

# What Matters in the Urbanisation of China?<sup>1</sup>

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## Abstract

*This study reveals the characteristics of urbanisation in China, which has started as a comprehensive socio-economic plan since 2014. It examines the ongoing urbanisation process from the perspectives of history, the size of city, village urbanisation and costs and benefits of the settlement of rural migrants in cities. The study argues that urbanisation in China is characterised by not only 'spatial urbanisation', which has been commonly observed in developed countries, but also 'institutional urbanisation'. Thus, it is imperative for the Chinese government to overcome the institutional barriers to achieve the goal of ideal urbanisation.*

Keywords: city size, rural migrant, urbanisation

JEL Classification: E17, O18, R10

## 1. Introduction

Urbanisation is often considered to be a natural consequence of industrialisation. However, China has begun to carry out urbanisation on purpose recently, which has appeared to be delayed compared with its economic development because the enlargement of cities was artificially restricted during the last half century.

After entering the 21<sup>st</sup> century, China has begun to focus on urbanisation which could be the driver of further economic growth to overcome the anxiety of middle-income trap.

This study deeply investigates the urbanisation process in China which has been conducted as a national critical development plan, discussing the characteristics of the Chinese urbanisation by clarifying its history and the current policy, as well as conducting a statistical analysis and field survey.

This study consists of four parts. First, the study examines the history of urbanisation and reveals that China has constrained its people's concentration to cities. Second, the study shows that the number of large cities have become relatively small and small cities are still many and tiny regarding the population, as statistics shows. Under restricted population conditions in larger cities, China is now focusing on urbanisation in villages with massive public investment, and the government apparently cannot afford to continue further urbanisation in the future, based on the cost-benefit analysis. Third, we propose that the characteristics of Chinese urbanisation consist of 'spatial urbanisation' and 'institutional urbanisation'. Finally, we conclude that investigating the rationality, sustainability, and affordability of urbanisation matters in China.

## 2. Background

### 2.1 History

The history of urbanisation goes back to the decades before the open-door policy and

economic reform, which began in 1978.

New China (People's Republic of China) was established under the leadership of Mao Zedong on 1<sup>st</sup> October, 1949 and the First Five Year Plan (1952–1957) was initiated to promote economic development with the support of the former Soviet Union. Massive labour flowed into cities since the construction boom occurred in the cities, owing to recovery from war. Furthermore, people's anticipation of having a free apartment allocation under the new socialist government stimulated migration. Excessive labour migration into cities, however, caused the 'Three Overrun' (by Zhou Enlai) problem, which indicates that the demand for labour, wage and food far surpassed (outweighed) the supply. Obviously, the urbanisation ended in failure.

Consequently, the government introduced a new policy, the so called Hukou (household registration) system which limited migration from villages to cities, to control mass migration and ensure social stability. In addition, an anti-urbanisation programme, such as increasing movement of the young generation to villages (Xia Fang Qing Nian), was implemented to promote rural development in coordination with the cities' growth. Through this experience, the Chinese government has become sensitive to labour migration and its ensuing progress of urbanisation. Okamoto (2014a) called this experience 'Trauma of Urbanisation'.

After Deng Xiaoping initiated the open-door policy and economic reform in 1978, industrial parks, which were known as 'Special Economic Zone' or 'Economic Development Zone', were newly established mainly in the coastal region in the 1980s and 1990s for attracting foreign investment. These new industrial areas accepted massive rural migrant workers as cheap labour in the meantime. In the 1980s, this type of migration was termed as 'Blind Flows' (Meng Liu), which implied a surge in the movement of low-educated rural migrants into cities. However, the image of migrants was gradually changed to 'Rural Workers Tide' (Ming Gong Chao) in the 1990s. The term involves the image of rural workers supporting the development of factories in the coastal area, and the government managed the ordered migration based on the contracts between both the inland and coastal governments regarding labour allocation (or migration). Subsequently, these workers settled in the new industrial area of cities, and it helped to advance urbanisation in the coastal region.

