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Urban growth, from manufacturing to consumption and financialization: the case of China's contemporary urban development

Thierry Theurillat 

ABSTRACT

This article provides an empirically based novel research framework addressing 'the land/built environment–finance and economic development nexus' of China's urban growth model. First, urban growth must be viewed beyond manufacturing and production activities to incorporate consumption activities. Mega-projects and infrastructure development have gradually become dependent on the incomes and spending of increasingly mobile consumers and residents. Second, the article highlights the 'Chinese type' of financialization of the built environment. As financial assets, urban land and real estate have been connected to newly emerging finance capital actors and circuits nationwide, as well as to direct cross-regional property investments made by urban households.

KEYWORDS

China; urban growth; variegated financialization of the built environment; production and consumption city; urban development

JEL B50, E20, G10

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INTRODUCTION

This article merges two separated fields of literature in economic and urban geography to address the connection between the production of the built environment and urban growth. From urban and regional studies perspectives, the former is a by-product of the latter (Camagni, 2017; Scott & Storper, 2015). Post-industrial urban growth is mainly viewed from basic activities; more specifically, from export-related services (such as knowledge-intensive business services) in domestic and international markets that create urban revenue and locally induce spillover effects for consumption and services. Recently, scholars have established that local spillovers from production are no longer automatic due to the changing scale of consumption. Cities are no longer places of just production, but ones of consumption, which relates to urban revenue and activities that capture the expenses and incomes of increasingly mobile residents and consumers for retail, leisure and culture purposes (Crevoisier & Rime, 2020; Markusen & Schrock, 2009).

The emerging field of the literature in financial geography has demonstrated the driving role of finance in the formation of the built environment in contemporary

capital accumulation by emphasizing the increased linkages between globally organized financial markets and cities (Aalbers, 2012, 2019; Moreno, 2014; Weber, 2015). Across many countries and regions, such linkages have taken 'variegated' forms depending on their socio-institutional contexts (Fernandez & Aalbers, 2016), which have enabled finance capital actors to capture a share of urban rents. This literature has also integrated the active role of municipal governments to create land value and to transform land and the built environment into 'liquid and mobile financial assets' by connecting land-use planning and real estate development to these actors and markets.

However, neither field of the literature has addressed the combination of both 'the increasing role of consumption activities in line with the mobility of people' and 'the variegated financialization of urban production' to analyse contemporary urban development. First, the growing significance of the city as a site of consumption activities that specifically highlights the issue of the quality of the urban built environment to attract a wide variety of consumers and potential residents has not been incorporated in urban and regional studies. Second, the key role played by the built environment as a financial asset has been

CONTACT

 thierry.theurillat@he-arc.ch

University of Applied Sciences and Arts, Western Switzerland (HES-SO), Neuchâtel, Switzerland.

mainly viewed from the perspective of production activities. Large urban (re)development projects as key urban drivers such as central business districts (CBDs), shopping malls and residential estates in inner-city or suburban areas have been iconic of financialized urban entrepreneurialism that improve global competitiveness by attracting multinational firms and related qualified human capital (Dörny et al., 2016; Fainstein, 2008; Guironnet et al., 2016; Scott, 2019).

The analytical framework that addresses the ‘urban built environment–finance and urban economic development nexus’ is developed in the next section and is then applied to address China’s ongoing urban development in the following. It revisits the established land-driven growth model used by scholars in urban studies to address the linkages between urban growth and the production of the built environment in China since the early 1990s (Hsing, 2010; Lin, 2009, 2014; Tao et al., 2010; Wu, 2015b, 2017) in two periods. The first from the 1990s to the Global Financial Crisis (GFC) contends that urban growth was mainly based on manufacturing and induced massive transformation of land and built environment into financial assets by local governments, real estate firms and households. Land development, in the context of China’s bank-based financial system, generates fiscal revenue for municipal governments coupled with housing consumption by urban households have functioned as the two main pillars of the built environment production. In the post-GFC period since 2008 the production of the built environment and its transformation into financial assets have been rescaled and entered a new, more complex and hybrid phase. First, China’s large real estate and infrastructure development have been increasingly fuelled by financialized investment vehicles structured by large banks, trusts and developers on a national scale. Moreover, urban property has diversified since cross-provincial households’ investments in residential and non-residential real estate have emerged, while large investors have increasingly become property owners nationally. Second, the urban growth model has structurally changed by mega-projects. It is still mainly induced by production activities, however, with more-intensive knowledge–business services, but also increasingly by consumption and the capture of extra-local households’ incomes due to the growing empowerment and mobility of people as consumers and residents.

This paper argues that China’s ongoing urban development now needs to be addressed as a combination between production and consumption activities along with financialization driven by urban households as property owners and increasingly supplied by Chinese types of finance capital actors and circuits. Additionally, the case of China brings an opportunity for a conceptual cross-fertilization of the two mentioned fields of literature to address the relationship between the production of the built environment, the mobility of people and urban growth in the financialization era.

Methodologically, this article empirically brings the perspective of the real estate industry in China’s ongoing urban development which has been under-addressed (with notable exceptions, see He & Wu, 2009; Qian, 2011; Theurillat, 2017a, 2017b). To document the national dimensions of real estate development and

financial circuits, a case study focusing on China’s private and state-owned large property companies (ranked among the top 50 in China) was carried out. Along with the collection of data from numerous documents, approximately 60 interviews were conducted with national large real estate companies’, commercial banks’ and investment funds’ managers in China and Hong Kong over a 30-month period starting in spring 2014. Moreover, this article builds on three previously published case studies that contribute to this field of enquiry which addresses China’s urbanization from the standpoint of both real estate and bank–finance industries that were carried out on local scales in a medium-sized city (Qujing in Yunnan province) and two large ones (Guangzhou and Kunming).

CONTEMPORARY URBAN (RE)DEVELOPMENT: ECONOMIC ACTIVITIES, THE BUILT ENVIRONMENT AND FINANCE

The driving role played by real estate in contemporary urban and regional economic development since early 2000 up to the present is addressed by mobilizing two distinct fields of the literature (Figure 1). First, the urban and regional development literature has provided theories about the basic types of economic activities that create urban revenue and induce urban development where linkages between production and consumption activities have been emphasized. Second, the literature on the financialization of urban production has underscored the increased mobility of finance capital and variegated ways of rent capture by finance capital actors. Connections between land, real estate, finance and urban governance have been unravelled in developed and emerging countries.

Urban revenue: from production to consumption activities

Since the early 1990s, urban and regional development studies scholars have tackled the issue of urban growth in the context of a shift from the original context of industrial capitalism to contemporary cognitive–cultural capitalism (Hutton, 2008). For Scott (2017, 2019), the former was based on Fordist mass production, where industrial manufacturing framed the interconnection between urban economic and built environment, most notably in advanced industrialized countries. In the contemporary context characterized by the mobility of firms, labour and knowledge, production-based activities are viewed as the central driver of urban competitiveness (Camagni, 2017; Porter, 1998).

