

An Institutional Study on the Multi-dimensional Urban Impacts of Property-Led Urban Development in China

Abstract:

The property-led urban development, under a drastic scale, has played an irreplaceable role in China's dramatic urban growth since the 1990s. Though, it has also been intensifying wide urban problems that undermine the sustained growth of urban areas. This paper discusses the multi-dimensional impacts of such a property-led urban strategy with the aid of a new property-related indicator framework that emphasises the real estate sector and incorporates both the key principles of sustainable development and development features of urban China. Based on a fieldwork of over 80 interviews in Chinese cities, an institutional study on the legal and regulatory framework, in relation to the property sector and urban development, has been conducted to unveil the underlying mechanisms and drivers for the wide adoption, rapid acceleration and multiple impacts of this property-led urban strategy in China. It is noted that the priority on economic development and quantity expansion not only determines the legitimacy of the property-led strategy in its early stage and the costs and exacerbation of its urban impacts, but also indicates the necessity for its transformation when sustainable development is rapidly becoming one of the paramount goals for China in the coming decades. It is the institutional factors that fundamentally shape these various urban outcomes, and therefore, set the direction and possibility for urban growth model changes.

Keywords: China, property-led urban development, urban impacts, institutional study

1. Introduction

Property-led urban regeneration was a driving force of urban policy in the UK in the 1980s (Healey, 1992, Jones, 1996), being an instant and tangible remedy for inner areas of British cities under severe urban decline. Through attracting and assisting private investment into large-scale and prestige property development projects, it offers powerful potential to revitalise the old city centres and run-down neighbourhoods, accommodate firms, attract inward investments, increase land and property values, create construction jobs, rebuild urban images and local confidence, and facilitate place marketing in globalising urban competition (Loftman and Nevin, 1996, Turok, 1992). However, it also received growing criticism in literature, mainly over its narrow focus on economic and physical regeneration while being negligent of social regeneration (Turok, 1992, Healey, 1992), and the short-term perspective that relies on

immediate physical transformation and initial job creation, rather than long-term sustainable urban growth (He and Wu, 2005).

Contextualized in increasing globalization and domestic land and housing reforms, property development has risen to take important roles in China's urban redevelopment. A property-led urban redevelopment, claimed by He and Wu (2005), has been adopted in Chinese central urban areas since the 1990s. It shares similarities with its counterpart in the UK, including basic motivation for economic growth and urban transformation, government support, private participation, and social impacts on inequality and exclusiveness (*ibid*). However, they also differ in terms of the role of government, role of private sector, urban governance process and the process of market operation and administration (Xu, 2008, 2013). Moreover, the scale of property-led urban strategy has been largely extended from central old areas to the entire city, underpinning the miracle of economic growth and urban transformation in China (Cao, 2009).

The property-led urban development in China features state ownership of urban land and sale of land to fund infrastructure and promote property development (Cao and Keivani, 2007). It powers urban development by generating funds for local governments, attracting property development investment, increasing investment returns, transforming urban areas, improving housing conditions and boosting local competitiveness (Xu et al., 2008). It creates new growth engine for localities even without favourable advantages in terms of geography, history and human capital (Cao, 2010). Nevertheless, this property-led approach has also given rise to undesirable urban outcomes that have wide implications to the sustainable and balanced development of Chinese cities. Problems such as huge economic and financial costs of urban development, housing price inflation, loss of arable land, loose planning, low quality development in poor location, and social discontent and intensity are inclined to grow and affect the long-term development of urban areas in China.

Therefore, property-led urban development has been widely adopted in Chinese cities, both being an irreplaceable part and a secret driver for urban success, and also the source for various urban problems. Calls for growth model reform have been emerging in China, when sustainable urban development and urbanization receives increasing momentum as set in the 12th FYP (reference). Though the property-led urban approach, has not been widely recognized and fully examined in literature, but rather limited explored. Cao and Keiveni (2010) explain the development stage and trajectory of such a model, which enabled a better comprehension of its significance and contributions to urban development over the past two decades. On this basis, this paper investigates the wide impacts to urban development in economic, environmental and social fields with the aid of a property-related indicator framework. An international expert survey involving 60 property and urban experts worldwide has contributed to the establishment

of such a framework (Xu et al., 2008). It further incorporates the theories and approaches of New Institutional Economic and offers an in-depth understanding of the institutional factors that determine these urban impacts and outcomes.

2. A Brief Note on Methodology

This paper focuses on the institutional analysis of the impacts of property-led development in China. It is based on extensive fieldwork conducted between June to November 2008 in four cities across China, i.e. Suzhou, Tianjin, Xi'an and Dongguan. The fieldwork consists of 70 interviews with seven groups of expertise, including government officials, planners, property professionals, developers, financiers, property agents and academics. Besides, another 13 interviews were carried out with senior officials at national and provincial level and prestigious scholars from China's top universities in Beijing, Shanghai, and Guangzhou. In addition, follow-up interviews were done during 2009-2013 in some of these cities at a smaller scale.

The paper adopts the institutional approach developed by North (1990) and system thinking theories developed by Senge (1990) to discuss the institutional arrangements and contexts in relation to the development and impacts of the property-led urban development in China. A property-related holistic indicator system (see appendix) has been developed to examine the multidimensional urban impacts and outcomes of this property-led strategy (Xu et al., 2008). Institutions are the rules of games in the urban development process while the urban development process is regarded as a system whose parts are interrelated and together induce dynamic impacts and outcomes as a whole.

3. Urban Impacts of Property-led Urban Development

3.1. Economic Impacts

The property-led urban development has been adopted in China as a highly effective model for the government to generate local revenue, initiate rapid urban changes and promote the development of land and property market. This is largely enabled and facilitated by the state's exclusive property rights over a critical resource – urban land.

During 1980-2011, China has realised a 10.0% annual growth of GDP (IMF, 2012), underpinned by three main drivers, i.e. fixed-asset investment (FAI), export and consumption. FAI has surged by 25.1% annually from 1978-2011, the quickest among the three sectors (NBSC 1978-2011). An

increasing role has been played by real estate in boosting FAI and national economy, and the proportion of investment in property development and acquisition in total foreign direct investment (FDI) have surged from 9.8% to 26.7% in 2011 (NBSC, 2003-2011).

The recent decade (2001-2010) has seen a total of 19.97 billion m² (land area) of government land sale, 569% of the amount during 1993-2000 (MLR, 2001-2010). A sum of RMB 9567 billion was generated during 2003-2010, accounting for on average 49.3% of local fiscal revenues over this period (NBSC, 2010b, MLR, 2010). The property development capacity has been extensively advanced, and the total completion of commodity housing, the primary component of the property market, has expanded from 206.0 million m² in 2000 to 612.2 million m² in 2010 (CEIN 2009, NBSC 2004-2010). Since 2005, the housing market has been driven by much stronger demand, with a market transaction of 868.5 million m² in 2010 alone (*ibid*).