This trend changed dramatically after 2000. 'Urbanisation' as one chapter appeared in the Tenth Five Year Plan (2001–2005), implying that 'urbanisation' had become a part of the national economic plan. Hukou, the restricted 'wall' between the urban and rural areas, has been increasingly mitigated or deregulated during the decade, and it has become easier for migrants to settle in small cities such as county-level towns. The medium-sized city became open to migrants under a certain conditions of housing and employment. The larger city, however, was still restricted for migrants.

## 2.2 New-type Urbanisation Plan

After the Xi-Li administration assumed power in 2013, Li Keqiang, the prime minister of China, emphasised plans to create a 'new human-centred style of urbanisation'. This new term appears to indicate that the current administration believes that urbanisation should be a part of the main development plan for the country's further economic growth during the period of the Xi-Li administration. In March 2014, China's State Council materialised this idea as a detailed development plan called 'National New-type Urbanisation Plan 2014-2020', and released it along with an urbanisation target of more than 60%.

Although the contents of this urbanisation plan encompass a wide range of topics concerning urbanisation, they can be mainly summarised as below:

- (1) To help more migrants settle in cities
- (2) To ensure that rural migrant workers enjoy equal public services in cities
- (3) Unification or integration of rural and urban systems
- (4) Regional balance of urban and city cluster development
- (5) Constructing environment-friendly cities
- (6) Increasing the capability of city management

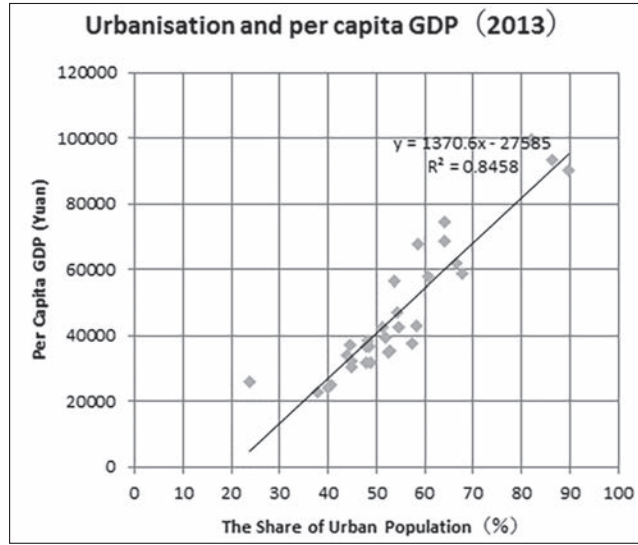
In short, this urbanisation plan, promoted by the Chinese government, can be regarded as a general economic development policy and an institutional reform programme, since the government is expecting to promote infrastructure construction and settlement of migrant workers, aiming to increase consumption and develop the service sector in cities. Moreover, while the latter contents from (4) to (6) are usually observed worldwide, the former points from (1) to (3) are typical Chinese characteristics of urbanisation. Besides, since the government has paid more attention to human settlement than to infrastructure construction, this plan is called 'new-type' urbanisation.

Although UN-Habitat is stressing the importance of urban planning and policy (UN-Habitat 2016), the implementation of urbanisation itself has not been an independent and economic policy throughout the world. Why does the administration of China focus on urbanisation? There are several reasons for this move, and there are some widely known benefits from urbanisation, as pointed out by Glaeser (2011).

