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# The financialization of rental housing in China: A case study of the assetlight financing model of long-term apartment rental

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#### **Abstract**

This paper offers a timely exploration of the ongoing financialization process in the Chinese rental housing sector, focusing on the "asset-light" financing models used by "long-term apartment rental" firms in this industry. These firms utilize an important financial means — "rental loan" — as to facilitate the capital explanation and the tenancy assetization. Using Shanghai as a case study, the paper also discusses the financial risks as well as tenants' vulnerability embedded in the financing model and enriches the knowledge of the heterogeneity of financialization as well as the different impacts of financialization on housing rights and urban governance. This paper engages with the literature of housing financialization by critically discussing the patterns and consequences of the financialization of rental housing.

Key words: financialization; rental housing; China; rental loans; long-term apartment rental

#### 1. Introduction

Previous research on the financialization of housing has generally focused on the owner-occupied housing sector in advanced economies (Aalbers, 2017, 2008; Gotham, 2009; Kohl, 2018; Rolnik, 2013), and recently similar analysis has been offered in the context of emerging economies (Fernandez and Aalbers, 2020; Migozzi, 2020; Wu et al., 2020). Rental housing, due to its high heterogeneity, hard-to-predict income streams and unstable cash flow, was commonly thought of as unattractive to financial capital and thus largely immune from financialization (Fields and Uffer, 2016). Nevertheless, over the last few decades, the rental housing sector has become the new frontier for financialization in both Global North and Global South countries (August and Walks, 2018; Aveline-Dubach, 2020; Fields and Uffer, 2016; Lima, 2020; Wijburg et al., 2018).

A similar trend is emerging in China. Over the last few years, capital worth 200-300 billions of Yuan has flowed into the Chinese rental housing sector (Li, 2020). Numerous innovative financial products have emerged in this buoyant market, and the integration of the housing and financial markets has been proceeding so progressively that the rental housing stock in Chinese cities has been transformed into highly liquid global assets (Cushman & Wakefield, 2019). Under both the motivation of profit-maximizing and the government's promotion policy, newly injected capital in the Chinese rental housing industry is invested in "long-term apartment"

rental" (LAR). LAR is a business-to-customer rental with the tenancy period longer than one year, which is different from the private landlord's short-term rental lease that is dominant in the Chinese rental housing market (MOHURD, 2017). LAR firms have two business models. One is the traditional "asset-heavy model" in which the firms lease the rental properties that they own, and the other is the "asset-light model" in which the firms obtain the leasing rights of properties from individual or corporate owners through agency contracts on a long-term basis, refurnish them, and then sublet the properties on behalf of landlords (Ba and Yang, 2016).

This paper engages with the ongoing debates of housing financialization, examining the financing models used by asset-light LAR firms and their "rental loan" in particular. The rental loan refers to a financial arrangement whereby tenants borrow loans from financial institutions to finance the lump sum of their upfront rents and repay such loans through monthly repayments, while the landlords receive the upfront payment of rents at the beginning of the rental lease (Q&K, 2019). Notably, tenants' upfront payment of rents or deposits also prevails in a number of traditional rental leasing arrangements, such as *chonsei* in South Korea (Kim, 2013; Ryu and Kim, 2018), *bogey* or *girvi* in India (Blanc, 2009), and *antichresis* which is popular in several south American countries (Navarro and Turnbull, 2010; UN-HABITAT, 2003). Deposit-only leasing can help landlords to raise funds from tenants for investment (Peppercorn and Taffin, 2009). However, the rental loan in China financializes leasing rights into financial assets, assisting rental firms to accumulate a capital pool (Q&K, 2019). According to our best knowledge, this type of rental loan is a brand new financial product which is unique in China and has not yet been reported elsewhere.

The paper also discusses the financial fragility and vulnerability of tenants that are embedded in the financing strategies used by LAR firms. As suggested by a recent report issued by the United Nations, the financialization of housing has become a worldwide challenge to ensuring "the right to adequate housing" (UN-OHCHR, 2017). This paper enriches knowledge on the heterogeneity of financialization as well as different impacts on housing rights and urban governance.

The rest of this paper is organised as follows. After presenting a brief review of the burgeoning literature on financialization in general and the financialization of rental housing in specific in section 2, we discuss the background and key policy changes in the rental housing sector in section 3 to contextualise our study of the financialization of LARs in China. Section 4 presents

a case study of the asset-light financial model of LARs. Conclusions are provided in the final section.

## 2. The financialization of rental housing: key concepts and related literature

Although the concept of financialization originated no later than in the mid-1990s (Arrighi, 1994), the literature explicitly employing this concept has proliferated only since the beginning of the 21st century (Christophers, 2015). The term has been used to describe a wide but closely connected array of phenomena, including the financialized firm that features with growing shareholder power in corporate governance (Froud et al., 2000; Knafo and Dutta, 2020; Lazonick and O'Sullivan, 2000), the financialized macroeconomy or finance-led growth regime (Boyer, 2000; Montgomerie and Williams, 2009; Stockhammer, 2004; Williams, 2000), the increasing reliance of corporate capital accumulation on financial channels rather than through production and trade (Krippner, 2005), and financialized daily life, particularly the growing prevalence of debt-financed household consumption (Cynamon and Fazzari, 2008; Martin, 2002).