The competitiveness paradigm has basically adopted two main perspectives over the last 30 years. The first views cities as contexts for innovation and creativity. The field of literature known as territorial innovation models (TIMs) (Moulaert & Sekia, 2003) has highlighted the various ways in which cities and regions have grown due to more knowledge-intensive and creative industries’ competitiveness. Initially, this endogenous approach to regional development considered regions as coherent innovative

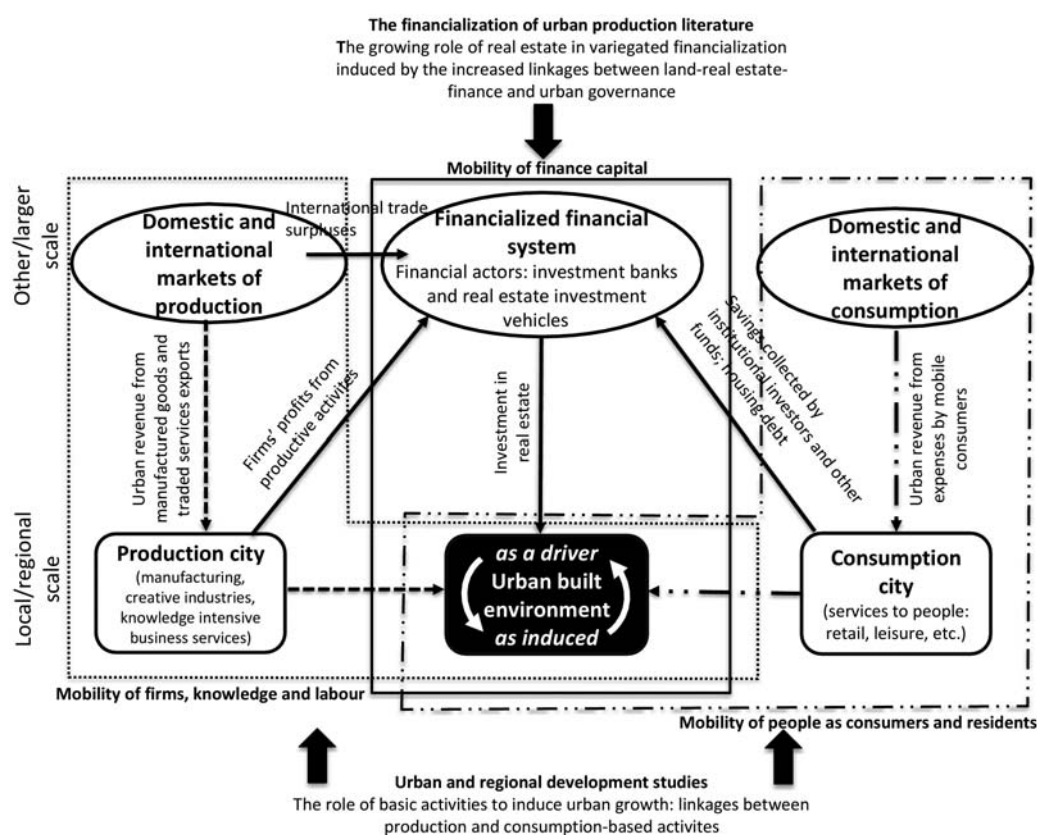


Figure 1. Stylized contemporary post-industrial urban (re)development in the era of the financialized urban built environment. Source: Adapted from Theurillat et al. (2019).

entities able to deliver products on so-called global markets. More recently, the global production networks (GPN) approach reveals the control being exerted by central cities on value chains distributed across many regions and nations (Coe et al., 2008). A second perspective considers urbanization as being the result of the competitiveness of large cities in business services provision. 'World city networks' (WCN) (Taylor & Derudder, 2016) epitomize the key role of global cities in the control and governance of the contemporary global economy. In this system, centred on multinational corporations as key actors, the urban hierarchy is driven by business services, which include financial services (Taylor et al., 2014). The clustering of business services in large cities is driven by agglomeration and urbanization economies, since these firms need rich knowledge capital to develop their businesses (Sassen, 2010).

Fundamentally, all these works implicitly rely on export-base theory (Hoyt, 1954), which emphasizes basic activities, revenue and expenditure flows (Vollet, 2007) and views urban economic development as a two-phase process. First, cities and regions generate revenue by exporting goods and traded services; second, this revenue is redistributed mainly in the form of wages for workers whose spending, in turn, induces local public and private services and real estate development. In other words, urbanization is driven by local production activities connected to global markets, while local consumption and services (retail, health, education, leisure, etc.) and real estate

are by-products of export revenues. Finally, urban and regional scholars underscore both Marshall–Jacobs urbanization economies and the Keynesian multiplier effect when analysing the urbanization process (Camagni, 2017; Scott & Storper, 2015).

Emphasizing the increasing mobility of consumers, numerous economic geography scholars have revisited export-base theory and the supposed local multiplier effect (Davezies & Talandier, 2014; Shearmur, 2016). Mobile consumers have indeed caused a growing geographical disjunction between the places of production that generate worker income (or for people receiving a private or public annuity) and the places where these funds are spent. Some cities and regions can be highly competitive as production places but significantly suffer from 'leaks' if those domiciled spend most of their income outside their localities. A first approach, the 'residential economy' concentrates on where people live and supposedly spend most of their incomes. It provides convincing explanation regarding the growth of many regions in Canada (Shearmur, 2016), France (Talandier, 2016) and Switzerland (Segessemann & Crevoisier, 2016), which are attractive for commuters, retirees and students. A second approach, the 'presential economy' (Guex, 2014; Vollet, 2007), analyses how the presence and the expenses of increasingly mobile consumers in some places generate economic activities. Mobile consumers can choose where they spend their money, and the expansion of the tourism sector has also contributed to this mobility on the supply side. Tourism

today encompasses many forms: leisure, shopping, day-trippers (Vacher & Vye, 2012), secondary residents (Roca, 2016), health services, events and experiences. Significantly, mobile consumers are attracted to places where they find more value for their expenses. In the past, tourist resorts were the primary beneficiaries of extra-regional consumption, whereas nowadays most places are being forced to improve their attractiveness to accommodate these consumers. As noted by Judd and Fainstein (1999), by the 1990s American cities had already turned to tourism, specifically to counteract the negative effects of deindustrialization and suburbanization. Today, Western societies are predominantly centred on a metropolitan economy characterized by competition between agglomerations to capture spending at national and international scales (Markusen & Schrock, 2009).

More broadly, in a majority of developed countries the mobility of consumers have made significant impacts on urbanization, which has been specifically tied to the growth of consumption activities being able to induce local development by capturing locally generated incomes (from inhabitants) and elsewhere (from extra-local demands). The growing significance of the city as a place of consumption specifically highlights the issue of the quality of the built environment to be attractive to a wide variety of consumers (tourists, day visitors, etc.), and existing and potential residents (retirees, students, etc.). However, the importance of the built urban environment in capturing these expenditures has been neglected by urban scholars. In other words, the built environment is still viewed as induced by basic economic activities.

