Introduction to the special issue: financialised urban development in *Land Use Policy*

Financialised urban development: Chinese and (South-)East Asian observations

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Abstract

The world-wide financial turn in land and urban development is now leading to financialised urban development, reflecting the rising influence of financial sector actors over the built environment. Observing Chinese and (South-)East Asian urban development, this collection interrogates financial sources and instruments as well as actors in variegated development practices. First, these studies confirm the wide spread of financialised urban development in the region and provide in-depth knowledge of financial operations associated with rental housing, infrastructure development, land and urban regeneration, which demonstrate remarkable similarities to Western economies. Second, the collection further reveals state agencies in financialised urban development, echoing recent research on the role of the state in financialisation. Third, these studies identify variegated developmental intentions and the contradiction between developmentalism and financial logic, which inevitably means that financialised urban development can be neither entirely entrepreneurial nor a smooth process of financialised value extraction. The studies highlight that, besides large development and financial corporations, the state utilises financial sector actors and deploys financial instruments that are often created by the state itself, such as a sovereign wealth fund or state-owned enterprises across spatial scales, to achieve its developmentalism and at the same time enhance statecraft.

Key words: financialisation, land, housing, development corporations, the state

1. The financial turn

An emergent literature on the financialisation of urban development suggests the rising role of financial sector actors (Peck and Whiteside 2016). The changing mode of finance has exerted significant impacts on urban governance, leading to the deepening of financial market logics and the expansion of financial practices into the traditional public sphere (Halbert and Attuyer 2016; Aalbers, Loon and Fernandez 2017; Van Loon, Oosterlynck and Aalbers 2019). New financial methods such as tax incremental finance (TIF) supplement or replace public sector funding (Weber 2010). Peck and Whiteside (2016) predict that, 'in an operating environment that has been *constitutively* financialised', entrepreneurial governance mutates into 'a value extraction machine' (p. 235). This body of literature stresses the financial turn as a governance change, for example the 'financialisation of American urban governance' in which financial disciplines, represented by bondholder value and financial gatekeepers like credit rating agencies, predominate.

Similarly, in East Asia Haila (2016) stresses the significance of land rent and suggests that in that context Singapore can be seen as a property state. Shatkin (2017) identifies the trend of 'land monetisation' and consequentially the 'real estate turn'. This real estate turn is in essence a financial turn, because housing financialisation is triggered by the global capital surplus (Aalbers 2008). Existing studies already suggest a wide range of actors in financialisation. First, they include the financial market actors involved in capital circulation and securitisation such as private equity funds in rental housing financialisation (Fields and Uffer 2016). Other actors may include those in real estate investment trusts (REITs) (Wijburg 2019; Aveline-Dubach 2020). Financial capital drives the process of financialisation through operating financial circulation. These actors may act across scales. Examining business property development in Bangalore, India, Halbert and Rouanet (2014) suggest that the 'transcalar territorial network' consists of both global finance capital and local developers. Such a network helps to promote financialisation through making the local property development environment more familiar to distant investors. Second, large businesses, which may not be actors in the financial market, drive the process of financialisation through using new finance models, for example corporate financing based on land assets, which is called assetisation (Ward and Swyngedouw 2018; Ward 2020). Third, actors may include those who are traditionally non-profit organisations such as housing associations (Aalbers et al. 2017), arms-length housing companies created by local authorities in England (Beswick and Penny 2018; Christophers 2017), but increasingly use the financial markets to fund their projects. Van Loon et al. (2019) stress the role of municipal land banks and municipal real estate corporations in the continental European process of financialisation.

Against the background of the wide spread of financialised urban development,[1] this special issue examines land and housing financialisation in China and (South)East Asia. The next section introduces the financial context in which urban development practices occur in the world and some special characteristics in the region. Section 3 examines financial sources and instruments, housing financialisation, and variegated development practices in China. Section 4 is based on Japanese and Indonesian cases to shed light on nation states, municipal governments and large corporations in financialisation. Finally, we rethink the theoretical implications of Chinese and (South)East Asian observations.

