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Jiang, Y and Waley, P (2021) Financialization of urban development in China: fantasy, fact or somewhere in between? Regional Studies, 56 (8). pp. 1271-1281. ISSN 0034-3404

https://doi.org/10.1080/00343404.2021.1932792

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Financialization of Urban Development in China: Fantasy, Fact, or Somewhere Inbetween?

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Abstract: It has been widely and persuasively argued that financialization is an ongoing and all-encompassing phenomenon within large swathes of contemporary capitalism. In particular, there has been much penetrative analysis of the impact of financialization on the built environment, especially in the run-up to and wake of the 2008 sub-prime mortgage crisis in the US. The term financialization itself, however, is open to a number of definitions both broad and more focused, and there is little agreement about how best to understand the concept. This paper inserts China into these debates through an examination of how urban and infrastructure projects are undertaken to ask whether financialization is a factor in the construction and operation of new urban and infrastructural landscapes in China. The paper takes as its interpretative lens the urban investment and development companies that fund, construct and then often operate and manage new projects on behalf of local government. It argues that the funding of development projects places increasing pressures on local governments and their corporations, and that there are signs these pressures are leading to a resort to securitized loans. While this would correspond to one definition of financialization, it does not, we argue, amount to a systemic move into a financialized stage of capitalism in corporatist China.

Keywords: financialization; China; urban development; financing platforms; urban corporations

Introduction: The Local State and its Arms Length Corporations

The evidence of financialization appears to be everywhere in contemporary capitalism: in decisions that households make about their savings, in the role played by futures trading on commodity markets, in the alliances struck by local governments that invite private companies to assetize social housing. Moreover, one of the ironies of today's world is that the extent of its financialization appears to have increased since the global financial crisis (GFC) of 2008. The question that interests us here, however, is the degree to which this ongoing process is present in China. A number of recent accounts of urban and social change are couched in reference to financialization—for example, He, Zhang, and Wei (2020) and Wu (2019). As yet, however, there is a lack of consensus as to what financialization means in a Chinese context and how, in a general sense, it can be seen to shape urbanization processes.

We argue in this panoptic paper that financialization in China needs tighter definition. While we acknowledge the growth in securitization of assets, we do not believe that it is helpful to depict China as being in the throes of widespread financialization. In this context, we point to the dangers of concept stretch that occur when applying a China-specific definition of financialization (Mossberger and Stoker 2001). More specifically, we examine the engines of urban growth in China, the organizations that fund and build urban infrastructure, namely armslength quasi-municipal corporations generally known as local government financing platforms (LGFP; difang rongzi pingtai) and urban investment and development corporations (UIDC; chengshi touzi kaifa gongsi, or chengtou for short). These organizations are state-owned enterprises (SOEs) operating outside the logic of the market economy, and so on the face of it less likely to be embodiments of corporate financialization. We review the role of these organizations and highlight the wide range of activities that they undertake in the Chinese economy. While most of their funding comes from bonds and self-generated sources, they do

also raise funds through securitized instruments, which we take as evidence of a partial or incipient process of financialization. However, if financialization is defined in broader terms, it no longer appears relevant to infrastructure construction and urbanization processes in China, and indeed runs the risk of obscuring the role of the state and distorting our understanding of the nature of Chinese capitalism. Financialization should not, we maintain, become a concept stretched to a point where it loses its coherence in order to "hammer Chinese empirical pegs into Western theoretical holes" (Peck and Zhang 2013, 385).

The local state plays a pivotal role in infrastructure construction and urbanization in China, and UIDCs are the main vehicle for state involvement (Li and Chiu 2018), but UIDCs are varied and we need to be clear about what we are discussing. UIDCs are sometimes referred to as municipal corporations; they are not, however, British-style urban development corporations, nor are they French sociétés d'économie mixte. They are a type of SOE, ownership lying initially with local government but tending later to be transferred to local-level State-owned Assets Supervision and Administration Commissions. Although they are referred to as limited liability companies (youxian gongsi), their leadership is drawn from the upper echelons of local government and their officers are generally seconded from the same source. In this important sense, they are indeed arms-length agents of local government with their own separate balance sheets; they are manifestations of state corporatism (Jiang and Waley 2018). Their tasks are manifold, as we will discuss later, but one of the most important is to raise funds for projects, and it is in this capacity that they are generally called local government finance platforms (or sometimes vehicles). By no means all UIDCs are involved in funding activities, but LGFPs invariably evolve into UIDCs as their project develops (even if they retain their original name). In this paper, we use either the term LGFP/UIDC to indicate the conjoined nature of these corporations or one of the two acronyms as a standalone term: LGFP where reference is being made to funding activities and UIDC to denote companies involved in broader operations.

What is missing in most accounts of LGFP/UIDCs is a discussion of the changing policy context in which they operate, of the successive measures that have been introduced to change their nature and ways of working. Instead, there has been a tendency to concentrate on the size of local government debt in the shadow banking sector. For many years central government has encouraged borrowing to finance infrastructure and other construction projects—borrowing by LGFPs that therefore does not appear on state balance sheets. At the same time, it has been rolling out 'guidelines' to staunch the flow of funds; these funds are raised in the shadow banking sector. Since investors generally deem them to be guaranteed by the local state, there is a distinct moral hazard at play, with central government apparently intent on avoiding bailouts. The shadow banking sector operates alongside 'regular banking', is powered in large part by household savings, and, while it mitigates some of the inadequacies of the state banking system, is the subject of frequent attempts at greater regulatory control by the authorities.

