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Administrative Urbanization and City-making in Post-reform China: A Case Study of Ordos City, Inner Mongolia

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Abstract: In post-reform China, local governments, instead of the central state, have become major promoters of urbanization. Differing from the existing literature based on Western theories, this article argues that a localized perspective, 'administrative urbanization', can provide a contextual explanation for the mechanism of urbanization in the reform era. The case study of Ordos indicates that new town construction, especially in the inland area, has become the main strategy for investment attraction and economic development. The local government has played a dominant role in this construction through a series of administrative measures, including avoidance of central state regulations, land leasing, high standard infrastructure construction, relocation policies and industrial attraction. This article also explores the issue of unsustainability in the new town, and identifies that underdeveloped industrialization, slow population agglomeration and real estate bubbles are primary threats to the sustainability of administrative urbanization.

Keywords: administrative urbanization; local government; sustainability; Ordos; China

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1 Introduction

Since the 1970s, under neoliberalism and globalization, inter-city competition around urban development has heightened. Accordingly, the importance of local authorities in the urbanization process and economic development has grown. Place promotion (Hall and Hubbard, 1996), urban entrepreneurism (Harvey, 1989) and public-private cooperation (Molotch, 1976) have been the focus of urban strategies in the literature. In Western countries, particularly when the transformation from the Keynesian welfare state to the Schumpeterian workfare state occurred, the emphasis of urban strategies was advanced to promote competition and the free market. To

attract global capital, therefore, local governments began cooperating with business and promoting the economic growth of the city. The main interest of local governments has changed from the allocation of public services to the promotion of local development (Harvey, 1989).

Under the influence of globalization, marketization and decentralization, post-reform China has also experienced a dramatic transformation in urban development. Local governments have become the 'promoters' of urbanization. To advance economic development, local governments construct economic development zones that attract capital and enterprises (Ning, 1998), intervene in land transactions and play an active role in

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the real estate market for the purpose of obtaining 'land rent'. Through administrative jurisdiction adjustments, local governments also incorporate rural places into urban areas, which places more land that can be used for urban construction under its control (Ma, 2005). Local governments are involved in place promotion, such as infrastructure improvement, city regeneration, CBD (Central Business District) construction to improve the city's image to remain competitive (Wu, 2000; He and Wu, 2005; Xu and Yeh, 2005; Lin, 2007).

Since the 2000s, new town (xincheng) construction directed by local governments has swept across China, including coastal and inland areas (Hsing, 2010; Liu et al., 2012; Wang and Liu, 2014a). Land sales and property development driven by new town projects can increase the GDP (gross domestic product), local governments have, therefore, been successively involved in the new town fever. New towns, located in rural areas far from the old city centre, are usually planned as the new 'city core' to hold more population and develop high-tech industries. On the one hand, the new construction has greatly promoted the expansion of cities, facilitated the urbanization process and improved the cities' image and investment environment. On the other hand, the new construction has also involved low compensation for land acquisition, overheated investment in infrastructure and the real estate market, along with other social issues. One consequence of such local government-led deliberate urbanization has been the emergence of some sparsely populated 'ghost towns' (Bernstein, 2008; Day, 2012; Chi et al., 2015; Sorace and Hurst, 2015), which have given rise to a form of new towns that never existed before. This 'city-making' movement has drawn sharp criticism from the media and scholars.

The purpose of this paper is to analyze the reasons this new town form has appeared, the key actors driving this particular urbanization process, the relationship between this form of city-making and the local real estate market and the problems and sustainability of these 'ghost towns'. We use the case of the Ordos City in China's Inner Mongolia Autonomous Region to elaborate these points. Although the case is special due to the rich coal resources and large private financing network in Ordos, it reveals some essential features of city-making movements. First, the Ordos government has demonstrated hegemonic power in the new town

project, and the mechanism and experience in this process can be generalized to understand local government-led urbanization throughout China. In addition, being a well-known ghost town, the new town of Ordos shares similarities with many other cases, such as Zhengdong in Zhengzhou City, Liangjiang in Chongqing City and Qibin in Hebi City. The ghost town issue of Ordos is representative of other places in urban China.

2 The Role of Local Government

The emergence of new town construction and the city-making movement can be attributed to the changing role of local governments. Since the 1980s, with the deepening of fiscal decentralization and economic marketization, local governments have gained more power in terms of fiscal responsibility, land acquisition and urban planning. City making has now become a common strategy to promote economic growth and urban development, particularly for inland cities where the central state and FDI (foreign direct investment) are less present. In this article, using the lens of 'administrative urbanization' (Liu *et al.*, 2012), we argue that the local government plays a decisive and predominant role in the city-making process.

Scholars commonly agree that the state has a dominant presence in China's urbanization process. Especially in the pre-reform era, the central state strictly 'controlled' urban growth through various forms of anti-urban political doctrines that promoted heavy industry development. For instance, the hokou (a government system of household registration) system was created to constrain the influx of the rural population (Chan, 1994). The danwei (workuint) system was introduced to manage urban people's housing, living arrangements and health services and so on. In addition, the central state governed the distribution, growth rate and size of cities and towns (Kirkby, 1985). Also, military industries were relocated to the sanxian (a geo-military concept which covers 13 provinces and autonomous regions with its core area in the northwestern and southwestern China) region (Naughton, 1988), and numerous new towns formed in the inland areas. As a consequence, the level of urbanization was low, with only a relatively small percentage of the total population residing in cities during the pre-reform era (Savage and

Warde, 1993). Urban residents were viewed mainly as producers rather than consumers, and before economic reforms, urban consumption was generally suppressed (Lin, 1998). Additionally, the local government generally obeyed orders and accepted instructions from the higher-level government during this period.