2. Understanding the financial context

In order to understand the financial turn, Christophers (2019) argues that we need to put financialisation in its 'financial context'. In the UK, this means the particular financial circumstances after the Global Financial Crisis, in particular austerity. Using local authorities in England as an example, he reveals this context as a state-imposed austerity in the post-crisis era. Confronted with financial constraints and a housing affordability crisis, local authorities in England set up arms-length housing companies to develop new homes (Beswick and Penny 2018; Christophers 2017). In the United States, the bankruptcy of Detroit presents a rather dramatic context of financialisation (Peck and Whiteside 2016). In that context, financial actors gained an increasingly dominant position to extract value from the city. In the post-socialist context of Poland, global financial actors drove the process of 'subordinate financialisation' owing to the nation's semi-peripheral position in the global economy (Büdenbender and Aalbers 2019), while in the UK, in addition to local authorities'

[1] In this paper, the term 'development' broadly refers to both new development and redevelopment. In order to distinguish them, we use a more specific term such as the 'development of a new town' to refer new development, while redevelopment is noted as regeneration.

tactics to cope with devolved austerity, large businesses managed to use the financial environment to create a new financing model (Ward 2020). Robinson and Attuyer (2020) question the characterisation of urban development in London as variegations of neoliberalisation and financialisation and argue that the London style of value extraction should be understood in the context of territorial fragmentation and the use of planning gain to deal with housing affordability challenges. They actually do not contrast financialisation with local planning but rather think that the logic of financialisation does not enter or dominate local governance when value extraction is practised. The contextual variation is seen as even more significant as there are different business models in London, Shanghai and Johannesburg (Robinson et al. 2020). Despite the involvement of financial sector actors to a varying extent, all mega urban projects examined in these three cities demonstrate 'achieving wider strategic objectives at national and metropolitan scales' (*ibid.*). Such is the importance of state agencies that the process of financialisation is not only conjoined by the state but is also subject to changing state regulation. Karwowski (2019) points out the limit of financial logics and the possibility of de-financialisation as well as financialisation.

Recent studies of urban governance suggest the need to pay more attention to state agencies. Under neoliberalisation and financialisation, the entrepreneurial city is not limited to 'reactionary politics' but rather presents variegated forms of 'municipal statecraft' (Lauermann 2018). Pike et al. (2019) argue that financialisation means a 'statecraft' different from both urban managerialism and entrepreneurialism. They pay attention to both national and local states and suggest that states are subject to but also lead financialisation. Aalbers (2020, p. 595) argues that 'the state does not take a passive role in these processes, but is actively facilitating, pushing and engaged in the financialisation of real estate.' He suggests that urban financialisation is becoming a state strategy. Van Loon et al. (2019) demonstrate variegated practices and state agencies in Europe, in contrast to North America (Peck and Whiteside 2016).

In short, despite the world-wide financial turn, to understand the process of financialisation and financialised urban development, the existing literature suggests the need to examine the financial context and the relationship between actors in this context.

3. Financialised urban development in China

Chinese urban development demonstrates a strong state developmental intention – or 'planning centrality' – under state entrepreneurialism (Wu 2018). In that context, the state acts through the market, including the financial market (Wu 2020). That is, financial products and instruments are deployed by the state. The state itself is transformed with the development of shareholder management of state assets (Wang 2015). In fact, financial sector actors are created by or connected to the state. For example, these financial agencies are state-owned enterprises. Urban Development and Investment Corporations (UDICs) are state-owned enterprises (SOEs) controlled by different levels of government but ultimately owned by the State Asset Supervision and Management Commission. They are set up to borrow capital (Fan 2016; Pan et al. 2017). 'Government guided investment funds' are established by different levels of government in the form of private equity subject to shareholder management, to support new strategic industries, economic upgrading and infrastructure development (Pan, Zhang and Wu 2020). In an increasingly financialised environment, the state, rather than rejecting the financial turn, embraces financial intermediaries and consequentially operates within the constraints of a financial regime. The state is actually part of this process by inventing new forms (like *chengtou* bonds) but at the same time reacts, regulates and imposes constraints on financial intermediaries. For example, since 2014 China has adopted a new financial management regime, which forbids the use of land mortgages. This is a new financial context. The state does not pursue a financialisation strategy per se. Recent studies highlight the specific development approach centred on UDICs (Feng, Wu and Zhang 2021; Jiang and Waley 2021). Jiang and Waley (2021) argue that the use of UDICs and consequent financialised sources does not mean that China is moving towards a financialised stage of capitalism. Wu (2021) stresses that financialising the Chinese city has been driven by the state. However, the wide application of financial instruments is not for financialisation itself but rather for dealing with the ramifications of entrepreneurial governance and the Global Financial Crisis. Facing increasing financial risks, the state has tightened its control over financialised urban development since 2014. In this section, we examine changing financial sources and instruments, housing development and variegated development practices associated with financialisation.