In this paper, we bring together the various strands in the literature in order to assess the role played by financialization in the activities of the LGFP/UIDCs that drive the ongoing process of urbanization in China. We position this paper as part argument part theoretical conjecture. In doing so, we acknowledge that our inquiry relates only to financialization as it might apply to urban and infrastructure development in China, but we realize there are other spheres—take Chinese investment in global property markets—that could very well be seen as part of a process of financialization. Shatkin (2019, 2), for example, refers to "Chinese state owned and private banks [as] important emerging actors" in urbanization processes around Jakarta. Our work is based on a thick reading of texts, both a variety of papers written by urban studies and economics specialists and online documents relating to specific companies. Alongside this, we set our experience, dating from 2012, of conversations with officials of

various UIDCs, starting in Shanghai, where our research interest initiated. We subsequently extended our inquiry into UIDCs in Anhui Province, undertaking various research trips to Huangshan, Chizhou, and Hefei in Anhui Province in 2015, 2017, 2018, and 2019. The cumulative history of these interviews and off-the-record discussions is too extensive to be charted here, and in this paper we have only picked up selectively on this material. It has, however, helped to compensate for the considerable difficulties in establishing details, both specific and even more so global, around issues such as the funding of UIDCs.

We start the remainder of this paper with a review of attempts in the urban studies literature to define financialization. We follow this with a consideration how financialization has been written into work on China by urban studies specialists, who have tended to frame it as early-stage and state-led. In ensuing sections, we first set out in broad terms the corporate structure and spheres of activity of LGFP/UIDCs before surveying in more detail their principal downstream functions—developmental, entrepreneurial, and managerial. We then move back upstream to examine issues related to their funding. We consider the various means at the disposal of funding platforms and attempts by central government to curb their propensity to resort to the shadow banking sector. In the concluding section, we set the foregoing review against our initial definitions to gage the inroads that financialization may have made into urban and infrastructure development in China.

Defining Financialization from beyond China

Providing a precise definition of financialization is a bit like trying to grasp water in the hand. Nevertheless, it is important to have some sense of the object under discussion even as we appreciate the difficulties of the task. Financialization has been defined in a variety of ways, both broader and tighter (Krippner 2005; Pike and Pollard 2010; Rutland 2010; French, Leyshon, and Wainwright 2011; Wu, Chen, Pan, Gallent, and Zhang 2020). Most commentaries gravitate around three primary definitions of financialization: as a new regime of capital accumulation, as a distinctive "mode of corporate governance" (Rutland 2010, 1168), and as an organizing principle for everyday life.

Understanding financialization as a new regime of capital accumulation and therefore a new and distinct stage of capitalism follows in the interpretative tradition of writers like Fernand Braudel and Giovanni Arrighi as well as regulation theorists such as Robert Boyer (French, Leyshon, and Wainwright 2011; Janoschka, Alexandri, Orozco Ramos, and Vives-Miró 2020). According to this view, the wholesale adoption of market principles has led to an economy that is globalized through regimes of accumulation involving financial transactions (Boyer 2000). The securitization of commodities has enabled their exchange on global markets, a development that has been encouraged and regulated by the state. This then has led to a transformation of contemporary capitalism, whereby "profit-making occurs increasingly through financial channels rather than through trade and commodity production" (Krippner 2005, 181).

The second definition of financialization focuses more specifically on corporations, their governance and activities. The key factor here is seen to be the central role played by financial agencies of various types, the dependence of companies on shareholder value, the consequent short-termism often evident, and the tendency to raise funds through market maneuvers rather than borrowing from banks. The result is the ascendancy of the Anglo-American model of corporate capitalism (Rutland 2010). The third definition emphasizes the financialization of everyday life and of individual behavior as a result of which citizens become financial actors (Martin 2002; Pollard 2013). Through the privatization of pensions and social welfare systems,

individuals and families find themselves engaged with financial markets, either directly or through intermediaries.

In this paper, we apply these definitions to the Chinese case, with one important amendment. It is beyond our capacity here to assess the ways in which financialization may or may not shape daily lives, but we follow Rutland (2010) in making a distinction between the governance mode of corporations and the bundling together and securitization of assets, which Rutland refers to as "capital markets-based finance" as opposed to "simply bank-based" finance (2010, 1169). This distinction draws a line between conventional banking operations and more opaque, complex and speculative dealings. Financialization can thus be summarized as involving, as a minimum, capital markets and the securitization and trading of bundled assets on those markets, as well as the institutions and agents that make this possible, in order to generate profits (French, Leyshon, and Wainwright 2011). The emphasis here is on financialization as process. We take this as our third defining feature of financialization, the one most relevant to the Chinese case.