It has long been proposed that urban space is the main context to absorb surplus capital flowing out of the primary capital circuit of productive investment and thus plays a prominent role in financialization processes (Harvey, 1985; Lefebvre, 1991). Since housing by its very nature possesses both a use value and an exchange value, and is also widely held by households as well as being capital-extensive, it has long been seen as the most prominent destination for the secondary circuit of capital (Aalbers and Christophers, 2014; Gotham, 2009, 2006). The financialization of housing generally refers to a situation where both the supply of and the demand for housing become increasingly determined by its exchange value rather than its use value (Fainstein, 2016). The growing importance of housing as an investable asset class encompasses all its relevant aspects, not just the owner-occupied sector, and over the last few decades rental housing has become the new avenue for capital investment around the world (Lima, 2020; Nethercote, 2020; Wijburg et al., 2018).

Private capital's growing interest in rental housing has been identified as having hybrid driving forces including market mechanisms, technology advances and policy incentives (Bernt, Colini and Förste, 2017; Kitzmann, 2017; Crook and Kemp, 2019; Wigburg, 2020). In the first place, the demand for rental housing is steadily rising worldwide. It is estimated that currently more

than 1.2 billion people in the world live in rented accommodation (Gilbert, 2016), and the ratio of renters continues to rise, in both advanced countries and developing countries although with different driving forces (Carliner and Marya, 2016; Gilbert, 2016; UN-HABITAT, 2003). Meanwhile, the global integration of financial markets, the sharp decline in interest rates, and the development of mortgage technology have further boosted the profitability of investing in rental housing (Fields and Uffer, 2016; Nethercote, 2020).

Numerous studies and reports have documented the impacts of financialization on structural change in rental housing provision, the socio-spatial unevenness of rental housing landscapes, and the well-being of renters (Aalbers, 2019; Lima, 2020; UN-OHCHR, 2017). The literature has reported that financialized landlords tend to adopt aggressive financing strategies and profit-maximizing business models under increased return pressures from shareholders (Byrne, 2020). A typical model is a short-term "opportunistic investment" – financialized landlords purchase properties using borrowed cheap credit capital and then seek high revenues from property sales (Kitzmann, 2017). In long-term business models, financialized landlords attract equity investment or employ REITs to acquire large-scale rental housing properties and then steeply raise rents (Fields and Uffer, 2016; Wijburg and Aalbers, 2017). A case study from Toronto shows that, financialized landlords capture "rent gaps" either by "squeezing out" large profits resulting from rent increases and cost reductions or by profiting from the displacement of low-income tenants with high-income ones (August and Walks, 2018). A Tokyo-based study also confirms that to meet investors' high expectation of returns REIT asset managers have to target the vast majority of their leasing activity at young and "promising" corporate employees and ignore other groups (Aveline-Dubach, 2020). Other investment strategies employed by financialized landlords to maximize returns include the speculative pursuit of profit opportunities by "gaming" deregulation policies, such as the relaxation of rent controls (Fields and Uffer, 2016); lifting rents by carrying out modernisation and refurbishment of old rental housing (Wijburg et al., 2018); promoting neighbourhood redevelopment (Bernt et al., 2017); and stimulating the gentrification of old neighbourhoods to push up rents (August and Walks, 2018; Soederberg, 2018).

As highlighted in existing studies, the role of the state is critical in the understanding of rental housing financialization (Bernt et al., 2017; Crook and Kemp, 2019). Rental housing investors cannot realise profit-making successfully without effective collaboration with local authorities. They may form public–private partnerships for housing policy coordination (Fields and Uffer,

2016; Kitzmann, 2017) and urban development and redevelopment (August and Walks, 2018; Bernt et al., 2017; Soederberg, 2018; Wijburg et al., 2018). In most contexts, different levels of government adopt neoliberal changes in their public policies and create favourable conditions to make the rental housing sector more attractive to financial investors. The financialization of rental housing is considered either as a by-product of policy change or as a deliberate action in the state's retreat from public housing provision (Hulse et al., 2020; Lima, 2020). The active involvement of city governments in the financialization of housing and the associated impact on the urban landscape have been discussed in several other strands of the relevant literature, such as the growth machine (Logan and Molotch, 1987), the entrepreneurialism of urban governance (Harvey, 1989), and the political economy of housing regimes (Schwartz and Seabrooke, 2008).

In summary, the existing literature reveals that various financial innovations have been created and aggressive corporate strategies have been employed since landlords became financialized. During this process, housing justice and rent affordability were greatly threatened. As put by the 2017 annual report of the United Nations (UN) Special Rapporteur on Adequate Housing, the financialization of housing "increasingly disconnects housing from its social function of providing a place to live in security and dignity and hence undermines the realization of housing as a human right" (UN-OHCHR, 2017: 3). However, as discussed in the previous literature, housing financialization is by nature variegated and path-dependent (Aalbers, 2017; Schwartz and Seabrooke, 2008). The patterns and consequences of the financialization of rental housing have varied under Chinese institutions.

## 3. The development of long-term apartment rental in China

## 3.1. Changing housing policies towards the promotion of rental housing

Although China's housing market developed rapidly after the abolition of the welfare housing system in 1998, the rental housing sector was largely neglected by the Chinese government in its drive to reform the housing system. Moreover, in the years immediately after 2008, priority was given to public rental housing (Chen et al., 2014; Shi et al., 2016), with the private rental housing sector remaining largely ignored. However, over the last few years, both the central government and local governments have sought to promote the development of the private rental housing sector, especially in the larger cities. The motivations behind this policy are

hybrid. Firstly, a well-functioning rental housing market can help to shift the demand pressures on the owner-occupied housing market and then alleviate the escalating pressure on housing affordability. Second, a booming rental housing sector can be a new outlet for excess capital that flows from the sluggish manufacturing sector. Third, the institutionalization of the rental housing sector can help improve the social governance of a highly mobile renter population. Fourth, a strong private rental housing sector can help to reduce governments' expenditures on public rental housing programmes.