The built environment: a driver for financialized capitalism

Scholars in the novel field of the financialization of the built environment (see Aalbers, 2019, for a review) have recently placed real estate at the centre of current financialized capitalism (Moreno, 2014), in which accumulation takes place more on financial markets than in the real economy (Krippner, 2005). Influenced in particular by seminal studies (Harvey, 1978, 1985; Lefebvre, 1974) that incorporated the role of urban space in capital accumulation, scholars have revisited David Harvey's seminal theory on the urbanization of capital and capital switching (Harvey, 1978, 1985), and the 'tendency to treat land or property as a financial asset' (Harvey, 1982, p. 347) to contemporarily address both the increasing and driving role of the built environment in urban growth and its connection to global financial markets.

First, the financialization of real estate has gone hand in hand with the emergence of a finance industry that facilitated the capture of urban rent. For numerous scholars, homeownership policies implemented in various nations since the early 1990s have played a key role in the financialization of housing (Aalbers & Christophers, 2014; Fernandez & Aalbers, 2016). Viewed as a means to stimulate the economy by increasing the wealth effect resulting from rising housing prices, homeownership has become the main source of wealth of many people, but

also, conversely, a massive mortgage debt market for banks. In this way, housing has increasingly become a financial asset for both banks and households as property owners. However, financialization went a step further in several countries (the United States and the UK being iconic) based on the securitization of real estate via the creation of various types of special investment vehicles (SIVs). In this way, housing mortgages, transformed into sophisticated derivatives and sold to institutional investors (pension and insurance funds), could further sustain new rounds of housing mortgages by banks, which finally culminated into the well-known US subprime mortgage crisis (Aalbers, 2012). In other contexts, the capture of rent by finance capital actors has taken the form of a direct urban property ownership via the development of listed real estate investment trusts (REITs) and private real estate funds (PERE). This process has even intensified in several countries during the post-crisis era since 2008, either for non-residential (Waldron, 2018; Weber, 2015) or for residential real estate (Fields & Uffer, 2016; Wijburg & Aalbers, 2017).

Second, the financialization of real estate has been inseparable from both the shifts in the financial system as well as the rescaling of financial circuits. During the last 20 years, the built environment has attracted massive investment, provided by newly financialized investment circuits connected to financial markets (Aveline-Dubach, 2008; Theurillat et al., 2010). Several processes have been influential in generating liquidities in search of investment opportunities: in some countries this has been achieved via the growth of pension funds (United States, the UK, Canada, the Netherlands and Switzerland), and in others via pooled investment funds (France, Germany and Italy); furthermore, trade surpluses and related sovereign funds, surplus money resulting from quantitative easing policies – all these activities combined have created a 'wall' of money (Fernandez & Aalbers, 2016) that advanced the development of global financialized investment circuits (Corpataux et al., 2009, 2017), circumventing, complementing or boosting existing bank-based local and national financial circuits.

On the whole, the real estate–finance nexus has been especially growing in recent context due to the abundance of money and low interest rates (Aalbers & Christophers, 2014; Waldron, 2018). Concurrently, direct connections between local real estate and global finance capital have been evolving quickly. The financialization of real estate is specifically defined here as the capture of rent by finance capital actors thanks to the construction and exploitation of the mobility of capital due to the massive transformation of tangible, non-liquid and immobile assets (such as buildings located in different cities and nations) into intangible, liquid and mobile financial assets by global finance capital players (large banks and various types of SIVs) located in the 'Global City' (Sassen, 1991). As a result, tensions arise between a shareholders' value logic on the financial markets (Boyer, 2000) and the production of the urban built environment in its local context. For instance, real estate has become a financial asset class

that enables the diversification of an investor's portfolio in accordance with the fundamentals of modern portfolio management theory. In the latter, capital allocation is made based on the risks and returns indices of real estate in comparison with the financial assets of other sectors (equities, bonds, currencies, etc.) and spaces (e.g., developed and BRIC (Brazil, Russia, India and China) countries cities). On the other side, nations and cities have become dependent on the collective opinions of financial markets (Orléan, 2012). Speculative and systemic fluctuations of global financial markets increasingly sway real estate development: financialization can amplify real estate cycles as well as make them subject to the impact of massive withdrawals of capital in the case of financial and economic downturns (Fernandez & Aalbers, 2016).

A combination to address the variegated financialization of the built environment and the types of basic economic activities

The grounded and variegated forms of the interconnections between mobile finance capital, built environment and cities due to socio-institutional local and national contexts have increasingly been unravelled in both developed and emerging countries (Aveline-Dubach, 2017; Haila, 2015; Mosciaro & Aalbers, 2017; Halbert & Rouanet, 2014; Sanfelici & Halbert, 2016).

First, connections to global finance capital and reconfigurations of real estate and finance industries relate to various national financial systems (Theurillat et al., 2015). On the one hand, the financialization of real estate depends on the existence of domestic financial institutions in real estate (REITs, PERE and institutional investors, such as pension funds) and the degree of liberalization and internationalization of foreign capital investment in domestic real estate. On the other, financializing real estate conjointly works with the development of 'transcalar territorial networks' (Halbert & Rouanet, 2014), linking international investors, large property development and consultancy firms, which has resulted in uneven and selective spatial processes.

Second, (global) financial markets have variegated local impacts regarding large real estate and infrastructure development projects (Halbert & Attuyer, 2016; Theurillat & Crevoisier, 2013, 2014; Torrance, 2009). For instance, the involvement of property funds in housing in Berlin and New York has arguably been based on a short-term increase of exchange value, resulting in the displacement of initial residents (Fields & Uffer, 2016); while in the case of mixed use and large-scale urban development projects in France and Switzerland, other institutional investors secured their investment in the long run based on rental incomes from large office and retail companies (Guironnet et al., 2016; Theurillat & Crevoisier, 2014).

Third, local state actors have played a key role in connecting local real estate to financial markets by using land as a financial asset for urban planning and (re)development (Ward & Swyngedouw, 2018). In the United States, municipal or local government agencies issue various products (e.g., tax incremental finance) on financial markets

to finance urban infrastructures (Ashton et al., 2016; Weber, 2010). In other countries, large real estate projects have been financed via public-private partnerships with finance capital vehicles, and finance players have become key actors of urban built environment changing urban governance (Ashton et al., 2016; Christophers, 2019; Kaika & Ruggiero, 2016).

Thus, by documenting 'local financializations' (Weber, 2015) of how land as a set of social relations and practices has been central for restructuring urban governance regimes and capital flows, scholars underscore that the ongoing financialization of urban production relies on unpacking the issue of land rent creation and capture based on its links between land-use planning, real estate and financial markets. However, the connections between cities and financial markets also need to be addressed in terms of various types of urban economic development.