However, the local governments, instead of the central state, have become the leading political force driving China's urbanization since the 1980s. Thanks to marketization, starting with the growth of village and township enterprises and political decentralization, local governments in rural areas (counties, market towns and villages) have gained more resources and incentives to promote urbanization through encouraging rural industrialization, which has been conceptualized as 'urbanization from below' (Ma and Fan, 1994; Ma and Cui, 2002). The roles played by local governments during this phase can be divided into two types: direct and indirect. The direct role refers to 'local state corporatism' (Oi, 1992; Walder, 1995), through which local governments are involved directly in township enterprises. Some enterprises were even established by local governments (Duckett, 2001). The indirect role means local governments only support the enterprises by providing policies or infrastructure, and they are not directly engaged in the operations of the enterprises (Blecher, 1991; Lin, 1997; Zhu, 2004).

Beginning in the 1990s, China's urbanization shifted its path again, and local governments in urban areas (cities and officially certified towns) began to actively develop their rural areas into urban spaces. These actions may be a response to the tax-sharing reforms launched in 1994. According to this fiscal decentralization policy, the extra-budgetary revenues generated from land leasing constitute the largest proportions of fiscal revenue for most cities (Yeh and Wu, 1996; Lin and Ho, 2005; Zhu, 2005). As new spaces for production, economic development zones have been constructed to attract investment (Démurger et al., 2002). Urban regeneration and new town projects have also been introduced as new methods for engineering local development. Local government-led space production has become a decisive factor in China's new urbanization process. To promote space production, high profile urban planning is used to improve the level of modernization (Hsing, 2010). Also, local governments manipulate adjustments in administrative divisions to expand their urban scope (Ma, 2005). Moreover, local governments encourage residents to move into the new town by relocating the city hall (Liu *et al.*, 2012). Market tools are also used by local governments progressively. For instance, land leasing prices have become a bargaining chip for local governments to attract investment (Wei and Jia, 2003; Wu, 2003); through infrastructure provisions, local governments increase the property values of the new town, driving developers and investors to invest (Hsing, 2010).

Several Western perspectives have been introduced to interpret the important role played by local governments in the new wave of urbanization. 'Urban entrepreneurialism' (Harvey, 1989) is one of the most intensively studied and most widely applied perspectives. It is argued that Chinese local governments, like their Western counterparts, have actively participated in advancing urban and economic development through various entrepreneurial approaches. For instance, the local government provides cheap land and a tax deduction to real estate developers, and in return, the developer cooperates with the government on infrastructure construction. To maximize local interests, this 'growth coalition' tends to escape the restrictions of the central state policy (Zhu, 1999). A growth coalition constituted by the local government, the banker and the real estate developer has also formed in many cases (Zhang, 2002; He and Wu, 2005). In addition, the establishment of locally initiated projects and the introduction of the market system are common measures taken by local governments (Chien and Wu, 2011). Thus, China's local governments share the same characteristics as their Western counterparts in terms of their 'growth-first' strategy, public-private cooperation, place promotion and so on (He and Wu, 2009).

In contrast with the similarities demonstrated in previous studies, however, scholars have also emphasized significant differences between Western and Chinese contexts. First, unlike Western countries' neoliberal trends, China's market transition has been a 'gradual reform' process, during which state intervention has played a primary role complementing the market (Ma, 2002; He and Wu, 2009). Second, the political system remains centralized in China, and the performance of local cadres continues to be evaluated by their superiors using local GDP growth. In addition, the level of urbanization and the attraction of FDI and new enterprises

are also important criteria determining local cadres' career advancement (Chien, 2010). Third, Chinese local governments, rather than businesses, control key resources within their territories and dictate the patterns of urban planning, land use and rural-to-urban migration (Wu, 1999; Shen *et al.*, 2006; Lin, 2007). Fourth, several case studies have pointed to a new direction for Chinese urban entrepreneurialism in which territorial cooperation can replace territorial competition. A cross-border, land-related development coalition among different administrative areas is emerging (Yang, 2006; Luo and Shen, 2009; Chien, 2013).

As mentioned above, a consensus has emerged that both commonalties and differences exist between local governments in China and the West. Nevertheless, either to demonstrate that China is the same as the West in this regard or to propose the 'distinctive features' of China, a large portion of existing studies is based on Western theories. In such studies, the purpose is not to explain China's urban practices but to test the applicability of Western theories (Wang and Liu, 2014b). However, to explain the underlying mechanism of the new wave of urbanization in China, and more importantly, to theorize China's urbanization characteristics, it is necessary to examine Chinese perspectives based on empirical studies. Such locally generated knowledge can be used to compare with Western theoretical perspectives. Particularly, for marginalized inland cities that have little or no FDI and lack marketization impetus, their city-making processes and development paths are difficult to explain with Western theories, which make contextual and local theories imperative.

Thus, by examining Chinese practices, this article aims to address the gap in the existing studies on Chinese urban development that have been strongly affected by Western perspectives. We argue that 'administrative urbanization' (Liu *et al.*, 2012), conceptualized as the urbanization process shaped by local state policies carried out through local government directives, catches the essence of China's city-making movement in post-reform China. We employ Ordos City as our case study, and the data used in this study come from our four rounds of fieldwork conducted from 2011 to 2015. Semi-structured interviews were carried out with municipal officials and urban planners who were involved in the new town project. Moreover, a survey focused on residents living in the new town was conducted to gather information

relevant to the evaluation of the residents' living environment. Statistical data, government documents, newspapers, and local historical materials were also collected and utilized in this study.

3 'City-making' in Ordos

3.1 The city-making from coastal to inland areas

First, the new town constructed in Ordos, in essence, is not fundamentally different from the city-making movement found in other parts of China, although the specific administrative tactics used by local governments vary. From this point of view, this study contributes not only to the local processes of urbanization but also sheds light on the general processes of urbanization in China. Geographically, the city-making movement was first developed in the coastal region in the post-reform era and then gradually spread to inland areas. The city revenue derived from land-leasing, which allows the conversion of rural land into urban space, reflects this trend. As shown in Fig. 1, before 2000, land-leasing revenue was concentrated in the coastal eastern China. Since 2000, although a large gap remains, land-leasing revenue has also increased rapidly in inland areas, including the central and western China.

