



HAL
open science

The Financialization of Rental Housing in Tokyo

Natacha Aveline-Dubach

► **To cite this version:**

Natacha Aveline-Dubach. The Financialization of Rental Housing in Tokyo. Land Use Policy, 2020, 112 (104463), 10.1016/j.landusepol.2020.104463. . halshs-02440007

HAL Id: halshs-02440007

<https://shs.hal.science/halshs-02440007>

Submitted on 14 Jan 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

The Financialization of Rental Housing in Tokyo Forthcoming in *Land Use Policy*

Natacha Aveline-Dubach

CNRS professor, Géographie-Cités, University Paris 1 Panthéon-Sorbonne, Bâtiment de recherches sud, Campus Condorcet 5, cours des Humanités, 93322 Aubervilliers cedex France (natacha.aveline@cnrs.fr),

Acknowledgement: I would like to express my gratitude to Dokkyo University (Department of law) for its financial support, with special thanks to Prof. Shunichiro Koyanagi. Many thanks also to Sébastien Haule for the computer graphics work.

Abstract

Over the past two decades, the private rental sector has grown significantly in Japan. Once an overlooked sector of the market, it has been seized by the financial industry to the point of becoming the second largest REIT residential market in the world. This paper explores the development of residential REITs in Japan, in a context of demographic decline and urban shrinkage. It highlights the strategies of major Japanese real estate groups to diversify their activities and strengthen their control over popular downtown Tokyo neighbourhoods, building on government initiatives to revitalize land markets and stabilize the banking system through REITs. As the paper shows, the need to secure financial investors' expectations of attractive returns has led REIT asset managers to target the vast majority of their leasing activity to Japan's young, "promising" corporate employees. By pointing to the mediation of large corporations in the landlord-tenant relationship, the paper brings these neglected actors into the framework of financialized rental housing, and puts the analysis into the broader context of employment.

Key words: financialization, securitization, rental housing, Tokyo, REIT, bubble, land use, property development, urban planning

1. Introduction

During the post-war period, Tokyo's land-use pattern fit Alonso-Muth's market-led mono-centric city model remarkably well. Major employment zones of white-collar workers were located in the city's five central wards, while non-competing residential uses expanded towards the outskirts. With the cost of transport offset by company support for employees' railway fares, residential neighborhoods further sprawled under successive waves of land booms. The last speculative drive, known as the "land bubble" (1985-1991), expanded Tokyo's commuting area beyond a 50 kilometer-radius from the center. However, the bust of this wide-ranging bubble in the early 1990s put an end to this orderly, yet unsustainable, pattern of land-use. Residential functions shifted back to the core areas, resulting in a dramatic reconfiguration of the job-housing balance. This process was marked by a surge in the provision of quality rental properties in a market sector that had been previously overlooked by the real estate industry. A major driver of this change has been the rise of institutional financial landlords, specifically, real estate investment trusts (REITs) in Tokyo's residential market.

Recent work on financialization in the private rented sector for housing has highlighted the emergence of a new breed of "global corporate landlords" (Beswick et al., 2016) or "financialized landlords" (August & Walks, 2018) which have come to manage large-scale portfolios of rental properties in several metropolitan regions of industrialized countries. This strand of literature has highlighted a range of predatory strategies on the part of these financial actors, especially in the post-crisis landscapes following the global financial crisis (GFC), generally framed through David Harvey's conception of (capital) "accumulation by dispossession" (Harvey, 2004). Such strategies consist in purchasing depreciated properties with the aim of aggressively increasing rents or speculating on the appreciation of the assets' values. While recognizing the growing importance of predatory behavior, this article moves away from the dominant emphasis on economic eviction, displacement and gentrification,

and instead explores a relatively neglected issue, namely the ability of this housing sector to meet changing needs in the context of Japan's economic and demographic transition.

In so doing, the present paper, which is part of a special issue on the financialization of urban space, contributes to debates on the interplay between global finance capital and housing market dynamics, based on the experience of Japanese residential REITs. The empirical grounding of this research in "post-bubble" Tokyo highlights the strong constraints that apply to the circulation of REIT capital in potentially declining real estate markets, and points to the multivarious efforts made by the State to organize the conditions of a dynamic housing market. It also illuminates the pivotal role of Japanese corporations themselves in reshaping housing needs amid a shrinking workforce and the dismantlement of lifetime employment traditionally found in these companies.

