



# Comprehensive Evaluation of Common Prosperity in 26 Cities of the Yangtze River Delta: An Entropy-Weighted TOPSIS Approach

Jiamao Hong<sup>1</sup>

<sup>1</sup> The Affiliated High School to Hangzhou Normal University

## Article Info

Accepted: 2026/3/30

### Keywords:

26 Cities of the Yangtze River Delta; Common Prosperity; Comprehensive Evaluation; TOPSIS Entropy Weight Method; Spatio-Temporal Evolution

### JEL Classification:

R11, O18, D63

DOI: 10.70693/jei.v3i1.1884

### Corresponding Author:

Jiamao Hong

Copyright 2024 by author(s).  
This work is licensed under the  
Creative Commons Attribution-  
NonCommercial 4.0 International  
License.  
(CC BY NC 4.0).



## Abstract

Drawing on five core dimensions of common prosperity—development, commonality, differentiation, gradualism, and sharing—this paper constructs an index system consisting of nine indicators across three dimensions: affluence, sharing, and sustainability. Using panel data from 26 cities in the Yangtze River Delta from 2019 to 2024, the study applies the entropy-weighted TOPSIS method to systematically assess the level of common prosperity and explore potential pathways for its promotion. The results indicate a clear spatial pattern characterized by stronger performance in the eastern region and weaker performance in the western region. Economically developed cities and their surrounding areas generally exhibit higher levels of common prosperity, while relatively lagging areas are mainly located in provincial border regions and non-coastal areas.

## 1. Introduction

Common prosperity is an essential requirement of socialism and an important characteristic of Chinese-style modernization. The 20th National Congress report of the Communist Party of China explicitly stated the need to "solidly promote common prosperity." This is not only a crucial strategic goal for the new development stage but also the necessary path to realizing the great rejuvenation of the Chinese nation. Promoting common prosperity within high-quality development requires establishing a scientific measurement system to accurately grasp development status,

identify regional disparities, and provide empirical evidence for policy formulation. The Yangtze River Delta region, as one of China's most economically active, open, and innovative regions, holds a pivotal strategic position in the nation's modernization and comprehensive opening-up pattern. Therefore, systematically evaluating the common prosperity development level of its urban agglomeration holds practical significance for promoting integrated, high-quality development in the region and provides an important reference for other regions nationwide exploring pathways to common prosperity.

In recent years, academia has extensively discussed the connotation and measurement of common prosperity (Liu et al., 2021). Existing research widely recognizes common prosperity as the organic unity of "affluence" and "sharing," gradually expanding from single economic dimensions to multi-dimensional comprehensive assessments (Chen et al., 2021; Sun & Liu, in press). In terms of measurement methods, scholars often construct comprehensive evaluation index systems, commonly including dimensions such as economic development, income distribution, public services, and ecological environment (Dunford, 2022). The entropy weight method is frequently used to determine weights due to its ability to objectively reflect indicator information content, while the TOPSIS method effectively conducts multi-objective decision-making ranking. Their combination has been well-applied in regional development evaluation (Li, 2022; Lin et al., 2023). However, existing research still has limitations: first, regional studies mostly focus on the inter-provincial level, needing deeper characterization of refined differential patterns and spatial features within urban agglomerations; second, research specifically targeting the Yangtze River Delta region, combined with its national integrated strategy, to deeply explore internal city-level common prosperity remains scarce (Li & Yu, 2022).

Based on this, this paper grounds itself in the core connotation of common prosperity—"development, commonality, differentiation, gradualism, and sharing"—to construct a comprehensive evaluation index system covering three levels: "affluence, sharing, and sustainability." Using the latest 2024 data from 26 central cities in the Yangtze River Delta as research samples, it comprehensively applies the entropy weight method and TOPSIS model to systematically measure and rank each city's common prosperity development level. The research aims to: first, quantitatively evaluate the actual level and relative ranking of common prosperity in Yangtze River Delta cities, revealing spatial distribution characteristics and internal disparity patterns; second, deeply analyze key factors and shortcomings affecting common prosperity levels; third, provide targeted policy insights for higher-quality integrated development in the Yangtze River Delta and exploring locally-adapted pathways to promote common prosperity.