3.1. Financial sources and instruments

While there is an extensive body of literature on China's land-based finance, existing studies on land finance have paid more attention to the fiscal incentive of local governments, or the financialisation of the state. Through selling state land, the local government gains fiscal income. The studies in this special issue reveal a wide range of financial sources and instruments deployed in Chinese urban development. First, the land mortgage has been a significant financial source of urban development. Re-examining land development from the perspective of financialisation, Wu (2019) describes how Chinese local governments used land mortgages to raise development finance. This is different from the influx of global capital into the city through financial deregulation and securitisation. Land financialisation reflects the intention of the state to initiate development through making land an asset for Chinese banks, similar to housing financialisation (Wu et al. 2020), in which households recognise the value of housing assets and convert their savings into property rights investment. Thus, the important motivation is not the land revenue itself, especially as the cost of land acquisition has significantly increased. Similar to what Christophers (2017) described in the treatment of land in the UK, the government does not treat land development as a process of financialisation but its practice of land mortgage or land-based financing has nevertheless promoted financialisation, because refinancing land mortgages through securitisation has triggered consequential waves of financialisation. The borrowing of UDICs and various local government financial platforms (LFPs) needed to be refinanced through *chengtou* bonds and later by local government bonds after local governments were forbidden to finance through land mortgages and *chengtou*.

Second, the important instrument for financialised urban development in China is *chengtou*, or literally urban development and investment corporations (UDICs) (Feng et al. 2021; Jiang and Waley 2021). While *chengtou* has sometimes been translated as local government financial vehicles (LGFVs) (Pan et al. 2017; Fan 2016), the *chengtou* did not start as a LGFV or remain as such. UDICs were development agencies for local governments but were later turned into financial platforms through using collateral to raise capital. Broadly speaking, a *chengtou* named as such is a state-owned enterprise that specialises in urban development. But other SOEs may also undertake such functions. For example, Zhangjiang High-Tech Park Development Co. is listed on the Shanghai Stock Exchange and also acts as a park developer and manager. The corporation belongs to Zhangjiang Development Group, which is an SOE. Similarly, Lingang Economic Group is a state-owned enterprise to develop an industrial zone (Shen, Luo and Wu 2020). But these SOEs are increasingly using a financialised approach. A major step is the *chengtou* bond which financialises the operation of these development corporations.

Examining Jiaxing, one of the earliest *chengtou* to issue bonds in China, Feng et al. (2020) describe its history as a development agency. Through restructuring it managed to meet the requirements of the central government for independent *chengtou* in 2013. The *chengtou* has issued bonds since 2008 but has also used bank loans to pay back earlier bonds. The loans are based on the collateral of existing buildings. The municipal government had been using *chengtou* to borrow and develop infrastructure based on the usual land leverage model until this was banned in 2014. The government then repaid its debt and helped the *chengtou* reduce its debt ratio. The regrouping also injects businesses that bring in revenue streams for *chengtou* such as gas, real estate and tourism. The regrouped *chengtou* is regarded as an independent corporation, which accesses the capital market as an enterprise. But the financial market still regards the connection with the government as an implicit guarantee of repayment, because *chengtou* also undertake urban projects for the government and in theory will receive the cost of repayment from fiscal income and the source of local government bonds. At this point, the *chengtou* no longer has a financial vehicle function.

Third, associated with the need to refinance the debt of *chengtou*, a bond market has been promoted. Financialised urban development has been achieved through the creation of a bond market for urban development in China. The *chengtou* bond is especially examined in this special issue (Wu 2019; Feng et al. 2020; Ye et al. 2020). The *chengtou* bond is a financial product created on the basis of a UDIC. In essence, it should be an enterprise bond. But owing to the connection between the UDIC and the local state, for example the promise of financial support or guarantees, the bond is actually regarded as a ‘quasi-municipal bond’. The financial guarantee may be implicit in the form of support through land assets injection or service charges for infrastructure. These UDICs are actually state-owned enterprises, belonging to the local government. Hence, the debt of UDICs is also viewed as part of local government debts. By issuing UDIC or *chengtou* bonds, the UDIC or *chengtou* becomes a local government financial vehicle (LGFV), as the local government accesses the capital market through this vehicle. What is distinct about this *chengtou* bond compared with municipal bonds is that the *chengtou* bond is not guaranteed by local fiscal revenue. It is often backed up by land assets or other assets held by *chengtou*. But in reality, when the bond is rated, the close relationship or implicit government guarantee is always considered. In many cases, without this consideration, *chengtou* bonds would require a significant risk premium. As the analysis in Ye et al. (2020) shows, the premium of a *chengtou* bond is higher but is still acceptable by UDICs. The financial reform after 2016 aimed to stop this practice of financial leverage, and UDICs are now made ‘independent enterprises’ rather than LGFVs.