REITs are investment entities comparable to mutual funds that pool capital from small and large investors to acquire and manage portfolios of income-producing properties. As REITs' shares are usually sold as securities on stock markets, the emphasis is put on the *securitization* of real estate rather than its financialization in a broader sense.

Although some REITs have speculative strategies that are clearly similar to those of short-term focused equity funds (particularly in the residential sector), it is important to take into consideration the restrictive regulations that govern their activities. As suppliers of "defensive" investment vehicles (i.e. offering low risk-adjusted returns), REITs are subject to a series of constraining rules relating, *inter alia*, to ownership control, leverage ratios and trading activities. These regulations vary between countries, but they have important commonalities that help to promote cross-border investment in the REIT sector.

In Japan, the REIT regulatory framework is quite restrictive. Japanese REITs (hereafter J-REITs) are not allowed to engage in real estate development, and must build up their asset portfolios by purchasing properties. J-REIT asset management structures are generally established by a real estate/construction conglomerate known as a "sponsor group" (of which they are a subsidiary) and tend to purchase the properties from this group (fig. 1). These conditions

therefore limit the opportunities to “buy low / rent high” that can be found in other REIT markets.

But more importantly, Japan is an unusual case where an overall decline in real estate values seems inevitable. Against a background of weak economic growth and demographic shrinkage, many parts of the country have already started to experience a structural decrease in housing values, including some areas of Tokyo’s suburbs (Kubo, Yui, & Sakaue, 2015; Phelps & Ohashi, 2018).

While J-REIT's channels can hardly be used for speculative purposes, they offer Japanese real estate conglomerates valuable opportunities for business diversification. At the time of an initial public offering, sponsor groups dispose of part of their properties in one or more REIT platforms in order to mobilize capital “locked” in their real estate holdings. Although they no longer own the transferred properties, the sponsor groups exercise full control over the management of the REIT's assets and receive fees on the real estate portfolio (Ooi, Ong, & Neo, 2011). Other properties are generally provided by development companies affiliated with the group — but not exclusively — and the building management is also entrusted to a group affiliate.

Within this context, residential J-REITs have recorded substantial growth since their introduction in 2004. They now rank second globally with a capitalization of JPY 2.74 trillion¹ (USD 25 billion), yet still well behind their US counterparts.² Currently, no less than 22 J-REITs are involved to varying degrees in the housing sector, managing a total of 1,410 condominium buildings in the Greater Tokyo area.

This paper examines the underlying dynamics of this growth from an actor-centred perspective. Focusing on the relationship between real estate conglomerates, J-REITs and the State, it looks at how these actors have joined forces to create an attractive private housing

¹ As of February 2019. Source: <https://j-reit.jp/en/market/>, checked on March 16, 2019.

² In August 2018, the capitalization of specialized residential REITs in the United States was USD 180 billion. This figure does not include the value of residential REITs that are part of numerous diversified REITs. (source :<https://www.reitnotes.com/reit-stocks-ranked-by-market-capitalization/2018-08-31>, checked on March 16, 2019).

rental market to secure stable demand from solvent tenants while also advancing homeownership policies.

The method involved discussions with a range of actors. Semi-structured interviews were conducted with asset management teams of 12 REITs managing more than 40 residential properties in the Greater Tokyo region. The questions focused on the REITs' locational strategies and modes of asset acquisition, their targeted tenant profiles and the characteristics of the properties. Complementary information on the broader context of the private rental sector in Tokyo and State policies was obtained from in-depth interviews with eight representatives of urban planning associations, leading Japanese real estate developers, real estate associations, and real estate consultancy firms. Data collection has also relied on the use of government reports, the ARES database of J-REIT properties, as well as a review of real estate reports and press articles.

The paper has two major sections. The first combines two bodies of literature, on the securitization of real estate and the rise of financial landlords, to highlight how financial investors and related lobbies have recently succeeded in developing a profitable private residential rental market with the support of State policies. From this, the second section discusses the experience of residential J-REITs in the Greater Tokyo region, examining the combined strategies of State authorities and REIT sponsor groups to extract value from the built environment within this changing demographic context.

2. Securitization, State Policy and Changing Housing Needs

Real estate securitization refers to the process of converting inherently illiquid commodities into exchange-tradable investment vehicles by way of financial engineering (Corpataux & Crevoisier, 2005) and the development of information and communication technologies (Lizieri & Finlay, 1995). As such, it is part of the broader transformation of real estate into a "quasi-financial asset" (Coakley, 1994), designed to extract value from the built environment (Weber, 2002; Corpataux & Crevoisier, 2005; Gotham, 2006, 2009; Theurillat, Rérat, & Crevoisier, 2015). Investors benefit in two ways from REIT investment, through regular dividend payments but also through the share value appreciation (Baum & Hartzell, 2012).