However, in tandem with economic growth and market expansion, risks and problems in the market and economy are also emerging. Although urban housing conditions have been dramatically improved with a 351% rise of per capita living area from 6.7 m² in 1978 to 31.6 m² in 2010 (NBSC, 1978, 2010), there has been witnessed a new rise of over specification in property development, and the proportion of housing size per unit over 120 m² has surged from 13% in the 1980s to 28% by 2005 (REICO 2009). Significant housing price inflation has been found on a 70 city basis, and the annual price increasing in 2010 alone amounted to 13.67% in 2010, much higher than the 11.2% rise of urban per capita disposable income in that year (NBSC, 2010a). According to J.P Morgan (2010), the housing price to earning ratio was around 6.7 in China, higher than the usually comfortable range of 3 to 4 in US and UK markets before the 2008 crisis.

Focus has been directed towards high-end and large property development, luring capitals for investment and speculation. Developers, in prospect of future market growth, have been over-committed themselves with new developments in poor locations without sufficient support of public infrastructure. This has accumulatively posed growing investment risks and further contributed to the overheating of market. Vacant areas of commodity housing in total completion amounted to 19% by 2008 (NBSC, 2009), a constant oversupply has also been found in commercial property market (including office and retail), which kept the price and rent growing slowly.

As an essential part of the property-led strategy, and an effective way to improve local investment environment and competitiveness, a large proportion of the land revenues have been reinvestment in infrastructure construction, including road, highway, metro etc. For instance, in 2009, 22 cities obtained central approval on their metro plans, contributing to 89 metro lines of 2500 km in China by 2016 (MOT, 2011). China also plans to spend over US\$1 trillion to expand its existing railway network from 78000km to 120,000km by 2020, making it the world's most extensive rail system (World Bank, 2012). Nevertheless, such grand investment projects further exacerbate the increasingly intense land shortage and unsustainability of land

finance system. As local governments are rapidly running out of sellable land, a long-term mechanism for local finance generation is becoming growingly crucial. The priority on quantitative expansion than qualitative advancement (such as location, design, appropriate sizes, and maintenance) in the property sector and urban development process has been closely related to the market boom and large-scale urban transformation, but largely at the expense of long-term risks, as well as environmental and social functions (see below).

3.2. Environmental Impacts

Efforts in energy efficient buildings, efficient land use and pollution control are largely limited by the drastic speed of economic growth under the property-led urban development model. The building sector is poised to account for 30%-35% of national energy consumption by 2020 when China becomes the world's largest construction site (Li and Colombier, 2009). By 2000, only 0.5% of the total urban and rural building floor area complied with the building energy saving standard, which was though introduced successively since the 1980s (Zhu and Lin, 2004) (Jiang and Tovey, 2009). There has been a progress in proportion of new buildings that meet energy standards at design stage from 53% in 2005 to 99% by 2009, although a gap of about 10% between design stage and construction stage remains noticeable (MOHURD, 2010).

In the land sector, vast arable land has been lost for urban development and urban land has not been used efficiently. The total area of idle land, i.e. sold land that has remained undeveloped for certain periods, was estimated account for about 7.8% of existing urban land area (Lu, 2006). Land regulatory tools such as building density and FAR values have not been fully utilised in China (Bertaud, 2007). FAR figures for new housing are mostly uniform and vary only between 1 and 2 in most Chinese cities, regardless of the location (*ibid*).

In terms of environmental quality, China has become the world's largest CO₂ emitter since 2007, and the largest waster generator since 2004. Water pollution has become a national issue in China. About 90% of rivers around urban areas are seriously polluted (MWR 2005); 42.7% of seven main river basins are unsafe for human consumption (MEP 2009); 300 among 662 Chinese cities have insufficient water supply and 110 suffer from severe water shortage (Jiang, 2009). The cost of pollution is estimated to be 3% - 5% of GDP by (World Bank and State Environmental Protection Administration of China, 2007), which will be further aggravated under rapid urbanisation.

3.3. Social Impacts

The property-led urban strategy has also led to intense social consequences and problems. In late 1990s, the Economic Decent Housing (EDH), as a main component of social housing scheme, was established and the government set a goal of providing 70% urban residents with low-cost

housing (State Council, 1998). Nevertheless, by 2010, the proportion of investment in EDH in total housing investment has dropped to merely 3% in 2010 (NBSC, 2011). Given the rapid expansion of commodity housing, the structure of housing supply becomes severely unbalanced. This further exacerbates the housing affordability and imposes social tension.

Property-led urban redevelopment prevails in many Chinese cities, involving large-scale building demolition, residential relocation and property development. Conservation of Historic building and sites has been severely challenged under the primary focus on rapid urban transformation, changes of land uses, and increase of property value. However, the social problems stemming from historic destruction, such as loss of identity and culture, could not be easily recovered by economic resources. The social discontent arising from massive demolition has been partly relieved by greatly enhanced compensation levels. However, higher compensations would also increase the cost of urban redevelopments and the difficulty of land reuse, and further limits its role in accelerating urban transformation and economic growth.

Urbanisation gives rise to increased demands for economic activities, but with further acceleration, it also brings about growing challenges in all sectors of economy, environment and society. With the estimated urbanization level to rise to 65% by 2030 and 80% by 2050 (Li and Yao, 2009), urban population is expected to grow by 319 million by 2025, posing severe threats to the sustainability of not only environmental and social capitals and economic resources.

Therefore, there are wide connections between economic, environmental and social sectors, which are currently not well-balanced in China and its cities. The property-led urban development model, in favour of 'weak sustainability', i.e. "developing economy first while treating the environment later" (Ott and Döring, 2003, Neumayer, 1999), is increasingly unable to coordinate these three sectors. Calls for reform such a model has been arising, which however should be guided by in-depth analysis of the underlying factors and mechanisms that determine its unsustainable impacts and outcomes. Hence, an institutional study of the legal and regulatory framework in relation to the property market and urban development has been conducted in the following section, attempting to unveil the structural problems that link to structural solutions.

4. Institutional Analysis on the Legal and Regulatory Framework

This section discusses the legal and regulatory framework related to the urban development and property sector in China and its cities, and their implications on the multifaceted urban outcomes and issues discussed above.

4.1 Legal clarity, continuity and sufficiency

These three variables reflect the general quality of legal guidance on urban development and the property sector in China and the case cities.