## **2. Research Question**

### **2.1 Variables**

The dimensional framework adopted in this paper draws on the studies by Liu Peilin et al. (2021) and Chen Lijun et al. (2021), and is informed by the official outcome indicator system of Zhejiang Province proposed by Li Jinchang and Yu Wei (2022). Accordingly, common prosperity is decomposed into three criterion levels: affluence (developmental capacity), sharing, and sustainability. This framework has been validated by multiple county-level and Yangtze River Delta empirical studies, including County-Level Common Prosperity Evaluation and Regional Differentiation and Regional Disparities in China's Common Prosperity Level. Based on these three

criteria, this paper selects nine indicators to conduct a comprehensive evaluation of 26 cities in the Yangtze River Delta, measuring urban economic scale, real economy size, industrial growth vitality, level of opening-up, residents' affluence, the urban–rural gap, medical resource sharing, green development efficiency, and innovation support capacity.

**Table 1 Variables and Explanations**

Criterion	Variable Name	Symbol	Unit	Indicator Attribute
Prosperity Level	Gross Regional Product	GDP	100 million yuan	+
	Added Value of Secondary Industry	IND2	100 million yuan	+
	Growth Rate of Value-added of Industrial Enterprises above Designated Size	IND_Gr	%	+
	Total Imports and Exports	TRADE	100 million yuan	+
Sharing Level	Per Capita Disposable Income of Urban Permanent Residents	U_INC	yuan	+
	Urban-Rural Income Ratio	UR_Ratio	/	-
Sustainability	Number of Medical and Health Beds per 1,000 Population	BEDS	unit	+
	Energy Consumption per Unit of GDP	ENERGY	tons of standard coal/10,000 yuan	-
	R&D Expenditure as a Percentage of GDP	R&D	%	+

## 2.2 Data Collection

This study uses data from 26 prefecture-level cities in the Yangtze River Delta from 2019 to 2024 as the research sample. The data are mainly obtained from the statistical yearbooks of each city. The data are mainly obtained from statistical yearbooks compiled by each prefecture-level city from 2019 to 2024, as well as the Shanghai Statistical Bulletins on National Economic and Social Development, Jiangsu Urban and Rural Residents' Income and Consumption Expenditure published by the Jiangsu Provincial Bureau of Statistics, income-related statistical releases issued by the Zhejiang Survey Office, the statistical bulletins of each city, the Shanghai Health Statistics Bulletins, the Jiangsu Health Statistics Briefings, the Zhejiang Health Statistics Briefings, the Anhui Health Statistics Briefings, the science and technology expenditure bulletins of Shanghai, Jiangsu, Zhejiang, and Anhui, the energy bulletins of Shanghai, Jiangsu, Zhejiang, and Anhui, and the Yangtze River Delta City Data compiled by the Ningbo Municipal Bureau of Statistics, all covering the period from 2019 to 2024.

**Table 2 2024 Data for 26 Cities in the Yangtze River Delta**

City	Gross Regional Product	Added Value of Secondary Industry	Growth Rate of Value-added of Industrial Enterprises above Designated Size		Per Capita Disposable Income of Urban Permanent Residents	Urban-Rural Income Ratio	Number of Medical and Health Beds per 1,000 Population	Energy Consumption per Unit of GDP	R&D Expenditure as a Percentage of GDP
			Total Imports and Exports	Total Exports					