Simultaneously, the main urban spaces produced by local governments have been transformed from development zones to new towns through local administrative measures during the city-making movement. Following the footsteps of the 14 development zones set up during the early reform era in the coastal cities by the central state, Chinese local governments have been pushing strongly for the establishment of development zones since the mid-1990s. It is estimated that by 1997, a total of 4210 development zones, covering a land area of 232 200 ha, were created (Lin, 1998).

However, urban sprawl, represented by large-scale new town projects, has quickly been emerging since the 2000s. Coastal cities are not the only areas involved in the city-making movement (e.g., Binhai new town of Tianjin) (Wei and Jia, 2003). A large number of new towns were built in the central and western China, such as Zhendong, a new town of Zhengzhou (Hsing, 2010), and Liangjiang, a new town of Chongqing. Even third-tier cities have built new urban areas to enhance their competitiveness and attract investment (Liu *et al.*, 2012; Wang and Liu, 2014a; Woodworth, 2015). Many

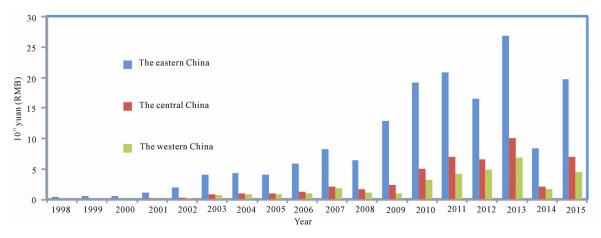


Fig. 1 Land leasing revenue in the eastern, central and western China (1998–2015). Data source: Ministry of Land and Resources of China, 1999–2016. The eastern China refers to Bejing, Tianjin, Shanghai, Hebei, Liaoning, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong, Guangxi and Hainan; the central China refers to Shanxi, Inner Mongolia, Jilin, Heilongjiang, Anhui, Jiangxi, Henan, Hubei, Hunan; the western China refers to Chongqing, Sichuan, Guizhou, Yunnan, Tibet, Shanxi, Gansu, Ningxia, Qinghai, Xinjiang. Source: Ministry of Land and Resources of China, 1999–2016

of them were developed in former development zones. As with other third-tier cities, Ordos built a new town, Kangbashi, based on the previous Qingchunshan development zone.

3.2 The Ordos story

As in other Chinese cities, Ordos City built a new town under the national policy to decentralize administrative and fiscal powers that has given rise to local urbanization processes and city-making movement. Nevertheless, the decision to pursue the new town project was also closely related to the development path of Ordos. Three major factors have contributed to the advancement of local government's urbanization agenda.

First, local economic growth has accelerated due to the post-reform rapid growth of large-scale coal extraction and coal-based industries. Located in the northwest part of the Inner Mongolia Autonomous Region, Ordos is a latecomer to China's reform-era economic growth. In this way, Ordos differs from coastal cities. The coal reserves in Ordos are one-sixth of China's reserves. The economic boom in the 2000s resulted from a massive increase in local coal production. Due to a boost in Chinese coal demand, the production of coal in Ordos achieved dramatic growth after 2000, reaching nearly 6×10^8 t in 2011. Accordingly, its annual GDP growth rate remained at 20% since the 2000s and its per capita GDP exceeded that of Beijing, Shanghai and Hong Kong (Ordos Statistical Bureau, 2012). The local government regarded the urban area as inadequate to support such a rapid pace of economic advancement; consequently, a new town construction plan was implemented to prepare urban space for future economic activities.

Secondly, in China's official territorial administrative structure, which is hierarchical, Ordos was known as the Yeke Juu League (League is a municipal level administrative unit in Inner Mongolia, most of which are agricultural and pastoral areas) prior to 2001. In that year, the Yeke Juu League was changed to Ordos City. This change was more than a change in name; it also represented a shift in the official administrative status from a rural location to a 'city'. Ordos' status shift was not an isolated case, as the same shift from rural 'leagues' and counties to 'cities' was a national policy implemented in many other places in China. Additionally, the conversion gave the local government more authority to maximize tax extraction from lower entities and convert rural land to urban use (Woodworth, 2015). As a result, new national urbanization policies and newly found coalbased wealth enabled the Ordos government to gain greater leeway to construct the Kangbashi New Town (KNT) within the city's administrative boundaries.

Third, the new town plan was developed because the urbanization agenda was helpful to the leaders' career advancement. Local officials are strongly motivated to boost urban development for their political future. More specifically, a local leader's job performance evaluation is typically based on how well the local economy has been developed, which is measured in terms of GDP

growth and the level of additional extra-budgetary income earned, which typically comes from land leasing (Li and Zhou, 2005; Wu *et al.*, 2007). However, local officials never openly reveal what motivates them to implement any local policies. Yet, all the key leaders of Ordos City involved in the new town plan have gone on to become the carders of the Inner Mongolia Autonomous Region Government, which indirectly provides some evidence for their 'political motivation'.

For reasons mentioned above, in 2004, the Ordos City government decided to construct the KNT based on the existing Qingchunshan development zone. Located southwest of the old city centre, Dongsheng District, KNT was planned as the new political, cultural and financial core for Ordos City whose future development would no longer be based on coal extraction and coal-based industrial development (Fig. 2).

3.3 Administrative urbanization in the new town

This section examines the administrative measures taken

by the local government to realize the 'administrative urbanization' during the construction process of the new town.

