The Balancing Mechanism between Efficiency and Fairness in the Process of Economic Development

Kai Zhuang

Andover High School, Andover, MA 01810, USA

Abstract

Efficiency and fairness constitute two fundamental value objectives enduring throughout economic development. Efficiency centers on optimizing resource allocation, lifting productive capacity and unlocking momentum for economic growth, whereas fairness highlights equal development opportunities, a rational distribution structure and shared development gains. The priority accorded to each dimension shifts across distinct developmental stages. Since the launch of reform and opening-up, China has substantially boosted resource allocation efficiency and fueled rapid economic growth by leveraging market mechanisms. Nevertheless, as economic development transitions to a high-quality phase, mounting concerns have arisen over widening income gaps, regional disparities, urban-rural divides and unequal access to public services. Exclusive emphasis on efficiency risks social stratification, while one-sided pursuit of fairness may dampen developmental dynamism. Accordingly, efforts must be made to advance fairness amid development and elevate efficiency within a fair framework. Starting from the theoretical nexus between efficiency and fairness, this paper analyzes the practical manifestations and root causes of imbalances between the two in economic development and explores viable balancing mechanisms from multiple dimensions, to offer insights for advancing sustained and sound economic development.

Keywords

Economic development, efficiency, fairness, income distribution, common prosperity, balancing mechanism.

1. Introduction

Coordinating the relationship between efficiency and fairness stands as an essential task in economic development. Efficiency bears resource allocation, economic growth and market dynamism, while fairness concerns development opportunities, distribution order and benefit sharing. For decades, the efficiency-oriented approach has been instrumental in unlocking market vitality and driving economic expansion. Yet alongside aggregate economic growth, challenges including income gaps, unbalanced urban-rural development and uneven provision of public services have gradually surfaced[1-3]. Economic development entails not only pursuit of speed and scale but also consideration of whether developmental fruits can be reasonably distributed and whether all social members can access relatively equal development opportunities. Against the backdrop of high-quality development, how to foster fairness while preserving efficiency has emerged as a pivotal agenda for economic and social governance. In this context, research on the balancing mechanism between efficiency and fairness carries practical implications for advancing sustained and healthy economic growth and safeguarding social equity and justice.

2. The Theoretical Relationship between Efficiency and Fairness

2.1. The Connotation of Efficiency

As a core concept in economic development, efficiency generally refers to maximizing output given fixed resource endowments or generating greater economic and social returns with fewer resource inputs. From the perspective of economic operations, efficiency encompasses resource allocation efficiency, production efficiency and institutional operational efficiency. Resource allocation efficiency demands that production factors-land, capital, labor, technology, data and beyond-flow toward sectors with higher productivity and innovation potential. Production efficiency means enterprises and workers lift output via technological progress, management optimization and organizational innovation. Institutional operational efficiency requires policies, rules and governance systems to cut transaction costs and enhance the stability and predictability of economic activities. Within a modern market economy, market mechanisms facilitate optimal resource allocation through price signals, competition and interest incentives, serving as a key channel for efficiency gains. That said, efficiency does not equate to unconditional pursuit of speed and scale; it ought to serve high-quality economic development and improvements in people's wellbeing. Only efficiency aligned with high-quality development requirements can deliver enduring value.

2.2. The Connotation of Fairness

Fairness serves as a vital benchmark for evaluating institutional rationality and social justice amid economic and social progress. Fairness differs from egalitarianism and does not simply demand identical outcomes. Instead, it underscores reasonable safeguards for all social members in terms of development opportunities, institutional rules and benefit sharing. Broadly speaking, fairness can be categorized into opportunity fairness, procedural fairness and relative outcome fairness. Opportunity fairness requires diverse groups to enjoy relatively equal starting points for development in education, employment, entrepreneurship and social mobility. Procedural fairness mandates open, impartial and transparent rules governing market competition, public policies and social governance. Relative outcome fairness stresses that income distribution and wealth accumulation should avoid excessive divergence, and that all social members ought to share the fruits of economic development reasonably. In economic development, fairness manifests itself in both distribution arrangements and capacity building. Balanced provision of public services covering education, healthcare and social security can strengthen individuals' developmental capabilities and thereby bolster overall social vitality[4-6].