The legal framework in China has been widely described by the interviewees as “*incomplete*”, “*insufficient*”, “*laggard*”, and “*lack of specifications*”. They mainly ascribed this to the unprecedented speed and scale of economic development and urban transformation in Chinese cities over the last few decades. It was a common claim among interviewees that “*time has been limited to compose circumspect and well-considered laws to regulate the complex and mushrooming problems in practice*”. Consequently, laws in China were often commented as “*superficially plenty but functionally insufficient*”.

Exemplification in the legal system offers support for such a low satisfaction over legal sufficiency and clarity. First, a major law on property rights was not available until 2007 when the *Property Rights Law* was introduced by CCCPC (2007), almost 30 years after the initiation of economic reforms. Without the legal guidance and protection of private property rights, residents’ compensation was kept low, enabling accelerated urban demolition, transformation, market expansion and economic growth. Though, the absence of such a law has also led to the weak role of the public in redevelopment decision-making, the aforementioned widespread social inequality and tensions, and in many cases, serious social consequences.

Further, although this law takes a step forward by restraining the right of the government to expropriate collectively-owned land for public interests (CCCPC, 2007), it does not specify clearly what are ‘*public interests*’. Demarcation between public interest and commercial interest, and delimitation of the local authorities’ role in the demolition process have not been solved (Dai, 2010). This was widely echoed by interviewed scholars as “*it leaves room for local distortion and circumventing behaviour*” (see Section 4.3).

Second, although a total of 103 cities have been designated as historic cities since 1982 and correspondent local plans and measures on historic protection have been developed, there have been no comprehensive or specific laws on protection of historic buildings and sites (Table 1). This is in stark contrast with the long history of China and its cities with abundant legacy of historic buildings and resources. This, again, has speeded up the pace of urban redevelopment, while creating severe pressure for historic conservation. Therefore, the insufficiency and vagueness of legal framework, although being affected by the limited time and capacity of

institutional development, is also affected by the primary goal of national development on economic growth.

Table 1 National regulations on historic protection

Year	Title	Issued by
2008	Urban and Rural Planning Law	NPC
2005	Codes of Planning for Protecting Historic Cities	MOHRUD, SACH
2002	Law of Conserving Cultural Relics	NPC
1994	Requirements on Protection Plans of Historic Cities	MOHRUD
1989	Urban Planning Law	NPC

Summarised and tabled by the author

In this regard, interviewees showed high reference to the continuity of the legal framework since the economic reforms, and ascribed it to the *“the prime leadership of the Chinese Communist Party (CCP) in China since 1949 instead of rotating presidency of multiple Parties in the West”* and *“the intention and ability of CCP in devising and implementing its long-term development strategy”*. This is reflected by the several revisions to the *Constitution*, the foundation for all laws in China, i.e. from the legitimization of private economy and transfer of land use rights in 1982, to adoption of the notion of ‘socialist market economy’ in 1993 and 1999, and further the 2004 amendments on more protection of private economy (Chen, 2004). The paramount significance of ‘open-door’ and ‘economic reforms’ have also been adhered to by the Hu-Wen administration (from 2006 – 2012) (Hu, 2007) and is highly likely to be continued with Xi-Li administration since 2013.

Such successive constitutional revisions have made a consistent and profound shift of the national task towards prioritising economic development. Via top-down mechanisms, it provides the basic principles for the formation of all collective-choice and operational rules. Thus an institutional environment with reduced transaction costs, stronger private property rights, new incentives, and increased productivity has been shaped and maintained for more than three decades. This consequently becomes an underlying source for the complex urban results previously-discussed, which can be summarised as a significant economic rise at the cost of deteriorating environmental quality and intensifying social problems.

Many interviewees argued that, *“the existing legal framework is often incomplete and many rules are laggard behind the current development stage, let alone being forward-looking”*. *“Available laws often have requirements without supporting measures and detailed*

specifications, causing difficulties in practical implementation" (see Section 4.3). Therefore, the legal framework that consistently favours economic reforms has fundamentally shaped a new incentive system since 1978 and encouraged rapid growth of economic-oriented sectors. However, its insufficiency and low clarity has led to growing loopholes within the framework that allow for opportunistic behaviour by market players. This causes disorders in market interactions by providing limited or improper guidance on market administration. The 12th FYP (Xinhua News, 2011b) goal of slowed economic growth also indicates more room to resolve these problems.

4.2 Policy clarity, continuity and sufficiency

These three variables indicate the general quality of policy guidance on urban development and property sector in China and the case cities.

In China, policies and regulations have been frequently used as an important and flexible institutional tool complementary to legal documents. However, both primary and secondary data suggest that there are notable insufficiency and low clarity of policies on property market and urban development.

Insufficiency and low clarity of policy guidance were widely criticised by the interviewees at regional and local levels. Different from legal guidance, policies and regulations were described as *"constantly changing"* and *"uncertain"*. Hence, according to local interviewees, *"ambiguous and difficult implementation"* has been very common. Scholars in Beijing and Shanghai further contended that *"despite local governments sometimes distorting central policies in their own interest, many policies are practically difficult to implement due to their vagueness, confusion and changes"*.

First, previous discussion on land sale (Section 3.1) indicates that a long-term fiscal resource, for instance, property tax is needed to replace the current heavy and unsustainable reliance on land finance. According to interviewees, *"research on property taxation has started since the 1990s"*, however, it was not until January 2011 when initial policy experiments was finally carried out in two large cities – Shanghai and Chongqing (Xinhua News, 2011a). This reflects the difficulty and transaction costs involved in devising the policies and deciding to pilot them. The policy absence has accelerated local governments' land sale, encouraged housing investments and expanded the land and property market. However, it has also intensified land shortage, urban sprawl and arable land loss.

Second, there were few national standards and regulations on the housing size until the *70/90 Policy* (State Council, 2006), reflecting greater attention was paid by government to rapid expansion of market scale and its economic benefits at that stage (Section 3.1). Such biased attention has altered the structure of housing supply, leading to housing speculation, housing price inflation, reduced housing affordability, and inefficient uses of land for decades. Moreover, a MOHURD official argued: *“for over half a year since being introduced, the 70/90 policy failed to provide definite instructions on whether the 70% requirement (i.e. no less than 70% of new housing spaces are small houses below 90 m²) applies to a city level or a single development scheme. It caused uncertainty in the markets, disturbing developers’ construction plans”*. This was widely confirmed by interviewed developers in the case cities, reflecting the inexperience of policy-makers in this area. Eventually it reduced the total housing completions in that year and undermined the aim of macro control.

Third, in order to curb housing speculation (Section 3.1), PBC introduced a requirement for higher down-payment of housing mortgages to ‘Second Home’ buyers in September 2007 (Xinhua News, 2007). However, many interviewees criticised that *“a clear definition of ‘Second Home’ was not available until December 2007 when PBC clarified that it refers to the second house being purchased via mortgage by any household member rather than any individual”*. The three-month gap again shows the learning-by-doing of policy-making, causing confusion for implementation. Interviewees noted that during this three month, *“house-buyers were taking advantages of the loopholes and avoided the higher rate by registering houses under different household members”*.