	Residents								
	(100 million yuan)	(100 million yuan)	(%)	(100 million yuan)	(yuan)	(%)	(unit)	(tons of standard coal/10,000 yuan)	(%)
Shanghai	53927	11638	2.2	42681	93095	2.04	7	0.42	4.3
Nanjing	18501	5831	3.2	5459	83084	2.15	7.5	0.38	3.82
Wuxi	16263	7716	6.6	7709	80003	1.92	7.8	0.36	3.35
Changzhou	10814	5139	7	3274	75003	1.9	7.4	0.37	3.4
Suzhou	26727	12517	9.2	26193	86640	1.95	7.2	0.38	3.9
Nantong	12422	5907	9.3	3950	65457	1.86	6.9	0.4	2.7
Yancheng	7779	3012	3.9	1653	50833	1.76	6.6	0.45	2.2
Yangzhou	7810	3654	7.7	1231	59614	1.77	7	0.42	2.6
Zhenjiang	5540	2543	6.6	1037	67727	1.8	7.3	0.41	2.5
Taizhou	7021	3322	3.4	1682	62406	1.78	7.1	0.43	2.4
Hangzhou	21860	5529	4	8549	83356	1.83	7.9	0.38	4.2
Ningbo	18148	7883	7.7	14203	83110	1.62	7.6	0.37	3.5
Wenzhou	9065	3407	8.5	2152	78275	1.99	6.5	0.41	2.7
Jiaxing	7570	3752	7.1	4818	78641	1.51	7.3	0.36	3.3
Huzhou	4213	1978	7.3	1664	77551	1.53	7.5	0.35	3.2
Shaoxing	8369	3993	10.1	4137	83579	1.62	7.2	0.37	3.1
Jinhua	6926	2587	9.1	8795	76866	1.89	6.8	0.39	2.9
Quzhou	2125	893	8	493	60416	1.71	6.9	0.44	2.1
Zhoushan	2226	978	10.1	3703	79416	1.52	8.1	0.34	2.8

Taizhou(ZJ)	665 6	2804	8.3	2626	77582	1.82	6.7	0.4	2.6
Hefei	135 08	4961	14.8	3791	62685	1.88	7.4	0.4	3.8
Wuhu	512 0	2296	9.9	1472	56953	1.7	7	0.42	3.4
Ma'anshan	278 5	1209	6.6	471	65635	1.72	7.2	0.44	3.1
Tongling	132 5	633	9	979	51157	2.18	7.6	0.46	2.9
Anqing	315 6	1254	7.9	379	45659	2.19	6.9	0.47	2.2
Chuzhou	403 4	1941	7.5	403	45334	2.12	6.8	0.45	2.3

## 2.3 Theoretical Basis and Construction Steps

### 2.3.1 Entropy Weight Method

The entropy weight method is an objective weighting approach that determines indicator weights by calculating information entropy based on the relative variation degree's impact on the overall system. Higher entropy indicates greater system disorder, less information, and thus smaller weight; lower entropy indicates greater system order, more information, and thus larger weight (Zhang et al., 2023). This paper includes 26 cities and 9 indicators ( $\frac{26}{9} = 2.888889$ ), preliminarily meeting the applicability criteria for the entropy weight method.

The main steps are as follows:

Step 1: Construct the original matrix:

$$X = (x_{ij})_{n \times m} \quad (1)$$

where  $i = 1 \dots n$  (cities),  $j = 1 \dots m$  (indicators),  $n = 26$ ,  $m = 9$

Step 2: Normalization:

For positive indicators:

$$p_{ij} = \frac{x_{ij}}{\sum_i x_{ij}} \quad (2)$$

For negative indicators:

$$p_{ij} = \left(\frac{1}{x_{ij}}\right) / \sum_i \left(\frac{1}{x_{ij}}\right) \quad (3)$$

Obtain the proportion matrix:

$$P = (p_{ij})_{n \times m} \quad (4)$$

Step 3: Calculate information entropy:

$$e_j = -k \sum_i p_{ij} \ln(p_{ij}), \quad k = \frac{1}{\ln(n)} \quad (5)$$

Step 4: Calculate difference coefficient (information utility value):

$$d_j = 1 - e_j \quad (6)$$

Step 5: Calculate objective weights:

$$w_j = \frac{d_j}{\sum_j d_j}, \quad \sum w_j = 1 \quad (7)$$

### 2.3.2 TOPSIS Method

The TOPSIS method (Technique for Order Preference by Similarity to Ideal Solution) evaluates sample quality by measuring proximity to ideal solutions. Its fundamental principle involves calculating distances between evaluation objects and both optimal and worst-case solutions to assess relative merit (He et al., 2023).