The *chengtou* bond constitutes a bridge between the capital market and infrastructure development in China. For the capital market, the bond seems to be an emerging asset class (Ye et al. 2020). But as revealed earlier, the risk of the *chengtou* bond has so far not been fully understood. Ye et al. (2020) compare the *chengtou* bond with the sovereign bond which is regarded as ‘risk free’ in order to calculate the relative risk premium. For example, the relative risk premium shows a significant geographical variation and spread. In coastal provinces such as Jiangsu and Zhejiang where a large quantity of *chengtou* bonds have been issued, the relative risk premium is lower than in Liaoning province in the Northeast and Guizhou in the Southwest. While the overall risk of the bond still remains unknown, the development of the secondary inter-bank financing market has begun to reveal the distribution of different risks and accordingly imposes a financial discipline as capital seeks higher returns from localities with higher relative risks. The continuation of the *chengtou* bond market reveals that while the state aims to contain the financial risk, financialised urban development remains and constitutes an enterprise-centred financial approach.

3.2 Housing financialisation

The most direct manifestation of financialised urban development is housing financialisation, which represents the core literature (Aalbers 2008; Fields and Uffer 2016). The Chinese case is distinctive in this aspect because financialisation does not present as mortgage securitisation. China's housing commodification mobilises millions of homeowners to invest in their properties as a process of 'assetisation' (Wu et al. 2020). Starting from a rather low mortgage level, commodification has led to an overall financialisation of urban development in China. This is because while Chinese households' incomes are lower, house prices also started from a low baseline. The privatisation of public housing provided initial assets to urban households. The fast-growing economy has substantially raised personal wealth and household incomes. Limited and monopolistic land supply by the government plus the influx of rural migrants and increasing population in the cities boosted house prices. Based on strong demand for urban land and housing assets, the state is able to provide capital liquidity to stimulate the economy. A household strategy is to turn savings into housing assets to gain value appreciation. Increasingly, households are willing to endure financial burdens and increase their mortgage and household debt, despite a low rental yield. This increasing homeownership purchase generates a thrust for land and infrastructure financialisation as the state and its development corporations manage and depend upon value capture from residential development.

The financialisation of housing and land thus reinforce each other (Chen and Wu 2020). Until 1998 there was limited financialisation as housing and land reform mainly involved the commodification of new houses. The primary land market strengthened the position of the state in this marketisation process. Eventually, this led to the development of land-based mortgages to provide development capital which is itself being financialised (Wu 2019) through local government financial vehicles and finance platforms (Pan et al. 2017; Huang and Chan 2018; Feng, Wu and Zhang 2020). Housing assetisation and further land-based financing allowed the state to initiate Chinese quantitative easing in 2008 to cope with the Global Financial Crisis, as large-scale infrastructure investment was funded by bank loans on the basis of land and infrastructure asset collateral, but this financial rather than fiscal operation triggered the necessity to re-finance debt through securitisation in subsequent waves – *chengtou* bonds and local government bonds – as a formal financialised approach to urban development.

Similar to the financialisation of homeownership, recently the development of the private rental housing market heavily taps into household wealth. After a long boom in the property market, housing affordability has become a thorny issue. In Shanghai, the rental market has only just started. Long-term apartment rental (LAR) is encouraged by the state to cool down property speculation and deal with the housing affordability crisis (Chen, Lu and Wu 2020). The developer invented a new 'asset-light' business model, because investors do not hold the ownership of rental housing. Instead, LAR firms sign a long-term lease agreement with the owners to rent out their apartments. It looks like these firms are just property agencies. However, asset-light Chinese rental firms are invested in by venture capital to aggressively expand their business. Once they gain a contract from renters, they require the renters to obtain 'rental mortgages', i.e. the firm gets loans from financial institutions, while renters pay monthly fees to these institutions as if they were paying rent. However, renters still need to pay instalments to the financial organisations even if the LAR firm stops providing rental to tenants. In other words, the renters in fact obtain loans from rental firms in order to gain a long-term tenancy. This is not very clear to renters when they sign contracts. This is particularly risky in the context of low rental yields as the rental business itself operates at a narrow profit margin and might not be viable. The interest of rental firms is not in rental income or the profit from rents as a rental agency, but rather in using a pool of contracts to gain venture capital and financial income. The purpose is to gain a sufficient market share of rental properties to be able to raise rents in the future. The asset-light model is thus known as 'rental services' to gain the income from rental difference. But this is a very challenging environment because of low rental yields. This model is quite speculative and risky, and is created by state agencies to promote tenancy instead of ownership in the discourse of 'housing for living, not for speculation'. The difficulty of LAR reveals some features of Chinese housing financialisation, which relies on household financial contribution.