Fourth, concerning sectors of the property market, there have been limited legal and regulatory requirements on the commercial property market since its establishment. This reflects the primary focus of the government on the housing market due to its economic benefits, leading to various problems including chaotic development, prolonged oversupply and improper location of commercial spaces (Section 3.1).

Fifth, within the housing sector, a scholar in Tianjin commented that: *“over the past decades there has long been a severe lack of local policies concerning the market of used housing (or second-hand housing)”*. This was echoed by a property valuer in Xi’an who claimed that: *“it was not until 2007 when governmental policies started to address this issue”*. It induces the under-developed status of the used housing market in China and the case cities and pushes market demand towards new housing spaces.

Sixth, in the energy use sector, government regulations and policies on energy efficient buildings (EEB) have been recent, since 2006 in particular (Table 2), as echoed by interviewees. Among existing rules, there are limited regulations that provide comprehensive guidance and requirements on different types of buildings, including new and old, from public to commercial. Such policy inadequacy has led to the slow development of EEB over the past decades.

Table 2 National regulations on environmental protection and energy use

Year	Title	Issued by
2007	Opinions on Energy Efficiency of Government Buildings and Large-Scale Public Buildings	MOHRUD MOF
2006	New Regulations on Energy Conservation of Civil Buildings	SC
2001	Design Standards for Energy Efficiency of Residential Buildings in Hot Summer and Cold Winter	MOHRUD
2000	Regulations on Energy Conservation of Civil Buildings	SC
1998	Energy Conservation Law	NPC
1988	Law of Water Pollution Control	NPC
1988	Law of Air Pollution Control	NPC
1986	Provisional Regulations on Energy Conservation	SC
1979	Environmental Protection Law	NPC

Summarised and tabled by the author

Seventh, in terms of land redevelopment, it was only in 1999 that a special measure on disposal of idle land was introduced by MLR (Table 3). Neither the 1999 version nor its 2004 revision has identified specific measures on delayed construction (such as unexpected force majeure, behaviour of government and affiliated sectors, and unfinished necessary pre-works before construction). Some interviewed local officials in Tianjin and Dongguan claimed that: “*it has been difficult to define idle land and decide regulatory measures in practice due to limited policy specifications*”. This also shows limited attention has been paid to efficient land use for decades.

Table 3 National regulations on land use

Year	Title	Issued by
2008	Notice on Promoting Economic and Intensive Use of Land	SC
2007	Notice on Strengthening Disposal of Idle Land	MLR
2005	Assessment Measures on Achievements of Provisional Governments on Arable Land Conservation	SC

1999	Administrative Measures on Idle Land Disposal	MLR
1997	Notice on Strengthening Land Administration and Protection of Arable Land	SC
1988	Land Administration Law	NPC

Summarised and tabled by the author

Eighth, as discussed in Section 3.2, there have been limited variations on building density regulations such as FAR values among different types of property, indicating the insufficient utilisation of this planning instrument and low awareness of policy-makers on its uses in efficient land uses.

Ninth, in the social sector, comprehensive institutions on social housing provision have been absent for two decades since the 1978 reforms. Although being re-established in the late 1990s, it has not practically been strengthened until 2007 (Section 3.2). Further, many of regulations and standards have been absent or vague. For instance, many interviewees noted that *“the size specifications have only been rationalised since 2007”*.

Tenth, except for recent developments, there have also been insufficient regulations and measures on demolition and compensation. This has accumulated rising social inequality and conflicts (Section 3.2), although it also lowered the transaction costs of urban redevelopment and speeded up urban transformation.

Therefore, vagueness and insufficiency has been a very common problem among policies and regulations, especially those on environmental and social development, and qualitative advancement of the land, housing, and commercial markets. This is fundamentally affected by the previously discussed constitutional settings, which prioritise the rapid economic growth. This has been a profound reason for the dramatic expansion of the housing market and the urban economy in Chinese cities, and also accumulating economic risks, and environmental and social problems.

The recent policy development on EEB, land, social housing, macro control has also been a direct result of the constitutional level decision on pursuing a more balanced development, reflected by the statement made by President Hu (2007). The discussion above indicates that the government remains inexperienced in regulating these issues due to its learning-by-doing approach.

Besides the problem of inadequacy and low clarity, policies have also been argued by interviewees as “*constantly changing*”. This is different from the general legal framework and partly complies with the nature of regulations as providing flexible regulatory tools as an important complement to laws. However, it has still caused practical problems. In this respect, the macro control has been a perfect example during the eight years 2003-2011, policies on the housing market already experienced three stages, i.e. control, stimulus and stronger control (Table 4). As a result, a general impression of “*frequent policy alteration*” has been shaped by local authorities and market players who have developed a habit of “*wait and see*”, as described by some local interviewees. Expecting future favourable policies, some developers, as confirmed by local interviewees, continued to expand their investments regardless of current control policies, especially during 2006-2007.

Table 4 Macro control policies 2003-2007

Year	Main Targets	Core Measures	Overall Effects
2003	<ol style="list-style-type: none"> 1) Control property investment 2) Restrain rising housing price 	<ul style="list-style-type: none"> • ‘Notice on Property Credit Administration’ • ‘Notice on Promoting Sustainable Development of the Property Industry’ 	Shift from ‘Support’ towards ‘Control’ by central government
2004	<ol style="list-style-type: none"> 1) Reduce supply of land & property 	<ul style="list-style-type: none"> • Land sale via tendering, auction and listing • Raise of base interest rates 	Rapid growth of housing price
2005	<ol style="list-style-type: none"> 1) Reduce both supply & demand 2) Regulate market practices 	<ul style="list-style-type: none"> • ‘Old 8 National Measures’ • ‘New 8 National Measures’ • Raise of housing mortgage deposit ratio 	Restrained speculation Slowdown of housing price increase
2006	<ol style="list-style-type: none"> 1) Increase supply & restrain demand 2) Adjust structure of housing supply 3) Encourage first-time home buyers 	<ul style="list-style-type: none"> • ‘6 National Measures’ • Tightening polices on land, tax and bank loan • ‘70/90’ policy on ordinary land & housing supply 	Accelerated increase of housing price
2007	<ol style="list-style-type: none"> 1) Control property investment 2) Restrain rising housing price 3) Build up housing security system 	<ul style="list-style-type: none"> • ‘Second House’ loan control • Policies on housing security • Property Rights Law 	A new round of national increase of housing price

2008	1) Prevent economic recession 2) Sustain the property market	<ul style="list-style-type: none"> • Local stimulation policies • Central Stimulus Plan 	Decline of housing price
2009	1) Sustain economic growth 2) Promote the property market 3) Restrain housing speculation	<ul style="list-style-type: none"> • Relaxed property development loans • '4 National Measures' • Increase of transaction tax • Increase of land costs 	Rebound of housing prices & transactions Signs of over-heating
2010	1) Increase ordinary & social housing supply 2) Restrain rising housing price	<ul style="list-style-type: none"> • '11 National Measures' • 'New 10 National Measures' • '5 National Measures' 	Decline of growth rate of housing prices
2011	1) Suppress housing investment	<ul style="list-style-type: none"> • 'New 8 National Measures' • Local restrictions on housing sales • Experiments of property tax 	Increase of transactions in short run

Summarised and tabulated by the author

In summary, the policy guidance in China and the cities often have low clarity, insufficiency and limited continuity. This is very much related to the current development stage and priority, although progresses have been seen recently and more will be made continually.