For numerous scholars, the key role played by built environment as a financial asset connected to (global) finance capital actors and circuits has been mainly viewed from the perspective of the production city. Large urban redevelopment projects such as CBDs, shopping malls or those related to leisure and cultural activities, as well as the widespread gentrification of inner-city or suburban neighbourhoods constitute all urban drivers and forms of contemporary financialized capitalism (Dörny et al., 2016; Fainstein, 2008; Guironnet et al., 2016; Scott, 2019). Yet, new large residential areas, new mega-projects (stadiums, exhibition centres, theme parks, etc.), infrastructures and the rehabilitation of large former manufacturing or transportation estates (railways, factories and harbours) for cultural and consumption activities (shopping malls) are all also emblematic key components of the role of the built environment in order to insert cities into the 'spatial division of consumption' (Harvey, 1989; Smet, 2016). Urbanization in Spain would illustrate the role of the consumption city in relation to the mobility of people and financialization. The development of financialized investment circuits indeed boosted urbanization and real estate development coupled with Northern European countries' elderly people who sought an attractive place to retire (Coq-Vuelta, 2013).

Nowadays, the 'land/built environment-finance and urban economic development nexus' has to be viewed from a more complex combination of production and consumption activities that are dependent on territorial contexts and urban governance (Crevoisier & Rime, 2020). Moreover, the driving role of real estate in contemporary economies and the connections between global and national financial systems and cities are variegated. Bank-based circuits are still significant in various countries in providing loans to households and real estate development companies, while the capture of urban rent by financiers primarily concerns large real estate development in large urban or tourist centres. Thus, the increasing role of real estate in contemporary urban development both as a financial asset and an urban growth driver still remains to be empirically and theoretically addressed by scholars. Large real estate development projects can be urban

growth drivers by creating additional urban revenue in relation to production and/or consumption activities, and, at the same time, by inducing further real estate development and urbanization spillovers. In addition, real estate development intensifies the competition for urban space and for rent capture by large and small property investors. The case of China in the next section provides an understanding of a combination between production, consumption and the variegated financialization of the built environment.

CHINA'S CONTEMPORARY FINANCIALIZED URBAN DEVELOPMENT

Numerous scholars in geography and urban studies have put land at the centre of urban growth in China since early 1990s. Based on the increasing dependence of cities to mobile production factors, mobile consumers and mobile finance capital, as previously highlighted, this section revisits the well-established land-driven growth model to address contemporary China's type of financialized urban development by dividing it into two main periods. The first urban growth period based on manufacturing that started from early 1990 has been overlapping with a post-GFC urban growth period that relates to a combination of production and consumption activities, as well as to the financialization of the built environment (Figure 2).

Urban growth since the 1990s: the role of manufactures

From the mid-1990s till the present, the majority of scholars in urban studies have highlighted the key role of land in China's economic growth and real estate development. This literature on 'land-driven growth' (Aveline-Dubach, 2017; Hsing, 2010; Lin, 2009, 2014; Tao et al., 2010; Wu, 2015b) initially refers to the land value-capture strategy that resulted from the decentralization of power and responsibilities in land management and urban planning, and the recentralization of the fiscal regime that benefits the central government. In China, municipal governments can lease urban land for real estate development and convert collectively owned rural land into urban land. Moreover, this conveyance generates revenue that directly benefits local governments and that compensates for an imbalanced tax regime in which urbanization costs (in urban infrastructures and in social services such as education, health, etc.) fall under the jurisdiction of local governments. On one side, market-oriented reforms and the institutional decentralization of land management have been at the core of 'urban entrepreneurialism with Chinese characteristics' (He & Wu, 2009), where local governments play a proactive role in promoting growth. On the other, the local economic empowerment corresponds to the recentralization of the political control of urban growth (measured by the gross domestic product (GDP) index) by the central state through the promotion of sub-national government officials (Chien, 2013), or through the incorporation of state priorities into urban planning

(Wu, 2015b). As a result, local municipal governments operate like land development corporations, and the capital accumulation that results from a land finance model which is, according to Wu (2017), the foundation of 'state entrepreneurialism' in China.

The land-driven growth model has first coincided with the use of land collateralized as a mortgage for bank loans and with urbanization around manufacturing industries since the early 1990s (Cartier, 2002). To cope with the structural mismatch between fiscal revenue and expenditure, and while not being permitted to directly borrow money from state banks until 2014,¹ local municipal governments mainly used local government investment vehicles (LGIVs), such as local state-owned utilities, real estate companies and investment companies (urban investment and development corporations) to finance infrastructures. These LGIVs were able to obtain loans from state banks by mortgaging land injected by local governments and provided serviced land to the land (lease) market. Low-priced and subsidized land together with cheap labour based on rural migrants from inner provinces were originally used to attract foreign investment when the first economic and technological development zones were established in coastal areas. It then continued to areas further inland and eventually turned into an inter-city competition to attract foreign and domestic firms. Within a decade, China had become the world's factory, primarily exporting cheap goods (textiles, electronics, etc.) to Western countries. By increasing the overall local GDP for local governments, industrial development raises the land value of the city, which in turn enables local municipal governments and related LGIVs to sell land (use rights), via auctions, for commercial and residential real estate projects. By selling land, LGIVs could repay their local bank loans. Ultimately, the expansion of the city's territory by grabbing rural land at a lower value and converting it into serviced land so as to raise its value and attract investment has played a key role in generating revenues to cope with the costs of urbanization for local governments (Lin, 2014; Wong, 2013).

In addition, land-driven accumulation and real estate development in the context of manufacturing became possible thanks to both capital switching from the primary capital circuit and to the transformation of housing into a financial asset since early 2000s (Aveline-Dubach, 2020; Theurillat, 2017a; Wu, 2015a; Wu et al., 2020). This resulted from changes to the state housing allocation system for homeownership (although based on lease rights limited to 70 years) and market allocation since 1998. First, households have massively invested in residential housing that became a financial asset. As property owners, urban households could benefit from urban rent, motivated by multi-property purchases both long-term (retirement) and short-term (surplus value) strategies. Second, housing rapidly became a growing investment for the state banking system. Mortgages to households, including individuals purchasing their second or third home (and beyond), have dramatically increased and housing became a key component of credit creation. Third, many local