3.3.1 Getting around central state regulation

The KNT was planned to cover a core area of 32 km². Yet land-use quotas over 70 ha need to be approved by the State Council. In addition, when the KNT plan was implemented, the central state was strictly limiting the conversion of land from rural to urban use. To pass the land-use plan quickly, the local government divided it into a series of small sectors of less than 70 ha. Each of these sectors was then submitted to the Inner Mongolia Autonomous Region Government separately and approved by the provincial government one by one (Song, 2009). Also, where applicable, the local government took full advantage of the preferential policies for ethnic minority in rural land conversion for urban use. According to the nation's Urban Planning Act of 1989, the upper ceiling of urban land for a medium-sized city is 85.1–105.0 m² per capita. However, for ethnic minority

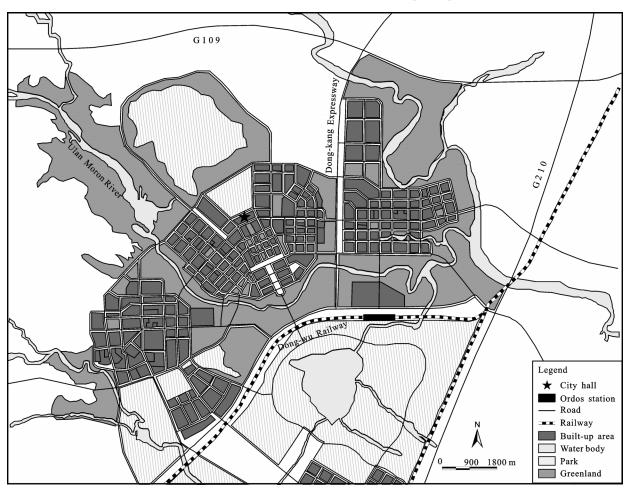


Fig. 2 Kangbashi new town of Ordos City. Data source: Ordos City Planning Board

areas, the regulation can be up to 150 m². KNT adopted this policy in its master plan (Wang and Liu, 2014a).

3.3.2 Market-oriented financing measures

Despite burgeoning local government revenue generated from coal production, the new town project lacked a considerable amount of funding. The Urban Infrastructure Investment Company (UIIC) was founded by the local government to raise funds through land leasing. All of the 32 km² of land was acquired from two villages. The compensation for the villagers was between 2000 and 60 000 yuan (RMB) per ha while the landleasing price reached as high as 5×10^6 yuan (RMB) per ha in some key projects in KNT (Data from the government document on land acquisition in KNT).

Additionally, UIIC raised funds through bond issuances and bank loans, which took land it acquired as collateral. The company completed key projects, such as a water treatment plant and power generation facility, by collaborating with private investors.

3.3.3 High-standard infrastructure construction

To attract non-coal industries, KNT was designed to project an image of a modern, prosperous, comfortable and livable place. Many mega projects, including more than 120 km of roads, parks, plazas, and modern and post-modern buildings were built according to high construction standards (Table 1), which cost 5.3×10^9 yuan (RMB) during 2004–2009. In addition to the municipal infrastructure and residential quarters, administrative office buildings have also received a large amount of investment to prepare for the relocation of the Ordos City government to KNT.

3.3.4 Relocation by political mobilization

To accelerate population growth in KNT, the local government relocated its offices and administrative organizations there. Officials who moved to the new town were given food and transport subsidies. Moreover, apartments were provided at a discount of 200–400 yuan (RMB)/m² to officials who would settle in the new urban center. In addition to officials from the public sector, workers from the main coal enterprises, such as Shenhua Group, were moved to KNT's large residential areas. Furthermore, a number of public facilities were moved to the new town including the public library, museum, and some educational institutions (e.g., Beijing Normal University Affiliated Middle School and Ordos Branch College of Inner Mongolia University).

In addition, preferential policies were established to attract more residents (Table 2). The policies provide free services for disadvantaged groups, such as the disabled, the elderly, ethnic minorities and pregnant women. And free buses were offered for all residents.

3.3.5 Non-coal industries attraction

To attract advanced manufacturing industries, the local government offers enterprise subsidies through coal resources in accordance with the level of investment. Chery Automobile (received 1.66×10^9 t of coal), BOE Technology (1×10^9 t), Vianet (1×10^8 t) were drawn to KNT by this policy. Also, enterprises can use land at a very low price. For instance, Hawtai Motors obtained 400 ha of land at a price of 15 000 yuan (RMB)/ha to build its factory (Wang, 2011).

Table 1 The investment of various infrastructure projects in Kangbashi New Town (2004–2009)

Туре	Investment (10 ⁶ yuan (RMB))	Project
Administrative office building	849	Chuangye Building, Caishui Building, Jincai Building, Guotu Buliding, Office buildings of Armed Police Detachment, Military Subarea, Forestry Bureau, Food and Drug Administration, Construction Committee, Public Security Bureau, Railways Bureau and Security Bureau
Cultural and educational facilities	652	Kangbashi No.1 Primary School, Beijing Normal University Affiliated Middle School, Ordos Branch College of Inner Mongolia University, News Building
Industrial projects	564	Factory of Hawtai Motor, Solar power station, Hengxin batching plant, Wuxin batching plant, Xiangyu brick factory
Residential quarters	1061	Wenming, Beijiang, Hongyuan, C-60, Zhujiang, Xingtai
Commercial projects	167	Central petrol station, Petrol stations No. 4, No. 5, No. 7 and No. 8, Field for driving tests, Office building for a heat source plant, Western Caizhi Center
Municipal infrastructure	1995	Road construction, Heat source plant of western area, Traffic lights, Road lighting works, Water supply projects, Reservoir, gas works, Man-made lake, Plazas, Septic tanks, Road greening

Note: data from the Administrative Committee of KNT

 Table 2
 Preferential policies for residents in Kangbashi New

 Town

Town			
Year	Policy		
2006	Opening the BRT (No. 21) connected KNC and Dongsheng District		
2009	Opening the free bus line of No. 1 and No. 2		
2010	Opening the free bus line of No. 3		
2010	Qualifying disabled people to receive free medical treatment		
2010	Providing the students who enter the university with an allowance $3000{\text -}10500~\text{yuan}$ (RMB)		
2010	Providing pregnant women with daily milk (250 g) and fruits (500 g) $$		
2010	People over 70 years old can receive an annual subsidy of 600 yua (RMB) and the people over 90 can get 1200 yuan (RMB)		

Note: data from the Administrative Committee of KNT

Additionally, a series of preferential policies were established to sponsor tertiary industries. Enterprises can use land at a low price and can receive subsidies, loans and tax exemptions and reductions from the local government (Data from the Administrative Committee of KNT).