3.3. The practices of financialised urban development

The papers in this collection explore various financialised city-making practices in China, ranging from city centre regeneration to new town development and waterfront mega projects. These projects share a similarity: they all have a developmental intention but at the same time encounter different degrees of financial difficulties when the financial instruments need to be adjusted or the external environment changes. These projects, although they use complex financial operations, are initiated and operated by state agencies.

For central city regeneration, Luan and Li (2020) examined three regeneration projects in Wuhan. The Zhongshan Avenue regeneration project aimed to preserve historical buildings of European styles built in colonial times. The East Lake Greenway improves the landscape, provides leisure space, and enhances the ecological environment. Because these projects do not generate revenue streams, the government uses the development corporation (*chengtou*) as a financial vehicle which in turn uses land mortgages of 'packaged land' in other places to finance these regeneration projects. Similarly, for a waterfront regeneration project to develop a new business district, a special purpose vehicle was set up under the local planning authority to ensure the implementation of development strategies. However, land financing encountered some difficulties. While the municipal government wished to develop a business district, most developers involved wanted to use this chance to develop more residential properties for profit. Moreover, the central government has forbidden land mortgage financing since 2014, which led to another 'financial turn' — to develop partnerships with banks and insurance companies (Citic Pacific) and state-owned enterprises (China Construction under the central government). The latter has even provided guarantees for the loans and trusts obtained by the local government for its share in the joint venture. Altogether, external investors contributed over 90% of the investment from the capital market.

For new town development, Su and Qian (2020) investigate a special case in northern China. In the city of Ordos in Inner Mongolia, real estate speculation was further driven by rising personal wealth from coalmining industries and informal private finance (Su and Qian 2020). The local government adopted a rather lax attitude toward informal private finance and fuelled a real estate frenzy through land mortgages and new town development, eventually leading to the bursting of the bubble in 2011. In Chinese cities, urban development has relied heavily on land financing, which led to a real estate boom and over-building.

A special type of new town based on university campuses is called the 'university town'. Shen (2020) examines Songjiang university town in Shanghai. As in other more developed cities in China, new town development in Shanghai is combined with new economic functions, for example, in this case tertiary education (Shen 2020) and an industrial zone of heavy equipment manufacturing in Lingang (Shen et al. 2020). Mass transit development combined with land development uses the development model of land value capture widely seen in East Asia (Shen and Wu 2020, Aveline-Dubach and Blandeau 2019). In the case of Songjiang university town, Shen (2020) identifies universities as a financing vehicle based on 'land-tuition-leverage'. These universities are public sector, but they managed to obtain development finance to develop their own suburban companies in the new town. In fact, the universities formed a development corporation to pool assets for operations. The municipality of Shanghai also contributed investment to the project. Besides the public–public partnership, the project also involved a private sector developer to perform land asset management and operation. But the universities incurred heavy debt, which required a bailout from the municipal government.

Waterfront mega urban projects are the salient feature of financialised city-making. In this collection, the new waterfront business district in Wuhan (Luan and Li 2020) and the Export Park (Li and Xiao 2020), together with the Lujiazui financial zone and new creative industries and knowledge clusters in Xuhui and Yangpu districts in Shanghai (Chen 2020), are examined in detail. Besides the widely known land financing model operated by development corporations, Li and Xiao (2020) found that in the post-Expo era, the Shanghai Expo Development Group took over land from three development corporations under the Expo Coordination Bureau and prioritised land allocation to central government SOEs. The rising role of SOEs in the post-Expo era suggests that the strategic objectives were to strengthen national status, update economic structures and improve the quality of life along the Huangpu River. While land finance has been an important means of realising the development intention, the Expo Park regeneration project indicates the salient feature of state-led financial and development operations. Other projects along the Huangpu River indicate quite diverse functionalities: from banking and insurance, culture and exhibitions, media and creative industries, to the knowledge economy and innovation and wide-ranging funding mechanisms such as tax relief, partnerships, private finance initiatives, loans, bonds and trusts (Chen 2020).

In short, with expanding financial sources and instruments, development actors take the chance to experiment with various approaches to mobilising financial capital in urban development. Their practices are constantly influenced by new policies which are not unidirectional towards financialisation.