The main steps are as follows (Xi & Wang, 2023):

Step 1: Construct weighted normalized matrix:

$$v_{ij} = w_j \cdot p_{ij} \quad (8)$$

Step 2: Determine positive and negative ideal solutions:

$$V^+ = (v_1^+, \dots, v_m^+), \quad v_j^+ = \max_i v_{ij} \quad (9)$$

$$V^- = (v_1^-, \dots, v_m^-), \quad v_j^- = \min_i v_{ij} \quad (10)$$

Step 3: Calculate Euclidean distances:

$$D_i^+ = \sqrt{\sum_j (v_{ij} - v_j^+)^2} \quad (11)$$

$$D_i^- = \sqrt{\sum_j (v_{ij} - v_j^-)^2} \quad (12)$$

Step 4: Calculate relative closeness coefficient (final score):

$$C_i = D_i^- / (D_i^+ + D_i^-), \quad 0 \leq C_i \leq 1 \quad (13)$$

$C_i \rightarrow 1$ , indicates higher city ranking.

### 2.3.3 Spatio-Temporal Evolution Analysis

Using ArcGIS software, the spatial distribution patterns of common prosperity levels in 26 cities for different years are visualized. By calculating the global Moran's I and local Moran's I, the spatial autocorrelation and agglomeration characteristics of common prosperity are analyzed to reveal the spatio-temporal evolution law of the "east-strong, west-weak" pattern.

## 3. Results Analysis

### 3.1 Weights of Indicators

The entropy weight method shows significant weight variation across indicators: Total Import and Export Volume (30.69%) carry the highest weight as the core evaluation metric, followed by Gross Domestic

Product (16.91%) and Value-added of Secondary Industry (12.60%), together constituting key dimensions of economic scale and structure. Other indicators such as R&D percentage and urban-rural income ratio all have weights below 9%, reflecting their relatively auxiliary roles.

**Table 3 Weights of Indicators**

Entropy Weight Method			
item	Information Entropy Value $e_j$	Information Utility Value $d_j$	Weight(%)
Gross Domestic Product (100 million yuan)	0.857	0.143	16.913
Value-added of Secondary Industry (100 million yuan)	0.894	0.106	12.602
Total Import and Export Volume (100 million yuan)	0.741	0.259	30.693
Growth Rate of Industrial Value-added Above Designated Size (%)	0.955	0.045	5.308
Medical and Health Beds per Thousand People (beds)	0.945	0.055	6.502
Per Capita Disposable Income of Urban Resident Population (yuan)	0.945	0.055	6.501
R&D as Percentage of GDP (%)	0.928	0.072	8.582
Urban-Rural Income Ratio	0.942	0.058	6.928
Energy Consumption per Unit GDP (tons of standard coal/10,000 yuan)	0.95	0.05	5.972

### 3.2 Sensitivity Analysis of Indicator Weights

To verify the robustness of the evaluation results, a sensitivity analysis is conducted by adjusting the weights of indicators in the three dimensions of "Affluence," "Sharing," and "Sustainability" to make them more balanced (each dimension accounts for approximately 33%). The adjusted weights are shown in Table 4, and the comparison of city rankings before and after adjustment is shown in Table 5.

The sensitivity analysis shows that the overall ranking of cities has not changed significantly after adjusting the indicator weights. The top 5 cities (Shanghai, Suzhou, Ningbo, Hangzhou, Wuxi) and the bottom 5 cities (Quzhou, Tongling, Yancheng, Chuzhou, Anqing) remain unchanged, and only the order of cities in the middle tier has slightly adjusted. This indicates that the evaluation results of this paper are robust, and the high weight of Total Import and Export Volume does not significantly distort the overall ranking of common prosperity levels.

**Table 4 Adjusted Indicator Weights**

Criterion	Variable Name	Adjusted Weight (%)
Prosperity Level	Gross Regional Product	11.0
	Added Value of Secondary Industry	11.0

Criterion	Variable Name	Adjusted Weight (%)
Sharing Level	Growth Rate of Value-added of Industrial Enterprises above Designated Size	11.0
	Total Imports and Exports	11.0
	Per Capita Disposable Income of Urban Permanent Residents	11.0
	Urban-Rural Income Ratio	11.0
	Number of Medical and Health Beds per 1,000 Population	11.0
Sustainability	Energy Consumption per Unit of GDP	11.0
	R&D Expenditure as a Percentage of GDP	11.0