First, urbanisation can be the new driver of economic growth. There is a positive relation between urbanisation rate and per capita GDP among provinces, which clearly shows the increase of labour productivity as the population concentrated in cities because it helps to create economies of scale and expand market size. (Figure 1)

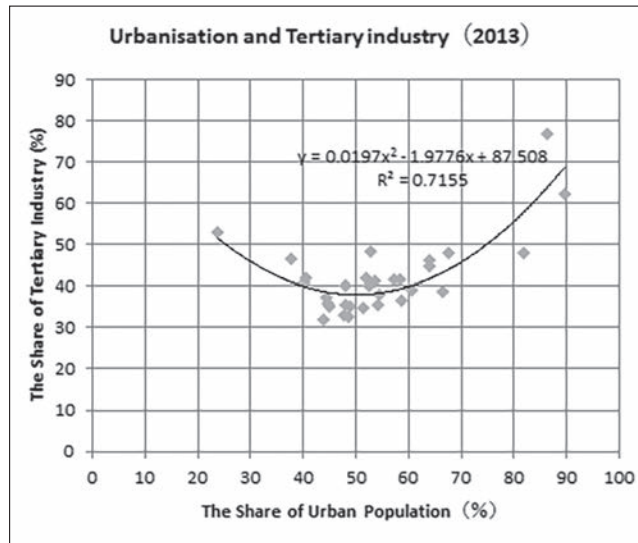
Second, urbanisation can be expected to bring about the transformation of industrial structure from a manufacturing-led economy to a service and consumption-centred economy. The shift from the economy driven by exports to that driven by domestic demand has been one of the inevitable elements and immense challenges for China to realise sustainable growth for years to come. If urbanisation induced these changes, it would help to avoid the 'middle-income trap', which many developing countries are facing today. Figure 2 indicates that highly urbanised provinces mostly are the economies where the tertiary industry has been developing. After provinces reached a 50% urbanisation rate, there is an increase in the share of the tertiary industry as the urbanisation progresses. However, the provinces with low urbanisation rate see a relatively high share of the tertiary industry because of the underdeveloped manufacturing sector.

**Figure 1: Urbanisation and Per Capita GDP by Province**

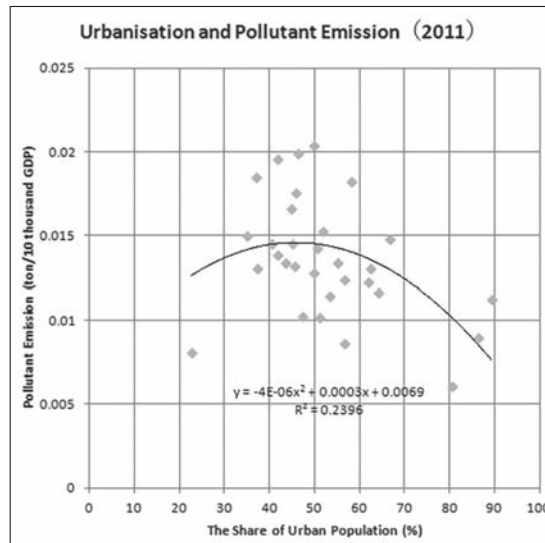


Source: China Statistical Yearbook

**Figure 2: Urbanisation and Tertiary Industry by Province**



Source: China Statistical Yearbook

**Figure 3: Urbanisation and Pollutant Emission by Province**

Source: China Statistical Yearbook

Finally, people living in cities have increased awareness of the environment and learn to support environmentally friendly development in China. For instance, the air pollution in Beijing has become an increasing concern for the government. Although urbanisation is often considered detrimental to the environment, cities are more eco-friendly regarding the usage of energy and emission of garbage (Glaeser 2011). In the case of China, Figure 3 does not show this trend clearly. However, this graph can be interpreted as a sort of the inverted U-shape relation between urbanisation and the emission of waste, which means that the waste emission increases as the population concentrates in cities, whereas the waste emission falls when urbanisation exceeds 50%.

### 3. Characteristics of urbanisation in China

As we discussed in the previous section, China restricted the movement of people from villages to cities historically, and the urbanisation rate is relatively low compared with other countries. However, the Chinese government has been promoting urbanisation from the beginning of the 21<sup>st</sup> century and accelerated the process under the name of New-type Urbanisation Plan since 2014. Here, we further investigate the urbanisation of China from the viewpoints of rationality, sustainability and affordability.

