perspective of historical materialism, Marx founded a scientific theory on the dialectics of productive forces and production relations. Rooted in technological revolution and China's high-quality development, new-quality productive forces creatively develop Marxist productivity theory. This paper traces this theoretical pedigree to interpret its theoretical achievements, limitations and practical value for contemporary Chinese economic development.

Keywords: theory of productive forces; Adam Smith; Friedrich List; Karl Marx; Xi Jinping thought on new-quality productive forces

1 Introduction

As a core category of historical materialism, the theory of productive forces evolve with scientific and technological revolutions and shifts in production modes. Against digital-intelligent and green industrial transformation, fostering new-quality productive forces is essential for China's high-quality development and Chinese-style modernization, which demands a review of its theoretical pedigree. From the Marxist perspective, this paper traces the evolution of productive-force theories, assesses Adam Smith's and Friedrich List's ideas, examines Marx's critical sublation of classical theories, and analyzes how new-quality productive forces inherit and innovate upon Marxist productive-force theories. It clarifies theoretical origins and offers references for understanding China's high-quality development logic.

2 Theories of productive forces in classical economics

2.1 Core ideas of Adam Smith's theory of productive forces

In the mid-18th century, Britain stood at the dawn of the Industrial Revolution. When Adam Smith published *The Wealth of Nations*, Watt's improved steam engine had not yet been widely deployed; water-power-driven workshops and early factory systems were expanding amid the transition from handicraft to machine-based production. Amid the shift from agrarian to industrial society, Adam Smith observed expanding colonial trade, booming commercial capital and a rising bourgeoisie striving to break feudal and mercantilist restraints for a free competition economic order [1]. Against this

background, he put forward his productive-force theory centred on the division of labour, capital accumulation and market mechanisms. Citing the example of the pin-making workshop, Smith showed that specialized labour raised productivity. Capital accumulation fuelled machinery deployment, factory expansion and labour recruitment, deepening the division of labour and generating virtuous cycles. Under free competition, the "invisible hand" of the price mechanism steered resource allocation, bringing spontaneous economic equilibrium, prosperity and fuller unleashing of productive forces.

2.2 Contributions and limitations of Adam Smith's theory of productive forces

Adam Smith's productive force theory generated vital economic insights. His division-of-labour analysis uncovered micro-growth drivers reflected in assembly-line production, while his free-market ideas promoted economic liberalism, capitalist institutions and market expansion. Constrained by its time, his theory has drawbacks. Rooted in the rational-economic-man assumption, it overlooked behavioural complexity and market failures including monopolies and externalities. Overstressing physical capital and labour, it undervalued technological progress and human capital, and overlooked disruptions brought by technological revolutions.

3 Friedrich List's development of productive-force theory

3.1 Main connotations of List's theory of national productive forces

In 19th-century Europe, threatened by British manufactured imports, Germany pursued industrial transformation. Amid rising nationalism, Friedrich List proposed his productive-force theory. Deeming Adam Smith's laissez-faire theory inapplicable to Germany's industrial difficulties, List adapted Smith's ideas to establish a framework for late-developing countries [2]. His concept of national productive forces referred to the systemic power of material and mental capital, rather than mere individual productivity and material-capital accumulation. For material capital, he advocated state-supported infrastructure, machinery upgrading and infant-industry tariff protection to raise national output. For mental capital, he stressed public investment in education and research to cultivate skilled talents and foster a supportive social culture, so as to boost the growth of national productive forces.

3.2 Merits and defects of List's productive-force theory

List contributed greatly to productive-force theories. He provided late-developing countries with a practical industrialization approach that emphasized state leadership and rejected laissez-faire dogmas, allowing countries such as Germany to protect domestic industries and achieve economic catch-up goals. Yet his theory had limitations. His stress on state intervention underestimated market self-regulation; excessive protection might cause enterprise inertia and inefficient resource allocation. Though he highlighted the importance of mental capital, List offered no quantitative framework or micro-level mechanism to operationalize this concept. Furthermore, his framework centered on industrialized nations and overlooked diverse development models and complex global economic relations. Even so, his theoretical legacy offers insights for countries exploring suitable development paths and understanding productive-force laws.