3. The Main Manifestations of Imbalance between Efficiency and Fairness in Economic Development

3.1. Persistent Gaps in Income Distribution

As market mechanisms play an increasingly prominent role, capital, technology, data and other production factors exert growing influence over income distribution, resulting in widening income disparities across social groups. To illustrate this issue intuitively, this paper analyzes official 2024 household income data released by the National Bureau of Statistics of China. As shown in Figure 1, grouped by national resident income quintiles, the per capita disposable income of the low-income group stands at RMB 9,542; the lower-middle-income group at RMB 21,608; the middle-income group at RMB 33,925; the upper-middle-income group at RMB 53,359; and the high-income group at RMB 98,809. Measured by population quintile shares, the high-income group captures approximately 45.48% of total household income, whereas the

low-income group accounts for merely 4.39%. The per capita income of the high-income group reaches roughly 10.36 times that of the low-income group.

These figures reveal that despite sustained growth in overall household income in China, notable disparities remain embedded within the income distribution structure. Moderate income gaps can generate incentive effects. Nevertheless, excessive divergence undermines public perceptions of social equity, suppresses aggregate consumption capacity, and impedes progress toward common prosperity.

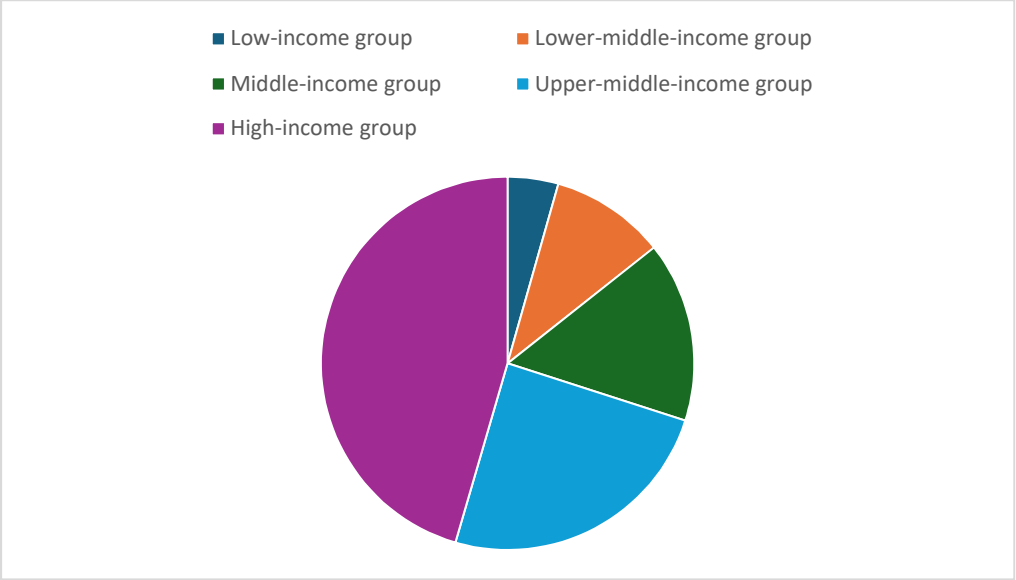


Figure 1. Income Share Table of the Fifth-class Income Group of National Residents in 2024

3.2. Unbalanced Regional and Urban-Rural Development

Unbalanced regional and urban-rural development constitutes a prominent manifestation of the trade-off between efficiency and fairness in economic development. Urban and rural areas still diverge significantly in industrial foundations, employment opportunities, public services and household income. Such disparities not only shape residents' living standards but also undermine equality in development opportunities. To demonstrate this issue intuitively, this paper analyzes 2024 income and consumption data for urban and rural residents released by the National Bureau of Statistics of China.

As illustrated in Figure 2, the nominal growth rate of per capita disposable income reached 4.6% for urban residents and 6.6% for rural residents; the growth rate of per capita consumption expenditure registered 4.7% among urban residents and 6.1% among rural residents. These figures show that rural residents have achieved faster income and consumption growth than their urban counterparts, pointing to a measurable narrowing of the urban-rural divide. Even so, the Engel coefficient stands at 28.8% for urban residents and 32.3% for rural residents, which suggests that rural residents still face scope for upgrading their consumption structure and quality of life. Advancing urban-rural integrated development, optimizing the provision of rural public services, and consolidating rural residents' capacity for sustained income growth represent vital pathways to realize the coordination and integration of efficiency and fairness.