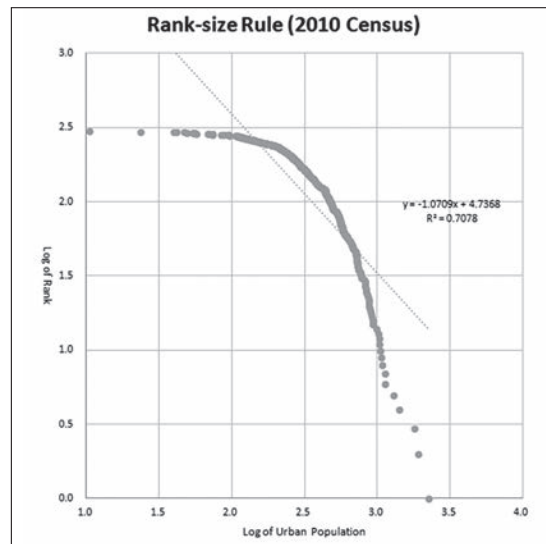
#### 3.1 City System – Rationality

It is well known that city size seems to be distributed according to a certain law, and it is the so called rank-size rule or rank-size distribution of city population, which is a commonly observed statistical relationship between the population sizes and population ranks of a nation's cities. The population of the N<sup>th</sup> largest city is 1/N times the population of the largest city, and it is also referred as Zipf's law. In large samples, this claim is equivalent to the city size

distribution, being characterised by a power distribution with a coefficient of minus one.

There has been extensive research in this field, and the results are almost similar despite several debates in the literature (see, for example, Chauvin et al. 2016). China has far fewer extremely large cities and more small towns than Zipf's law would suggest. Okamoto (2014b) also shows the same result as follows.

**Figure 4: Rank-Size Rule**



Source: Okamoto (2014b)

Moreover, other studies concluded that there are a few large cities and a great number of small towns in China (Henderson 2009; Lu and Wang 2014). Thus, the policy should be considered based on the balanced city system. The ongoing urbanisation policy in China still focuses on keeping city size of megacities such as Beijing, Shanghai, Guangzhou and Shenzhen. This policy, however, obviously will not be sustainable if the city size distribution holds to the rank-size rule.

### 3.2 Village Urbanisation – Sustainability

As shown in the rank-size rule, China should open up the megacities for the settlement of rural workers. However, the government still decided to restrict rural migration in extremely large cities in the 'New-type Urbanisation Plan'. On the other hand, in the plan, China urged that people's concentration in small size towns should be promoted. Under the strict migration condition in larger cities, urbanisation in villages and towns is one of the most feasible options for the Chinese government, and it can also be one of the most vital features of Chinese urbanisation. This urbanisation in China is called 城镇化 (Chengzhenghua) in Chinese, which means 'urbanisation in both city (Cheng) and town (Zhen) areas'.

Here, take the example of Guizhou. Urbanisation in villages and towns is an urgent issue in Guizhou Province in accordance with the progress of 'a comprehensively well-off society'. Since Guizhou is located in highlands with Karst topography, it is challenging for the Guizhou government to conduct urbanisation due to the limitation of flat land. This poor natural condition



compared with the coastal area has caused Guizhou to remain underdeveloped among other provinces, and consequently be ranked the lowest in per capita GDP<sup>2</sup>. Guizhou serves as a typical example of urbanisation in a rural area, considering its less developed feature, and urbanisation with emigration, not immigration, unlike the coastal region.

Topographical constraints such as Karst, highlands and mountains, allow Guizhou to conduct an original and exclusive urbanisation, named 'Newly Mountain type urbanisation'. It can be termed as 'urbanisation with local employment'.

According to the field survey conducted by the author (Okamoto 2016), Guian New Area (National Level) has been established near Guiyang, the capital city of Guizhou, since 2014. Some villages were shut down and residents were shifted to new villages prepared by the government with a definitely 'generous' privilege policy such as sufficient compensation payment for their lands and houses, and so on.