The Chinese government formally launched the current campaign to boost the private rental housing sector in 2015. Firstly, the Ministry of Housing and Urban–Rural Development (MOHURD) published its guidelines on how to speed up the development of the private rental housing industry and vowed to establish a comprehensive structure for the provision of well-built rental housing within three years (MOHURD, 2015). In this document, the potential of REITs as a financing tool for rental housing development was for the first time officially proclaimed, and pilot programmes were called for. Next, the central government's annual Economic Affairs Conference that was held at the end of 2015 proposed that the housing system should move towards achieving "a balanced development between purchasing and renting" (gouzu bingju).

At the beginning of 2016, the State Council introduced a milestone policy document – (SC[2016]36) – to reinforce the development of the rental housing industry from the supply side, including the requirement that all municipal governments put aside a certain proportion of land for new rental housing construction, encouraging the conversion of business buildings into residential housing for rental use, preferential tax treatment for rental housing businesses, and the introduction of more innovative financial instruments to ensure adequate funding for rental housing companies, e.g. corporate bonds and ABS (asset-backed securities) (The State Council, 2016). This document also outlined a series of policies to stimulate demand for rental housing, such as demanding tenure neutrality in the provision of social welfare and enabling the use of HPF money to pay housing rents (The State Council, 2016).

<sup>&</sup>lt;sup>1</sup> In China, tenants are treated with less priority than homeowners in accessing public services and social welfare, including their children's enrolment in public schools (Zhang and Chen, 2018).

<sup>&</sup>lt;sup>2</sup> HPF is a compulsory savings system based on monthly contributions from both employees and employers, but the money was practically restricted to home purchasing purposes before 2015 (Chen and Deng, 2014; Deng et al., 2020).

Following the call from the State Council, more ministries have drafted policies to escalate housing financialization. On April 24<sup>th</sup> 2018, the Securities Supervision Commission (SSC) and MOHURD jointly announced a notice to promote rental housing–based asset securitisation (SSC[2018]30). The most recent stimulus involves injecting direct funding support from the central government. Between 2019 and 2020, altogether 24 cities were selected after two rounds of competition into a three-year pilot programme in which each city's development of its local rental housing market would be annually supported by 0.6-1 billion Yuan funding from the central government's fiscal budget (SJTU-CHURD, 2020). These national level housing policies show clear signals to incentivise the development of rental housing.

# 3.2. The development of "long-term apartment rental"

The LAR industry in China has gone through three stages of development: emergence (2011-2014), radical expansion (2015-2019) and slowdown (since 2020). In the early 2010s, growing housing unaffordability, increasing inflows of migrants into the cities, and the lack of highquality, professional rental services created incentives for venture capital (VC) and private equity (PE) firms to invest in the LAR industry even without any government stimulus. These firms expected significant rent escalation as a result of both the robust growth of demand for quality rental housing and the institutionalisation of rental housing in the mega-cities (Cushman & Wakefield, 2019). Funding from VC and PE firms was the main financing source for LAR firms at this stage. For example, Mofang Apartment, one of the earliest as well as largest LAR firms in China, raised approximately 40 million Yuan in Series A funding from both international and domestic VC providers (Warburg Pincus and DT Capital Partners) in March 2013, and a further US\$ 14 million in Series B funding from Warburg Pincus in May 2015 (YuanyuanABS-R, 2017). Banks and other traditional financial institutions, under unfavourable financial regulations, had mostly chosen to keep their distance. Although financing options were limited, the number of participants and the amount of capital invested in the LAR industry continued to grow steadily. Between 2011 and 2014, roughly 150 enterprises were established as LAR-type firms or their subsidiary firms (BeijingNews, 2020). From 2015, the Chinese LAR industry expanded sharply under the policy stimulus. Between 2015 and 2019, about 750 enterprises were created as LAR-type firms or their subsidiaries (BeijingNews, 2020).

However, the growth momentum of the LAR industry significantly waned in 2020, partly due to the economic and social shock resulting from the COVID-19 pandemic. Around 100 LAR firms have closed down since 2019, mostly due to the collapse of cash flow (BeijingNews, 2020). With the abrupt slowdown of capital inflows, the industry witnessed unprecedented market distress in 2020 and even some industry leaders became cash-strapped to the extent of verging on bankruptcy.

## 3.3. The asset-light financing model

Under the promotion policy of the government, the Chinese private rental housing industry has become a hotspot for capital investment during the last few years. LAR is at the core of this industry. The asset-light business model in which rental firms sublet apartments to tenants on behalf of landlords has emerged in the Chinese LAR industry since the mid-2010s and come to prevail in last few years (Ba and Yang, 2016). This business model is very different from the traditional "asset-heavy" model where rental firms lease only the housing units that they own.

The popularity of the asset-light business model in the Chinese LAR industry is underpinned by a series of uniquely Chinese institutional factors. On the investor side, it is generally financially unacceptable for investors to employ the build-to-rent or purchase-to-rent strategy in the Chinese rental housing sector. Compared with the skyrocketing housing prices that are boosted by property speculation and other market-institutional factors, the rental yields in Chinese cities consistently remain at a very low level. In most Chinese cities, the average rental yields rate (measured as the ratio of annual rents to housing prices) is generally 1-2% (Tsai and Chiang, 2019), much lower than even the interest rates of deposit savings at banks. On the landlord side, many owners of multiple homes are reluctant to rent out vacant properties directly to individuals, concerned about the annoying troubles of providing rental services to individual tenants under well-functioning market regulation. Note that property tax has hardly been practised in China and thus the opportunity cost of keeping housing vacant is low. A national household survey for 2017 suggested that 65 million units (or 21.4%) of the total housing stock were vacant in urban China (CHFS, 2018). On the demand side, younger cohorts of fresh graduates and white-collar employees that demand higher quality rental services also prefer to rent apartments from rental agencies rather than directly from private households

(Cushman & Wakefield, 2019). The asset-light business model emerged to break through the barriers constraining the three parties from engaging in the rental housing market.