4. Insights from (South-)East Asia

This collection contains a small number of important studies in East and Southeast Asia. Financialised urban development in Japan demonstrates the roles of the nation state, the municipal government and large corporations (Aveline-Dubach 2020). Tokyo's rental REITs market is a significant case as it is the second largest residential REITs market in the world. Japanese rental REITs originate from the financial context of the Japanese economy. The earlier deregulated financial environment led to the bursting of the land bubble and devaluation of properties for financial investors. In this context, the state has striven to revitalise central Tokyo and stabilise the banking system. State policies at both national and local levels have created an attractive rental housing market. In the midst of urban shrinkage, the Tokyo municipal government promotes residential intensification in the capital region. The government promotes the condominium as a new residential model in central wards of Tokyo. The development of rental housing REITs is supported by generous tax treatment and planning liberalisation from the Japanese state. Companies subsidise market rents through housing allowances for their employees. Property conglomerates seize the lucrative 'fee-based' business of providing REIT rentals. Focusing on the securitisation of rental housing through REITs in Japan, Aveline-Dubach (2020) stresses the role of the Japanese state in establishing regulatory, tax and legal frameworks. The state agency is 'primordial'.

On Indonesian infrastructure development, Shatkin (2020) examines the development of the Jakarta–Bandung high-speed rail link and interrogates the relations between financial sector actors and the state. In the extended Jakarta region, Indonesian national state actors seek to extend their power and build political coalitions under a discourse of 'state developmentalism'. The financial sources include Chinese state bank financing and Chinese purchase of bonds and provision of loans to Indonesian state-owned banks for investment. The case reveals financialised urban development and global capital circuits. The interaction between transcalar financial actors and nation states underlies the dynamics of infrastructure project financialisation. The role of the state, especially the national state, is highlighted in the financialisation of urban development, as 'the state strategically tacks between various sources of capital to maximise its agency and autonomy' (Shatkin 2020). The project of the Jakarta–Bandung high-speed rail link demonstrates a new insight beyond 'land monetisation' (Shatkin 2017) as a 'real estate turn'. It reveals the sovereign state and international geopolitics of development – a context in which financialised urban development occurs. The development reveals variegated state agencies in the financial turn. Both the Tokyo and the Jakarta case reveal an intention that is not limited by profit making, which includes revitalising central Tokyo and enhancing the political power of the Indonesian state.

Conclusion

Observing Chinese and (South-)East Asian urban development, this collection of papers examines the financial turn and financialised practices of urban development. The special issue makes several contributions. First, these studies demonstrate wide-ranging financial approaches in urban development and confirm the financial turn in the region. The empirical research enriches our understanding in terms of variegated operation in financialised urban development.

Second, the research in China and (South-)East Asia reinforces the recent understanding of the role of the state in financialisation (Aalbers 2017; 2020; Van Loon et al. 2019; Pike et al. 2019; Wu 2021). Contrasting Peck and Whiteside (2016), Van Loon et al. (2019) suggest that in the continental European region new financial sources allow the government to be more entrepreneurial. The relationship between finance and state is a more entrepreneurial use of new financial instruments by the state. Indeed, in the United States, TIF is used by the local government to supplement public sector finance to achieve its regeneration purposes. The studies here reveal state agencies in the process of financialisation.

Third, in addition to the role of the state, or state-led financialisation, the studies reveal more compounded goals associated with financialised urban development. In East Asian developmentalism, the intention of using financialised urban development is not confined within the financial logic, although the operation of financialised urban development has to consider the financial requirements during financial mobilisation. Financialised urban development may not be driven by financial deregulation or neoliberal governance. It is triggered by wider geopolitics across the national scale as shown in Jakarta's high-speed rail project (Shatkin 2019) or Chinese land mortgage and consequential re-regulation of land finance (Wu 2019; 2021). State agencies remain in the initiation and development of mega infrastructure projects as shown in Chinese urban regeneration.

The papers in this collection also show that financialised urban development introduces a new dimension into governance, which means that these urban development projects cannot be entirely developmental. In the Chinese context, the major challenge is that with a strong developmental intention, many mega urban projects are costly and financially not viable by design. Financialisation is not the aim of urban development in China. Rather, in the context of state entrepreneurialism, financialisation is an instrument to fulfil state strategies and centrality. For example, in urban redevelopment, national political mandates strongly influence local regeneration practices beyond a growth machine dynamic (Wu et al. 2021). In this way, the financialised approach has been instrumentalised by the state. Instead of seeing a financial discipline imposed by financial actors on urban governance in the United States (Peck and Whiteside 2016) or entrepreneurial public–private partnership in Europe (Aalbers 2017; Van Loons et al. 2019), observations from Chinese and (South-)East Asian development reveal quite complex 'statecraft' (Pike et al. 2019). The studies consistently demonstrate the tension between developmentalism and financialised urban development, which means that financialised urban development can be neither entirely entrepreneurial nor simply financialised value extraction.

