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Layout of Comprehensive Functional Zones in China's Territorial Space and Near-term Regional Guidance (Postprint)

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Abstract

The “Four Major Blocks” overall strategy, when superimposed with major regional strategies and the functional zoning strategy, has provided strong support for China’s coordinated regional development, yet has also introduced potential risks such as resource waste and exacerbated regional development disparities due to strategic fragmentation. Based on a synthesis of the current situation of China’s coordinated regional development, this article, from the perspective of strategic synergy and integration, emphasizes comprehensive territorial spatial coverage, core leadership, and guidance from major strategies, and proposes a comprehensive functional zone layout plan that divides China into ten major areas: the Beijing-Tianjin-Hebei region, the Yangtze River Delta region, the middle Yangtze River region, the upper Yangtze River region, the southern coastal region, the lower Yellow River region and the Fen-Wei Valley, the Yellow River “Ji Zi Wan” region, the Northeast region, the Northwest arid region, and the Qinghai-Tibet Plateau. It further explores the functional positioning and key near-term tasks for different areas, aiming to provide a reference for constructing a territorial spatial development and protection pattern characterized by complementary advantages and high-quality development.

Full Text

Preamble

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Layout of Comprehensive Functional Regions and Recent Regional Guidelines in China

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Abstract

The overall strategy of the “Four Major Sectors,” superimposed with regional major strategies and the major functional oriented zoning strategy, has strongly supported China’s regional coordinated development. However, strategic fragmentation has also introduced potential risks such as resource waste and intensified regional development imbalances. Based on an analysis of China’s regional coordinated development trends, this paper proposes a comprehensive functional region layout from the perspective of strategic synergy and integration. The layout emphasizes full territorial coverage, core area leadership, and major strategic guidance, dividing China into ten regions: Beijing-Tianjin-Hebei, Yangtze River Delta, Middle Reaches of the Yangtze River, Upper Reaches of the Yangtze River, Southern Coastal Area, Lower Reaches of the Yellow River and Fenwei Valley, the “Ji-shaped Bend” of the Yellow River, Northeast China, Northwest Arid Region, and the Qinghai-Tibet Plateau. The functional orientations and recent key tasks of each region are discussed to provide references for building a territorially advantageous, high-quality development and protection pattern.

Keywords: regional coordinated development, comprehensive functional regions, spatial layout, regional guideline

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1. Current Situation and Development Approach

1.1 Development Situation

China’s regional development exhibits three prominent characteristics. First, regional economic growth shows multi-dimensional differentiation, with significant disparities remaining between major economic zones. Between 2012 and 2022, the coefficient of variation in provincial GDP growth rates increased from

4.35% to 8.15%, while the GDP share of the eastern region declined from 39.29% to 35.40% [4,5]. Second, development polarization has become increasingly pronounced, with central cities and urban agglomerations emerging as the primary spatial carriers for economic and social elements. In 2022, the GDP of 19 major urban agglomerations accounted for 85.00% of the national total, up from 77.39% in 2012. Third, some regions face challenges in transforming old and new growth drivers during industrial upgrading, resulting in insufficient development momentum.

[Figure 1: see original paper] Differentiation characteristics of regional GDP growth in China from 2012 to 2022

1.2 Regional Coordinated Development Approach

To address these challenges, four key approaches are proposed. First, break administrative barriers and market segmentation by using urban agglomerations as the primary spatial form to create growth engines for high-quality national development. Second, leverage comparative advantages to promote rational regional division of labor, optimizing the spatial layout of industries such as manufacturing and services. Third, improve spatial governance by optimizing territorial spatial structure based on major functional oriented zoning. Fourth, safeguard livelihoods and support development in special types of regions through multi-dimensional assistance measures.

2. Comprehensive Functional Region Layout

2.1 Multiple Strategy Coordination and Integration

The logical relationship among regional coordinated development strategy, regional major strategies, and major functional oriented zoning strategy forms the foundation for comprehensive functional region planning [Figure 2: see original paper]. The integration follows five principles: (1) synergistic integration as the overarching goal; (2) leveraging the radiating and exemplary role of regional major strategies; (3) consolidating the foundational platform and institutional functions of major functional oriented zoning; (4) optimizing territorial development and protection patterns in response to evolving conditions; and (5) providing zoned guidance to promote integration effectiveness.

2.2 Comprehensive Functional Region Layout Plan

Based on these principles, China is divided into ten comprehensive functional regions [Figure 3: see original paper], each with distinct resource endowments and varying capacities for population and industry concentration (Table 1), offering complementary functions and advantages in the new development and security patterns.