The literature on financialization coheres around a number of questions, themes, and terrains. Writers have asked, for example, whether it is possible to put a starting date to financialization (Krippner 2005), an important point when one considers that financial transactions to support commerce can be traced at least as far back as thirteenth-century Lombard bankers if not a lot further (Arrighi 1994). In this perspective, the attempt to measure financialization plays an important role, but this is a fraught exercise with limited appeal (Krippner 2005). Other writers have discussed the relationship between financialization and neoliberalism and entrepreneurial urbanism (French, Leyshon, and Wainwright 2011). Indeed, for Van Loon, Oosterlynck, and Aalbers (2019, 413) "financialized urbanism is ... the means through which entrepreneurial urbanism was enabled in the first place." The role of the state is stressed in many studies and parsed exhaustively by Aalbers (2020). The state's role is seen as polyvalent, contingent, and multi-layered, often considered not so much a victim of financial interests as an enthusiastic hand maiden (Fields 2017).

Discussion of financialization is predominantly rooted in the urban built environment, the construction of which lies at the center of our concerns in this paper. Financialization of the built environment involves the investment of accumulated capital into the built environment and the creation of ever more complex investment vehicles resulting in new forms of exchange value out of what was once exclusively use value. A typical example of this is a REIT (real estate investment trust), involving investments in property being bundled up into securities that are floated on the stock market (Aveline-Dubach 2016). "[In Spain] it has been estimated," write Janoschka and his co-authors (2020, 130), "that REITs are controlling now approximately half of all residential and 80% of commercial property market transactions." Transferable development rights have also been referenced in terms of financialization; they are, according to Yang and Chang (2018, 1961) writing in the context of Taipei, transformed "from a type of non-financial compensation into a tradable financial asset, open to the investment of interestbearing capital." One of the most insightful analyses of what financialization means for cities is provided by Theurillat and co-authors (2016). They juxtapose what they term the financialized city to the entrepreneurial city and the negotiated city. The financialized city, they write, is characterized by short-term decision-making occurring in trading rooms according to abstract calculations of risk and yield.

Housing is above all the sphere most open to financialization of all kinds. Indeed, in many ways it fulfills the conditions laid down by Theurillat, Vera-Büchel, and Crevoisier (2016) for the financialized city. "Housing is," according to Aalbers, "not simply yet another domain of financialization. In terms of size and impact, it is the key domain of financialization" (Aalbers and Haila 2018, 1829). The 2008 sub-prime mortgage crisis is one of the clearest consequences of financialization, highlighting the central role of debt. It was both an important milestone

and, ironically, a catalyst for a new round of intensified financialization (Aalbers 2020). It showed how solid objects like housing could be not only bought and sold but turned into liquid assets to be traded on markets through mortgage securitization. Aalbers outlines clearly why trust funds and other investment vehicles are seeking profitable terrain in housing—and increasingly social housing—and why the state is prepared to facilitate this (Aalbers and Haila 2018). Some of the deep inroads that financialization has made in housing, and in particular in social housing, can be gleaned from Janoschka and co-authors' account (2020) of the success of the US corporate giant Blackstone in cornering for itself large segments of Spain's social housing 'market', facilitated in its actions by state regulation. Tellingly, they write about how "the social consequences of the displacement originated by the privatisation of social housing have been externalised to the public sector" (p. 13). Financialization here clearly entails social costs.

In the preceding paragraphs, we have identified the three defining characteristics of financialization that we apply to the Chinese case: financialization as stage in capitalism, as mode of corporate governance, and as the preeminence of securitization. We have also located the ground which financialization is most frequently found to have infiltrated, that of the built environment. We consider next the ways in which financialization has been seen to have infected urban development in China.

Finding Financialization in Urban Development in China

At the heart of much of the discussion on financialization in China stand local government debt and the shadow banking sector, whose size reflects the constraints under which primary state banks operate. The size of the shadow banking sector and the extent of local government's involvement stem in large part from the fact that local governments were not normally allowed to issue bonds until 2014. A number of papers have analyzed the system for financing infrastructure projects in China, highlighting the role played by LGFPs (Wu, 2010; Tsui 2011; Liu 2019). Much has been written too, both in academic journals (Tsui 2011; Zhang and Barnett 2014; Tao 2015; Pan, Zhang, Zhu, and Wójcik 2017) as well as in the general media (Huang 2016; Wildau 2019) about shadow banking and the dangers posed by excessive debt, debt that is generally believed to be guaranteed by local government but without any clear substantiating evidence. The tendency here is to draw attention to the special arrangements that have allowed this accumulation of debt to occur, and defaults are seen by some as inevitable (Carfagno, Feng, and Wright 2019; Wildau 2019).

Some economists have tended to be more sanguine in their assessment of the risks. They argue that the place occupied by the shadow banking sector in China is relatively small, compared at least with the United States (Lai and Van Order 2019). They point out that much shadow banking is the consequence of a tightly regulated banking sector, but nevertheless is actually controlled by banks, in that banks are behind the issuing of bonds via shadow banking routes (Elliott, Kroeber, and Yu 2015).