Reference

Aalbers, M. B. (2008) The financialization of home and the mortgage market crisis. *Competition and Change,* 12**,** 148-166.

Aalbers, M. B. (2020) Financial geography III: The financialization of the city. *Progress in Human Geography,* 44**,** 595-607.

Aalbers, M. B., J. V. Loon & R. Fernandez (2017) The financialization of a social housing provider. *International Journal of Urban and Regional Research,* 41**,** 572-587.

Aveline-Dubach, N. (2020) The financialization of rental housing in Tokyo. *Land Use Policy***,** https://doi.org/10.1016/j.landusepol.2020.104463.

Aveline-Dubach, N. & G. Blandeau (2019) The political economy of transit value capture: The changing business model of the MTRC in Hong Kong. *Urban Studies,* 56**,** 3415-3431.

Beswick, J. & J. Penny (2018) Demolishing the present to sell off the future? The emergence of 'financialized municipal entrepreneurialism' in London. *International Journal of Urban and Regional Research,* 42**,** 612-632.

Büdenbender, M. & M. B. Aalbers (2019) How subordinate financialization shapes urban development: the rise and fall of Warsaw's Sluzewiec business district. *International Journal of Urban and Regional Research,* 43**,** 666-684.

Chen, J., T. Lu & F. Wu (2020) The financialization of rental housing: a case study of the long-term apartment rental sector in Shanghai. *Land Use Policy*. (doi to be added)

Chen, J. & F. Wu (2020) Housing and land financialization under the state ownership of land in China. *Land Use Policy*. (https://doi.org/10.1016/j.landusepol.2020.104844)

Chen, Y. (2020) Financialising urban redevelopment: transforming Shanghai's waterfront. *Land Use Policy*. (https://doi.org/10.1016/j.landusepol.2020.105126)

Christophers, B. (2017) The state and financialization of public land in the United Kingdom. *Antipode,* 49**,** 62-85.

--- (2019) Putting financialisation in its financial context: Transformations in local government-led urban development in post-financial crisis England. *Transactions of the Institute of British Geographers,* 44**,** 571-586.

Fan, L. 2016. Quenching thirst with poison? Local government financing vehicles: past, present, and future. In *Regulating the visible hand?* Eds. B. L. Liebman & C. J. Milhaupt, 69-84. Oxford: Oxford University Press.

Feng, Y., F. Wu & F. Zhang (2020) The development of local government financial vehicles in China: A case study of Jiaxing Chengtou. *Land Use Policy,* (https://doi.org/10.1016/j.landusepol.2020.104793).

--- (2021) Changing roles of the state in the financialization of urban development through chengtou in China. *Regional Studies***,** 1-12.

Fields, D. & S. Uffer (2016) The financialisation of rental housing: a comparative analysis of New York City and Berlin. *Urban Studies,* 53**,** 1486-1502.

Haila, A. 2016. *Urban land rent: Singapore as a property state*. Oxford: Wiley-Blackwell.

Halbert, L. & K. Attuyer (2016) Introduction: the financialisation of urban production: conditions, mediations and transformations. *Urban Studies,* 53**,** 1347-1361.

Halbert, L. & H. Rouanet (2014) Filtering risk away: global finance capital, transcalar territorial networks and the (un) making of city-regions: an analysis of business property development in Bangalore, India. *Regional Studies,* 48**,** 471-484.

Huang, D. & R. C. Chan (2018) On 'land finance' in urban China: Theory and practice. *Habitat International,* 75**,** 96-104.

Jiang, Y. & P. Waley (2021) Financialization of urban development in China: fantasy, fact or somewhere in between? *Regional Studies***,** 1-11.

Karwowski, E. (2019) Towards (de-) financialisation: the role of the state. *Cambridge Journal of Economics,* 43**,** 1001-1027.

Lauermann, J. (2018) Municipal statecraft: Revisiting the geographies of the entrepreneurial city. *Progress in Human Geography,* 42**,** 205-224.

Li, L. & Y. Xiao (2020) Capital accumulation and urban land development in China: (Re) making Expo Park in Shanghai. *Land Use Policy***,** https://doi.org/10.1016/j.landusepol.2020.104472.

Luan, X. & Z. Li (2020) Financialization in the making of the new Wuhan. *Land Use Policy***,** https://doi.org/10.1016/j.landusepol.2020.104602 .