At another rural area in Guian New Area, Foxconn, which is a famous international electronics company, has set up new factories that will be able to provide more than 20 thousand jobs in two years. The local government has invested a huge amount of money into the development of a new town for the people who work at its factories there.

In addition, some other villages have also been refurbished and revitalised under the campaign of the promotion of 'Beautiful Villages' policy, which aims at shifting from an agricultural-based economy to a tourism-based economy, taking advantage of their natural beauty and historical heritage.

All these exercises to develop their town and village, however, have been promoted aggressively by the government and most of the financial resources are provided by the government and collective social capital. This phenomenon can be considered as investment-driven urbanisation – the cost of urbanisation is borne by the government. Furthermore, the development model of every village becomes very similar among other villages, because they learn from one another. This can be called 'Copy and paste urbanisation' – This can be referred to as 'copy and paste urbanisation'. It becomes critical to differentiate their tourism resources to ensure the flow of tourists, which is the next stage of development. Therefore, this kind of urbanisation arguably is not sustainable if the influx of money or visitors stops into the villages.

### 3.3 Human-Centred Urbanisation – Affordability

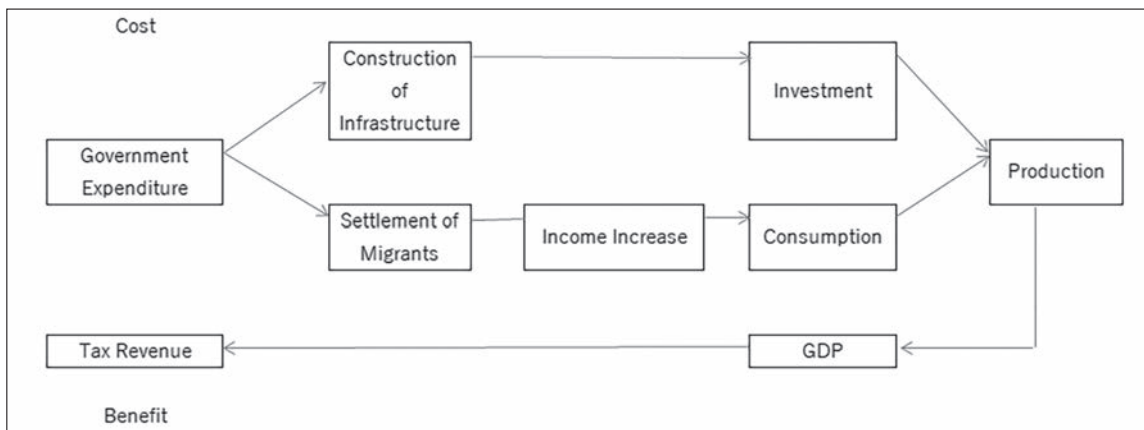
The primary issue of New-type Urbanisation is how to settle the migrants from rural areas into cities. As mentioned above, the cost of urbanisation such as resettlement of farmers and revitalization of villages is enormous, and the government is expected to bear the responsibility of paying the bill of migrant workers' settlement. Then we would have these questions. How much does it cost? Can the government afford to pay the bill?

Several research institutes and scholars (for example, see The Research Group of DRC 2011, Dang 2013) have estimated the cost of migrants' settlement. They estimated that the government has to pay around 100 thousands yuan for additional burden of social safety net and infrastructure when one rural migrant becomes an urban resident. The World Bank and the Development Research Centre (2014) simulated the cost and benefit of urbanisation in the long term based on their economic model, and it indicates that although the cost is larger than the benefit in the short term, it would be able to pay off in the long run.

Okamoto (2014c) has also estimated the cost and benefit of urbanisation, and the results

are discussed in the next section. Figure 5 presents the relation between the costs and benefits. The cost is considered to be the expenditure by the government on construction of urban infrastructures such as transport networks like roads and subways, and public services for settlers, such as social insurance, which is supposed to be only provided to the urban household registration holders. The benefit of urbanisation would be the tax revenue the government can obtain by both expanding consumption by increased new settlements and shifting to tertiary sectors.