Compared to unlisted funds, securitized real estate is sought for its *liquidity*, an attribute involving “homogeneous, predictable and standardized features that enable financial actors to convert [an asset] into cash quickly and easily” (Gotham, 2009: 357). Although liquidity exposes REIT shareholders to stock market volatility (Lizieri, 2009), it allows for the flexible management of mixed-asset financial portfolios, which helps optimize capital allocation and reduce the risk of capital immobility (Corpataux & Crevoisier, 2005). Securitization also expands the scope of the real estate “investable universe” by contributing to the interconnection of financial circuits through which investors can gain cross-border, cross-sector and cross-cycle diversification benefits (Aveline-Dubach, forthcoming).

The increasing entanglement of finance and the built environment makes cities increasingly vulnerable to the movements of global finance, and in return multiplies the systemic risks initiated by real estate crises (Halbert, Henneberry, & Mouzakis, 2014). Residential real estate, in particular, has proved to be the main catalyst of such recent crises (Crowe, Dell’Ariccia, Igan, & Rabanal, 2013). And yet, this has not prevented the development of global real estate investment networks – and corresponding forms of securitization – in a growing number of countries, with the noticeable exception of China. While in 1994 only four countries had REIT markets, today REITs are established in 37 countries (through 849 entities)³ and account for more than half of the real estate securities markets globally (Baker & Chinloy, 2014 : 254). Such a growth would not have been possible without the support of States in two key ways: i) by enacting regulations in support of REIT investment, and; ii) by adapting urban planning systems to the needs of financial investors.

2.1. Real estate securitization and the State

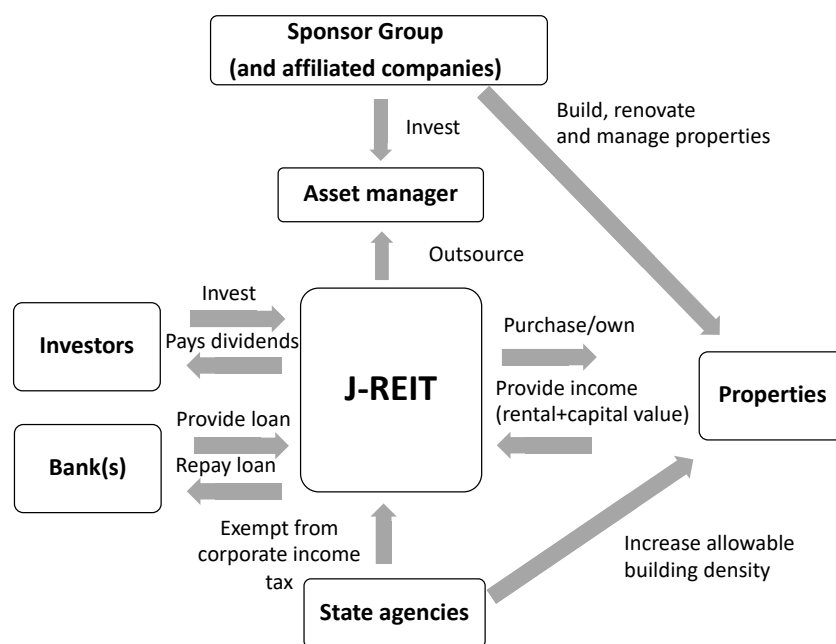
First and foremost, the adoption of REIT regimes requires national States to establish regulatory, tax and legal frameworks. The rules vary between countries, but common principles define how REIT operate as investment vehicles. A key aspect is their advantageous tax status (Baker & Chinloy, 2014). In most jurisdictions, REITs are exempted from corporate income tax if they redistribute most of their profits to their shareholders (typically 85-90

³ https://www.ey.com/en_gl/real-estate-hospitality-construction/how-reit-regimes-are-doing-in-2018.
Checked on March 1, 2019.

percent). While shareholders are subject to taxation on their dividends and the sale of their shares, local tax legislation often provides alternative mechanisms to reduce this burden (Liu, 2010). In particular, shareholders domiciled in foreign countries — especially tax havens — can enjoy particularly favorable tax conditions depending on the agreements signed between different jurisdictions. For this reason, REITs offer higher returns than shares of publicly traded real estate companies (Newell, 2012). This substantial taxpayer support for REIT investment is generally not subject to public debate, since REITs are presented as active contributors to local economic growth and urban regeneration by providing key elements of corporate investment (Henneberry & Roberts, 2008) through their large-scale portfolios of stabilized, long-term commercial properties (Boisnier, 2015).