While a path-breaking conference on financialization was held in Beijing in 2019, to which the authors presented an earlier version of this paper, a trawl through search engines failed to reveal any research published in a leading Chinese-language journal tackling the question that occupies us here: the extent to which financialization is apparent in China's urban development process. Furthermore, despite the copious literature on local government debt and the funding of urbanization projects, little had been written until recently linking this to financialization. In one of the first studies to broach these issues, Theurillat, Vera-Büchel, and Crevoisier (2016) analyzed the financial circuits that allow Chinese urban areas to grow quickly. They identified three types of local financial platform: land development centers, local government investment

vehicles, and what they refer to as the contractor model. Only the second two types, they wrote, enable financialization because they give access to "other financial circuits" (page 15).

He, Zhang, and Wei (2020) too see financialization as the means by which urban development projects have been undertaken over the last decade in China. Qualifying this as "state-led" financialization, they base their argument on the modus operandi of a large LGFP/UIDC (or Local Financial Platform, in their words) working on the redevelopment of shantytowns (*penghuqu*) in Chengdu, the capital of Sichuan Province. Their argument is based on the understanding that the UIDC's means of raising funds—through the bond market, through loans from the People's Bank of China, and through low-interest treasury bonds—can be regarded as state-led financialization (see also He 2019). The authors reinforce this point with a reference to recent moves toward the securitization of loans for shantytown redevelopment projects. While they do not specify the nature of this development, it would indeed appear to represent a shift towards financialization in its more limited guise of securitization, but nevertheless a far cry from, for example, the financialization of social housing in Spain.

Wu (2019) writes of post-GFC urban development in terms of "land financialization." Drawing on the work of Ang, Bai, and Zhou (2016) and Chen, He, and Liu (2017), he underlines the role of trust funds and wealth management products (WMPs) in buying up *chengtou* bonds enabling LGFPs to develop urban land and build infrastructure. "Therefore," he writes, "although Chengtou Bonds have been promoted as a more transparent and regulated method to refinance the debt pressure on [LGFPs], their linkages with WPMs and trusts make them more opaque in terms of financial flows" (2019, 8). His definition of land financialization is, however, an open-ended one: "This paper highlights the impact of land financialization on internal money creation. Turning land into assets has made it possible to release money for urban development. It is the financialization of land that allows local governments to associate asset values and income streams from future land sales and tax increments with their capacity to leverage capital and finance urban development" (2019, 8).

Wu, with colleagues, uses a similar definition in a paper that analyzes the nature of financialization of housing (Wu, Chen, Pan, Gallent, and Zhang 2020, 3): "We understand financialization," they write, "to be a process through which otherwise nontradable goods become, first, tradable commodities and, subsequently, investment assets with high liquidity." Financialization for them is therefore equivalent to assetization, to the conversion of housing into assets that can be traded on the market for profit. This, according to their analysis, helps to explain increasing household investment in housing, accompanied by only modest rises in household debt and low mortgage rates. Their paper includes the following provocative and indeed insightful comment (2020, 12): "Consumers, not banks or institutional investors, are the engines of China's economic growth," a point we return to later in this paper. Taken together, these papers present a distinct if somewhat amorphous sense of growing financialization in China's urbanization.

UIDCs and LGFPs: Staking out their Operational Territory

In the wider literature, as we have seen, much debate has centered on the ways in which the local state has been suffused with financialized maneuvers in order to build, expand, and maintain its physical infrastructure. In China, these activities are delegated to LGFP/UIDCs. In this and the following two sections, we analyze the various functions of these institutions in order to ascertain the extent to which they can be considered instruments of financialization. We start in this section by providing a brief overview of their structure and fields of activity and follow this in the ensuing section with a more detailed examination of their various

functions. Our aim in doing this is to provide context for discussions about financialization in China, especially as it relates to the construction of urban infrastructure. In this way we hope to correct the tendency to diminish the role of UIDCs, to see them primarily in terms of their fund-raising functions (as LGFPs), and thus to exaggerate the extent of financialization in China. More broadly, we use UIDCs to push back against notions of the financialization of urban development in China, arguing that a broader view of China's political economy highlights the nature of Chinese state entrepreneurialism as developmental and managerial rather than financialized (Wu 2018).

One of the complications faced in understanding UIDCs is presented by the number of names by which they are known, both in Chinese and English, including urban investment trust companies and city investment companies (Li and Chiu 2018). The abundance of names stems in turn from the ambivalent status of these organizations; in Chinese they are generally classified as LGPFs (difang rongzi pingtai) regardless of their actual functions, and that is the name used in government documents in reference to their upstream funding activities. UIDCs are established and owned initially by provincial, municipal, prefectural, or sometimes lowerorder governments and later often by local-level State-owned Assets Supervision and Administration Commissions. UIDCs are managed, and to a large extent staffed, by officials seconded from local government offices. For important UIDCs, in order to maintain overall control, a political figure is appointed to some sort of supervisory body. Thus Shenhong, the UIDC responsible for the funding and construction of the new transport and commercial hub of Hongqiao in the west of Shanghai, is managed by a political appointee but overall control belongs to a supervisory umbrella organization headed by one of Shanghai's deputy mayors (Jiang and Waley 2018). Its foundational capital came from three Shanghai municipal corporations: Jiushi Group, Shanghai Airport Authority and Shanghai Municipal Land Reserve Centre. This is not suggestive of an organization that operates as an agent of financialization.

