

DOCTORAL THESIS

A new pattern of extended metropolitan regions (EMRs) in China: case study of the Changzhutan (CZT) EMR

Dai, Lizhu

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ABSTRACT

Almost 30 years has passed since the concept of EMR first appeared. It is well acknowledged that globalization has been one of the major driving forces in the less-developed countries (LDCs) including China. The 2008 Global “Financial Tsunami” has recently ushered in a new economic dynamic in China, i.e. it has forced the Chinese government to take domestic demand as an important national development strategy and this will change its global economic relations as well as lead to changes in its domestic spatial dynamics. In that regard, new EMRs in Inland China, e.g. the Changzhutan (CZT) EMR in Hunan province, the Wuhan EMR in Hubei province, and the Zhongyuan EMR in Henan province, have been designated by the central government to support the domestic demand. Apart from the Coastal EMRs, i.e. the Pearl River Delta (PRD) EMR, this new phenomenon has also extended EMRs to Inland China. Would EMRs formed in Inland China share the same characteristics, mechanisms and spatial structure as those in the coastal areas? How will the new global economy, the demand for development of a low carbon economy and the domestic market impact on the growth of the interior EMRs in China? What can we learn from this new EMR experience in China, theoretically and practically for future policies and planning?

Using provincial demographic data by municipality and county in 1990-2010 and supplemented by field surveys, we have tested our hypotheses after a literature review on the development of urban regions in the LDCs. Using the CZT as a case, temporal analyses based on municipal level demographic, economic and land-use data have been conducted to verify the hypothetical driving forces. Through the method of Fixed-effects (FE) model, it brings understanding on a possible new urbanization trend in China, which would likely be embedded in local forces against the nation’s new development strategy of emphasizing domestic demand in the

context of the country's transition towards a major global economy.

Through the GIS mapping based county-level data of the CZT, spatial analyses are then conducted to examine the spatial structure of these EMRs in Inland China that are hypothesized as driven by the combination of domestic and global forces. The results have revealed that interior EMRs show a similar pattern to traditional Coastal EMRs in spatial pattern development, i.e. the co-existence of regional concentration of growth dynamics with the intra-EMR dispersion tendency of economic activities from its core to its peripheral “rural areas”, although the nature of these forces might be different. For instance, its industrial activities that play a significant role in region-based concentration have shown a tendency toward “low-carbon” in line with the EMRs designation as the Experimental Zone of the “Two-oriented” (resource conserving and environmental-friendly)¹ Society. Institutional perspectives have also been used to test the planning and management formation mechanisms of the EMR. It is found that the government role has been very significant and proactive in the formation of this region.

Finally, a delimitation method is introduced to delimit the CZT into three rings to further demonstrate the spatial characteristics of region-based urbanization and its dynamics from domestic and global forces regulated by the government.

¹ “两型”社会, it indicates the two directions of development towards resource conserving and environmental protecting.

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