4 Revolutionary contributions of Marx's theory of productive forces

4.1 Theoretical background amid capitalist contradictions

By the mid-19th century, global capitalism expanded alongside severe internal contradictions. Though the Industrial Revolution boosted productive forces, it brought harsh conditions for the working class. Sharp wealth disparity and cyclical crises triggered social unrest, and the proletariat grew into an independent political force pursuing justice. Observing capitalist defects amid proletarian struggles, Karl Marx formulated his theory of productive forces. For Marx, productive forces were not merely material output or technical tools, but the objective material capacity of human beings to transform nature through labour by harnessing natural resources and technologies.

4.2 Profound insights into dialectical unity

Marx's productive-force theory is based on the dialectical unity of productive forces and production relations. Productive forces, the human ability to transform nature, consist of labourers, production tools and labour objects, while production relations promote or constrain their development. Drawing on the labour theory of value, the surplus-value theory and the capital accumulation theory, Marx uncovered capitalist value creation, exploitation and inherent crisis risks. The advancement of productive forces is not merely technical, it is driven by the contradictions between productive forces and production relations. Under capitalism, such contradictions will break through the constraints of private ownership, create material preconditions for socialism and communism, and advance social justice and human emancipation.

4.3 The eternal radiance of an ideological beacon

Marx's theory of productive forces redefines the laws of social development. Taking productive forces as the core driving force of history, it establishes the productive-force perspective of historical materialism to interpret the evolution of social formations and provides analytical tools for studying and critiquing capitalist economies. Still of great applicability today, his theory reveals how contemporary capitalist developments such as financial-capital expansion and transnational monopolies reproduce contradictions between productive forces and production relations. It guides socialist production-relation adjustment, industrial planning and balanced economic growth, and explains North-South disparities and developing-country plights while advocating a fairer, more efficient and sustainable global economic order.

5 Theoretical innovations and new-era practices of Xi Jinping's thought on productive forces

5.1 Theoretical innovation against contemporary global trends

Global technological and industrial transformation characterized by digital, intelligent and green development is intensifying international competition and global supply-chain risks. As China's economy has entered the stage of high-quality development, traditional growth models are confronted with bottlenecks and demand new driving forces. Against this backdrop, the thought on new-quality productive forces creatively innovates Marxist theory of productive forces, helping China break through development constraints and seize technological and industrial revolution opportunities.

5.2 Theoretical innovations with rich connotations

As a modern extension of Marxist theory of productive forces and an important component of Xi Jinping's Economic Thought, new-quality productive forces take technological innovation as the core. They transcend the constraints of traditional production factors to foster new production modes and economic forms enabled by advanced technologies. They advance the integration of digital and real economies as well as industrial coordination, incorporate green development to achieve sustainable growth, and rely on talent cultivation and institutional optimization to improve innovation systems. This framework enriches contemporary Marxist theory of productive forces.

5.3 Concrete practices for high-quality development

Guided by Xi Jinping's thought on new-quality productive forces, China has achieved economic progress in the new era through breakthroughs in core technologies concerning the space station, 5G communications and high-speed rail. High-tech industries drive economic and industrial upgrading. The integration of digital and real economies, intelligent manufacturing and the industrial internet have lifted productivity and transformed traditional industries [3]. The expanding new-energy sectors promote energy conservation, emission reduction and ecological improvement for the Beautiful China initiative. Optimized business environments and policies foster market innovation; unicorn enterprises and specialized, refined, distinctive and innovative SMEs underpin new-quality productive forces. These nationwide practices illustrate China's high-quality socialist economic development, provide references for developing countries, and verify the theory's guiding role in national rejuvenation.

6 Conclusion

This paper traces the evolution of productive-force theory from classical economists to Marx. While classical theories suffered from historical limits, Marx's dialectical analysis achieved theoretical breakthroughs. Xi Jinping's thought on new-quality productive forces inherits the essence of Marxism, adapts to China's realities, guides Chinese-style modernization and provides references for late-developing countries. Future research will further enrich Marxist economic theory.

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- [1] Wu L. A study of modern Western economic thoughts on poverty—revisiting theories of poverty of Marx and Adam Smith[J]. Journal of Hubei University of Economics (Humanities and Social Sciences Edition), 2022,19(7): 25-28.
- [2] Wang Z J. List's theory of "national productive forces" and its significance[J]. Journal of Southwest China Normal University (Humanities and Social Sciences Edition), 2001, (3): 13-16.
- [3] Wang X Y. Logical approaches and paradigm revolutions of new-quality productive forces from the perspective of historical materialism[J]. Nankai Journal (Philosophy and Social Science Edition), 2026, (4): 54-64.