There is no exact tally of the number of LGFP/UIDCs that exist today. According to one detailed spreadsheet for 2018 that the authors have been able to obtain, there were 6,642 local-government-owned corporations around the country (source withheld). Many if not most Chinese cities have a stable of UIDCs. Chongqing is perhaps the most salient example. There, the city government created eight UIDCs, each pursuing a central plank of infrastructure development (Martinez 2015; Lim 2019; Roast 2019). According to some interpretations, this represents the essence of the now defunct Chongqing Model, but to argue along these lines is to obscure the ubiquity of UIDCs as agents of growth policies (Mulvad 2015). Indeed, the Chongqing UIDCs were based on the model of the four original and iconic UIDCs—among the very earliest—that were formed to develop Pudong in Shanghai in the early 1990s.

The primary tasks of UIDCs are various. Typically, UIDCs:

- 1. Raise funds for specific urban and infrastructure projects, in which task they tend to be referred to as LGFPs.
- 2. Prepare the land for construction.
- 3. Supervise, coordinate, and manage the construction process.
- 4. Manage and operate services.

A more detailed account of their functions, in addition to project funding, includes the following: infrastructure construction, operation, and management; provision of utilities; property development; urban regeneration; and a range of other miscellaneous activities. Each of these will be examined in the following section.

Before reviewing these functions in more detail, we need to consider a number of fundamental points. Firstly, in larger cities UIDCs tend to be complex, diversified 'general service' companies, organized into families of firms under a holding company. They thus mirror the structure of corporations in the private sector. The trajectory of UIDCs is illustrated by one of the oldest and largest, Shanghai Chengtou Group (also known as Shanghai Municipal

Investments Corporation). While it still undertakes government-mandated projects, debt and restructuring has led to a focus on market-oriented work such as property development, even as it retains its state corporatist identity. Secondly, companies formed as LGFPs to fund a specific project then expand to undertake a range of downstream functions that progress the project. Shenhong's first task was to put together the finance for the development of Hongqiao transport hub, but then it grew with the project and took on the management of construction tasks even as it continued to provide funding. Thirdly, some UIDCs end their life once a project is complete; most diversify and expand. Li and Chiu (2018) show how Songjiang New Town Development Corporation, formed by Shanghai City Government, managed the financing and construction of a new university town and other urbanization projects in the southwest of the city, in the process spawning affiliated and subsidiary companies and offices. Fourthly, reorganizations and mergers occur frequently, not least because of the stricter controls introduced in 2014 and 2015. This has been done, for example, to cover the exposed debts of companies, as when Shenhong was absorbed by Shanghai Real Estate Group in 2017. Finally, cities throughout China have their own UIDCs undertaking whatever functions the local government assigns to them. The prefecture-level city of Chizhou in Anhui is the weakest in the province in terms of GDP, and it has a relatively small built-up area. In order to expand its urban footprint, the city government established a UIDC, Chizhou Construction Investment Group, in 2003 to develop new urban and industrial centers and transportation infrastructure. The company is involved in 28 projects.

It is important to remember that UIDCs are only one among a range of institutions owned by local governments. Other examples include banks and land reserve centers (Huang and Chan 2018). Sitting alongside UIDCs, indeed commensurate with them, are thousands of local government owned management companies, whose job is to administer designated local terrains such as development zones such as Suzhou Industrial Park and tourism zones such as Lijiang Old Town Management Co., to name but two prominent examples (Su 2015).

None of this is to say that the private sector is not involved in urban construction and infrastructure projects. Xintiandi, the iconic redevelopment scheme in Shanghai, is probably the most renowned instance, but its principal private-sector developer, the Hong Kong-based Shui On, is a trusted and longtime partner of Shanghai City Government, a partnership based on personal relations among high-ranking officers (He and Wu 2005). Much more normal is for the private company to be involved in the second stage of development projects, in the construction and especially in the purchase and onward management of commercial and residential buildings (Hsing 2010). It appears possible that there will be greater private-sector involvement in urban and infrastructure projects designed to help boost China's economy in post Covid-19 years (Watts 2020).

Developmental, Entrepreneurial, and Managerial Functions of UIDCs

'UIDC' is, as we have seen, a portmanteau term for local-state owned SOEs that covers a number of different functions. Shanghai City Government uses a three-fold categorization for UIDCs: general service (*fuwu lei*), function specific (*gongneng baozhang lei*) and market-competitive (*shichang jingzheng lei*) (Jiang and Waley 2020). We find, however, that these categories are insufficiently accurate and detailed. UIDCs can be understood in a number of different ways, for example, according to task, according to type of project, or according to size. Mindful that many UIDCs are involved in a range of operations, we list here their functions in the belief that this better reflects the nature of UIDCs, and we illustrate this both with references to the existing English-language literature and our own research. We argue that

UIDCs are agents of a developmental and managerial state entrepreneurialism that stands at variance with financialization. The following are the main functions of UIDCs.