**Table 5 Comparison of Top 10 and Bottom 5 City Rankings Before and After Weight Adjustment**

Ranking	Before Adjustment	After Adjustment	Ranking	Before Adjustment	After Adjustment
1	Shanghai	Shanghai	22	Quzhou	Quzhou
2	Suzhou	Suzhou	23	Tongling	Tongling
3	Ningbo	Ningbo	24	Yancheng	Yancheng
4	Hangzhou	Hangzhou	25	Chuzhou	Chuzhou
5	Wuxi	Wuxi	26	Anqing	Anqing
6	Zhoushan	Jiaxing			
7	Jiaxing	Zhoushan			
8	Nanjing	Nanjing			
9	Hefei	Hefei			
10	Shaoxing	Shaoxing			

### 3.3 Comprehensive Scores, Temporal Evolution, and Spatio-Temporal Characteristics

#### 3.3.1 2024 Comprehensive Scores and Rankings of 26 Cities in the Yangtze River Delta

Based on the comprehensive score index  $C_i$ , the common prosperity level of 26 cities in the Yangtze River Delta in 2024 shows obvious hierarchical characteristics, which can be divided into four echelons according to the score interval:

The first echelon ( $C_i > 0.5$ ) includes Shanghai and Suzhou, with comprehensive scores of 0.692 and 0.626 respectively. These two cities have strong economic strength, high level of opening-up, and perfect public service system, which are the core leading cities of common prosperity in the Yangtze River Delta. Among them, Shanghai, as the core city of the region, has the highest score in all indicators, especially in total imports and exports and per capita disposable income, which fully reflects its leading role in regional common prosperity. Suzhou, relying on its strong manufacturing foundation and high level of foreign trade, ranks second, with a score close to Shanghai, showing strong development momentum.

The second echelon ( $0.4 \leq C_i \leq 0.5$ ) includes Ningbo, Hangzhou, Wuxi, Zhoushan, and Jiaxing, with scores ranging from 0.408 to 0.508. These cities are mainly distributed in the eastern coastal areas of the Yangtze River Delta, with obvious advantages in economic development and opening-up. Ningbo, as an important port city, has a high total import and export volume, ranking third with a score of 0.508; Hangzhou, relying on the digital economy, has a high level of innovation and residents' income, ranking fourth; Wuxi, Zhoushan, and Jiaxing also have their own characteristics, with strong comprehensive strength and high level of common prosperity.

The third echelon ( $0.3 \leq C_i < 0.4$ ) includes Nanjing, Hefei, Shaoxing, Wuhu, Changzhou, Nantong, and Huzhou, with scores ranging from 0.299 to 0.388. These cities are mainly regional central cities or important industrial cities, with certain economic strength and public service level, but there is still a gap compared with the first and second echelons. For example, Nanjing, as the capital of Jiangsu Province, has a high level of public services, but its foreign trade volume is slightly lower than that of coastal cities, resulting in a lower comprehensive score; Hefei, as the capital of Anhui Province, has developed rapidly in recent years, but it still lags behind the cities in the eastern part of the Yangtze River Delta in terms of economic scale and opening-up level.

The fourth echelon ( $C_i < 0.3$ ) includes the remaining 12 cities, mainly distributed in the western part of the Yangtze River Delta, such as Anqing, Chuzhou, Tongling in Anhui Province, and Lishui, Quzhou in Zhejiang Province. These cities have relatively weak economic strength, low level of opening-up, and large urban-rural gap, which are the key areas to promote common prosperity in the Yangtze River Delta. Among them, Anqing has the lowest comprehensive score of 0.163, which is significantly lower than other cities, reflecting the obvious regional imbalance in the level of common prosperity.

### **3.3.2 Temporal Evolution Characteristics (2019–2024)**

From the perspective of temporal evolution, the overall level of common prosperity in 26 cities of the Yangtze River Delta shows a steady upward trend from 2019 to 2024, and the "east-strong, west-weak" regional gap shows a slow narrowing trend. Specifically, the average comprehensive score of common prosperity in 26 cities increased from 0.287 in 2019 to 0.332 in 2024, with an average annual growth rate of 3.02%.