4.3 Enforceability at Central and Local Levels

This variable focuses on the enforceability of laws and regulations at central and local levels, reflecting the quality of their implementation.

While insufficiency and low clarity of formal rules were considered by the interviewees as “*understandable*” due to the rapid pace of urban development, their low enforceability were commonly criticised as “*the most fundamental institutional problem*” in China and the cities. This is in line with the prevalently unsatisfying implementation of some regulations discussed in Section 3. The problematic implementation of rules could also be illustrated three a few aspects.

Example one: property tax. Even though pilot policies on property tax have finally been initiated in Shanghai and Chongqing since January 2011, the detailed rules in each city have been very

different. Such difference, reflected by interviewees in Shanghai, mainly focuses on *“the subjects of tax, tax rates and time of payment”*. Shanghai targets the second or more houses of a household at the tax rate of 0.6%, while Chongqing levies all high-end houses with prices more than twice of the local average, at a tax rate of 0.5%-1.2% (Xinhua News, 2011a). This implies that property taxation remains at a nascent stage in China that needs more time on experiments before any general consensus on rule-making is formed.

By April 2011, only about RMB 0.79 million (equivalent to the market value of one house unit of 100 m²) was collected in Shanghai, paid by merely 20 households among the total 2306 identified ones (*ibid*). By end of November 2011, the tax collected in Chongqing totaled RMB 100 million, half of the planned amount, and merely about 0.12% of local land revenues in 2011 (Soufun News, 2012). Further, it involves costs of enforcing timely payment by households. Therefore, clearly property tax remains highly difficult to become a pivotal part of local finance in the short run, if not long run.

Besides, through increased costs of holding properties, formal introduction of property tax could largely release sold but still vacant areas (Section 3.1) onto the market, imposing downward pressure on housing prices due to increased supply. This was argued by interviewees as *“a main barrier for active implementation by local governments, primarily concerning market growth”*. Hence, although property tax should be promoted as a long-term fiscal source, there remain great challenges to enforcing this institution in practice and a schedule of its large-scale national implementation is still unseen.

Example two: energy efficiency of buildings (EEB). The unsatisfactory implementation of EEB codes has been seen for decades (Section 3.2). Despite successive building codes since the 1980s, their nature of setting compulsory limits does not encourage a performance level that is better than such bottom lines (German Development Institute, 2008). This is evidenced by interviewed developers in all the four cities, who considered the current EEB codes as *“very basic and easy to reach”*. They recognised that *“there is much room to raise EEB levels”*, however due to *“extra costs”* and *“no financial incentives”*, they *“do not desire a better performance than merely meeting the standards”*.

Moreover, national standards need a monitoring mechanism to ensure enforcement. Interviewees in Beijing and Shanghai regarded monitoring for enforcing building environmental standards as weak and insufficient in Chinese cities. They ascribed this to be due to *“the high costs of human and financial resources in surveillance”* and *“the difficulty in maintaining*

surveillance throughout the construction process". Meanwhile, *"non-compliance and distortions"* have been found in local governments, who are *"more committed to economic goals than environmental tasks"*. This has been a main reason for the gap between design and construction of EEB (see Section 3.2), which although has been narrower.

The recent progress on EEB has partly been a result of increased market-oriented policy instruments. For instance, the Chinese government allocated RMB 1.6 billion to EEB in 2007, and budgeted 2.5 billion for 2008 (German Development Institute, 2008). Local interviewees claimed that EEB demonstration projects can receive subsidies in Tianjin since 2007 and China's first green building award was set up in Suzhou SIP in 2006. Since then, a number of green and low-carbon public buildings have been quickly erected in Suzhou SIP (Suzhou News, 2010). This shows greater determination of the government in promoting energy efficiency. However, these financial incentives remain preliminary and limited in scale and influence, requiring more time to have real and lasting effects.

There are several key and common reasons for such problematic implementation of formal rules in China and the case cities. First, the previously discussed insufficiency, poor clarity and also low continuity of rules (Section 4.1 & 4.2) often lead to wide confusion and difficulties in implementation. This largely increases the difficulties of their enforcement, which reduces institutional efficiency according to North (2005, 1990). Many examples could be found in sectors such as the *70/90 policy*, *'Second Home'*, idle land disposal, demolition and so on.

Second, it was widely claimed by local officials in the four cities that *"many of the national regulations that equally apply to all locations were too rigid and not suitable for local conditions"*. In contrast, interviewed officials and scholars in Beijing claimed that *"China is huge with great variety and it always allows certain room for local adjustments of national policies, except for the 70/90 Policy."* Such divergence in opinions shows the different interests of the central and local governments, and the fact that they are constantly balancing these interests through resistance and coordination. This, however, often disturbs the sound implementation of national rules.

Taking the hot-debated *70/90 policy* as an example, some local interviewees considered it as *"mainly targeting more-developed large cities such as Shanghai and Beijing where housing prices inflation was more severe"* and thus *"should not be equally implemented in the second tier cities"*. The *70/90 policy* is a special policy as it is an operational rule made by the constitutional level body. This indicates the strong determination of the central government to realise the

policy results in the shortest time possible, overlooking possible local resistance. However, once the macro control was temporarily shifted towards economic stimulus during 2008-2009 (Table 4), poor implementation of 70/90 policy was widely found at local levels (Xinlang News, 2009), which was recognised by local interviewees in all the four cities.

Third, there are high costs of central surveillance and absence of relevant institutional arrangements, as discussed above. Fourth, the transaction costs of breaching the 'rules of the game' have been low in many cases, offering very limited constraints over market behaviour. Interviewees in Beijing, for example, noted "*there is limited punishment on local distortion of central rules*". Fifth, as noted by a senior lawyer "*generally it is common in China that the rule by man still outweighs the rule of law*". As a result, the practical implementation of rules often depends on the intention of a particular government leader. This is a long-rooted historical factor, which can be taken as a contextual factor that will not alter in the short term and has profound impacts on human interactions at all levels.