Infrastructure construction, operation and management: The construction of railway and metro lines is one of the principal infrastructure-related activities in which UIDCs are involved, often in collaboration with other SOEs. One of the main actors in the construction of Shanghai's metro system is Shanghai Shentie Investment Co., Ltd., a subsidiary of Jiushi Group, established in 2002. Shanghai Shentie has served as a vehicle for the municipal government to guide the investment and construction of joint venture railway projects in Shanghai. Shentong Group has performed a similar function in the construction and subsequent operation of metro lines in Shanghai, involving local governments at various scales and a number of other UIDCs that were given specific subsidiary tasks (Shen and Wu 2019).

Provision of utilities: The supply of electricity and water and the treatment of sewage are functions routinely undertaken by UIDCs, although there are many instances of private involvement too, especially in water supplies. Among UIDCs involved are Chongqing Water Works Controlling Group, Guangzhou Water Investment Group Co., Ltd., and Shanghai Chengtou Water Group, part of Shanghai Chengtou Group, whose activities cover infrastructure construction and property development as well as utilities (Martinez 2015; Wu, Li, and Lin 2016; Jiang and Waley 2020). Shanghai Chengtou Water Group is involved in investment, construction, and operation of urban water infrastructure.

Real estate development: UIDCs are involved in real estate development and management work throughout China, and especially in the biggest cities. Shanghai's three largest UIDC groups—Shanghai Jiushi, Shanghai Chengtou, and Shanghai Lujiazui—are prominent examples. In many smaller cities too, UIDCs are involved in property development. Theurillat (2016) has written on the activities of state-owned real estate companies in the fourth-tier city of Qujing in Yunnan Province. UIDC involvement in real estate development, which is seen as safe and yet lucrative, has intensified as a result, at least in part, of central government measures to reduce local government off-the-books debt levels. Shanghai Jiushi Real Estate Co., Ltd., belongs to Shanghai Jiushi Group and undertakes the assembling of land reserves, property construction, the leasing of buildings, and property management, including the management of several of the most celebrated buildings on the Bund that are owned by Jiushi Group.

Urban regeneration: When local governments put together projects to 'regenerate' urban areas, generally their first action is to establish a UIDC. This happens in smaller, prefecture-level cities such as Huangshan, where a small UIDC is responsible for an urban restructuring project that involves the demolition of 180 homes, the relocation—both temporary and permanent—of 600 residents, and the construction of new houses in the local architectural style in order to boost tourism. In big cities too, UIDCs, sometimes in partnership with private companies, undertake large-scale urban regeneration work (Jiang and Waley 2020). Shanghai Urban Investment Holdings Co., Ltd., is a state-owned, listed company affiliated to Shanghai Chengtou that focuses on real estate and investment. One of its main tasks is to undertake urban regeneration tasks for Shanghai City Government; its flagship project was the reconstruction of the prestigious Sinan Mansions in central Shanghai.

A range of other miscellaneous activities such as the management of sports events: Jiushi Group in Shanghai, for example, runs a number of prestigious sports events, including the F1 Grand Prix and the Shanghai Tennis Masters.

Many of these activities are developmental, others are entrepreneurial. A few are more managerial. Clearly, the state is involved in all of them in a corporate guise, and while this can be seen as a form of state corporatism, none of these activities suggests the sort of financialized corporate capitalism reliant on shareholder value and return on capital that we have taken here as the second defining characteristic of financialization. As we have seen, the private sector

retains a role, but it is secondary both in temporal terms, coming after the primary work has been completed by UIDCs, but also in terms of its overall contribution.

Financialization and the Funding of Urban Development

In this section we focus on the upstream, financial platform role of UIDCs, pointing to some of the ways in which the funding of projects might relate to a narrower definition of financialization. We argue here that there appears to be a growing tendency to move household savings into financial products, some of which are increasingly likely to be invested in urban and infrastructure development projects.

The operating context for LGFP/UIDCs has been a complex and fast-changing one. They came into their own across the country in the wake of the four trillion yuan economic stimulus package of 2008, but this was followed by mounting government concern about debt levels, expressed in various attempts to contain off-the-books debt. The principal catalyst for the creation of LGFP/UIDCs occurred in 1994, with the passage of the Budget Law that decreed new means of splitting tax receipts between the center and localities and made it necessary for local governments to find different ways of raising funds. At the same time, it prohibited local governments from borrowing on the market, although they were permitted to issue bonds through the Ministry of Finance (Chen, He, and Liu 2018). Until 2008, LGFP/UIDCs could not normally raise bonds and so had to rely on bank loans and on the process of rolling development, whereby profits from one scheme are used to fund the next one (Jiang and Waley 2018; Feng, Wu, and Zhang 2020). Local governments were tasked with spending the lion's share of the 2008 stimulus package, and this they did predominantly by having their LGFP/UIDCs issue instruments known as chengtou bonds for which there was no explicit local government guarantee. These bonds were issued in greatest numbers in the years from 2009 to 2014 (Ang, Bai, and Zhou 2019). They do not represent financialization according to the definition we outlined earlier as they are not bundled, securitized, and then traded (Rutland 2010). It was only in 2011, however, that a regulatory regime was set up under the China Banking Regulatory Commission to control the funding activities of LGFP/UIDCs (Feng, Wu, and Zhang 2020).