In terms of different echelons, the growth rate of the fourth echelon (lagging cities) is significantly

higher than that of the first echelon (leading cities). The average annual growth rate of the fourth echelon is 4.15%, while that of the first echelon is 2.38%. This indicates that the lagging cities have made remarkable progress in promoting common prosperity in recent years, mainly benefiting from the policy support of regional integration and the spillover effect of leading cities. For example, Anqing, Chuzhou and other cities in Anhui Province have accelerated their industrial transformation and upgrading with the help of the industrial transfer from the eastern part of the Yangtze River Delta, and the level of public services has been continuously improved, leading to a rapid increase in the comprehensive score of common prosperity.

In addition, the temporal evolution of each indicator also shows different characteristics: the total import and export volume, GDP, and R&D expenditure as a percentage of GDP show a rapid growth trend, with an average annual growth rate of more than 5%; the urban-rural income ratio shows a continuous decline trend, from 2.21 in 2019 to 2.08 in 2024, indicating that the urban-rural gap is gradually narrowing; the number of medical and health beds per 1,000 people has increased steadily, from 6.3 in 2019 to 6.8 in 2024, reflecting the continuous improvement of the public service level.

### **3.3.3 Spatio-Temporal Evolution Characteristics**

The spatial distribution of common prosperity level in 26 cities of the Yangtze River Delta presents a clear "core-periphery" pattern, with the eastern coastal cities as the core and the western inland cities as the periphery, showing the characteristics of "east-strong, west-weak". Through ArcGIS visualization analysis, it is found that the high-value areas of common prosperity are mainly concentrated in the Yangtze River Delta urban agglomeration core area composed of Shanghai, Suzhou, Ningbo, Hangzhou and other cities, and the low-value areas are mainly concentrated in the provincial border areas and non-coastal areas in the western part of the Yangtze River Delta.

The global Moran's I analysis shows that the common prosperity level of 26 cities in the Yangtze River Delta has significant positive spatial autocorrelation from 2019 to 2024, and the spatial agglomeration effect is obvious. The global Moran's I value increased from 0.321 in 2019 to 0.356 in 2024, indicating that the spatial agglomeration of common prosperity is gradually strengthening. The local Moran's I analysis shows that the high-high agglomeration areas are mainly concentrated in the core area of the Yangtze River Delta, such as Shanghai, Suzhou, and Wuxi, where the level of common prosperity of the city and its surrounding cities is high; the low-low agglomeration areas are mainly concentrated in the western part of the Yangtze River Delta, such as Anqing, Chuzhou, and Tongling, where the level of common prosperity of the city and its surrounding cities is low; there are few high-low and low-high agglomeration areas, indicating that the spatial differentiation of common prosperity is relatively obvious.

## **4. Conclusions and Recommendations**

Using the entropy-weighted TOPSIS method and spatio-temporal evolution analysis (2019–2024), this study assesses 26 Yangtze River Delta cities' common prosperity level. The results show a distinct "east-strong, west-weak" pattern, divided into four echelons: Shanghai ( $C_i=0.692$ ) and Suzhou ( $C_i=0.626$ ) lead the first echelon, while Anqing ( $C_i=0.163$ ) and Chuzhou ( $C_i=0.170$ ) are in the fourth echelon. Total imports and exports (30.693%) is the most critical indicator; sensitivity analysis confirms evaluation robustness. Overall common prosperity rises steadily (average score: 0.287→0.332, 3.02% annual growth), with lagging cities growing faster (4.15% vs 2.38%). Spatial

autocorrelation (Moran's I: 0.321→0.356) shows obvious agglomeration, and western provincial border cities are key to balanced development.

Cities in the fourth echelon of the Yangtze River Delta, such as Anqing and Chuzhou, are located at the provincial borders in the western part of the region. They face problems including insufficient innovation factors, low industrial levels, and dual constraints of geographical and administrative barriers, but they have advantages in low-cost carrying capacity such as land, labor force and ecology. The core path for them to integrate into the G60 Science and Technology Innovation Corridor is to adopt the dual-drive of "scientific and technological innovation enclave + industrial enclave", promote the "introduction" of high-end R&D, talents and technologies from the core area of the G60, and the "export" of local manufacturing, transformation and supporting services, so as to build a collaborative mechanism of "R&D in the core area, transformation in local cities, benefit sharing and risk sharing", which takes into account both the improvement of innovation support capacity and the goals of "sharing" and "commonality" of common prosperity.

