Evolution analysis of Shantytowns reconstruction policy[1]

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Abstract. In the context of rapid economic development and accelerated urbanization, this paper adopts the method of policy measurement to analyze the evolution of China's shantytowns' rebuilding policy in 1994-2017 from four aspects of departmental cooperation, policy quantity and intensity, goals and measures. China included the reconstruction of the shantytowns (hereinafter referred to as "shed reform") into the urban subsistence housing project and started the large-scale implementation of the reform in2008. During the renovation of shantytowns in China, the policy is an important factor to guide the development of shantytowns. Based on this background, taking the reform policy of shantytowers from 1994 to 2017 as the research object, this paper analyzes the evolution of the policies.

Key words. Shanty town transformation, Policy measures, Evolutionary analysis.

1. Introduction

The object of study in the article is on January 1, 1994 - January 1, 2017 enacted policies about shantytowns renovation. And a total of 65 relevant shanty towns reform policies are chosen to constitute a sample for this article.

The paper quantifies the reform policies of shantytowns from three aspects: policy strength, policy objectives and policy measures. The quantitative criteria for the reform of the relevant policies in shantytowns are mainly based on four indicators: scope, intensity, detail level and pertinence. Examples of quantitative standards for policy dynamics, policy measures and policy objectives are shown in Table 2.

Table 1. Distribution of policies related to slum upgrading in China

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Type	Opinion	Notice	Method	Decision
Number	15	37	12	1

Table 2. Quantitative criteria for slum upgrading policy

Index	Standard
Policy dynamics	5——The "decision" issued by the CPC central committee, or the laws enacted by the National People's Congress and its Standing Committee; 4——Regulations, rules, decisions, plans, strategies and policies formulated by the State Council; 3——Provisional regulations, interim regulations, opinions and measures formulated by the State Council, or regulations, rules, decisions, plans, rules and policies formulated by various ministries and commissions; 2——Provisional measures, provisional opinions, compendiums, notification issued by the State Council, planning outline, interim provisions, implementation schemes, opinions and measures formulated by various ministries and commissions; 1——Provisional (trial) approach, interim comments and notices issued by the ministries and commissions.
Policy objective	5——The policy objectives are listed separately in the policy text and one or more goals are clearly set out. Detailed action plans are put forward, and the role of renovating the shantytowns is very obvious; 4—— The policy objectives and terms of tasks are separately listed in the policy text and one or more goals are clearly set out. Detailed action plans are put forward, but the effect on the reconstruction of the shantytowns is general (macro level); 3——There are no separate policy objectives and terms of work in the policy text, but one or more goals and specific action plans are clearly set out, which have a certain effect on the reconstruction of shantytowns; 2——There are no separate policy objectives listed in the policy text. One or more goals are expressed in the policy content, but no concrete plan of action exists?? 1——There is no single policy objective outlined in the policy text, nor does the policy content express one or more objectives without specific action plan.
Policy measures	5——Clearly put forward shantytowns reform methods or implementation details, and have detailed and specific contents; 4——Put forward shantytowns reform methods or implementation details, which is more detailed and has a wide range of objects; 3——There is no clear solution to shantytowns or implementation details, but the content is more detailed and involves this goal; 2——Mentioned the related words of "shantytowns reform or implementation details", but the content is simple; 1——Only proposed shantytown renovation, but no specific content.

The research on the evolution of the shantytowns in the article adopts the annual value of policy dynamics, policy measures and policy objectives. The formula is as follows

$$TPG_i = \sum_{j=1}^{N} T_{ij} P_{ij} G_{ij} i \, [1994, 2007] \tag{1}$$

Among them, i represents the year from 1994 to 2017; N represents the number of policies promulgated in year i, j represents the jth pol icy promulgated in year i, from 1 to N; G_{ij} represents the policy strength of the jth policy; T_{ij} indicates the score of the policy goal of the jth policy; P_{ij} indicates the score of policy measures for the jth policy. Therefore, TPGi represents the annual value of policy dynamics, policy objectives and policy measures in year i.

2. Analysis on the evolution of Shanty town reconstruction policy in China

2.1. Analysis of departmental cooperation evolution

A total of 18 departments and 144 departments are involved in formulating shantytowns reform policies from 1994 to 2017, with an average of 2.22 departments participating in each policy. The Ministry of Housing and Urban-Rural Development, the Ministry of Finance development of the shantytowns and are the major departments in formulating policies for the reconstruction of shantytowns in China.