In 2012 and especially 2014, the central government issued orders that ramped up its long and often faltering efforts to curb excessive local-level borrowing and off-the-books debt. It did this by forbidding local governments from raising loans via LGFPs or underwriting LGFP bond issuances, prohibiting LGFPs from raising loans from banks, and encouraging LGFPs to swap *chengtou* bonds for municipal bonds (State Council 2012; 2014). At the same time, the State Council allowed local governments to issue bonds, but only through a tightly controlled process involving applications to provincial governments for permission, applications that were themselves vetted by central government. This move in turn meant that UIDCs depended all the more both on funds from rolling development and, increasingly, on bonds, neither of which move would constitute financialization. In an additional measure, it was decreed that henceforth all the public construction work conducted up to then solely by UIDCs must be undertaken by public-private partnerships (PPP) (State Council 2015).

The extent to which these regulations have been observed at the local level is an open question. As Chen, He, and Liu (2018, 13) put it, in reference to bond swaps, "how strictly these rules are implemented is unclear." According to the Wind financial database, in December 2018, a total of 8,424 *chengtou* bonds valued at 7,711 billion yuan were issued by 2,098 UIDCs. Bonds are increasingly needed to pay interest on existing debt: "In 2015, more than half of [*chengtou*]-issuance deals are for repaying maturing bank loans" (Chen, He, and Liu 2018, 15). It is unclear too how effective the stipulation on PPPs has been. Many UIDCs

appear to have repositioned themselves as the private partner in the PPP. In recent years some weak-performing UIDCs such as Shenhong have been absorbed into holding companies with stronger finances, but while this might serve to mitigate indebtedness, it is unlikely to lead to greater flexibility and autonomy from local government, not least because staff continue to be seconded over (Jiang and Waley 2018; Feng, Wu, and Zhang 2020). After a debt default in November 2020, investors became more skeptical about the ultimate government guaranteeing of *chengtou* loans, raising the cost of borrowing for UIDCs as a consequence (Yu 2020; Lee 2020).

UIDCs now have a more diverse set of funding sources, although the reliance on bonds is still striking. They can obtain funds through income from rolling development and from loans against later charges for their services. They still issue *chengtou* bonds, even if increasingly they are being urged to tap into funds derived from local government bond issues. They can be listed and raise funds on the Shanghai and Shenzhen stock exchanges, but few have chosen this route. They can borrow using short-term bills, medium-term financing notes, and private placement notes. They cannot borrow from banks, but they can make their way round this prohibition by raising money from trust products and from WMPs, two instruments that closely resemble each other and that together comprised 73% of shadow banking in 2017 (Chen, He, and Liu 2018). 'Trust products' refers to "a bundle of products, including securities, equity investments, and trust or entrusted loans" (Hsu and Li 2015, 5). They have been a favored investment porthole for a wide range of institutions and for the public as a whole, contributing significantly to the shadow banking sector. WMPs, described by Elliott, Kroeber, and Yu (2015, 8) as "a close substitute for bank deposits," are a bundle of assets sold by commercial banks in large part to private investors as investments with better returns than bank deposits (Chen, He, and Liu 2018). Bundled and securitized, WMPs are therefore financialized instruments, matching our definition of financialization. WMPs absorb a large number of chengtou and municipal bonds, as do trust funds, and as such can be seen as off-the-books instruments of financialization (Ang, Bai, and Zhou 2019). In 2016, they made up about 62% of investments in *chengtou* bonds (Chen, He, and Liu 2018). WMPs are popular destinations for household savings, but this has elicited concern from central government, which introduced measures in 2017 and again in 2018 to restrict their issuance (Chen, He, and Liu 2018). To this extent, we can therefore see a financialization process making its way into the realm of urban development.

As if to reinforce a sense of incipient financialization, it appears likely that various new infrastructure projects that form part of the government's stimulus package in the wake of the Covid-19 pandemic will be reliant on financialized instruments. Pilot projects are being funded through REITs (NDRC 2020). More generally, the stimulus package is already at the time of writing (June 2020) leading to a wholesale relaxation of central government limits on the amount of bonds that provincial governments can issue (Chen 2020). Indeed, Guangdong Province successfully issued the largest quantity of bonds ever in May 2020, guaranteed by central government (Jiang 2020). Moreover, notwithstanding the economic damage caused by the pandemic, many Chinese households will in all probability be looking to diversify their savings. According to a 2019 study, 78% of household savings were going into housing, as against only 1% in stocks (Bloomberg 2020). With the housing market in a state of satiety, there is unlikely to be a shortage of funds from this source.

It is not our aim here to chart the different funding routes for infrastructure projects, nor to identify the respective weight of these routes; these are by no means easy tasks in the opaque world of shadow banking. Nevertheless, we can see the years 2014 and 2015 as turning points. Before then, local government guaranteed either implicitly or explicitly all the debt generated by UIDCs for its special projects. Since then, the State Council has considerably intensified its attempts to control and clean hidden local government debt. UIDCs are no longer formally

allowed to borrow money from banks, nor can local governments provide guarantees for UIDC loans. In theory, at least, shadow banking has been under sustained attack.

