Response Path Adapted to the Unbalanced Shrinkage of Small Towns in Metropolitan Areas

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Reporting framework

- Background
- Method
- Result
- Discussion
- Conclusion
Over 600 cities and 4000 small towns in China are now shrinking. And they are mostly on the periphery of urban agglomerations, especially the megacities.
Shrinkage in China: shrinkage with growth

For small towns in metropolitan areas, it shows local shrinkage under the overall urban growth.

- **Strong Growth in Metropolises**
  - outflow of labor force hollowing out of families aging population
  - convenient urban transportation network
  - central supply of capital

- **Local Shrinkage of Small towns**
The shrinkage characteristics of small towns in China are varied, including a population decline, an economic deactivation, the space destruction and environmental pollution.
Population, economy and land are selected as the index dimensions to evaluate the shrinkage of small towns in this study, with a view to systematically explain the phenomenon of shrinkage of small towns.

Population
- total population
- urbanization rate

Economy
- regional GDP
- total fixed asset investments
- local fiscal revenue

Land
- built-up area
- population density
- area of public green space

three-dimensional comprehensive index system of population, economy and land.
2004: small difference, with a spatial pattern of "high in the north and low in the south"
2009: the north-south difference gradually weakened
2014: a spatial structure of “decline of circle layer” which rings the main downtown
Result: Comprehensive Development Index of Small Towns

By comparing the calculated results of the comprehensive development index of small towns with the spatial distribution characteristics of retail business in Wuhan, it is found that the calculated results of the comprehensive development index of small towns are highly consistent with the spatial distribution characteristics of economic industry, so as to further verify the authenticity of the comprehensive development index.
Result: Unbalanced Shrinkage of Small Towns

Shrinkage = $\Delta_{\text{Index}} = \text{Index}_{t1} - \text{Index}_{t2}$

2004-2009: a large area of shrinkage of small towns in Wuhan;
2009-2014: an overall growth trend;
2004-2014: a pattern of "unbalanced shrinkage" which coexists with significant growth and shrinkage.
Result: Unbalanced Shrinkage of Small Towns

data from the single dimension of population.

**2004-2009:** 45 small towns in Wuhan experienced population shrinkage, covering all six districts;

**2009-2014:** only 10 small towns experienced population decline;

**2004-2014:** "shrinkage in the north, growth in the west, growth and shrinkage coexists in the south and east";
## Discussion: Formation Mechanism of the “Unbalanced Shrinkage”

(1) Unbalanced supply of institutions

<table>
<thead>
<tr>
<th>Time</th>
<th>Policy/ Institution</th>
<th>Content</th>
<th>Effect</th>
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<tbody>
<tr>
<td>2004</td>
<td>Opinions on speeding up the construction of small towns</td>
<td>Developing key towns, accelerating investment in infrastructure and public service facilities and guiding the injection of social capital</td>
<td>Effectively promoting the construction and development of Yangluo, Wuhu, Zoumaling, Xingou, Xiangkou, ZuoLing, Shekou and other key towns</td>
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<td>2006</td>
<td>Urban agriculture development planning of Wuhan</td>
<td>Promoting the construction of urban agricultural industrial zones</td>
<td>Six industrial parks have been formed, including Wuhu to Shuangliu, Dongxihu, Caidian to Hannan, Huangpi to Xinzhou and Jiangxia</td>
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<td>2008</td>
<td>11th five-year plan of city spatial layout in Wuhan</td>
<td>Delimiting six new town clusters and six ecological green wedges</td>
<td>Promoting the rapid growth of towns within the new town cluster and limiting the development of towns within the ecological green wedge;</td>
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<td>2010</td>
<td>Master plan of Wuhan</td>
<td>Determine the four-level town system of &quot;main city - new town - central town - general town&quot;</td>
<td>Strengthening the supporting facilities of the new town and the central town and improve the construction scale of the central town</td>
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<td>2011</td>
<td>Opinions on accelerating the implementation of new urbanization</td>
<td>Cultivating the development of central town, characteristic town as a strategy to promote new urbanization</td>
<td>Further strengthening the development level of the central town. And show policy preference on land indicators, financial supply, and public facilities construction</td>
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<td>2012</td>
<td>Notice on the pilot reform of the administrative system of economically developed towns</td>
<td>Carrying out a reform of strengthening the administrative system of expanding the power of economically developed towns</td>
<td>Three regional growth cores have been formed, including Zhashan and Wuhu</td>
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</table>
Discussion: Formation Mechanism of the “Unbalanced Shrinkage”

(2) Centripetal delivery of social capital

With the rapid development of the central downtown of Wuhan since 2005, the capital appreciation effect and effective recovery rate of the central downtown are much higher than the peripheral small towns, causing the government finance and social capital of the traditional small towns to turn to the central supply.
(2) Centripetal delivery of social capital

With the rapid development of the central downtown of Wuhan since 2005, the capital appreciation effect and effective recovery rate of the central downtown are much higher than the peripheral small towns, causing the government finance and social capital of the traditional small towns to turn to the central supply.
(3) Reconstruction of regional division of labor network

Since 1978, small towns become the connection bridge and transfer station connecting the circulation of material resources between "urban area" and "rural area", thus gradually forming a stable "city-town-village" three-level division of labor network within the scope of the city.
Conclusion: Response Path Adapted to the “Unbalanced Shrinkage”

(1) Integrating into the regional differential development pattern and striving for the institutional dividend

(2) Promoting an industrial transformation and attracting the market release of social capital

(3) Improving the living environment and promoting intensive use of land

(4) Building a stable regional division of labour network
Thank you!