Asset-light LAR firms in China typically sign a long-term agency contract with the owners of rental apartments for a period of 3 to 5 years and obtain the rights to renovate and lease the apartments to renters on behalf of landlords (KeResearch, 2018). For LAR investors, participating in the industry via the asset-light business model requires almost no capital investment, except for minor expenditures on providing renovations and services. This lowers the capital requirements of investors to enter the industry and is a key reason underpinning the rapid expansion of LAR business in China during the last few years.

In sum, innovative financial tools and an under-regulated market have effectively fostered the financialization of the LAR industry in Chinese mega-cities. Financialization strategies have included assetization, securitisation, conventional financing and overseas IPOs. The role of financial institutions has been given particular prominence by the government in accelerating the growth of the LAR industry. However, rapid financialization and the unrestrained operations of financial institutions have caused uncontrolled financial risks, and the number of LAR firms going bankrupt has increased sharply over the last few years. In cases involving rental loans, the situation is particularly complicated, because tenants who signed contracts for rental loan have continued to be liable for monthly repayments to the mortgage issuers even after the LAR firms went bust (which meant that the tenants lost their rental use rights). In fact, many tenants have been forced to move out of housing units by landlords because their LAR firm defaulted on the payments while still being legally liable for their unpaid loans. In cities like Shanghai, Hangzhou and Nanjing, bankruptcies of LAR firms have even caused street protests and social instability, which local governments have seen as significant challenges (Xinhua News, 2019).

## 4. Case study of asset-light LAR firms in Shanghai

By mid-2020, about 80 LAR or LAR-related firms had been set up in Shanghai, and the number was second only to Shenzhen (BeijingNews, 2020). Examining the on-going process of the financialization of asset-light LAR firms in Shanghai offers an opportunity to observe in detail the features and risks of rental housing financialization in China.

### 4.1. Methodology

The analyses in this section are derived from three sources. First, we collected documents related to the LAR sector in Shanghai, including public policies from the Shanghai municipal government, annual reports from local consultancies, IPO prospectuses from LAR firms and publications from research institutions, as well as reports from news media. This set of data was analysed to brief the growth of the LAR industry and its market status in Shanghai. Meanwhile, we investigated the LAR business models, financial structures and strategies in Shanghai. Second, we drew up a dataset of rental loans actually used in one leading asset-light LAR firm in Shanghai, Y Rental Firm, to present the structure of this financial product. Descriptive statistics show the types of financiers, the amount of rental loans activated and the profiles of tenants. Third, we organized field trips to key LAR projects from 2018 to 2019 in Shanghai, and conducted semi-structured interviews with LAR firm CEOs, landlords, financial institutions' managers, tenants and local government officers. Data from the interview contributed to the understanding of the relationship between key stakeholders.

## 4.2. The financial model of Shanghai asset-light LAR firms

There were four ways for LAR firms in Shanghai to improve the profitability of their business. Firstly, LAR firms made cost-efficient investments in the renovation of rented properties by using pre-designed and standardised decoration packages, which in turn allowed them to charge higher rents and higher maintenance fees. Secondly, parent firms of LAR companies often set up subsidiaries to provide auxiliary services, thus providing a package of value-added services, from home refurbishment to property management, as well as clients' data analysis. Thirdly, most LAR firms carried out reconstruction work in the apartments, aiming to create additional bedrooms for rental use, e.g., converting living rooms into additional bedrooms. Strictly speaking, all such reconstruction work is illegal as it violates the building code issued by the government and also posits several negative externalities to neighbours. However, in order not to discourage investors' interest in the LAR business, in most cases the municipal government tolerated such reconstruction. This, however, is in sharp contrast to the government's consistent tough crackdown on co-renting or group renting (qunzu in Chinese)

(SUMLEB, 2020).<sup>3</sup> These business strategies aim to put up the rental price in the market. As a tenant of LAR housing commented,

"It is too expensive. The LAR price is at least 20% to 30% higher than that is charged by other rental housing" (interviewed on February 27th, 2020).

In addition, endorsed by the central government's policy (SC[2016]36) and further supported by the municipal government's policy guidelines (SHURDC, 2018), many LAR firms were encouraged to purchase a long period (5-10 years) of use rights of dilapidated business buildings from their owners and converted these buildings into rental apartments after modifications. Called "non-residential to residential conversion" (*fei gai ju* in Chinese) in Shanghai, such accumulation of rental properties significantly reduced the firms' capital requirements compared to purchasing the leasing rights of apartments from private property owners. The conversion also qualified for applying for subsidies from the central government's fiscal support for rental housing development (SJTU-CHURD, 2020).

LAR firms also responded promptly to the changed tenant demand in Shanghai. LAR firms' tenants are typically young white-collar workers in the sectors of finance, professional services and IT, which are generally located in the downtown area. After finding that these tenant groups simply needed a decent place to sleep, with a location as close as possible to their place of work, LAR firms chose to create housing portfolios on the basis of individual rooms rather than entire apartments. The CEO of a leading LAR firm commented,

"LAR companies emerged to solve three mismatch problems between the supply and demand of rental housing in Shanghai – the mismatch of unit size, location and price between apartments that were available for renting and apartments that young-generation tenants wanted to rent" (interviewed on May 28<sup>th</sup> 2020).