Table 3. Quantitative distribution of policies formulated by different departments

Department	State Council	national development and Reform Commission	Ministry of housing and urban rural development	Ministry of finance	Ministry of land and resources	people's Bank of China
Policy number	13	17	42	25	13	7
Department	China Banking Regulatory Commission	State Administration of Taxation	State Forestry Administration	Ministry of civil affairs	Ministry of Agriculture	Else
Policy number	5	4	4	3	3	8

2.2. Analysis of policy quantity and dynamics evolution

From Figure 1, the number of policies and the intensity of the policies generally show a positive correlation and an upward trend. In addition, since 2010, the number and intensity of policies issued each year are at a high level and relatively stable. The main reasons are as follows: (1) After 2010,

China has entered a phase of rapid development. The proposal of an innovative national strategy and the promulgation of the National Development have given rise to a series of projects related to the transformation of shantytowns policy; (2) After the global economy entered post-financial crisis era in 2010, the process of urbanization accelerated and the renovating of shantytowns was paid more attention; (3) When Premier Li Keqiang reported the government's work in 2004, he pointed out: In the coming period, the existing "three 100 million people" will be dealt with emphatically.

2.2.1. Analysis of policy objectives evolution Similarly, the data shows that promoting shantytowns reconstruction is the core objective of the shantytowns rebuilding policy in China in 1994 to 2017, while the optimization of transformation mode is the lowest. The reasons are as follows:

First, to promote the core status of the target on shantytowns renovation. Since the 21st century, with the accelerating marketization in our country, the shantytowns have been unable to meet the needs of the times of social and economic development. In order to meet the needs of urban development in our country, shantytowns redevelopment projects have been implemented to effectively enhance the integrity and scientificness of urban planning and to improve housing conditions for the needy people.

Second, the attention paid to the optimization of shed reform is lower, but it is on the rise year by year. First of all, China's early shantytowns retrofit model is mainly dominated by the government's all-around transformation model.With the rapid economic development, the remodeling of shantytowns continues to push the nationwide , and the government almighty transformation mode urgently needs to be optimized; Secondly, the relevant documents in 2012 proposed to encourage private capital to actively participate in affordable housing projects, which opened the way for the reconstruction of shantytowns with private capital investment door. On June 25, 2015, the National Development and Reform Commission proposed to innovate the financing system, which provided a strong backing for the transformation of shantytowns to public-private cooperation.
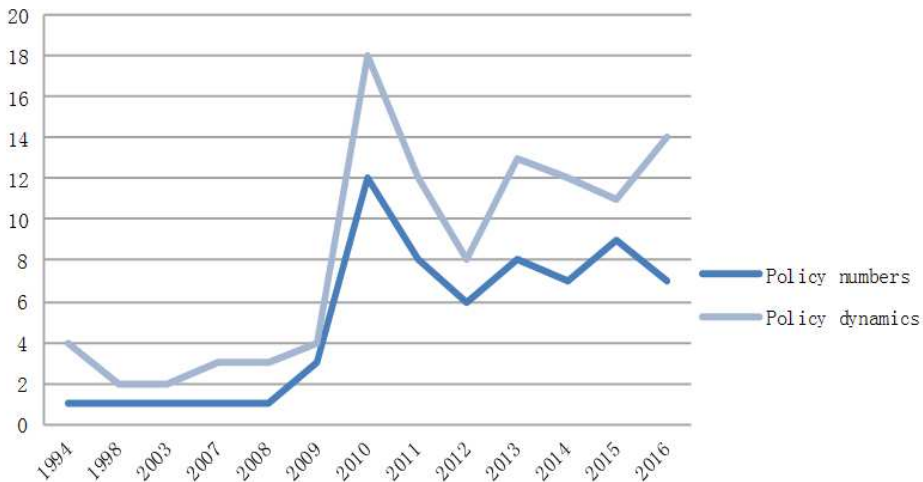

Fig. 1. The number of policies and trends of strength evolution

2.2.2. Analysis of Policy Measures Evolution As can be seen from Figure 3, we can find from 1994 to 2017 that all kinds of measures are in a gradual upward trend. Among them, administrative measures occupy the main position, while the application of fiscal measures and tax measures are relatively less.