Peasants over 50 and all ethnic minorities can receive a free annual

4 The Sustainability of KNT Project

4.1 The sustainability of KNT project

After a decade of construction, administrative urbanization has improved the development conditions of Ordos in many respects. The first is that the growth rate of the built-up area (It refers to a non-agricultural urban area within basic municipal utilities) of Ordos was 230%, reaching 256.6 km² in 2013 (Ordos Statistical Bureau. 2014). The wide urban area can support more industries for development. The second is the high-quality infrastructure and public facilities, which have provided residents with comfortable living conditions. Even though the infrastructure remains inadequate for long-term settlement, according to our survey, over 70% of residents feel satisfied with the status quo. The third is the environmental protection and ecological improvement, which were synchronized with the new town construction. Green areas cover 4900 ha, which was 43% of the land in KNT in 2013. All of these points contribute to the sustainable development of KNT and Ordos City.

4.2 The unsustainability of KNT project

Despite these successes, acute problems connected with

this burst of urbanization have also emerged. The unsustainability of the new town project is quite clear.

4.2.1 Vacant property

The first problem is KNT suffers from the 'ghost town' controversy. In contrast with the high housing sale rate (92%) in KNT, the occupancy rate was low (varying from 1%-55% among the main residential quarters) (Data from the Ordos Development and Reform Commission). Indeed, according to a government investigation, 40% of housing buyers bought housing for the purpose of speculation. In addition to the vacant property, the informal financial network behind the speculation is also a serious problem. Because of the high rates on bank loans and short-term repayment period, a large amount of private savings was channeled into property development through private lending, which distorted the market. Eventually, a credit crisis occurred in the private lending network along with a slump in the coal market and the slowing economy in 2010 and 2011. These factors led to a large amount of suspension or abandonment of property projects in KNT. Also, the property sales dramatically decreased because of the credit crisis and property suspension.

4.2.2 Under-developed industries

Another urgent problem that has plagued the sustainability of KNT is the negative returns on investment and the inability to attract additional new enterprises. By 2010, the number of medium-sized and large enterprises in KNT was 247, of which manufacturing industries were a large portion. However, most of the industries were local cement producers (Data from the Administrative Committee of KNT), and the advanced industries that the local government had most hoped it could attract are not adequately represented in KNT. Accordingly, the total revenue of KNT during 2004-2010 was 2.39×10^9 yuan (RMB) while the total investment was 31×10^9 yuan (RMB) (Data from the Administrative Committee of KNT). Despite attracting several hightech manufacturing enterprises through preferential policies, the barriers to involving them in the new town's future development include a lack of skilled workers and interrelated industries. In an interview, a manager from an auto parts manufacturing company said that, 'There are few local people who can handle our job, thus most of the workers are recruited from Anhui Province (where the parent firm located). This has hindered the long-term development of the company

in Ordos.' Due to over-production in coal industries and the credit crisis in property development in 2012, the economic growth rate has dropped considerably in Ordos. Apparently, the lack of a healthy mix of different types of new enterprises to replace the traditional coal-based industries is a fundamental problem threatening the long-term sustainability of KNT.

4.2.3 Low population growth

The population in KNT increased gradually from 2004 to 2015, but its growth rate fluctuated dramatically during that time. Particularly since 2010, the increase has slowed and the annual population growth rate has not exceeded 10% (Fig. 3). By 2014, 82 000 people were living in KNT, consisting of the employees of Ordos City's public sectors, schoolteachers and students, workers from large coal enterprises and land-lost villagers. Most of the residents moved to the new town as a result of the local government's relocation policy. After the 'relocation residents' were settled, the pace of population growth slowed. Without the presence of new enterprises that can offer new jobs, it is difficult for KNT to attract new residents to alleviate the serious problem of having a large number of vacant new residential buildings and wide empty streets, which has led to the 'ghost town' phenomenon. In addition, the small population in KNT has confined the development of tertiary industries. A private shop owner in Dongsheng District said, 'My wife now works in KNT because her workplace has moved there, but I can't move my business to KNT. There are not enough consumers to support it.

5 Administrative Urbanization as a Policy Tool

The case of Ordos illustrates well that local government-led 'administrative urbanization' is a powerful tool for China's national policy of deliberate urbanization. Especially for the inland cities that lack FDI and adequate domestic investment, the role of the local government is even more important. To obtain more resources for development, the local government uses all means to avoid the central state's regulatory policies. To attract investment, the local government invests heavily in infrastructure construction to improve the city image as a business-friendly location. As with other areas in China, land leasing has been a major source of financing

for urban construction. The huge gap between the price of land acquisition and leasing makes the local government the biggest beneficiary. In addition, the local government also collaborates with the private sector to address the shortage of construction funds. Faced with the problem of slow population growth, the local government adopts an approach of political mobilization through administrative directives. Thus, local government offices and public facilities (e.g., schools and universities) are relocated to the new town. As a result of the relocation policy, officials from the public sector, teachers and students settle in KNT. With the construction of residential quarters, workers from large-scale mining enterprises and peasants who lost their land from land conversion to urban use are also relocated to the new town. To attract advanced manufacturing businesses, the local government provides incentives including cheap land, tax reductions and exemptions and even coal resources. Consequently, the local government has mobilized all the power and resources it can muster to carry out administrative urbanization. Building a modern, business-friendly environment for investors has become the prevalent local policy objective (Fig. 4).