Therefore, there remain considerable institutional barriers for better enforcement of formal rules at all levels. This ranges from the biased constitutional priority, defects of institutional arrangements, conflicts of interests among governments, and limited use of transaction costs in policy-making. Argued by interviewees, poor implementation was "*the most critical institutional problem in China*", which makes existing policies invalid and ineffective for adjusting human interactions and urban results. This as a whole acts as a main obstacle for long-term development of the legal and regulatory framework, although there has been seen recently a stronger determination of the central government in making progress on the poorly enforced ones.

5. Aggregate Discussion and Analysis

When the above three sectors are considered together, there emerged findings on their interactions and combined impacts on general urban sustainability and the sustainable development of the land and housing market.

5.1 Impacts on General Sustainable Strategies

Problems in clarity and sufficiency affect the practical implementation, discouraging further improvements of formal rules. It is thus not surprising that regional and local interviewees repeatedly commented that *“fundamental reasons for urban unsustainable problems are the defects of the existing institutional framework”*. Therefore, *“urban sustainability can not be achieved without institutional reforms”*.

As one of the pioneering countries, China developed a national sustainable development agenda early in the mid-1990s, soon after the formation of action plan *Agenda 21* at UN conference in 1992 (Gan, 1998). The sustainability concept has also been passed down and increasingly highlighted since the 9th FYP (1996-2000) (Section 4.3). Nevertheless, many relevant sectors, as previously discussed, have attracted limited policy attention or received unsatisfactory implementation, inducing growing unsustainable problems in Chinese cities. A fundamental reason for this is the incentive system in favour of economic performance, causing severe negligence and resistance against issues that do not promote rapid growth of economy.

During the fieldwork, it was claimed over and over again by both regional and local interviewees that *“economic growth is the ultimate priority for China and its cities at the current developmental stage”*. One university professor in Shanghai added that:

“Sustainable development is crucial to China. However, considering current national conditions, economic sustainability is the core and foundation for sustainability in other sectors such as environmental and social sustainability.”

This argument accords with the result of the expert survey that unveiled the top priority of economic growth over all indicators among China-based experts (Section 4.1). Hence, to sustain strong economic growth is regarded as the central task and pre-conditions for realising sustainable development in the country. This confirms its adoption of a *‘weak sustainability’* strategy (Section 3) since the reforms, focusing on developing the economy first and treating environment and society later. Such a core role of the economy gains more justification when the world has been deeply trapped by the financial crisis since 2008, and thus is not likely to alter in China in the short run.

Considering the rising conflicts between economic growth and urban sustainability (Section 3), a compromising solution emerges, which can be summarised as **‘to maintain the focus on the economy, but allow for slower economic growth and meanwhile raise the attention to other**

sustainable sectors'. This has already been reflected in the 12th FYP which lowered the target of average GDP growth to 7.5% during 2011-2015 (Xinhua News, 2011b). It notes that a new strategy of '*sustaining economic growth while addressing environmental and social problems*' has been adopted, an important step forward than the '*weak sustainability*'.

However, an effective incentive system supporting such a new strategy has not been well developed. This is in spite of the wide acknowledgement by interviewees of "*the recent intention of central government on strengthening evaluation of official performance in non-economic sectors*". A set of explicit and quantitative indicators for non-economic sectors as national targets in successive five year plans, remains absent, except for the energy intensity per GDP unit and proportion of major pollutants (Section 3.2). This is partly due to the difficulty in identifying suitable measurements, especially in the social sector, which was widely confirmed by interviewees. This makes it difficult to monitor official performances on balanced development at various levels, let alone to enhance their motivation on sustainability and affect the decision-making at collective-choice and operational levels.

Moreover, the prevalent practice of the property-led urban development model and its wide negative impacts on economic, environmental and social sustainability (discussed in Section 3.2) have not yet been fully recognised and addressed in principal government documentations on national development, including the *China Agenda 21* and 12th FYP (Gan, 1998, CCCPC, 2010). This makes it hard to develop holistic and pertinent measurements in relation to the property sector which plays a crucial role in the urban development process.

Therefore, the characteristics of the current legal and regulatory framework in China determine its high efficiency in realising economic growth but low efficacy in balancing economic progress with environmental and social progress. Substantial redirection towards sustainable development requires not only a top-down major institutional change in terms of rephrasing the primary goal, but also effective enforcement mechanisms that alter incentives, motivation, and values, and increase costs of breaches throughout the three institutional levels.

The evolving status of institutional arrangements means that China's path towards sustainable development will be an incremental one. Full understanding of the impacts of the property-led urban development are required to enable better institutional arrangements that promote the property sector and urban development to prioritise urban sustainability.

5.2 Impacts on the Sustainability of Land Market

The central goal of prioritising economic development has set an ultimate foundation for all formal rules on land market to be formed. Exemplifications can be widely found, such as the 'First Land Reform' that legitimised transfer of land use rights in *Constitution 1988* (Chen, 2004), the 'Second Land Reform' on open land sale in *Decree 11* and *Decree 71* by MLR (2002, 2004) and the formation of land financing system for local governments. Consequently, these rules have produced dramatic government-led growth of the land market and urban economy.

However, it is also the underlying source for many increasingly thorny unsustainable problems. First, it leads to the unsustainable heavy reliance on land based finance, which accelerates urban sprawl and arable land loss, and increases environment impacts and infrastructure costs (Section 3.1 & 3.2). It is further intensified by the above discussed difficulty in developing and implementing property tax. Acute land shortage continues to push up land prices and impacts of unsustainable land financing could be potentially spread towards the general economy.

Second, as the owner and sole supplier of primary urban land, the government has a direct impact on determining land prices. A scholar in Shanghai contended that *"due to the government monopoly, land supply in China has long been kept lower than market demand, resulting in over-pricing of land"*. Further, echoed by interviewed developers, the 'Second Land Reform' has enormously raised the costs of land acquisition, becoming *"a decisive factor for setting the prices of developments on the land"*. Hence, sustained prosperity of the land market becomes closely related to the interest of local governments, who however also need to administrate the market from an objective perspective.

Third, some interviewees depicted the rapid market growth as *"illusive prosperity"*, underneath which hidden problems are snowballing. Motivated by a potential surge of land prices, developers have been enthusiastically building up their land stock for land appreciation, especially during 2002-2004 and 2006-2007 (Section 3.1 & 3.2). Thus, local governments and developers have formed a coalition in promoting market growth, which has been conducive to inflation of land and housing prices, escalating investments in property development, risks of bubbles and market overheating (as discussed in Section 3.1).