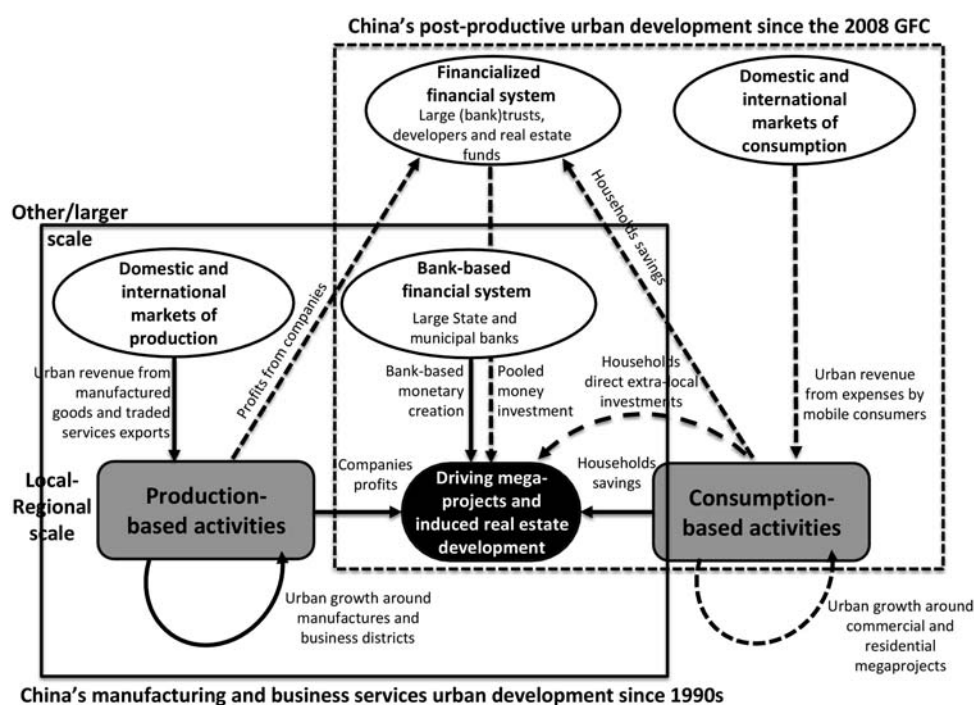


Figure 2. Research framework to address China's ongoing financialized urban (re)development. Source: Author's own elaboration.

state-owned manufacturing firms created real estate branches or companies to profit from real estate development. Thus, housing financialization since the end of 1990s has become a key driving force behind China's rapid urbanization and land-driven growth accumulation.

Post-GFC urban growth since 2008: the role of mega-projects as urban drivers

The initial land-driven growth model in China based on manufacturing was revisited by scholars who highlighted a second phase of economic growth and urbanization since at least early 2010s (Hsing, 2010; Wu, 2017) where real estate mega-projects and mega-events have played a key role for urban growth.

First, the urban model gradually shifted 'from industrialism to urbanism' (Hsing, 2010) since local governments used the latter to drive urban growth (Qian, 2011; Wu, 2015b). While the original inter-urban competition was based on attracting manufacturing firms, it has shifted towards attracting developers for building various types of post-industrial mega-projects. Urban renewals and new towns development in suburban areas have been first associated with CBDs (He & Wu, 2009), and then with various types of high-tech and science parks, universities, administrative districts as well as cultural districts (Li et al., 2014; Li & Chiu, 2017; Shen & Wu, 2016; Wu, 2018). These urban redevelopment forms are iconic of the business services and creative economy. For numerous scholars, next to tertiary services, cultural and creative industries (CCIs) have become a key growth strategy for local governments in China since early 2000s (He, 2017; Zheng, 2011). CCIs zones and all sorts of cultural facilities are often used as a branding strategy or place marketing to

enhance cities' competitiveness, promote their images and attract qualified workers. While placing new manufacturing zones in suburban areas or other inland cities (Shen & Wu, 2016), local governments have pushed the transformation of old industrial sites in the inner city into various types of cultural districts. In many cases, such state cultural-led urban renewal is often converted into commercial real estate development in close connection to tourism (Keane, 2011) as well as high-end residential areas (Wu, 2010).

Second, all this development coincides with massive infrastructure investments. In terms of infrastructure-led urbanization (Wu et al., 2016) or of a mega-event urbanization model (Zhao et al., 2017), the linkages between infrastructure, mega-events and large real estate projects have become key elements of urban growth strategies in large cities such as for the 2008 Beijing Summer Olympic Games, 2010 Shanghai Universal Exhibition, 2010 Guangzhou Asian Games and 2011 Shenzhen Universiade. All these are based on a growth model characterized by huge infrastructure and real estate investments.

Whether called infrastructure, mega-urban projects or mega-events-led urbanization, the current phase of 'policy of new urbanization' (Wu, 2017) is emblematic of the complexity of China's urban growth machine that must be viewed as a mix between production and consumption activities. Contemporary China's urban redevelopment is characterized with the building of various kinds of urban centralities that host post-manufacturing activities such as more knowledge-intensive business services and consumption activities that are expected to further drive economic growth and real estate development. Moreover, the rapid development of consumption places based on the

combination of both residential and commercial use and events that capture household incomes relates to the increasing role played by external demand in the production of the built environment.

The changing business models of the real estate industry based on consumption activities and the mobility of people

Large national developers (top 50) have played a major role in the construction of key mega-projects from which spillovers are expected in China. They, mainly state-owned real estate development companies, have expanded their markets from their original and large cities' bases in developed and coastal areas (Guangdong, Beijing–Tianjin and Yangtze River Delta) to inner provincial capitals and lower tier cities from early 2000 until the present. As increasingly renowned national brands, they usually benefit from support of local governments and can negotiate attractive conditions with regard to location and land price. Large mega-projects, functioning as key urban drivers, combine various uses, transforming the traditional urban development model of the real estate industry based purely on separate residential or commercial districts.

Next to large-scale residential estates developed all over China by national champions such as Country Garden and Evergrande, many developers have shifted away from pure residential real estate. In upper cities, novel types of mix-use and consumption places have been developed based on retail and leisure activities (e.g., Wanda Plaza for Wanda, Xintiandi for Shui On Group, MixC for China Resources Group, etc.), theme parks and new resorts based on entertainment, wellness or 'natural' landscapes (e.g., Wanda, Fosun's acquisition of Club Med). In this new business model, widely implemented in lower tier cities in China by local developers (Theurillat, 2017a, 2017b), the residential part of the project remains, however, crucial since the mix-use, retail or leisure part will

be financed by the sale of apartments to households. Simultaneously, large scale commercial and mixed-use real estate development that have blossomed in many cities and resorts around China have been increasingly targeting non-local demand for primary or secondary residency (such as retirees purchasing a flat in a province with a more temperate climate) and consumption (tourist) purposes.

As key urban growth drivers that will further induce real estate development, mega-urban projects have been dependent on both the increased mobility and purchasing power of urban households. The construction of new and rapid transportation infrastructures between and within cities (high-speed train lines, motorways, airports, subways, etc.) throughout the country and within cities of various social infrastructures such as museums, sports facilities, congress and exhibition halls, and the cultural heritage rehabilitation of urban districts have been key components of the increasing mobility of people and of the rapid development of domestic tourism at various levels, in prefectures, provinces and a national scale (Su, 2015; Zhang et al., 2011). Simultaneously, disposable incomes of urban households have quasi doubled since early 2010, from an annual per capita amount of 21,033 RMB in 2010 to 39,250 RMB in 2018 (Figure 3). While China still has a relatively low consumption rate on an international scale, the consumption expenditure has increased 43% from 18,258 to 26,112 RMB of annual expenditure per capita.