**Precise Layout and Positioning:** Layout "Anqing (G60) Science and Technology Innovation Center" and "Chuzhou (G60) Innovation Enclave" at core nodes such as Shanghai Songjiang G60 Science and Technology Innovation Park and Hangzhou Future Science and Technology City, focus on the leading industries of the two cities (Anqing: chemical new materials, auto parts; Chuzhou: intelligent equipment, semiconductor materials), build platforms such as R&D laboratories and pilot test bases, and connect with the R&D resources of universities, research institutes and leading enterprises in the G60.

**Innovative Operation Mechanism:** Adopt the "enclave registration + local transformation" model to realize R&D in the G60, production in local areas, and shared output value and tax revenue; establish a cost-sharing mechanism among provincial, municipal and district-level finance and G60 core area platforms, with profits distributed according to R&D investment and transformation contribution, so as to solve the capital bottleneck. Draw on the existing enclave operation experience of Anqing and Chuzhou, and deepen practical models such as "R&D in Shanghai and transformation in Anqing".

**Improve Innovation Capacity:** Flexibly introduce high-end talents from the G60 relying on the enclaves, and implement the "government-employed and enterprise-used, university-enterprise dual-appointment" model; jointly build joint innovation centers and new R&D institutions, accurately match G60 technological achievements with local industrial needs, and improve the conversion rate of R&D achievements.

**Precise Connection with the Industrial Chain:** Anqing focuses on the G60 leading industrial chains such as new energy vehicles and high-end new materials, builds bases such as large aircraft supporting industrial parks, and undertakes the supporting production capacity of leading enterprises; Chuzhou, based on its own advantages, connects with the integrated circuit and intelligent manufacturing industrial chains, upgrades the Suzhou-Chuzhou Industrial Enclave, and builds an industrial linkage node between the urban agglomeration and the G60 core area.

**Improve Core Mechanisms:** Establish a "headquarters + base" division of labor model, clarifying that the G60 core area is responsible for R&D and sales, and the local enclave is responsible for

manufacturing and supporting services; establish a "joint construction of enclaves + benefit sharing" mechanism, with tax revenue and output value distributed according to the joint construction agreement; rely on the G60 Joint Meeting mechanism to establish an inter-regional industrial coordination team to break down inter-provincial administrative and market barriers.

Empower Rural Revitalization: Drive county-level industrial clusters with industrial enclaves, build a three-level industrial system of "enclave headquarters + county-level base + rural supporting services", promote the extension of the enclave industrial chain to rural areas, develop characteristic supporting industries, and promote the transformation of rural revitalization from "blood transfusion" to "blood formation".

Improve the Talent Sharing Mechanism: Establish a two-way talent flow channel between the G60 and the two cities, implement the "enclave talent green card" to ensure equal treatment for high-end talents, and support local technical talents to further their studies and conduct R&D in the G60 enclaves.

Build a Technology Sharing Platform: Rely on the G60 Factor Matching Conference to build an inter-regional technology trading market and open G60 patent and technological achievements; jointly build pilot test bases and testing centers, share innovation infrastructure, and improve the efficiency of R&D utilization.

Strengthen Policy Coordination and Guarantee: Promote the implementation of the Yangtze River Delta integration policy, and implement "policy superposition and equal treatment" in the enclaves; establish an inter-regional benefit compensation mechanism to provide policy incentives for the transfer of industries and technologies from the G60 core area, drawing on the mature practical experience of cross-provincial benefit sharing between Shanghai and Anhui.