The reasons are as follows:

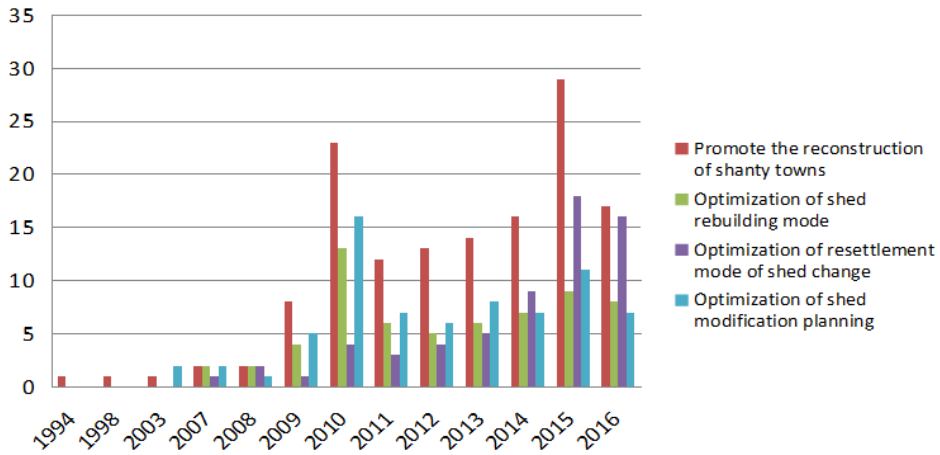First of all, administrative measures have relatively more means of action. The samples in
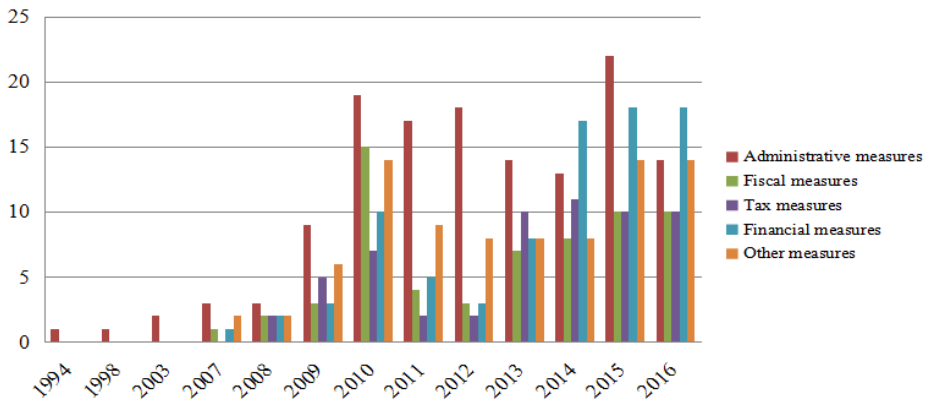
Fig. 2. Evolution trend of policy objectives

Fig. 3. Evolution trend of policy measures

the article all belong to the policies promulgated by the state government departments, the policy departments direct the remodeling of shanty towns through administrative measures is inevitable.

Second, the use of tax measures is relatively small. The tax measures involved in China's shantytowns rebuilding policy are all preferential tax treatments. As the main source of state finance, taxation is bound to be restricted; On the other hand, the formulation of tax measures involves a large number of government departments. Therefore, the application of tax measures is relatively limited.

3. Conclusion and suggestion

First, the form of policy promulgation is dominated by macroeconomic policies with lower intensity and lack of a more compulsory policy. Most of the policies on shantytowns reconstruction in China exist in the form of macroeconomic policies with less efforts.Therefore, in the future transformation of shantytowns, Shantytown reconstruction policy development should pay attention

to improving the intensity of the policies such as decisions, relevant laws and regulations, and strengthen the mandatory provisions for the reconstruction of shantytowns.

Second, the formulation of shantytowns-related policies involves many departments and the cooperation among departments is gradually strengthened. The 65 selected shantytowns policies involved 18 departments, involving a large number of departments. Therefore, in order to ensure efficient cooperation among various government departments, the functions and rights division among government departments should be further improved.

Third, the core objectives of policies in different years are broadly consistent and the goal of promoting shantytowns rebuilding occupies a dominant position. With the constant changes in the economic environment both at home and abroad, It can be seen that China's shantytowns reform policy objective has obvious stage characteristics. With the constant changes in the economic environment, the development of policy objectives is not the same. However, the renovation of shantytowns as a long-term project should pay more attention to the coordinated development among the goals of the shantytowns renovation policy in the long run.

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