This has been an inherent barrier for successive macro control policies since 2003 (Section 4.3). An interviewed agent in Suzhou argued that: *"despite macro control policies, the local*

government will not allow the market to cool down and the prices to fall notably, due to their direct benefits in land revenues". This was a common viewpoint among regional and local interviewees despite the tendency of increasingly stringent macro control. Such wide belief in long-term market growth largely affects the behaviour of officials, market players and consumers.

Therefore, the institutional setting on land market has been a double-edged sword. It has been highly efficient in boosting market growth and the urban economy through increased property rights and declining transaction costs. But it also determines its long-term negative impacts on environmental sustainability, and social and economic stability, which are increasingly felt in today's China (as discussed in Section 3.1 & 3.2). Changes in land institutions initiated the property-led urban approach decades ago, and it should also be the core for reforming this model in order to achieve sustainable development. This requires new formal as well as informal institutions that promote wider recognition of local governments on not only the economic but also environmental and social functions of the land.

5.3 Impacts on the Sustainability of Housing Market

In line with the changing institutional environment and progressive land reforms, housing institutions have been altered to promote incremental housing reforms. However, discussions in previous sections unveil three critical loopholes of the institutional framework of housing market that affect its sustainability.

First, over the past decades the focus of formal rules on the housing sector has been skewed towards the principal goal of housing privatisation and commercialisation, while the social housing sector has been severely weakened (Section 3.2). A scholar in Shanghai claimed that *"the state designation of the housing sector as a strategic growth pole of the national economy has brought about political support and governmental emphasis at all levels"*. This shapes a prevalent emphasis of regulations and policies in various fields on economic functions of the housing sector. For instance, the termination of public housing distribution, establishment of housing finance system, and promotion of massive urban demolition at the costs of low compensation and historical building destruction have all served the central aim of boosting the housing market through increased demand and supply. This has not only brought economic rise but also severe overheating.

On the other hand, social housing institutions were not established until late 1990s (Section 3.2), the third stage of housing reform since 1998. Given these institutions, the proportion of social housing has kept declining as a percentage of total housing construction since 2000 (Section 3.3). According to interviewees in the case cities, *“till 2008 many of construction plans of EDH and LRH were not fully implemented”*. This is fundamentally shaped by the top-down negligence of social housing and less political support and enforcement mechanisms. It has caused long-term impacts on the entire housing structure, i.e. rapid growth of commercial housing stock but with steep decline of social housing supply. When the urban housing privatisation rate reached 83% (NBSC, 2008), inadequate social housing has already been severely affecting social stability. Although ambitious social housing plans since 2007 signals an important institutional rebalance towards the social function of housing sector, their successful implementation remains challenging (Section 3.2).

Second, within the commercial housing market, houses have been increasingly oriented toward high-end sectors, distorting the structure of commercial housing supply (Section 3.1 & 3.3). This was induced by the government’s idea since 1998 that *‘every Chinese people should be able to buy houses in the market with further progress of housing reforms’*, cited by some interviewees. *“Market demands for larger houses have been escalating as housing ownership and improvement of housing conditions has been advocated by the government”*. This was used by interviewed developers as the justification for them to produce larger houses to cater for consumers’ need. However, actually developers have been playing a more proactive role in determining the size of housing supply. This is due to their increased property rights under surging land and housing prices, reduced transaction costs of limited regulations on housing sizes before 2006 (Section 3.1) and loose disposal of idle land (Section 3.2).

However, considering the previously discussed huge population, rapid urbanisation, and limited land for urban construction in China (Section 3.2), the idea that *‘everyone can buy a market house’* is neither practical nor sustainable. This gives rise to reduced housing affordability and increased housing inequality, dampening sustainable development. In this respect, the promulgation of 70/90 Policy by the State Council (2006) has been a milestone. As an operational rule made at the collective choice level, it signifies the first serious attempt of the central government since the housing reforms in rebalancing the structure of housing supply and redirecting the housing needs of consumers.

It is also a significant step forward in establishing house-building standards, which have been absent for decades and is crucial for the long-term growth of the housing industry. This policy reflects the tendency of growing importance to be addressed by the highest level decision-makers on efficient use of land, housing spaces and resources, in line with the principles of

sustainable development. Moreover, some scholars argued that “by reducing total prices of housing units, smaller houses can greatly relieve the increasing burden of housing expenditure of urban residents” and “mitigate the lowering housing affordability and social housing shortage”.

Nevertheless, this policy remains controversial and not fully implemented as it has loopholes and involves redistribution of property rights. For instance, 1) by prescribing a nationwide quantitative target, it removes the power of local authorities in determining local adjustments. Some interviewed local officials, considering local bestselling housing sizes (Table 5), have shown their resistance by describing this policy as a ‘one knife cut’ unsuitable for local conditions. 2) It disregards varied expertise of developers and requires a compulsory 70% of housing units smaller than 90 m² in each project. Interviewed developers, especially those specialised in high-end developments, regarded it as “a form of government intervention that brings unequal opportunities for market competition”.

Table 5 Bestselling size of housing per unit in the four cities (m²)

Suzhou	Tianjin	Xi’an	Dongguan
100-120	100-120	130-140	130-140

Source: summary of interviews in mid-end 2008

Hence, 70/90 Policy involves rigid regulations that penetrate the three institutional levels and provokes reluctance from interest groups such as local governments and developers. Although some progress has been made (e.g. the proportion of small houses in total annual production in Xi’an rose from 15.6% in 2005, up to 22% in the first half of 2006, 38% by 2007 and 44% by mid-2008), these interest groups would rather circumvent it when chances rise (e.g. the stimulus period 2008-2009). Effective implementation would require lower costs of its enforcement, and greater flexibility to reduce the resistance. Further, a scholar in Shanghai contended that the idea of ‘everyone can buy a house’ should be replaced with ‘everyone could buy or rent a house’. This could be a more fundamental and long-term solution as it changes the contextual factor of consumer mentality.

A third problem in the housing sector relates to a fact that while the size of the commercial housing market and its role in national economy expands massively (Section 3.1), many housing standards remain absent or poorly implemented. A senior official from MOHURD argued that “the housing sector has been utilised by the government as an unparalleled tool to sustain economic miracle, however, the sustainable development of the housing sector itself has not been equally highlighted”.

Based on the discussions in Section 3 and the primary results, those standards which are absent or laggard mainly include: 1) standardised design criteria of different housing types, commercial and social housing, 2) quantitative specifications on energy standards of different housing types, 3) standards of housing maintenance and management, 4) coordination with land uses in housing development schemes, such as location and density. This explains the problematic developments in these areas as discussed in Section 3.1 & 3.2, which consistently reflect the dominant focus on rapid expansion at the cost of quality advancement of the housing industry over decades.