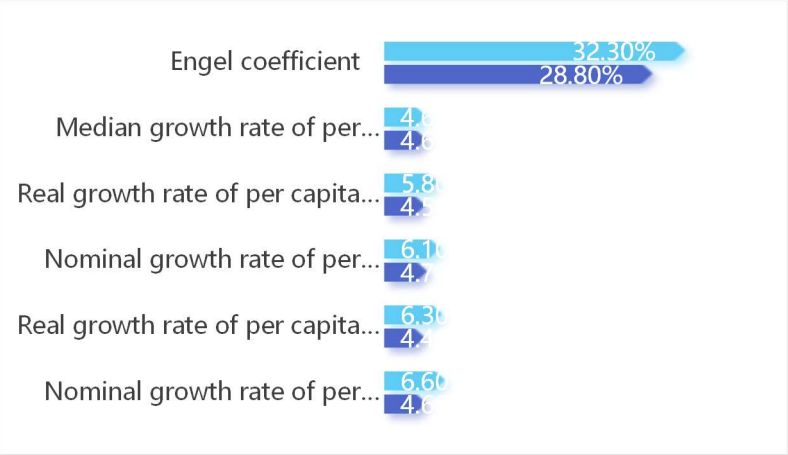


Figure 2. Comparison of income and consumption-related indicators of urban and rural residents in 2024

3.3. Uneven Supply of Public Services

Basic public services including education, healthcare, elderly care, housing and social security constitute core components of livelihood security and lay a crucial foundation for equalizing development opportunities. When public service resources are overly concentrated in large cities, central urban districts and advantaged regions, disparate starting conditions emerge for different population groups. For instance, unequal access to high-quality educational resources shapes children's developmental prospects; uneven distribution of medical resources creates gaps in residents' health security; inadequate elderly care and housing security amplify the living pressure on low-income groups[7-8].

On the surface, uneven public service provision reflects flawed resource allocation; fundamentally, it translates into unequal development opportunities and compromised social fairness. Such disparities erode residents' sense of gain, hinder human capital accumulation and drag down overall social efficiency. Advancing the equalization of basic public services serves not only as a vital instrument to safeguard fairness, but also as fundamental underpinning for elevating the quality of economic development.

4. Analysis of the Causes Underlying Imbalances between Efficiency and Fairness

4.1. Inherent Limitations of the Market Mechanism

The market mechanism boosts the efficiency of resource allocation, yet it is not all-powerful. Market operations follow competition and profit-seeking logic, driving resources to gravitate toward regions and industries with higher returns, superior conditions and lower risks. While this mechanism lifts aggregate efficiency, it tends to concentrate resources among advantaged actors, leaving disadvantaged regions, industries and groups in a competitive inferior position. Furthermore, the market mechanism readily gives rise to externalities, monopolies and information asymmetry. To maximize profits, firms may disregard environmental costs and social responsibilities; platform enterprises may leverage data and scale advantages to secure market dominance; workers lacking sufficient information and bargaining power can hardly secure fair treatment.

A core source of the efficiency-fairness imbalance lies in the fact that the market mechanism is adept at addressing efficiency issues but cannot automatically realize fairness goals. Accordingly, governments must implement necessary adjustments via institutional design and public policies.

4.2. Inadequate Regulatory Capacity of the Distribution System

China has established a distribution system centered on distribution according to labor, supplemented by diverse forms of distribution. Nonetheless, multiple facets of its practical operation remain to be refined. In primary distribution, better coordination is required between the growth of labor remuneration and labor productivity, as income growth remains sluggish for many ordinary workers. In redistribution, taxation, social security and transfer payments still have untapped potential to narrow income gaps. For the third distribution, institutional mechanisms governing philanthropy, public welfare, social donations and volunteer services have not yet achieved full effectiveness.

Insufficient regulation within the distribution system may trigger excessive wealth concentration and impair social fairness[9-10]. Conversely, excessive or ill-designed regulatory interventions risk dampening the initiative of market participants. The optimization of the distribution system does not aim for simplistic equalization. Instead, its core objective is to foster a more reasonable and orderly income distribution pattern while preserving labor enthusiasm and innovation dynamism.

4.3. Structural Disparities in the Allocation of Public Resources

Distinct levels of economic development, fiscal revenue capacities and administrative resource endowments across regions lead to marked divergences in the capacity to deliver public services. Economically developed regions generally boast stronger fiscal capacity and can provide higher-quality education, healthcare, transportation and social security services. By contrast, limited fiscal resources hinder public service infrastructure development in less developed areas. These gaps further influence talent mobility, industrial layout and residents' development opportunities, generating a cumulative "Matthew effect" whereby the advantaged grow stronger and the disadvantaged fall further behind.