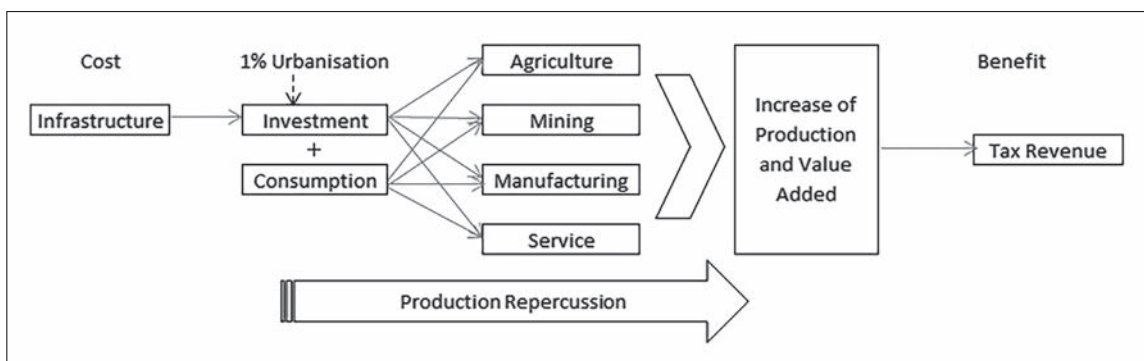
**Figure 5: The Cost and Benefit of Urbanisation**



Source: Okamoto (2014c)

Okamoto (2014c) carried out an economic simulation using the simple input-output model based on the scenario shown in Figure 6. The estimated investment and increased consumption promoted by 1% urbanisation, calculated from the past trend, would stimulate the production of each industrial sector and would lead to the increase of GDP and, consequently increase tax revenue. The simulation results are indicated in Table 1 with a comparison of other research results.

**Figure 6: The Simulation Model**



Source: Okamoto (2014c)



**Table 1: The Simulation Results** (Unit: 100 million Yuan)

|           | Cost   | Benefit |
|-----------|--------|---------|
| DRC       | 11,147 |         |
| Dang-CASS | 17,781 |         |
| WB-DRC    | 31,567 | 91,765  |
| Okamoto   | 6,198  | 2,267   |

Source: Okamoto (2014c)

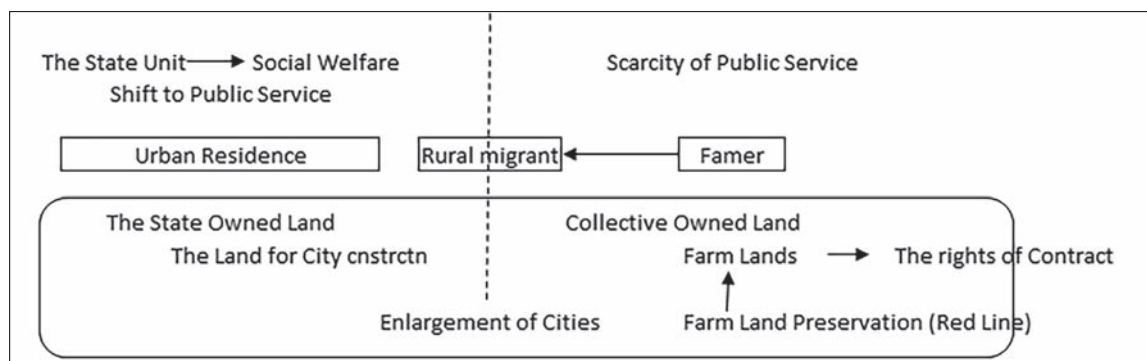
Although the cost estimated by Okamoto (2014c) is underestimated compared with other research because of the exclusion of public service, the result illustrates that the expected revenue of the government will be lower than public spending. It means that the government cannot pay the bill for urbanisation. Therefore, urbanisation conducted mainly by the government can no longer be certainly sustainable in the long run unless the government discovers other sources of revenue<sup>3</sup>.