Pan, F., F. Zhang & F. Wu (2020) State-led financialization in China: The case of the government-guided investment fund. *The China Quarterly,* https://doi.org/10.1017/S0305741020000880.

Pan, F., F. Zhang, S. Zhu & D. Wójcik (2017) Developing by borrowing? Inter-jurisdictional competition, land finance and local debt accumulation in China. *Urban Studies,* 54**,** 897-916.

Peck, J. & H. Whiteside (2016) Financializing Detroit. *Economic Geography,* 92**,** 235-268.

Pike, A., P. O'Brien, T. Strickland & J. Tomaney. 2019. *Financialising City Statecraft and Infrastructure*. Cheltenham, UK: Edward Elgar Publishing.

Robinson, J. & K. Attuyer (2020) Extracting value, London style: Revisiting the role of the state in urban development. *International Journal of Urban and Regional Research,* DOI:10.1111/1468-2427.12962.

Robinson, J., P. Harrison, J. Shen & F. Wu (2020) Financing urban development, three business models: Johannesburg, Shanghai and London. *Progress in Planning,* (doi: to be added).

Shatkin, G. 2017. *Cities for profit: the real estate turn in Asia's urban politics*. Ithaca: NY: Cornell University Press.

--- (2020) Financial sector actors, the state, and the rescaling of Jakarta's extended urban region. *Land Use Policy***,** https://doi.org/10.1016/j.landusepol.2019.104159 .

Shen, J. (2020) Universities as financing vehicles of (sub) urbanisation: The development of university towns in Shanghai. *Land Use Policy***,** https://doi.org/10.1016/j.landusepol.2020.104679.

Shen, J., X. Luo & F. Wu (2020) Assembling mega-urban projects through state-guided governance innovation: the development of Lingang in Shanghai. *Regional Studies,* 54(12):1644-1654.

Shen, J. & F. Wu (2020) Paving the way to growth: transit-oriented development as a financing instrument for Shanghai's post-suburbanization. *Urban Geography,* 41(7): 1010-1032.

Su, X. & Z. Qian (2020) Neoliberal financial governance and its transformation under real estate boom and bust: The case of Ordos City, China. *Land Use Policy***,** https://doi.org/10.1016/j.landusepol.2020.104728

Van Loon, J., S. Oosterlynck & M. B. Aalbers (2019) Governing urban development in the Low Countries: From managerialism to entrepreneurialism and financialization. *European Urban and Regional Studies,* 26**,** 400-418.

Wang, Y. (2015) The rise of the ‘shareholding state’: financialization of economic management in China. *Socio-Economic Review,* 13**,** 603-625.

Ward, C. (2020) Contradictions of financial capital switching: Reading the corporate leverage crisis through the Port of Liverpool's whole business securitization. *International Journal of Urban and Regional Research* (http://doi.org/10.1111/1468-2427.12878).

Ward, C. & E. Swyngedouw (2018) Neoliberalisation from the ground up: Insurgent capital, regional struggle, and the assetisation of land. *Antipode,* 50**,** 1077-1097.

Weber, R. (2010) Selling city futures: the financialization of urban redevelopment policy. *Economic Geography,* 86**,** 251-274.

Wijburg, G. (2019) Reasserting state power by remaking markets? The introduction of real estate investment trusts in France and its implications for state-finance relations in the Greater Paris region. *Geoforum,* 100**,** 209-219.

Wu, F. (2018) Planning centrality, market instruments: governing Chinese urban transformation under state entrepreneurialism. *Urban Studies,* 55**,** 1383-1399.

--- (2019) Land financialisation and the financing of urban development in China. *Land Use Policy* (https://doi.org/10.1016/j.landusepol.2019.104412).

--- (2020) The state acts through the market: ‘State entrepreneurialism’ beyond varieties of urban entrepreneurialism. *Dialogues in Human Geography*, 10(3) 326-329.

--- (2021) The long shadow of the state: Financializing the Chinese city. *Urban Geography,* (forthcoming).

Wu, F., J. Chen, F. Pan, N. Gallent & F. Zhang (2020) Assetisation: the Chinese path to housing financialisation. *Annals of the American Association of Geographers*, 110(5): 1483-1499

Wu, F., F. Zhang & Y. Liu (2021) Beyond growth machine politics: Understanding state politics and national political mandates in China’s urban redevelopment. *Antipode,* (forthcoming).

Ye, Z., F. Zhang, D. M. Coffman, S. Xia, Z. Wang & Z. Zhu (2020) China’s urban construction investment bond: contextualizing a financial tool for local government. *Land Use Policy*. (https://doi.org/10.1016/j.landusepol.2020.105153).