Governments also impose financial regulations for assessing REIT real estate performance and asset management, which have the effect of spreading financial standards and practices well beyond REIT markets (Aveline-Dubach, 2014). This is particularly problematic in the residential sector, as housing becomes seen as a financial commodity rather than as the basis for household stability and security (Marcuse and Madden, 2016).

Figure 1. Relationship between the sponsor group, the J-REIT and the State



Source: the author

Paradoxically, REIT channels are often established to resolve major real estate crises arising from to State policies that have contributed to real estate investment. The first residential REITs were introduced in the United States after the collapse of the housing market in the early 1990s (Jones, 2007), following excessive deregulation of the banking industry (Renaud, 1997). A decade later, Japanese REITs emerged from the bursting of the "land bubble", also triggered by a deregulated environment for bank credit and urban development (Aveline-Dubach, 2014). More recently, the global financial crisis has also been a major catalyst for the current expansion of REITs. In the wake of this event, the large-scale devaluation of property markets generated vast inventories of distressed housing properties that financial investors were particularly well-placed to acquire. In Ireland, Spain and Greece, a significant number of housing units were securitized and pooled into REIT portfolios (Chilton, Silverman, Chaudhry, & Wang, 2018; Waldron, 2018; Alexandri & Janoschka, 2018), while a new class of "single-family rental REITs" emerged in the USA — alongside the traditional multifamily model — from the purchase of distressed homes at foreclosure auctions (Chilton et al., 2018; Alexandri & Janoschka, 2018).

In the case of Ireland, Waldron (2018) highlighted the importance of REITs in reducing the debt burden of the country's failing banking sector and attracting capital to the distressed property market, coordinated by what the author called a "financial chain" mobilized by policymakers to reconnect the struggling real estate market to global financial investors.

Beyond this post-crisis function, REITs offer State authorities ready-to-use solutions to release locked-up capital in publicly owned assets through *en-bloc* sales. The structural deterioration of government budgets and incremental "colonization" (Chiapello, 2017) of State policies by financial logics, instruments and practices have led to the privatization of entire public housing estates (Marcuse & Madden, 2016). A portion of these have been incorporated into REIT platforms (Wijburg & Aalbers, 2017; Bernt, Colini, & Förste, 2017; August & Walks, 2018) as part of a process described as "financialized privatization" (Aalbers, 2016). The expansion of securitized real estate has involved other categories of publicly-owned facilities such as hospitals, prisons, or universities (Wijburg, 2018). In France, this process has unfolded even

within the State, with the creation of a REIT structure —Icade, currently the fifth largest French REIT— by a para-state banking institution (Fretigny, 2015; Wijburg, 2019).

However, investment opportunities are carefully examined by REITs, which place a high importance on the location of the properties. REITs' building portfolios tend to be hyper-concentrated in a small number of cities —primarily financial centers — in well-connected central or neighboring areas (Aveline-Dubach, 2016). Cognitive biases and benchmarking practices inherent in financial investment contribute to this spatial selectivity (Henneberry & Mouzakis, 2014). Yet it is influenced above all by the liquidity risk carried by securitized vehicles. As publicly-traded entities, REITs are exposed to shareholders' "permanent exit capacity" (i.e. possibility to sell their shares at any time — Crevoisier, Theurillat, & Araujo, 2011) in addition to systemic risks. To ensure stable income streams, portfolios are composed of "liquid" properties (i.e. with the maximum re-sale potential). Such assets are sought in the prime areas of each market, targeting buildings that have a stable appreciation rate and low vacancy risk, and which are preferably occupied by major firms with high long-term leases (Boisnier, 2015). Opportunities to acquire such high-profile properties tend to occur through the sale-leaseback of corporate real estate, a process driven by shareholder value (Rutherford, 1990) and occasionally encouraged by State policies (Boisnier, 2015). Importantly, this effort to identify and acquire suitable buildings lead many REITs to become active promoters of urban change according to their own standards.