However, this development is a double-edged sword. Whereas it can greatly speed up local urbanization, it can also have negative results when local leaders miscalculate the effects during the planning stage, the national and local economies weaken unexpectedly and the tool is used to advance local leaders' political careers. For Ordos, the 'ghost town' issue threatens the sustainable development of administrative urbanization. Although great efforts have been made to promote industrial development and population growth, no concrete results have been achieved. The new town was grossly miscalculated by the local government and property developers in their real estate speculation. Many real estate developers involved in new town construction and even many coal-mining enterprises set up branch companies to be involved in real estate development, which has led to a massive growth in real estate development. By 2012, the housing area per capita in Ordos was 49.4 m² (Ordos Statistical Bureau, 2014), which was 1.5 times the national average. In particular, a serious housing surplus existed in the new town. The prosperous property sales were supported by informal financing networks and residents' speculation before the crisis occurred. However, this kind of property boom is

vulnerable due to its singular base, which in this case is the prosperity of the coal industry. The low speed of industrial agglomeration and population growth in the new town exacerbated the problem. When the growth of the coal industry slowed, a property crisis exploded because of a deficiency in circulating funds and fracturing of the capital chain. Therefore, the grossly inflated local real estate market and accompanying 'ghost town' phenomenon were some of the biggest challenges to the sustainability of administrative urbanization. This consequence is especially strong in areas where the economy is based on one resource.

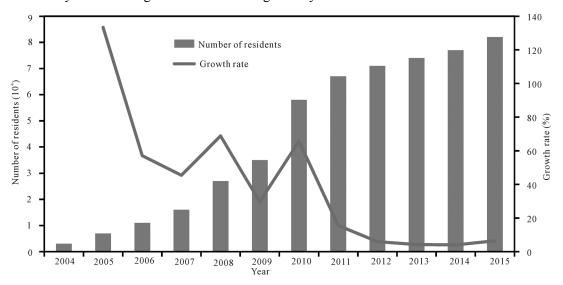


Fig. 3 Population growth in Kangbashi New Town (2004–2015). Data source: Administration Committee of KNT

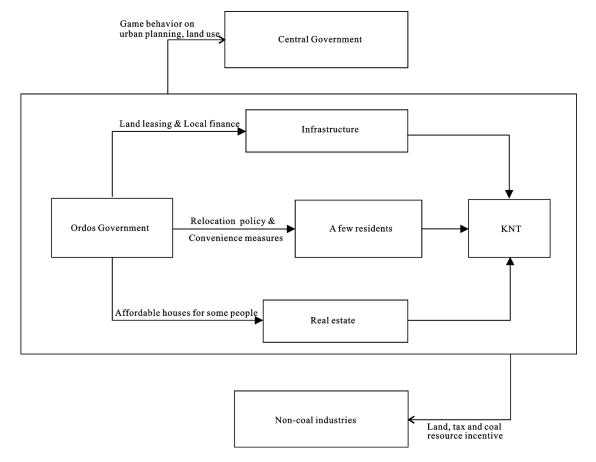


Fig. 4 Administrative urbanization of Ordos City

Conclusions

In contrast with the existing literature on Western theories, this article has attempted to explain the mechanism of urbanization in post-reform China through the concept of administrative urbanization. Whereas administrative urbanization is widely found at the local level (cities and counties), the way it is implemented varies considerably from place to place depending on local conditions. Although the local state has always dictated local development since the People's Republic was established in 1949, during the pre-1978 reform era, the local government was obligated to closely follow the guidelines of national development set by the central government with little or no authority for local autonomy. Thus, during the Maoist period, urban growth through local administration produced fairly uniform socioeconomic and spatial patterns, but since the decentralization of the 1990s, local urban patterns have become much more diverse and have emerged as a consequence of a more flexible system of administrative urbanization.

The characteristics of post-reform administrative urbanization have been shaped by several important factors. First, the national decentralization policy has given local governments greater autonomy with huge fiscal power and has greatly expanded administrative authority and flexibility. Second, marketization has led to fierce competition among cities, and each city has been attempting to outperform other cities in economic growth. This competition is closely tied to the nation's system of cadres' performance evaluation, which affects their career advancement. The key evaluation criteria are local GDP growth, the amount of investment capital and new enterprises attracted and the amount of urban infrastructure and housing construction. The factor of cadres' performance evaluation has been significant in determining what and how construction projects are built, thus affecting the ways administrative urbanization is carried out, which in turn results in different urban forms and city characteristics in different localities. Third, new town construction has been the most prevalent strategy of administrative urbanization because it can be much easier to implement than renovating existing city areas. The production of new town space has been regarded by local leaders as an effective way to achieve economic development, as space is more readily

available to house enterprises.

The KNT construction of Ordos reveals the features and mechanism of administrative urbanization. Through a series of policy reforms in land, housing and urban planning, the Ordos Government has been empowered with more resources and authority to stimulate the local economy. Under the authority of the local government, rural land is acquired from peasants at a relatively low price and converted into urban land in the planning of a new town. Income obtained from land leasing provides the local government with initial funds for infrastructure construction. Additionally, housing reform provides more opportunities for the local government to promote real estate development through large-scale demolition of the old city centre and construction of public infrastructure and subsidized housing in the new town. Through the urban process, the local government not only dictates the directions and tempo of development through administrative mechanisms but also is actively involved in the new town project.

Administrative urbanization of Ordos, thus, represents a unique Chinese approach to urban growth. Different from the western experience developed on the logic of global capital, state intervention and free market forces, the implications of the Ordos case is that state power has not retreated from market reforms, and the local government has manipulated and regulated the market process through administrative measures. In addition, unlike densely populated cities along the coast, the new town is built not to solve problems of high population density, housing shortages, traffic congestion and environmental deterioration. Rather it is built to attract new investment for local economic development. Contradictory characteristics, such as the developmental state of authoritarianism and entrepreneurial state of neoliberalism, are combined into the property of Chinese local governments in post-reform era (Wu, 2016).