A recent and more plausible estimation of disposable incomes in China highlighted the fast and substantial rise of the share of urban and middle and upper classes' consumers since 2010 (Table 1). Having an annual household disposable income from 140 up to 297,000 RMB, this population represented 49% of the estimated 818 million of urban consumers in 2018. Moreover, urban

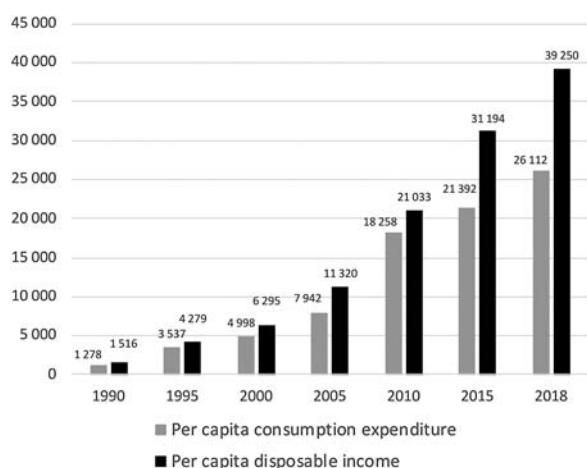


Figure 3. Annual per capita consumption expenditure and disposable income for urban households (RMB), 1990–2018. Source: *China Statistical Yearbook*, National Bureau of Statistics (NBS). <http://www.stats.gov.cn/english/>

Table 1. Annual disposable income of the urban population in China.

	RMB (thousands)	Population (millions)	
		2010	2018
<i>Middle- and upper-class urban population</i>			
Global	> 390	6	16
Affluent	297–390	3	10
Mass affluent	197–297	10	63
Upper aspirant	138–197	34	311
<i>Lower-class urban population</i>			
Aspirant	79–138	403	257
Lower aspirant	49–79	134	89
Poor	< 49	79	72
Total urban population		669	818
Middle and upper class (%)		8%	49%

Source: Ho et al. (2019).

consumers in lower tier cities depict recent growth and future expectations of both retail and leisure consumption in China (Ho et al., 2019).

The rescaling of the financialization of the built environment in China

The growth of large-scale mix-use, commercial and leisure facilities across China, as well as the key role of mega-events in urban growth have been accompanied by the financialization of the built environment. While municipal governments, local real estate (state) firms and households fuelled by credits from state-owned banks have been the major drivers of both the production of the built environment and of its transformation into financial assets, the dynamic of households' financialization has been gradually rescaled, and large professional investors have emerged on a national scale these last 10 years. This trend was the result of the United States' US\$600 billion economic stimulus package for 2008–09 to combat the potential ramifications of the GFC on China's domestic economy, whereas key real estate and infrastructure investments were used to boost local, provincial and national economies.

First, financialized investment circuits supplied the real estate industry and local governments' infrastructure

development. In the absence of liquid domestic financial markets and of REITs² until 2016, some new finance capital actors have emerged in China. While bank loans, including households' mortgage and property development loans, and buyers' cash (deposit and pre-payment) have been the main sources of funding for the real estate industry, self-raised funding has also played a significant role, composing 31–41% of the total funding sources from 2005 to 2018 (Figure 4).

While self-raised funds originally referred to various local and shadow banking forms of financial institutions that collect industry profits and household savings on a local-regional scale to supply funds for housing development (Theurillat, 2017a), they now tend to refer to a Chinese-style of finance capital actors and circuits. Typically, they are investment vehicles that collect funds on a national scale from investment companies, individuals and firms in order to enable indirect investment in various activities, which increasingly is in real estate and infrastructures. However, contrary to real estate funds (listed as REITs or PERE) in other countries, Chinese investment funds do not invest directly in property but, like banks, provide loans to the real estate industry. This type of securitized loan has taken the form of wealth management products sold at a national level by trust

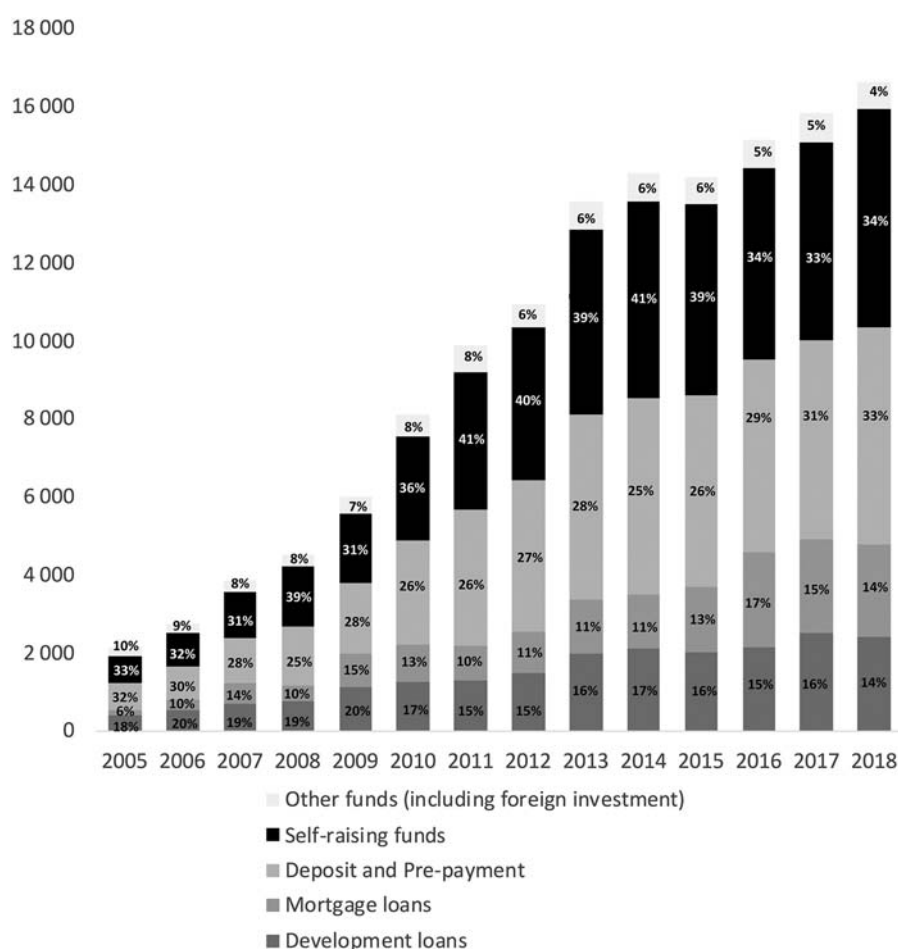


Figure 4. Funding sources of the real estate development industry in China, 2005–18 (RMB billions).