#### 4. What matters?

##### 4.1 Further Discussion – Process of Urbanisation

Figure 7 illustrates how the process of urbanisation in China has advanced so far for the last few decades and what has occurred in the process. Before 1978, the urban area and rural area were divided clearly in terms of the institution, mainly governed by the state-owned enterprise in urban areas and people’s commune in the countryside, and the migration was strictly controlled and basically prohibited with some exception such as soldiers and university students. After 1978, rural workers began to migrate from their villages to towns and cities, becoming the cheap labour force in factories and helped in the massive exports of China and its rapid development. Nevertheless, no social welfare has been provided to the migrants while urban residents enjoyed the privileges of this welfare. The demand for land in cities has increased due to the needs for dwellings and production sites. For the construction of cities, however, the changes of registration from the collective-owned land to the state-owned land are imperative when farmlands need to be converted to the cities’ construction land. This is because the government needs to preserve farmlands in order to maintain sustainable agricultural production.

**Figure 7: Illustration of Urbanisation in China**



Source: by author

As seen in Figure 7, the Rural-Urban Divide, or the so called Dual System, has been established institutionally in terms of labour, land mobility and the difference of citizenship. ‘Hukou’, the household registration system, played a major role in restricting migration and generated ‘illegal’ migration. In the meantime, migrants without urban citizenship cannot enjoy welfare packages of pension, medication, and education even though they live in cities. In addition, the division of land registration system deters the progress of urbanisation.

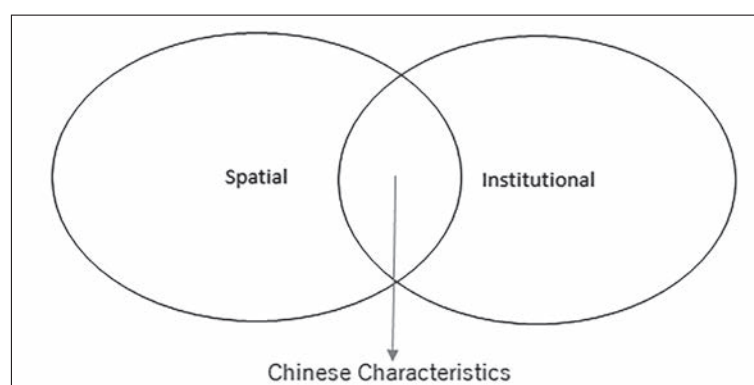
#### 4.2 Spatial and Institutional Urbanisation

In market economy countries, urbanisation in itself is often referred as the process of enlarging cities where labour and capital are concentrated in particular regions, and the land is changing from farms to buildings. Then, the policy the government adopts is a sort of the countermeasure of alleviating the pressure on infrastructure in cities, such as roads, underground and educational and medical institutions. This is termed as ‘Spatial Urbanisation’ in this paper: The government has to address the issue of how to effectively utilize space to adjust to the increasing population.

However, in China, as shown in the promotion of New-type Urbanisation Plan discussed above, urbanisation entails the enhancement of settlement of migrants in cities and also equalisation of both infrastructure and social welfare between rural and urban areas, while focusing on spatial urbanisation. In this regard, the Chinese government has focused on the reform of house registration system or ‘Hukou’ and reform on the unification of production factor market, such as labour and land market, between rural and urban areas. This is termed as ‘Institutional Urbanisation’ in this paper, which mainly focuses on how to reform the economic and social system to promote urbanisation in China.

In short, Chinese urbanisation is characterised by not only spatial issues that other countries experienced, but also institutional issues on the urban-rural division which has been artificially formed during the planned economy era. This discussion is shown in Figure 8.