Moreover, public resource allocation often exhibits urban-biased, center-biased and construction-oriented tendencies at the expense of balanced development, undermining both the efficiency and fairness of resource utilization. The allocation of public resources should not merely follow economic returns and population density. It must also respect the inclusive, fundamental and bottom-line nature of basic public services, ensuring all population groups have access to essential developmental conditions.

5. Constructing the Balancing Mechanism between Efficiency and Fairness in Economic Development

5.1. Optimizing the Primary Distribution Mechanism

Primary distribution constitutes the foundational link within the income distribution system and serves as a key starting point for reconciling efficiency and fairness. To refine the primary distribution mechanism, it is essential to uphold distribution according to labor as the principal approach, fully recognize workers' core role in wealth creation, and foster broadly synchronous growth between labor remuneration and labor productivity. Second, it is necessary to establish a sound rational wage growth mechanism, perfect the minimum wage system and collective wage bargaining mechanism, and guarantee reasonable earnings for ordinary workers, especially frontline employees. Third, the distribution mechanism for factor participation needs improvement. While acknowledging the contributions of capital, technology, management, data and other production factors, policymakers should prevent excessive concentration of factor returns toward capital. For workers engaged in new forms of employment, clearer standards for labor rights protection should be formulated, alongside enhanced systems for social insurance, occupational safety and income security.

Primary distribution should embed both efficiency incentives and fairness orientation. Enabling workers to secure steady, reasonable incomes amid economic growth helps lift consumption capacity and public confidence, thereby generating endogenous driving forces for sustainable economic development.

5.2. Reinforcing the Redistributive Adjustment Mechanism

Redistribution represents the primary policy instrument for governments to narrow income gaps and uphold social fairness. Strengthening redistribution requires further upgrading systems covering taxation, social security and transfer payments. In taxation, the regulatory capacity of the tax system should be enhanced to moderate excessive income, ease the tax burden on low- and middle-income groups, and facilitate a more rational income structure. In social security, authorities ought to expand insurance coverage, raise benefit levels, and bolster protection for low-income populations, vulnerable groups and flexible workers. In transfer payments, fiscal funds should be deployed with greater precision and effectiveness, with increased support directed toward underdeveloped regions, rural areas and regions lacking adequate basic public services.

Table 1 intuitively illustrates the practical effects of redistribution. Institutional arrangements including income transfers, medical insurance, elderly care security and livelihood assistance effectively raise household income, relieve living pressures and support disadvantaged groups. Well-designed and effective redistribution does not undermine efficiency. Instead, it mitigates social risks via institutional arrangements, strengthens residents' sense of security and expands consumption potential, ultimately delivering simultaneous progress in fairness and efficiency.

Table 1. The actual basis and role of the redistribution adjustment mechanism

Analysis Dimension	Related data	Main Functions
Transfer income Medical insurance	In 2024, the average net transfer income per capita of the national residents was 7,644 yuan, accounting for 18.5%	Increase residents' income, regulate income gap
Old-age security	The number of people participating in basic medical insurance was 132,638 million	Improve the basic living security level
Social assistance	The number of people covered by employee pension insurance was 534,490 million, and the number of people covered by rural and urban residents' pension insurance was 538,300 million	Relieve the pressure of elderly care, enhance the sense of security in daily life
Overall judgment	The number of people receiving urban minimum living allowance was 625 million, and the number of people receiving rural minimum living allowance was 336.2 million	Provide support for disadvantaged groups, maintain social fairness
Analysis dimension	This includes aspects such as income, medical insurance, pensions, and minimum living allowances.	Promote fairness and sharing through redistribution

5.3. Optimizing the Public Service Equalization Mechanism

Public service equalization serves as a core driver of opportunity equity. Fairness in economic development is embodied not only in equitable income distribution, but also in the equal access of all social groups to basic developmental opportunities. To optimize the public service equalization mechanism, priority should be given to advancing balanced development in education, medical care, elderly care, housing and social security.

In terms of education, high-quality educational resources should be extended to rural and underdeveloped regions as well as disadvantaged schools to narrow disparities in educational opportunities. In terms of medical services, it is critical to strengthen grassroots healthcare

systems and enhance the accessibility and inclusiveness of basic medical resources. Regarding elderly care and housing security, a multi-tiered security system should be improved to mitigate the living burdens of residents. Meanwhile, the efficiency of public service provision can be enhanced through fiscal transfer payments, cross-regional cooperation and the construction of digital public service platforms.