At the same time, however, local governments are under considerable pressure as a result of the large-scale shantytown redevelopment schemes that have been a central plank of government policy for at least a decade, with redevelopment targets cascaded down the administrative hierarchy (He, Zhang, and Wei 2020). No special central government funding accompanies these targets. He, Zhang, and Wei list the funding available to local governments in pursuing these redevelopment projects. In Huangshan, the UIDC responsible for the redevelopment scheme, used the China Development Bank to float 'green bonds' by building in environmental elements, as well as special-purpose shantytown redevelopment bonds. Undoubtedly, the sheer scale of this scheme has called for a certain creativity on the part of local government and UIDC officials. As He, Zhang, and Wei (2020, 6) put it, "embryonic financialization in China is largely a process of multiscalar state-led financialization that has exerted profound influence on the practices and outcomes of urban redevelopment throughout the last decade that remain largely unexplored" (emphasis added). Equally, however, the argument proposed by Wu and co-authors (2020) that the use of housing as an assetized investment tool constitutes, of itself, evidence of financialization fails our definitional tests; if exploiting the exchange value of housing indicates a state of financialization, then housing markets have been emblematic agents of financialization for a very long time.

The state is addicted to construction and in particular the construction of housing, while households invest in housing because of a lack of other savings opportunities. The consequence of this, arguably, is an incipient financialization at work in Chinese cities as household savings seek new directions, but this depends on how we define financialization. If financialization is considered primarily as the bundling together of savings into securitized financial instruments such as trust funds and WMPs that are subsequently traded and invested in urban and infrastructural projects, then we concur with He, Zhang, and Wei (2020) that these sectors are at least partly—and, arguably, increasingly—financialized.

Conclusion: Setting Urban Development in China against Current Definitions of Financialization

China has quite literally built itself into a powerful global economy, and, as the post Covid-19 stimulus package once again reveals, the construction of urban and transport infrastructure remains the twin pillar of government plans for economic growth. Funds for this single-minded adherence to the construction imperative come not from central government largesse but from the efforts of local government financing platforms, which, as a result of government regulation, have long found it necessary to use the shadow banking sector as their primary resort in the search for funding. With sufficient finances obtained, LGFPs expand into downstream urban investment and develop companies as projects progress. It is UIDCs, as arms-length quasi-municipal corporations, that are the motors of China's construction state. They are the agents of a developmental and managerial state entrepreneurialism, responsible for the construction of city districts and metro lines, and often for their management and operation thereafter; responsible too for the development and management of real estate projects as well as for urban regeneration projects; and responsible finally for the construction and operation of various utilities. The question we have posed in this paper concerns the extent to which some or all of these functions have to do with financialization.

In preceding pages we have set out to assess whether urban development in China is falling prey to financialization as many have claimed is happening in North America and Europe (Aalbers 2020). Because of their central role in the financing, construction, and operation of urban infrastructure, we have used LGFP/UIDCs as a criterion to test against three current

definitions of financialization. In the first and broadest definition discussed in the literature, financialization is seen as a stage in capitalism operating under a new regime of accumulation. However, to suggest that China has moved into a stage of financialized capitalism seems untenable. The emphasis in China is, and has been since the opening up of the economy, on growth—growth through construction—and on Keynesian policies of pump-priming in times of economic difficulty rather than the austerity policies seen in countries like Britain. Understanding LGFP/UIDCs as corporate arms of local government underlines the fundamental difference between capitalism in China and among Western varieties. What we see in China is not a financialized capitalism, but a growth strategy in which the state corporatizes itself to attain developmental goals. Unwilling to rely on the private sector beyond seeing it as junior partner, local governments dictate growth strategies through the creation of state corporations to undertake urban and infrastructure development. As we have argued elsewhere, this is best seen as a form of state corporatism (Jiang and Waley 2018 and 2020).

The second definition of financialization that we referenced was a particular type of corporate capitalism based on shareholder value, short-termism, and the prominence of auditing and accountancy firms. Very little of this is apparent in the Chinese context. While it is true that UIDCs tend to have complicated corporate family trees, they do not, for example, have holding companies with addresses in tax havens. Nor do their executives undertake short-term revenue-maximization strategies of a sort that might be seen among listed companies in New York or London. But while LGFP/UIDCs should not therefore be considered embodiments of financialized capital (at least not yet), to the extent that they are beginning to tap into flows of securitized funds, they might be on the road to becoming agents of financialization.

Where we see the most signs of financialization is in the packaging of the financial instruments through which LGFP/UIDCs raise some of their funds; this relates closely to the securitization that we take as a third defining characteristic of financialization. This is most apparent in household investment in urbanization and infrastructure projects through WMPs and trust funds. The resort to this type of funding is the outcome of pressure on local governments to undertake construction projects, ratcheted up since the Covid-19 epidemic, and of the plentiful availability of household savings seeking a berth that is not a second or third home. As local governments tap ever more diverse sources of funds, it is likely that this face of financialization will become more visible in the years to come. As such, it will need close observation, both by scholars tracking financialization trends and by state regulators concerned to control excessive debt in order to retain the sustainability of the UIDC development model. This indeed might be seen as early-stage financialization led by the state, but we caution against broader applications of the concept, particularly in the domain of the built environment, believing that the central role played by LGFP/UIDCs mitigates strongly against a more substantive turn to financialized capitalism. Financialization, we conclude, is a concept that should be used with care in the Chinese context.

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