Furthermore, this article has highlighted issues of unsustainability associated with administrative urbanization. The problems of inadequate new industrial growth, slow population agglomeration and real estate bubbles have become serious problems facing local leaders, rendering some newly produced urban spaces unsustainable. Unless the central government makes fundamental changes in the ways the nation is governed, China's urbanization will continue to be shaped by local administrative mechanisms. This study has focused on

the effects of administrative urbanization in a single resource-based inland city. More in-depth case studies with different types of cities in different geographical settings are needed to reveal the various ways administrative urbanization has been carried out in China. New empirical findings are needed to support or reject the generalizations of administrative urbanization presented in this paper.

References

- Bernstein F A, 2008. In Inner Mongolia, pushing architecture's outer limits. New York Times, May 1, 2008.
- Blecher M, 1991. Developmental state, entrepreneurial state: the political economy of socialist reform in Xinju Municipality and Guanghan County. In: White G (ed). *The Chinese State in the Era of Economic Reform: The Road to a Crisis*. Macmillan: Basingstoke, 67–75.
- Chan K W, 1994. Cities with Invisible Walls: Reinterpreting Urbanization in Post-1949 China. Oxford: Oxford University Press, 56–69.
- Chi G, Liu Y, Wu Z et al, 2015. Analysis based on positioning data in China. *Computer Science*, 2015, 68(12):1150–1156. arXiv:1510.08505
- Chien S S, 2010. Economic freedom and political control in post-Mao China: a perspective of upward accountability and asymmetric decentralization. *Asian Journal of Political Science*, 18(1): 69–89. doi: 10.1080/02185371003669379
- Chien S S, Wu F L, 2011. Transformation of China's urban entrepreneurialism: the case study of the city of Kunshan. *Cross-Currents: East Asian History and Culture Review*, (1): 1–28.
- Chien S S, 2013. New local state power through administrative restructuring-a case study of post-Mao China county-level urban entrepreneurialism in Kunshan. *Geoforum*, 46: 103–112. doi: 10.1016/j.geoforum.2012.12.015
- Day P, 2012. Ordos: The biggest ghost town in China. bbc. com/news/magazine-17390729. Cited 17 December 2016.
- Démurger S, Sachs J D Woo W T et al., 2002. Geography, economic policy, and regional development in China. Asian Economic Papers, 1(1): 146–197. doi: 10.1162/1535351023202 64512
- Duckett J, 2001. Bureaucrats in business, Chinese-style: the lessons of market reform and state entrepreneurialism in the People's Republic of China. *World Development*, 29(1): 23–37. doi: 10.1016/s0305-750x(00)00083-8
- Hall T, Hubbard P, 1996. The entrepreneurial city: new urban politics, new urban geographies? *Progress in Human Geography*, 20(2): 153–174. doi: 10.1177/030913259602000201
- Harvey D, 1989. From managerialism to entrepreneurialism: the transformation in urban governance in late capitalism. *Geografiska Annaler*, 71(1): 3–17. doi: 10.2307/490503
- He S J, Wu F L, 2005. Property-led redevelopment in post-reform China: a case study of Xintiandi redevelopment project in

- Shanghai. *Journal of Urban Affairs*, 27(1): 1–23. doi: 10.1111/j.0735-2166.2005.00222.x
- He S J, Wu F L, 2009. China's emerging neoliberal urbanism: perspectives from urban redevelopment. *Antipode*, 41(2): 282–304. doi: 10.1111/j.1467-8330.2009.00673.x
- Hsing Y T, 2010. The Great Urban Transformation: Politics of Land and Property in China. New York: Oxford University Press 22–46
- Kirkby R J R, 1985. Urbanization in China: Town and Country in a Developing Economy, 1949-2000 AD. New York: Columbia University Press, 113–119.
- Li H B, Zhou L A, 2005. Political turnover and economic performance: the incentive role of personnel control in China. *Journal of Public Economics*, 89(9–10): 1743–1762. doi: 10. 1016/j.jpubeco.2004.06.009
- Lin G C S, 1997. Red Capitalism in South China: Growth and Development of the Pearl River Delta. Vancouver: UBC Press, 52–55.
- Lin G C S, 1998. China's industrialization with controlled urbanization: anti-urbanism or urban-biased? *Issues & Studies*, 34(6): 98–116.
- Lin G C S, Ho S P S, 2005. The state, land system, and land development processes in contemporary China. *Annals of the Association of American Geographers*, 95(2): 411–436. doi: 10.1111/j.1467-8306.2005.00467.x
- Lin G C S, 2007. Reproducing spaces of Chinese urbanisation: new city-based and land-centred urban transformation. *Urban Studies*, 44(9): 1827–1855. doi: 10.1080/00420980701426673
- Liu Y G, Yin G W, Ma L J C, 2012. Local state and administrative urbanization in post-reform China: a case study of Hebi City, Henan Province. *Cities*, 29(2): 107–117. doi: 10.1016/j.cities. 2011.08.003
- Luo X L, Shen J F, 2009. A study on inter-city cooperation in the Yangtze River Delta Region, China. *Habitat International*, 33(1): 52–62. doi: 10.1016/j.habitatint.2008.04.002
- Ma L J C, Fan M, 1994. Urbanisation from below: the growth of towns in Jiangsu, China. *Urban Studies*, 31(10): 1625–1645. doi: 10.1080/00420989420081551
- Ma L J C, 2002. Urban transformation in China, 1949-2000: a review and research agenda. *Environment and Planning A*, 34(9): 1545–1569.
- Ma L J C, Cui G H, 2002. Economic transition at the local level: diverse forms of town development in China. *Post-Soviet Geography and Economics*, 43(2): 79–103. doi: 10.1080/10889 388.2002.10641194
- Ma L J C, 2005. Urban administrative restructuring, changing scale relations and local economic development in China. *Political Geography*, 24(4): 477–497. doi: 10.1016/j.polgeo. 2004.10.005
- Ministry of Land and Resources of China, 1999–2016. *China Land and Resources Statistical Yearbook*, 1999–2016. Beijing: Geological Publishing House. (in Chinese)
- Molotch H, 1976. The city as a growth machine: Toward a political economy of place. *American Journal of Sociology*, 82(2): 309–332. doi: 10.1086/226311