In all, the greater the scale of the housing market becomes, the more serious the long-term consequences of the above three structural problems will be. Sustainable development of the housing market, as a dominant part of the property market, will not be achieved without proper institutional rearrangements on the balanced structure of housing supply and specified standards of housing quality.

6. Conclusion

Based on the property-related holistic indicator framework, this paper discusses the wide urban contributions, impacts and consequences that the property-led urban development model has given rise to in China. Moreover, through the three-level institutional analysis and an integrated system perspective, discussions reveal more the underlying sources for the current prevalence of this model. Poor economic performance and crisis in socialist regime in the 1960s-1970s, as described by Cao (2003) and Shih-Shen (2007), could be the main contextual trigger for the economic reforms since 1978. Since then, legitimisation of private ownership (Park et al., 2006) has been enabled in the sector of land use rights and property developments. Decentralisation of power provides stronger property rights at the collective choice and operational levels (Figure 1).

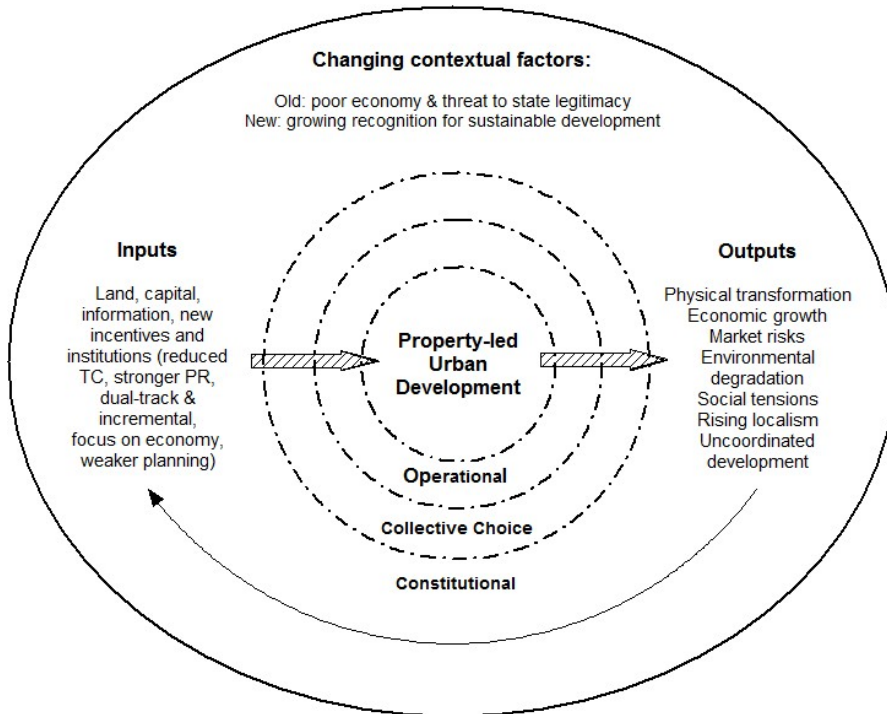


Figure 8.3 System operation of property-led urban development in China

Due to the primary emphasis on rapid economic growth and incentive systems for economic progress from constitutional to collective choice and further operational level, ownership of urban land by local governments, and strong potential of the property sector in realising instant urban results, which is for instance found in the UK (Healey, 1992, Jones, 1996, Adair et al., 2003), the property-led strategy has risen to be a powerful and effective urban growth instrument in China since the 1990s.

This paper further contributes to the debate on the prevalence of the property-led urban development model in China by discovering that the dominance of this model has been fundamentally shaped by institutional changes on stronger property rights and reduced transaction costs at collective choice and operational levels, enabling new incentives and higher efficiency of economy. However, it is also the priority towards quantity expansion over qualitative improvement, as reflected in the legal and regulatory framework in relation to property market and urban development, which determines the growing costs of such a development model along with its further expansion across China. It can be powerful for only limited period of time when rapid urban growth and transformation remains as the paramount goal of development.

As development needs to be sustainable and coordinated development becomes the new theme for urban China for the coming decades, the legitimacy of the property-led model is increasingly challenged. Though, the property-led strategy remains applicable and significant in the post-reform era when no other suitable alternative exists. The institutional analysis in the paper indicates potential areas of reforms within the model and property sector to expand its long-term benefits and restrain its unsustainable impacts so as to adapt to the new stage of China's urban development. These reforms emphasise the rebalancing of quantity expansion and quality improvement in wide areas such as property development, use and investment, housing supply, land use, and infrastructure construction. Therefore, this research conducts an in-depth analysis on the property-led development model and explores areas that need to be improved to better achieve sustainability.

Appendix

Table 6 Indicator system for property-related urban sustainability

<i>Economic Sustainability</i>		
Themes	Indicators	Measurement variables
General performance	Economic growth	GDP growth & per capita GDP
		FDI & inward investment growth
Real estate development	Property development capacity	Scale of government land sale
		Revenue of government land sale
	Quantity of property	Property completions & purchases
		Quality of property
	Housing size	
	Property location	
	Housing maintenance	
Real estate use	Efficiency of property use	Vacancy rate of housing
		Vacancy rate of office
		Vacancy rate of retail
Real estate investment	Property investability	Rental and price of commercial property
		Price earning ratio for housing
Infrastructure quality	Public mass transit	Mass transit projects by mode
	General transport	General transport facilities by mode
<i>Environmental Sustainability</i>		
Energy use	Energy efficiency of buildings	Proportion of new buildings that meet energy standards
Land use	Recycling of land	Arable land protection
		Idle land disposal
	Building density	Built density (site/city)
Floor area ratio/plot ratio (FAR)		
Pollution	Pollution level	Annual days of good air quality
		Water pollution and shortage
		Green space per capita
		Waste collection and recycling measures

<i>Social Sustainability</i>		
Population change	Population growth & migration	Urbanisation rate
Social housing	Social housing provision	New starts & completions Quality (size, location)
Social cohesion	Demolition & relocation	Level of compensation & relocation
Cultural heritage	Destruction to historic buildings & sites	Impacts of property developments on historic buildings
<i>Institutional Sustainability</i>		
Legal & regulatory framework	Legal guidance	Legal clarity Legal continuity Legal sufficiency
	Policy guidance	Policy clarity Policy continuity Policy sufficiency
	Rule enforceability	Enforceability at central & local levels
Urban governance & planning	Transparency of government	Transparency of governments in general Government coordination
	Role of non-governmental sector	Capacity of non-government organisations
	Transparency of urban planning	Transparency of planning process Implementation of urban plans
Property market administration	Government administration	Role & power of government
	Professional bodies	Independence & professionalism
	Availability and quality of data	Availability and validity of data
	Skills & training	Professional qualification and training

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