Asset-light LAR firms have adopted various aggressive financing strategies to accumulate their capital. First, they use rental loans, which are a financial arrangement whereby tenants borrow money from financial institutions to finance the lump sum of upfront rents over the whole tenancy period as demanded by landlords and repay the loan debt to the financial institutions

<sup>&</sup>lt;sup>3</sup> Group renting (*qunzhu*) refers to the situation where an apartment has been illegally leased to tenants exceeding the maximum number allowed by law (Harten et al., 2020).

via monthly repayments. As mentioned in the introduction, leasing arrangements that require tenants to pay significant amounts of deposit or upfront rent also exist in a number of countries, the most notable one being *chonsei* in South Korea.<sup>4</sup> Formal or informal financing models that help tenants to finance the sizable upfront payments prop up these leasing arrangements (Peppercorn and Taffin, 2009; UN-HABITAT, 2003). If the lump sum of tenants' upfront rent is shifted directly to landlords from the loan provider, the rental loan in the Chinese case would be not much different from those financial products. In both cases, landlords, as the beneficiaries of the loan, accumulate capital through the credit provided by tenants. Figure 1a illustrates the basic logic of rental loans in the original sense.

(Figure 1a. The rental loan financial model directly launched by the landlord)

Previous research has shown that both landlords and tenants are willing to accept the lump sum upfront payment scheme rather than the common periodic payment scheme as long as both parties are better off or at least none is worse off under the former scheme than the latter scheme, i.e. the amount of upfront payment is set at a level where tenants pay less or at least do not pay more total rental costs in present value (PV) while landlords can get arbitrage gains from investment using the pre-paid rents (Kim, 2013; Park and Pyun, 2020). However, what deserves investigation is why the upfront payment scheme is not popular in most rental housing markets. We suppose that it is due to the difficulties for tenants in financing lump sum upfront rents. Few financing institutions will be interested in issuing loans to tenants at affordable interest rates as the tenants have no collateral for these loans. However, with fast big-data technology advances in personal credit scoring as well as the increasingly wide use of personal credit in daily life, more and more banks, especially small banks in China, are willing to issue collateral-free consumption loans to individuals (Liu, 2020). In Shanghai, rental loans are usually issued by smaller financial institutions, such as P2P (peer-to-peer) loan companies. Rental loans, essentially consumption loans collateralised on tenants' "social credit", provide a new case of how advances in fintech (financial technology) drive the financialization of daily life in emerging economies.

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<sup>&</sup>lt;sup>4</sup> Tenants under *chonsei* renting in South Korea are required to pay *key* money or a one-time upfront deposit that amounts to 40-80% of the property's value, then go rent-free during the whole tenancy and get the deposit refunded when the lease term expires. Tenants who cannot afford to pay the deposit have to finance it through getting a loan (Kim, 2013; Ryu and Kim, 2018).

Moreover, the rental loans launched by Chinese asset-light LAR firms have more complications than common rental loans. With the engagement of asset-light LAR firms as the agents of landlords, the triangular relationship of tenant—bank—landlord that was embedded in the original rental loan is restructured to a new triangular relationship of tenant—bank—firm (as illustrated in Figure 1b). Landlords, however, are now disconnected from tenants because they do not receive the lump sum of upfront rent from banks directly. LAR firms induce tenants to sign rental loan contracts with the banks using rent discounts and receive the lump sum of upfront rent from the banks on behalf of the landlords. However, in most cases the firms do not transfer the entire amount of lump-sum payments to landlords immediately; instead, they transfer the payments on a quarterly or even monthly basis, so that they can *temporarily* keep the differentials of cash flow in their own capital pools (Figure 1b).

(Figure 1b. The rental loan model launched by asset-light LAR firms)

With rental loans, asset-light LAR firms are injected with a significant amount of interest-free funds and they generally use them to expand their housing portfolio under fierce market competition (01Caijing, 2019). In this situation, rental loan becomes a financial conduit that converts leasing rights into liquid capital for LAR firms to use for business expansion, just like the land use right helping local governments to gain development capital (Xu et al., 2009). As a recent study suggests, land mortgages, local government financial vehicles and Chengtou bonds are operated to "use land as a financial asset to create financial capital to fund urban development projects" (Wu, 2019: 1). The emergence of rental loans also implies that firms can even accumulate capital without any equity inputs. In fact, rental loans have been used extensively by asset-light LAR firms in Shanghai. A bank manager who is in charge of issuing rental loans commented that "most LAR firms have used rental loans" (interviewed on January 14<sup>th</sup> 2020).

Below we use the case of Y Rental, a leading asset-light LAR firm in Shanghai with which we conducted detailed interviews, to shed more light on the structure and implications of rental loans. The use of rental loans by Y Rental has three distinctive features, as shown in Table 1. Firstly, the use of rental loans by the company has been on a large scale (in terms of capital and the number of borrower-tenants). Up until 2018, Y Rental had received capital proceeds to the tune of 169.9 million Yuan from a range of loan issuers, including three P2P loan firms, two insurers and four banks. To create new funding sources, Y Rental successfully turned

10,724 individual tenants into borrowers of rental loans, and the lump sums received as rental loans went straight into the company's capital pool. Secondly, out of these lump sums, rental loans provided by P2P firms accounted for a share of 72.9 per cent, four times that of the corporate loans issued by banks. Moreover, up to 84 per cent of the firm's borrower-tenants had taken out rental loans from P2P firms. This is because P2P loan firms typically charge high rates of interest and are therefore more incentivised to form partnerships with private rental firms to promote rental loans. Thirdly, P2P firms have targeted those groups of tenants who were more likely to require cheap rental apartments and were more likely to be willing to take out small-amount mortgages. For example, comparing the borrower-tenants of P2P firm No.2 and Bank No.1, the former group's average monthly rent was less than one-third of that of the latter group. There were also clear differences between these two groups of borrower-tenants in terms of their monthly rents and their average loan amounts.