Notably, public service equalization does not mean uniform resource allocation across all regions. Instead, it aims to uphold unified basic service standards, remedy developmental shortcomings, and guarantee foundational developmental capabilities for all social members. Improved public service fairness ultimately contributes to human capital accumulation and delivers long-term gains in overall economic efficiency.

5.4. Improving the Market Supervision Mechanism

Fair competition is a fundamental prerequisite for the efficient operation of a market economy and provides the institutional foundation for reconciling efficiency and fairness. While market mechanisms can fully stimulate economic vitality, such vitality relies on impartial competition rules and standardized market order. Market efficiency and social fairness will be undermined by monopolistic behavior, unfair competition, disorderly capital expansion and widespread information asymmetry.

Accordingly, it is essential to refine the modern market supervision system, improve anti-monopoly and anti-unfair competition regulations, and standardize the orderly development of the digital and platform economy. Specific regulatory measures should prevent large enterprises from excluding small and medium-sized market entities by leveraging their advantages in data, algorithms and capital. Meanwhile, strengthened supervision over labor rights protection, consumer interests and environmental governance is required to ensure that enterprises undertake corresponding social responsibilities while pursuing operational efficiency and profits.

The essence of market supervision is not to constrain market dynamism, but to build a level playing field for all market participants by clarifying institutional rules, stabilizing market expectations and standardizing industrial order. Only efficiency generated on the basis of fair competition can be healthy, stable and sustainable.

6. Conclusion

In conclusion, efficiency and fairness are two indispensable and mutually reinforcing dimensions of economic development. Efficiency focuses on optimal resource allocation and the stimulation of economic vitality, laying a solid foundation for the expansion of social wealth. Fairness, by contrast, emphasizes equal developmental opportunities and reasonable benefit sharing, which constitutes a crucial condition for maintaining social stability and enhancing the sustainability of economic progress. Although a certain tension exists between the two, they share inherent internal unity.

Currently, China's economic development has shifted from high-speed growth to a high-quality development stage, in which developmental goals prioritize quality optimization, structural upgrading, livelihood improvement and social fairness over mere growth speed and scale. Therefore, while leveraging market mechanisms to improve economic efficiency, it is necessary to strengthen government macro-regulation and institutional improvement, covering primary distribution, redistribution, public service equalization and market supervision.

Guaranteeing fairness in the developmental process and advancing efficiency within a fair institutional framework is essential to sustain sound and robust economic development. It also helps unify overall social interests with public wellbeing and people's sense of gain, thereby solidifying the foundation for achieving common prosperity.

References

[1] Kahnt, T., & Tobler, P. N. (2013). Salience signals in the right temporoparietal junction facilitate value-based decisions. *The Journal of Neuroscience*, 33, 863–869.

[2] Greene, J. D., Sommerville, R. B., Nystrom, L. E., Darley, J. M., & Cohen, J. D. (2001). An fMRI investigation of emotional engagement in moral judgment. *Science*, 293, 2105–2108.

[3] Jacobson, L., Koslowsky, M., & Lavidor, M. (2012). tDCS polarity effects in motor and cognitive domains: A meta-analytical review. *Experimental Brain Research*, 216, 1–10.

[4] Charness, G., & Rabin, M. (2002). Understanding social preferences with simple tests. *The Quarterly Journal of Economics*, 117, 817–869.

[5] Mills, K. L., Lalonde, F., Clasen, L. S., Giedd, J. N., & Blakemore, S. J. (2014). Developmental changes in the structure of the social brain in late childhood and adolescence. *Social Cognitive and Affective Neuroscience*, 9, 123–131.

[6] Feng, C., et al. (2021). Common brain networks underlying human social interactions: Evidence from large-scale neuroimaging meta-analysis. *Neuroscience & Biobehavioral Reviews*, 126, 289–303.

[7] Eklund, A., Nichols, T. E., & Knutsson, H. (2016). Cluster failure: Why fMRI inferences for spatial extent have inflated false-positive rates. *Proceedings of the National Academy of Sciences of the United States of America*, 113, 7900–7905.

[8] Tassy, S., et al. (2012). Disrupting the right prefrontal cortex alters moral judgement. *Social Cognitive and Affective Neuroscience*, 7, 282–288.

[9] Bond, D., & Park, J.-C. (1991). An empirical test of Rawls's theory of justice: A second approach, in Korea and the United States. *Simulation & Gaming*, 22, 443–462.

[10] Antal, A., et al. (2022). Non-invasive brain stimulation and neuroenhancement. *Clinical Neurophysiology Practice*, 7, 146–165.