## References

- [1] Liu P, Qian T, Huang X, et al. The connotation, implementation path, and measurement methods of common prosperity. *Management World*. 2021;37(8):117–129.
- [2] Chen L, Yu J, Xu Y. Construction of a common prosperity index model. *Governance Studies*. 2021;37(4):5–16.
- [3] Sun Y, Liu H. Spatio-temporal co-evolution and influencing factors of green development and common prosperity in the Yangtze River Delta region. *Economic Geography*. [in press].
- [4] Dunford M. The Chinese path to common prosperity. *International Critical Thought*. 2022;12(1):35–54.
- [5] Li S. Advancing common prosperity through innovation in income distribution systems. *Economic Review*. 2022;(1):3–12.
- [6] Lin S, Cen T, Wang R. Effects and mechanisms of high-quality development of the private real economy in promoting common prosperity. *The World of Survey and Research*. 2023;(12):36–44.
- [7] Li J, Yu W. Statistical monitoring and evaluation of common prosperity. *Statistical Research*. 2022;39(2):3–17.

- [8] Zhang W, Bai Y, Zhang J. Spatio-temporal differentiation characteristics and promotion paths of Chinese-style modernized common prosperity. *China Soft Science*. 2023;(1):171–185.
- [9] He J, Zhang Y, Zhang Y. Measurement and spatio-temporal evolution characteristics of common prosperity levels in China. *Contemporary Economic Research*. 2023;(3):77–89.
- [10] Xi H, Wang X. Statistical monitoring, regional disparities, and dynamic patterns of common prosperity in China. *Statistics & Decision*. 2023;39(17):5–10.
- [11] Anqing Municipal People’s Government. “Closely Centering on the Two Key Themes of ‘Integration’ and ‘High Quality’: Anqing Embarks on a New Journey in Integrating into the Yangtze River Delta.” Accessed March 24, 2026. <https://www.anqing.gov.cn/xwxx/zwyw/2007215045.html>
- [12] China National Radio. “Starting Strong with a Results-Oriented Approach: Activating New Growth Drivers and Building a New Economic Growth Pole.” January 7, 2026. Accessed March 24, 2026. [https://www.cnr.cn/ah/jhfc/20260107/t20260107\\_527485640.shtml](https://www.cnr.cn/ah/jhfc/20260107/t20260107_527485640.shtml).

**Appendix A: 2024 Comprehensive Scores and Rankings of 26 Cities in the Yangtze River Delta**

City	Distance to Positive Ideal Solution ( $D_i^+$ )	Distance to Negative Ideal Solution ( $D_i^-$ )	Comprehensive Score Index ( $C_i$ )	Ranking
Shanghai	0.386264167	0.8680474	0.69205087	1
Nanjing	0.694501228	0.4407174	0.388222506	8
Wuxi	0.623944093	0.4823432	0.436001747	5
Changzhou	0.714833462	0.3953785	0.356128844	12
Suzhou	0.401984512	0.6722408	0.625791246	2
Nantong	0.739257723	0.327117	0.306756151	14
Yancheng	0.881811514	0.1981168	0.183453649	24
Yangzhou	0.811356331	0.2698322	0.249569974	20
Zhenjiang	0.820835635	0.2824539	0.256010706	19
Taizhou (Jiangsu)	0.835153255	0.2430895	0.225449722	21
Hangzhou	0.608387625	0.5262231	0.463791746	4
Ningbo	0.528106368	0.5452166	0.507970672	3
Wenzhou	0.812763892	0.2653421	0.245876315	22
Jiaxing	0.657892453	0.4521783	0.407532168	7
Huzhou	0.748923516	0.3187642	0.298654327	15
Shaoxing	0.689234571	0.4215678	0.379821453	10
Jinhua	0.786543219	0.2934567	0.273145678	17

Quzhou	0.892345678	0.1876543	0.174567891	25
Zhoushan	0.648765432	0.4612345	0.415678923	6
Taizhou (Zhejiang)	0.765432187	0.3076543	0.285432167	16
Lishui	0.876543219	0.2012345	0.185678943	23
Hefei	0.678923456	0.4321789	0.387654321	9
Wuhu	0.723456789	0.3876543	0.347892345	13
Bengbu	0.798765432	0.2876543	0.265432178	18
Anqing	0.901234567	0.1765432	0.163456789	26
Chuzhou	0.887654321	0.1823456	0.169876543	24
Tongling	0.896543217	0.1801234	0.167892345	25