## (Table 1. The structure of rental loans used by Y Rental, 2018 about here)

Cash flows from rental loans have become a major, and sometimes the most important, source of funding for asset-light LAR firms. For example, Qingke reported in its IPO Prospectus that as of the date of its listing, over 60 per cent of the rental units under its management had been paid for through rental loans, making up a total of 872 million Yuan – approximately three times the value of the corporate loans issued to it (Q&K, 2019). Danke Apartment, the first Chinese LAR firm to list on the New York Stock Exchange (NYSE) (listed in January of 2020) reported that it had received upfront payments from financial institutions in connection with rent financing (essentially rental loans) of 3,105.7 million Yuan (US\$ 434.5 million), as well as advances from tenants of 794.3 million Yuan (US\$111.1 million) as of the end of September 2019, jointly constituting half of its business liabilities (SEC, 2020).

LAR firms also actively use corporate loans, another financial conduit based on the financialization of rental leases that the firms have signed with tenants. As shown in Table 2, corporate loans provided by large banks often have a longer maturity and lower interest rate than loans provided by small financial institutions. For example, China Construction Bank, a major state-owned bank, once offered LAR firms corporate loans with an annual interest rate of 7.8 per cent, whereas the interest rate charged for rental loans can vary from 4.75 per cent to as high as 10 per cent (01Caijing, 2019).

## (Table 2. Comparing corporate loans and rental loans in the LAR industry about here)

Although the use of rental loans is extensive, corporate loans are still the primary financing tool for most LAR firms, even asset-light ones. When applying for such loans, asset-light LAR firms pledge the rental leases that they have in hand. The use of rental leases as a form of collateral like "assets" has become an increasingly acceptable practice among local banks in Shanghai. Banks seem to have a fair degree of trust in the future cash flows that would be steadily generated from these rental leases (i.e. the rents paid by tenants). As explained by a bank manager, "Banks consider asset-light LAR firms' future rents as a form of collateral; firms provide long-term rental leases as certificates of their future rents; in a sense, we take long-term rental leases as collateral" (interviewed on 6<sup>th</sup> June 2020).

Banks are more likely to issue loans to LAR firms that hold a large stock of rental units and maintain higher rates of occupancy. A corporate loan is often divided into three parts: payments to obtain leasing rights from landlords, expenditures on maintaining rented units, and expenditures on refurbishing rental apartments. Thus, corporate loans serve to consolidate the financialization strategy of the asset-light business model. Based on the assetization of rental leases, the LAR firms further enlarge the capital pool available for portfolio expansion, enabling them to better compete for more rental leases.

However, particularly ambitious firms often grow their capital pool aggressively by experimenting with even more unusual financing options. As Qingke noted in their IPO Prospectus (Q&K, 2019):

Our business requires significant capital expenditure for sourcing, renovation and maintenance of rental apartments. Inability to access financing on favourable terms in a timely manner or at all would materially and adversely affect our business, results of operations, financial condition and growth prospects.

To cope with the pressure to expand their housing portfolios as quickly as possible, many LAR firms have used whatever financing options were available to them, ranging from rental loans, corporate loans and bond financing via corporate bonds to rental ABS (Figure 2). If a firm can prove that it holds a leading market share in the industry, it has a high chance of obtaining

equity financing from investors such as VC and PE, etc., and even IPO possibilities on overseas stock markets (HUAON, 2020).

(Figure 2. The financialization model of asset-light LAR firms)

#### 4.3. Financial risks

Using aggressive financial tools, particularly rental loans, comes at a high cost. On the one hand, to induce more tenants to accept signing rental loan contracts with the banks, the LAR firms have to give high rebates of lump-sum rents to these tenants; on the other hand, to compete for more leasing rights, LAR firms also need to promise a higher payment to landlords. Under fierce competition, the gap between rental incomes from tenants and payments of leasing rights to landlords very soon narrowed and even became negative in many cases. However, as many senior executives as well as investors in LAR firms previously worked in the E-Commerce industry, most of them had firm convictions regarding the business philosophies prevailing in online platform market competition, such as "today's profit is meaningless", "scale is the king", and "winners will take all". Thus, the highly financialized LAR firms compete to lower rents charged to tenants while raising payments to landlords, carrying over the expanding operating deficits but betting that the upward spiral of scale—capital—scale would continue until the equity invested can be withdrawn with high returns via paths such as an IPO or being acquired by other investors. Nonetheless, many investors in this industry have gradually found that the profitability rate of this business is very thin. In any case, once the speed of liquidity inflow falls behind the speed of cost growth, the firm quickly runs out of cash to pay existing landlords and faces bankruptcy. For example, according to Q&K's financial reports, the company reported net losses of 0.245 billion Yuan, 0.499 billion Yuan, 0.498 billion Yuan for the three fiscal years of 2017-2019; and while revenue grew only modestly at 6.5% to 0.627 billion Yuan in 2020Q1, the net loss increased by over 38% to 0.417 billion Yuan. A similar financial mishap was observed with Danke, which reported an accumulated net loss of 5.1 billion Yuan over the fiscal years of 2017-2019 and continued to lose money to the scale of 1.23 billion Yuan in 2020Q1. Meanwhile, Danke's total liabilities reached 9.1 billion Yuan and the debt-to-asset ratio was as high as 97.06% at the end of 2020Q1. Although the LAR industry has revealed a high risk, the trend of financialization has not slowed down. In fact, banks and PE may try to rescue an LAR firm when it is heading for bankruptcy. In extreme cases, financial institutions have provided tailor-made financial tools for their clients, intending to save them from a capital chain rupture. For example, when the firm of Y Rental was unable to pay the debts, its financier negotiated with another LAR firm M Rental – a client in good financial standing – to buy out the troubled rental leases from Y Rental, as well as to pay the debts for Y Rental; in return, M Rental would be offered by this financier additional corporate loans with preferential terms. In a sense, financial institutions would rather replace the debtor on the verge of bankruptcy than control the financial risk of the industry. Usually after the replacement of weaker LAR firms, the rental leases will be transferred to stronger LAR firms, contributing to the enlargement of recipient firms' lease pools at low cost. Obtaining new rental leases and preferential financing can thus accelerate these LAR firms' assetization and financialization. In the process, LAR financing activities are sustained while the risks are transferred from one firm to another. One bank manager explained the logic of after-risk financialization as a reduction of risk for all parties around the Y Rental's nearbankruptcy:

"We sit down together with these two LAR firms to think about a solution. The weaker firm's bankruptcy will do nothing good for any of us. We must prevent our loans from becoming bad debts" (interviewed on November 17<sup>th</sup> 2018).

## 4.4. Threats to tenants' housing rights and urban governance

Previous research has extensively documented how the "fragility, volatility and predatory nature of financialized housing markets" may cause catastrophic outcomes on individual households (UN-OHCHR, 2017:7). In China, tenants' housing rights are under attack with the growing financialization of the rental housing sector. We focus on the impacts of the innovation of the rental loan. A significant amount of rental loans in the Chinese LAR industry are issued by P2P firms. The massive involvement of P2P rental loan issuers in the LAR market is due to the fact that small financial institutions, particularly P2P loan firms, are typically much easier to access than large financial institutions. In particular, for borrowers who do not meet the qualification criteria set by large banks, P2P loan firms offer shorter maturities and easier qualification criteria. However, P2P lenders tend to be more expensive and usually face greater

financial risks. In fact, due to inadequate capital levels and poor risk management, many P2P loan firms have defaulted, gone bust, or even run off with investors' money. As a result, the large-scale use of P2P-sourced rental loans has left many rental firms – as well as their tenants – severely exposed to risk. Furthermore, rental loans are differentiated depending on the user group. For example, low-income tenants are more likely to be debtors of P2P loan companies (Xinhua News, 2019), since they are more likely to be persuaded by LAR firms to use P2P rental loans for the rent discount. The use of rental loans puts this group of tenants in a particularly vulnerable position due to the associated high risks.

Although not all LAR firms use P2P rental loans, they commonly suggest the use of rental loans when approaching potential tenants. Clients are usually offered rebate incentives to pay a year's upfront rent and induced to finance this lump sum by taking out rental loans, which are provided by the firms' partner banks. Clients who refused to accept such loans would be either declined or charged a higher rent. In some cases, tenants were misled into taking on rental loan liabilities without sufficient awareness (Xinhua News, 2019). Given their weak bargaining position in the rental relationship, many tenants have been induced or forced to accept rental loans, meaning that their tenancy rights can face severe threats if their rental firm goes bankrupt.

Tenants are particularly vulnerable. When several Shanghai-based LAR firms (including Y Rental) went bankrupt, hundreds of tenants and landlords clashed with legal disputes and even physical violence (Xinhua News, 2019). Many landlords regained their property by evicting tenants once they found out that their rental firms had gone bust. Despite these evictions, according to the rental loan contract the tenants still have to repay the remaining debt to the loan-issuing institutions, even though their tenancy rights have been revoked by landlords. Similar scenes occurred but on a much bigger scale when Danke headed into financial distress from the fourth quarter of 2020, as Danke was managing a property portfolio of 440,000 apartment rooms in 13 cities and was one of the largest asset-light LAR firms in China (TheStandard, 2020).

It now becomes clear that, although rental loans may have helped many LAR firms to grow in size at a rapid rate, the financing logic behind these products clearly shows that the financialization of the rental housing business is in essence based on the assetization of future rents. Such financialization strategies have been incentivised, and even used illegally, because

of the greed of both small financial institutions and rental firms seeking higher profits, which have ultimately come from the pockets of tenants, leaving them facing considerable financial risks.

Meanwhile, the financialization of LAR firms also implies that such firms must face financial risks as their corporate strategies come under great pressure from shareholders' demands for high returns, forcing firms to push rents higher by every viable strategy available to them. The aggressive operational models adopted by Chinese asset-light LAR firms and their consequences discussed in this paper show that financialized firms make decisions under the pressure for returns of "impatient" shareholders. Thus, managing the risks associated with the predatory nature of highly financialized rental housing firms has become an urgent issue of urban governance in Chinese cities.

#### 5. Conclusion

Private rental housing has recently become the new frontier for financialization worldwide. In China, the process of financialization has been facilitated by an under-regulated financial market (in particular P2P financial organisations) and policy support for rental housing provision, because governments see a well-developed private rental housing industry as the solution to a number of pressing challenges in Chinese cities. The central government emphasizes the development of private rental housing as a new way of coping with housing affordability and maintaining social stability, while at the same time reducing the burden of public rental housing provision. Local municipal governments, meanwhile, have been motivated by the desire to maintain their competitiveness through urban redevelopment and increase private rental housing through a new financialized provision. Changing housing policies have made it easier for investors to invest in the rental housing sector, which has fuelled the development of the LAR industry. Moreover, innovative financial mechanisms such as rental loans have been applied to private rental housing, reinforcing the role of financial institutions and investors in rental housing.