Source: *China Statistical Yearbook*, National Bureau of Statistics (NBS). <http://www.stats.gov.cn/english/>

companies, often with the help of banks (bank-trust companies) and various large mutual funds which form China's shadow banking sector. Bank and property buyers' funds, such as housing mortgages and cash that can be collected in advance due to the presale system, typically finance the development and construction phase of real estate projects, while shadow-banking circuits are mainly used to acquire land areas since bank loans are prohibited for development. Moreover, shadow banking strengthened as a result of stricter conditions for bank funds both to households and real estate companies (increase of own funds and of interest rates) from 2010 to early 2015.

Recently, this indirect and portfolio investment has been further developed by introducing new types of investment funds based on crowd-investing principles. Large Chinese developers (Country Garden, Greenland, Vanke and Wanda on the forefront) have initiated online investment platforms in the form of open funds (known as quasi-REITs) that collect money directly from investors (mainly households), based on various models which occur on cross-provincial and national scales. In these cases, investors receive a return on their investment as shareholders of a fund that targets either the commercial and mixed-use real estate market or the emerging rental housing market supported by the central government since 2017. Simultaneously, finance capital and shadow banking actors and circuits have also played a significant role in financing infrastructures (He et al., 2019; Pan et al., 2016; Theurillat et al., 2016). While LGIVs could mortgage lands injected by local government to obtain bank loans, they increasingly turned to financialized circuits such as the municipal bonds interbank market (where bonds have been sold to households since 2016) and (bank) trust companies due to periodical stricter banking regulations since 2010.

Second, residential and commercial property ownership gradually changed. As mentioned above, massive property investment by urban households have been a key characteristic of housing financialization in China. The development of new towns and resorts all over China has, however, witnessed a new phase since non-local residents have increasingly become the main target of developers. While property purchases are still strongly restricted to urban citizens (having the local residency permit: *hukou*) or just restricted for some period of time in first-tier cities in China (Beijing, Shanghai, Guangzhou and Shenzhen), numerous lower tier cities (from 1 to 5 million inhabitants) have been encouraging housing purchases by non-local residents since 2014. Thus, cross-regional and provincial investment in housing has become a key feature of ongoing business models of real estate developers and of housing development throughout China. Moreover, this rescaling of residential investment has coincided with the development of mixed-use and leisure real estate development. While developers used to invest as landlords in retail areas such as supermarkets, shopping centres or hotels, the business model changed. Next to apartments, the sale (of lease rights limited to 40 years for commercial real estate) of retail (shops) and

hotel (rooms) areas to households based on guaranteed revenue streams (rental income) by real estate companies have become the new norm of non-residential real estate development. This type of subdivision of area and property has been a 'pragmatic' means for many local and regional developers in lower tier cities to build and sell mix-use mega-urban projects despite the absence of large investors. Top national developers can take advantage of other business model opportunities rather than investing as property owners or parcelling out the buildings' property. For instance, Wanda and Vanke recently implemented an asset-light strategy for the development of new retail or mixed-use real estate projects, like many of their counterparts in Europe and the United States (i.e., selling them to large investors). Next to foreign large investors, such as pension funds and REITs seeking long-term investment in China, this strategy of turning to large investors has coincided with the emergence of domestic institutional investors, such as Chinese insurance companies, which are permitted to invest up to 30% of their total assets in real estate since 2010.

The financialization with Chinese characteristics for ongoing urban development

Urban development in China has been increasingly financialized these last 10 years. While a new Chinese style of finance capital actors and circuits emerged, the scope of investment for households as main urban property owners has enlarged. Simultaneously, the role played by massive infrastructure investment and mega-urban projects in the production of the built environment in China epitomizes a new phase of urbanization in which urban revenue and spillovers have become more dependent on consumption activities and on the capture of expenditures of increasingly mobile consumers and residents.

These two trends are deeply interrelated. First, built environment as a financial asset has become a more liquid and mobile investment. The initial land-growth model associated with a first type of bank-based financialization driven by local government (via LGIV), real estate firms and households' investment in built environment has rapidly been rescaled. Increasingly, urban households can diversify their portfolio by investing directly in other cities' real estate, similarly to large investors such as real estate and insurance companies. Moreover, they can invest indirectly both in real estate and urban infrastructure via large wealth management companies such as (bank) trusts (which primarily belong to banks, insurance companies and national state-owned companies) and funds (also in the form of crowd-investing funds of large developers). Located in the country's three major financial places such as Beijing, Shanghai and Shenzhen (Zhao et al., 2013) and collecting deposits on a national scale, large wealth management companies tend to be at the centre of China's shadow banking or financialized circuits in which built environment becomes a more liquid investment (in the form of loans and bonds) for households, investment companies, firms and insurance companies. Financialized circuits have so far benefitted from

periodically stricter monetary policy that focused (only) on restricting bank loans since early 2010 as well as from a much less strong regulation compared with financial markets where listings, issuances and transactions have been strictly controlled by the state.

Second, the production of the built environment has been progressively dependent on attracting both more mobile households as investors and consumers. The initial land-growth model based on manufacturing and spillovers in real estate development has changed. The massive investment for urban infrastructure, such as exhibition halls, conference and sports centres along with the exponential growth of large-scale retail and leisure facilities across China, as well as the key role of mega-events for urban growth are emblematic of a post-production city which urban growth model has been increasingly related to external drivers. In numerous cities and new towns across China, real estate development has been possible by targeting investment from extra-local households in the first line. Thus, urban ownership tends to be related to non-local landowners in cities that opened their real estate markets. Simultaneously, the construction of higher quality residential, consumption and leisure places have been key conditional components to increase the attractiveness of new resorts, towns or districts in suburbs, as well as core urban areas in large and lower tier cities that implemented urban renewal policies.

DISCUSSION AND CONCLUSIONS: A RESEARCH FRAMEWORK FOR THE FINANCIALIZATION OF URBAN (RE)DEVELOPMENT IN CHINA AND BEYOND

In China, linkages between urban growth and built environment have been framed by the land-driven growth model in economic geography and urban studies. The role of the built environment in Chinese capitalism has been underscored by numerous scholars over the past 20 years. More recently, it has been addressed to highlight the increasing financialization with Chinese characteristics.

Urban infrastructures, used as collateral to obtain funds, have been a major driver of the use of land as a financial asset for urban governments which rapidly amplified local debts towards national state banks and increasingly non-banking financial institutions such as (bank) trusts, respectively, in the form of credits and creating wealth management products (municipal bonds and indirect loans sold to investors) (He et al., 2019; Pan et al., 2016; Wu, 2015a, 2017). In parallel, the issue of housing financialization has been separately addressed (Theurillat et al., 2016; Wu et al., 2020). Real estate development in China could be implemented as a result of the use of housing property as a financial asset by urban citizens. Moreover, when addressed in relation to economic growth, the significant role of urban built environment in China's capitalism has been mainly viewed from the standpoint of production activities. While the role of mega-urban projects and of mega-events has been

acknowledged by scholars, related consumption and mega-events activities are, however, still seen as momentary growth tools to maintain local GDP (Wu et al., 2016; Zhao et al., 2017).