**Figure 8: Characteristics of Urbanisation in China**



Source: By author

The cross term of spatial and institutional urbanisation indicates the most challenging issues the Chinese government has to tackle. A typical example of this is ‘village in town’, where the rural system is institutionally applied to the place, which spatially has already become an urban area accepting many migrant workers. Bei Si Cun in Beijing is one of the most prominent

villages in town which had been broadcast throughout the country by CCTV.

How to renovate or reform the villages in town is a severe problem in China because there are numerous rural migrants living there illegally and farmers of origin (having lived there with permanent registration) became virtually land owners or office workers in cities. The property right of land is vague because they are owned by a collective unit (all of the rural people literally but the rural government in reality). In addition, the government faces the dual problems of people - where to go - and money - where to come from.

## 5. Conclusion

As discussed above, the concentration of population in cities has not been consistent with the development of the Chinese economy due to the restriction of migration by the government, and the dual system between urban and rural areas has accelerated. On the other hand, a large part of the rural population began to move from the countryside to cities spatially after 1978 despite the restriction of the household registration system, which plays a crucial role in creating the dual system. Thus, the government needs to take appropriate measures against the issues of insufficient supply of social infrastructures such as housing, city transportation network, hospitals and schools, typically occurring in the process of population migration (spatial urbanisation). Furthermore, the government needs to deal with the significant challenges of how to settle the migrant workers who have already lived in cities, by removing the 'wall' segregating the urban and rural areas (institutional urbanisation).

In this study, we have found that the city size distribution has been distorted compared with the Zipf law, caused by the control of urbanisation. The rank-size rule showed that China has relatively small megacities such as Beijing, Shanghai, and a large number of small cities like towns and villages. Even though the urbanisation policy applied to megacities currently still restricts the number of settlements, village urbanisation has passionately been promoted to alleviate the pressure of emigrants from rural areas to the large cities. As seen in the field survey in Guizhou, the government is enhancing 'village urbanisation' such as the construction of new towns and reform of old villages, which are encouraged by huge government investment. Artificially, the rural farmers have become city and town dwellers by the government policy. However, they are nominally living in cities or towns without any equal privileges which urban people enjoy.

Village urbanisation is the right direction from the viewpoint of the rank-size rule, and it helps to create jobs for rural people who had migrated to urban areas earlier. However, the sustainability and feasibility of village urbanisation needs continuous investment by the government in the long run. In reality, according to the simulation, the cost of urbanisation would be larger than the benefit. That is, the increase in tax revenue brought about as the consequence of further economic development by urbanisation would be only around one-third of the government expenditure required for urbanisation. Therefore, the Chinese government has been facing a difficult situation on how to manage its spatial and institutional urbanisation at the same time.

What matters in the urbanisation of China? The author believes that the following topics should be researched further as discussed in the previous section:

- 1) The rationality of control by city size

- 2) The sustainability of urbanisation by the government
- 3) The affordability of policy implementation related to the financial source of the local administration, which is deeply dependent on land development.

The city is presumably a kind of place where government intervention occurs for carrying out urban planning in one situation and the individuals participate in the market freely. Too much intervention by the authority would halt city growth and ‘Laissez-faire’ in cities would lead to the disorder of development. Both extreme situations would decrease the fascination of the city itself. To realise vibrant cities, the exquisite balance between appropriate control by the government and free economic activity of the private sector is necessary. If China could manage both ‘spatial urbanisation’ and ‘institutional urbanisation’ appropriately to create vibrant and prosperous cities through this new-type urbanisation experiment, this experience would contribute to the development of urban policy or urban planning in the future.

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<sup>2</sup> However, per capita GDP in Guizhou became the second lowest in the provincial ranking from 2014, and it was the first time since 1949.

<sup>3</sup> The New-type Urbanisation Plan mentioned that property tax will be an alternate option for additional revenue for the government. However, it seems hard to implement as the trial implementation in Shanghai and Chongqing apparently resulted in failure.

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