- Naughton B, 1988. The third front: defence industrialization in the Chinese interior. *The China Quarterly*, 115: 351–386. doi: 10.1017/s030574100002748x
- Ning Yuemin, 1998. New process of urbanization-dynamics and features of urbanization in China since 1990. *Acta Geographica Sinica*, 53(5): 470–477. (in Chinese)
- Oi J C, 1992. Fiscal reform and the economic foundations of local state corporatism in China. *World Politics*, 45(1): 99–126. doi: 10.2307/2010520
- Ordos Statistical Bureau, 2012. *Ordos Statistical Yearbook 2012*. Beijing: China Statistical Press. (in Chinese)
- Ordos Statistical Bureau, 2014. *Ordos Statistical Yearbook 2014*. Beijing: China Statistical Press. (in Chinese)
- Savage M, Warde A, 1993. Urban Sociology, Capitalism, and Modernity. New York: Continuum, 101–134.
- Shen J F, Feng Z Q, Wong K Y, 2006. Dual-track urbanization in a transitional economy: the case of Pearl River Delta in South China. *Habitat International*, 30(3): 690–705. doi: 10.1016/j. habitatint.2005.04.003
- Song Fuli, 2009. The problem of land acquisition behind Wubaoquan. finance.people.com.cn/GB/71364/9209512.html. Cited 27 March 2013. (in Chinese)
- Sorace C, Hurst W, 2015. China's phantom urbanisation and the pathology of ghost cities. *Journal of Contemporary Asia*, 46(2): 1–19. doi: 10.1080/00472336.2015.1115532
- Walder A G, 1995. Local governments as industrial firms: an organizational analysis of China's transitional economy. *American Journal of Sociology*, 101(2): 263–301. doi: 10.1086/230725
- Wang F L, Liu Y G, 2014a. China's urban planning and administrative urbanisation: case of Ordos. Proceedings of the Institution of Civil Engineers-Urban Design and Planning, 167(5): 196–208. doi: 10.1680/udap.14.00012
- Wang Fenglong, Liu Yungang, 2014b. How unique is 'China Model': a review of theoretical perspectives on China's urbanization in Anglophone literature. *Chinese Geographical Science*, 25(1): 98–112. doi: 10.1007/s11769-014-0713-2
- Wang Xiaoqiao, 2011. Coal mines as dowry: the secret recipe of Ordos to attract enterprises. *Southern Weekly*, September 15, 2011. (in Chinese).
- Wei Y D, Jia Y J, 2003. The geographical foundations of local state initiatives: globalizing Tianjin, China. *Cities*, 20(2): 101–114. doi: 10.1016/s0264-2751(02)00118-x
- Woodworth D M, 2015. Ordos Municipality: a market-era re-

- source boomtown. *Cities*, 43: 115–132. doi: 10.1016/j.cities. 2014.11.017
- Wu F, 1999. The 'game' of landed-property production and capital circulation in China's transitional economy, with reference to Shanghai. *Environment and Planning A*, 31(10): 1757–1771. doi: 10.1068/a311757
- Wu F L, 2000. Place promotion in Shanghai, PRC. *Cities*, 17(5): 349–361. doi: 10.1016/s0264-2751(00)00031-7
- Wu F L, 2003. The (post-) socialist entrepreneurial city as a state project: Shanghai's reglobalisation in question. *Urban Studies*, 40(9): 1673–1698. doi: 10.1080/0042098032000106555
- Wu F L, Xu J, Yeh A G O, 2007. *Urban Development in Post-reform China*: *State*, *Market*, *and Space*. Abingdon: Routledge, 32–58.
- Wu F, 2016. Emerging Chinese cities: implications for global urban studies. *The Professional Geographer*, 68(2): 338–348. doi:10.1080/00330124.2015.1099189
- Xu J, Yeh A G O, 2005. City repositioning and competitiveness building in regional development: new development strategies in Guangzhou, China. *International Journal of Urban and Regional Research*, 29(2): 283–308. doi: 10.1111/j.1468-2427. 2005.00585.x
- Yang C, 2006. The Geopolitics of cross-boundary governance in the Greater Pearl River Delta, China: a case study of the proposed Hong Kong-Zhuhai-Macao Bridge. *Political Geography*, 25(7): 817–835. doi: 10.1016/j.polgeo.2006.08.006
- Yeh A G O, Wu F L, 1996. The new land development process and urban development in Chinese cities. *International Journal of Urban and Regional Research*, 20(2): 330–353. doi: 10.1111/j.1468-2427.1996.tb00319.x
- Zhang T W, 2002. Urban development and a socialist pro-growth coalition in Shanghai. *Urban Affairs Review*, 37(4): 475–499. doi: 10.1177/10780870222185432
- Zhu J M, 1999. Local growth coalition: the context and implications of China's gradualist urban land reforms. *International Journal of Urban and Regional Research*, 23(3): 534–548. doi: 10.1111/1468-2427.00211
- Zhu J M, 2004. Local developmental state and order in China's urban development during transition. *International Journal of Urban and Regional Research*, 28(2): 424–447. doi: 10.1111/j. 0309-1317.2004.00527.x
- Zhu J M, 2005. A transitional institution for the emerging land market in urban China. *Urban Studies*, 42(8): 1369–1390. doi: 10.1080/00420980500150714