Thus, this paper provides a novel research framework to address China's ongoing urban development by arguing that it is iconic of a combination of production and consumption activities, and of the financialization of the built environment. Mega-urban projects and urban infrastructures development epitomize a transition to a new and more complex urban growth model that can be driven by the revenue from production activities exports and also from the spending of increasing mobile consumers in China. In addition, the role played by land/built environment in urban growth as a financial asset both for municipal governments and households has been gradually dependent on national-scale shadow banking and financialized investment circuits structured by large professional actors, and on urban households as more mobile property investors. In short, China's ongoing urban development transition phase has been gradually rescaled and dependent on external demands for consumption and investment which has exacerbated urban competition that had mainly occurred for production factors only. As a variegated process over time and space, the combination between economic activities and the financialization of the built environment take specific forms in China's central-local governments' institutional context, and two phases can be featured from the early 1990 to the present.

During a first period since 1990, the land value creation and capture is associated with an urban growth model that mainly relates to industrial city development coupled with real estate development based on local governments, real estate companies (property branches of state-owned firms) and household investments in a bank-based financial system. Urbanization mainly resulted from the production of manufactured goods for domestic and international markets. The supply of land has functioned first as a trigger to (re)build cities as production clusters. Then business services, consumption activities and built environment (housing, real estate and infrastructures) for local demand, mainly those of workers and residents are induced. From the outset, the banking system played a key role in the production and transformation of the built environment into a financial asset. Land assets permitted the creation of local credit by state banks along with LGIVs for infrastructure development and to households and real estate companies for real estate development. Simultaneously, as the main financial asset for urban households as property owners, real estate development was driven by massive investment on local scales.

During the post-2008 GFC period, the land value creation and capture has become more complex and associated with an urban growth model that relates to a mix of production and consumption activities. First, mega-urban projects have been materializing the increasing role of business services as well as of emerging more high-tech industries that have been supported by the Central state's upgrading policy these last years. Second, this

period has also seen the rapid significance of consumption for China's economy. While there is still a debate regarding the significance of domestic consumption for China's growth (Piketty et al., 2017) and the level of purchasing power of Chinese consumers, signs of their increased mobility are more tangible due to the rapid development of transportation means (generalization of private cars, highways, high-speed train lines and domestic flights). Whether or not they are a direct result of these evolutions, changes can be observed in urban growth driven by consumption activities for increasing extra-provincial and national consumers, not only in resorts, but also in new towns, and cities' redevelopment throughout China.

Simultaneously, the role of land/built environment as a key financial asset for capital accumulation has been increasingly disconnected from the local production export sector (manufacturing and business services) and spillover effects on investments, and thus rescaled combining direct investments by urban households and indirect investments structured by large professional investors. On one side, local real estate development tends to be connected to extra-local investments made by urban households seeking to diversify their real estate investment in the many cities that have opened their property market throughout China. On the other, urban infrastructures and mega-projects development has been increasingly linked to national shadow banking, financialized and non- (less) regulated circuits and actors such as large (bank) trusts, developers and real estate funds which enable households, firms and institutional investors (insurance companies and state funds) to make portfolio investments.

As a result, the 2010 decade has seen a more complex and hybrid combination between the 'types of driving economic activities' and 'the Chinese type of financialization of the built environment' which simultaneously constitutes the proposed research framework for future research regarding China's urban development. This framework is useful to address the specific territorial combination of the 'land driven growth model' that has produced various local outcomes such as dramatic increases in real estate prices, oversupply, gentrification, ghost cities phenomena, increase of local governments debt and those related to increased extra-territorial linkages regarding 'the land/built environment-finance and economic development nexus'. First, the construction of mobility and liquidity of capital in the production of the built environment still needs to be addressed to understand 'housing and land financialization' (Chen & Wu, 2020) within China's bank-based financial system. For instance, which cities, to what extent and how the rescaling of housing investments by urban households and the interconnections between bank and shadow banking have been enabling the key role played by built environment production in China's urban accumulation? Second, the role of the mobility of consumers and residents in relation to the construction of higher quality and large residential and consumption areas in numerous places still needs to be investigated to measure to what extent and how 'the consumption city model' is being implemented to

complement or replace 'the production city model' as a means to strengthen China's domestic economy.

The case of China's ongoing urban development exemplifies existing processes of a (re)combination between production, consumption and the variegated financialization of the built environment. While Anglo-American countries such as the United States and the UK are iconic of the key role played by a pure form of financialized built environment in capital accumulation due to the direct connections between cities and global financial markets based on both the securitization of mortgages or large capital finance actors as urban property owners; China is rather iconic of countries where the transformation of 'land and real estate into financial assets' operate within bank-based financial systems and State land ownership. At the same time, China's case is illustrative of a process started in the early 1980s, first by large cities in North America and European countries, and numerous cities today developing without or re-orientating their economy out of production activities with positive and negative outcomes (Crevoisier & Rime, 2020).

Finally, this research framework is relevant to conceptually deal with the production of the built environment in the era of financialization by addressing the origin of land rent (Ward & Aalbers, 2016) both in relation to urban growth models related to local hybridity between driving production and consumption activities, and to the rent capture issue. In this perspective, the cross-fertilization between two fields of literature in geography is very useful. On one side, the economic geography and regional studies literature has been revisiting the production and export-base model, assuming that captive local workers-consumers are an outdated standpoint to address the creation of urban value only from the perspective of production activities. On the other, the financialization of real estate literature has been revisiting the urbanization of capital. The significance of the connections between local real estate and financial markets to boost the production of the built environment, and the ways and issues of rent capture by finance capital actors have been extensively highlighted. However, the implications of the increasing mobility of people as consumers and residents in enhancing urban growth through mega-projects have been under-addressed by scholars. Conversely, the issue of real estate development these last twenty years, with rising property prices and gentrification issues, must also be addressed in relation to a more complex combination between increasingly mobile investors such as both individuals and large finance capital actors who have become landlords in numerous cities (Beswick et al., 2016).

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NOTES

1. Since 2014, local governments have been allowed to issue bonds in the interbank markets. At the same time, some of the banks' credits to local governments were transformed into bonds in the interbank market (loan-to-bond swap programme) that finally took the form of securitization since they could also be purchased by individuals since 2016 (Theurillat et al., 2016).
2. The first REIT in China was launched on the Shanghai Stock Exchange in October 2017 by the state-owned developer Poly Real Estate. It is related to the emergence of the national rental housing market. Some Chinese REITs were previously launched on the Hong Kong Stock Exchange with a focus on non-housing rental markets (Aveline-Dubach, 2013).

ORCID

Thierry Theurillat  <http://orcid.org/0000-0003-2079-0751>

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