Table 1 Core areas and strategic guidelines of ten comprehensive functional regions of China

Comprehensive Functional Region	Core Area(s)	Strategic Guidance
Beijing-Tianjin-Hebei Region	Modern Capital Metropolitan Circle	Beijing-Tianjin-Hebei Coordinated Development
Yangtze River Delta Region	Yangtze River Delta Urban Agglomeration	Yangtze River Delta Integration, Yangtze River Economic Belt Development
Middle Reaches of Yangtze River	Middle Reaches of Yangtze River Urban Agglomeration	Yangtze River Economic Belt Development
Upper Reaches of Yangtze River	Chengdu-Chongqing Twin City Economic Circle, Central Guizhou Urban Agglomeration, Central Yunnan Urban Agglomeration	Chengdu-Chongqing Twin City Economic Circle, Yangtze River Economic Belt Development
Southern Coastal Area	Guangdong-Hong Kong-Macao Greater Bay Area, Beibu Gulf Urban Agglomeration, Coastal Urban Agglomeration of Guangdong-Fujian-Zhejiang	Guangdong-Hong Kong-Macao Greater Bay Area

Comprehensive Functional Region	Core Area(s)	Strategic Guidance
Lower Yellow River & Fenwei Valley	Shandong Peninsula Urban Agglomeration, Central Plains Urban Agglomeration, Guanzhong Urban Agglomeration, Central Shanxi Urban Agglomeration	Yellow River Basin Ecological Protection and High-Quality Development
Yellow River “Ji-shaped Bend” Area	Hohhot-Baotou-Ordos-Yulin Urban Agglomeration, Lanzhou-Xining Urban Agglomeration, Ningxia Yellow River Urban Agglomeration	Yellow River Basin Ecological Protection and High-Quality Development
Northeast China	Harbin-Changchun Urban Agglomeration, Mid-Southern Liaoning Urban Agglomeration	Northeast China Comprehensive Revitalization
Northwest Arid Region	Northern Tianshan Urban Agglomeration	Western China Development
Qinghai-Tibet Plateau	-	Western China Development

4. Policy Recommendations

- (1) Strengthen strategic integration and synergy. Establish mechanisms for coordinating regional major strategies, regional coordinated development strategy, and major functional oriented zoning strategy to form policy 合力.

- (2) Highlight classified guidance. Differentiate policies according to the functional positioning and development stage of each comprehensive functional region.
 - (3) Enhance the driving role of function and efficiency. Improve evaluation systems and institutional arrangements oriented toward high-quality development.
 - (4) Optimize spatial development and protection patterns. Refine territorial spatial planning to ensure implementation at the operational level.
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References

1. Jin F J, Lin Y H, Ma L, et al. Evolution of the strategic position and high-quality development direction of the Yellow River Basin. *Journal of Lanzhou University (Social Sciences)*, 2022, 50(1): 1-12. (in Chinese)
2. Zhang K Y. Effect and development trend of the new mechanism of regional coordinated development. *People's Tribune*, 2024, (3): 40-44. (in Chinese)
3. Sun J W, Wang Z, Jiang Z. Regional coordinated development from the perspective of Chinese-Style Modernization. *Journal of Beijing Administration Institute*, 2023, (3): 1-10. (in Chinese)
4. Xi J P. Promote the formation of a regional economic layout with complementary advantages and high-quality development. *Qiushi*, 2019, (24): 4-9. (in Chinese)
5. Gao G L, Li T J, Sun W Q. Opening-up in China: Progress, reflection and prospect. *Economic Review Journal*, 2018, (10): 26-35. (in Chinese)
6. Jin F J, Chen Z. Evolution of transportation geography in China since reform and opening-up: Patterns and principles. *Acta Geographica Sinica*, 2019, 74(10): 1941-1961. (in Chinese)
7. Sheng L, Quan H. The situation of regional growth differentiation and the geographical pattern of China's new normal. *Fudan Journal (Social Sciences Edition)*, 2018, 60(3): 135-145. (in Chinese)
8. Xi J P. Accelerate the construction of a new development pattern and grasp the initiative of future development. *Qiushi*, 2023, (8): 4-8. (in Chinese)
9. Fan H S. Key points to promote coordinated regional development. *Regional Economic Review*, 2022, (3): 5-7. (in Chinese)

10. Zhang K Y. Great achievements of China's regional coordinated development in the new era. *Governance*, 2023, (2): 2-7. (in Chinese)
11. Fan J, Zhou K. Theoretical thinking and approach exploration on deepening the implementation of major function oriented zoning strategy with "Three-zones and Three-lines". *China Land Science*, 2021, 35(9): 1-9. (in Chinese)
12. Gao G L. Cooperatively implementing the major regional development strategies and the strategies for coordinated regional development and functional zoning. *Frontiers*, 2021, (14): 116-121. (in Chinese)
13. Sheng K R, Fan J. Fundamental institution function of major function oriented zoning for China's land development and protection. *Bulletin of Chinese Academy of Sciences*, 2016, 31(1): 44-50. (in Chinese)
14. Fan J. The strategy of major function oriented zoning and the optimization of territorial development patterns. *Bulletin of Chinese Academy of Sciences*, 2013, 28(2): 193-206. (in Chinese)
15. Xiao J C, Liu B K, Hong H. Building a territorial space system featuring complementary advantages and high quality development. *Regional Economic Review*, 2023, (1): 28-35. (in Chinese)
16. Sun J W, Shi W J. Study on regional coordinated development and Chinese modernization. *Regional Economic Review*, 2023, (2): 5-11. (in Chinese)
17. Fan J. A research on the importance and significance of major function oriented zoning based upon the analysis on the restrictive factors of regional coordinative development. *Bulletin of Chinese Academy of Sciences*, 2007, 22(3): 194-201. (in Chinese)
18. Fan J, Zhou K, Sheng K R, et al. Territorial function differentiation and its comprehensive regionalization in China. *Science China Earth Sciences*, 2023, 53(2): 236-255. (in Chinese)

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Note: Figure translations are in progress. See original paper for figures.

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