The LAR industry has grown rapidly as a result of the specific Chinese-style financialization of rental housing services, rather than through conventional profit-making business models. In this process, the asset-light model aggressively uses rent financing. The shift from an asset-

heavy to an asset-light financing model in the Chinese LAR industry illustrates how the financialization process essentially presents a regime shift whereby capital accumulation "occur[s] increasingly through financial channels rather than trade and commodity production" (Arrighi, 1994; Krippner, 2005: 181). The power dominance of financial actors is evident in the creation of rental leases at the household level, the expansion of rental housing portfolios at the company level, and the changing structure of rental housing at the city level. However, the financialization processes in rental housing in general neglect tenants' housing rights and expose their rental tenancies to greater financial risk, including the risk that tenants may have to pay the remaining debt of their rental loans even after their tenancies have been terminated.

There have been both inequality and power asymmetry in tenancy relationships, with rental firms dominating and tenants being dominated. However, both the tenants and owners of rental housing services have faced rising financial risks and their rights currently have limited legal protection. The current trend of financialization of the rental housing sector in China also undermines the government's pledge to increase the attraction of private rental housing provision and results in fewer housing choices. Consequently, housing affordability among the younger generation has deteriorated because of the risk of facing more predatory lending from highly financialized rental firms and enlarged market volatility. This paper reveals the roots, forms and consequences of financial vulnerabilities created by the recent financialization of the rental housing sector in China, which has recently come to the surface in the media.

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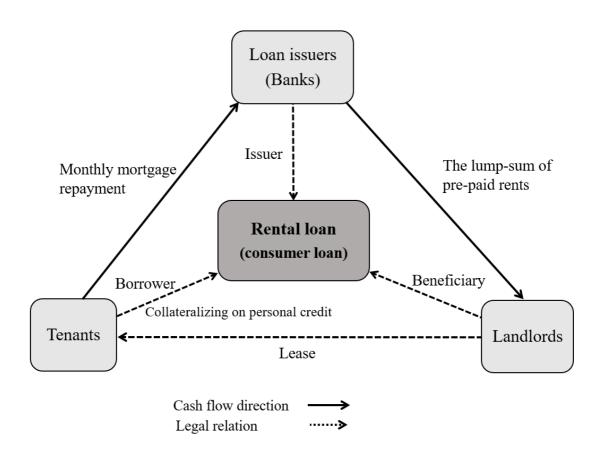


Figure 1b. The rental loan model launched by the asset-light LAR firm

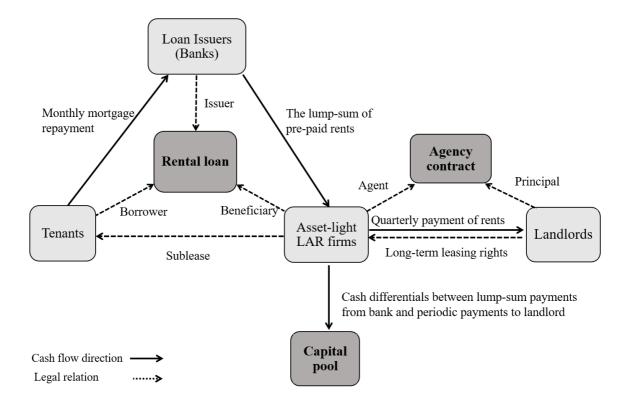


Figure 2 The financialization model of asset-light LAR firms

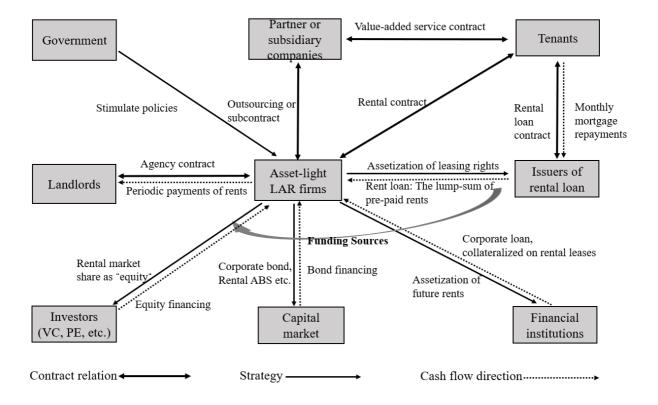


Table 1 The structure of rental loans used by Y Rental, 2018

Rental loan	Number of	Lump-sum to	Average loan amount	Average
issuer	borrower-	rental firms	per borrower-tenant	monthly rent of
	tenants	(million Yuan)	(Yuan)	tenant (Yuan)
Bank No.1	5	0.2	45,120.0	3,760.0
Bank No.2	79	3.1	38,742.5	1,616.8
Bank No.3	271	12.2	44,900.0	2,004.6
Bank No.4	417	15.5	37,121.7	1,591.8
Insurer No.1	854	13.6	15,978.9	1,452.6
Insurer No.2	93	1.5	16,215.2	1,351.3
P2P firm No.1	557	8.2	14,806.1	1,346.0
P2P firm No.2	2,369	29.1	12,279.7	1,125.4
P2P firm No.3	6,079	86.4	14,217.8	1,300.1
Sum	10,724	169.9		

Table 2 Comparing corporate loans and rental loans in the LAR industry

Aspect	Corporate loan	Rental loan	
Main issuing institutions	State-owned banks and	Small financial institutions	
	commercial banks	such as P2P loan companies	
Loaner	Firm	Tenant	
Interest rate	Average	Varying	
Maturity length	Long	Short	
Application difficulty	Difficult	Easy	