Theorists have drawn attention to the growing dominance of financial actors in urban decision-making processes. Several have demonstrated how financial investors interfere in city development — generally via locally-embedded developers — by co-defining the nature of urban projects in terms of their intended purpose (e.g. multifunctional buildings to mitigate vacancy risks), size (e.g. minimum investment thresholds for economies of scale) and occupation (e.g. large-size firms) (Guironnet et al., 2012; Theurillat & Crevoisier, 2014).

The influence of institutional investors in the built environment is also facilitated by real estate-financial lobbies that seek to align planning policies with investor interests. A nascent body of literature has turned attention to the informal strategies and tactics mobilized by these actors. Waldron showed how an epistemic community of financial and development

actors used the narrative of "financial viability" in post-crash Ireland to radically deregulate the local planning system. Under the pretext of freeing up barriers to residential supply, the Irish government adopted an impressive package of reforms covering "virtually all of the development sector's policy prescriptions" (Waldron, 2019: 700). Similar conditions are observed in the United Kingdom, where Slater (2016) and Haughton and Allmendinger (2016) give account on the successful strategies of free market think tanks, business groups and professional organizations to make planning and housing policies more market-oriented and hostile to regulatory action against home price inflation on the grounds that it impedes market equilibrium. Finally, Kutz (2016) Kutz and Lenhardt (2016) and Krijnen (2016) have examined the geographical spillover effects of financial crises on the planning and governance systems of cities beyond Europe. These and other studies demonstrate how the deregulation of capital markets and corresponding expansion of domestic financial liquidity helped to intensify the rechannelling of financial investment into foreign housing stock, which directly impacted local government efforts to coordinate planning and development initiatives in cities of the Global South.

2.2. The housing sector as a new frontier for securitized real estate

Despite the gradual widening of their sectoral scope, REITs have for long neglected the residential housing market. Back in the mid-2000s, residential assets were used at best as a complement to commercial property in REITs' mixed-use portfolios. The United States stood out as an exception with specialized trusts in the residential sector established in the early 1990s, and which recorded significant growth (Jones, 2007). In France, when some large private property groups transformed into REIT structures in the early 2000s, their residential portfolios were almost entirely divested (Nappi-Choulet, 2012).

The weak attractiveness of the housing private rental market was due to a range of demand- and supply-side constraints, which led to low returns compared to commercial uses (for example, 8% versus 19% in 2005 in Britain).⁴ On the demand side, the scope of the private

⁴ Kathryn Grant and Sandeep Sankoli, July 2017, Current Issues Note 18, "Institutional investment in housing", Greater London Authority, p. 8.

rental sector was reduced in the post-war period, being sandwiched between social rental housing and owner-occupation. In a majority of countries, including post-socialist economies, home-ownership was heavily promoted to middle income households, as part of a “social package” associated with life achievement (Rowlands & Gurney, 2000). This was made possible by the unprecedented expansion of mortgage markets, alongside strong State support, often in the form of subsidized loans, subsidized homeowner saving schemes, and favorable tax regimes (Stephens, 2003). Ronald stressed the ideological dimension conveyed by the preference for this type of tenure, especially in English-speaking countries where “the owner-occupier has been elevated as a better type of citizen, neighbor and even parent” (Ronald, 2008b: 2). In East Asian developmental States, the strong emphasis on ownership was even more acute where mass housing construction was made a pillar for economic growth (Oizumi, 2006 Ronald, 2007; Wu, 2015) and housing a “store of welfare resources that can be carried across generations or be exchanged” (Ronald, 2007: 477). China represents the extreme culmination of this ideology of homeownership where some 52 million empty housing units are held by households (Aveline-Dubach, 2020). In countries that show strong support for home-ownership, socio-ideological forces and cultural prejudice have led to the stigmatization of rental housing as a residual and poorer form of tenure (Rowlands & Gurney, 2000).

The poor quality of the stock in a number of private rental markets has contributed to maintaining the negative perception of this sector. In most countries, the rental supply has been traditionally dominated by small-scale landlords (individuals, companies, employers, non-profit organizations) pursuing highly diverse economic objectives (Crook & Kemp, 2014). Due to the fragmentation of their interests, residential landlords have not gained political influence (Gilbert, 2016), particularly since real estate lobbies centered the buyer’s market on government agendas. There have nonetheless been many exceptions, notably in continental Europe, and in the United States where, according to Jones (2017), the vast size of rented properties explains the stunning development of residential REITs. Clearly, financial investors seek economies of scale and do not favor small-size and spatially dispersed properties.

https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/current-issues-note-18.pdf, checked on February 2019.

Regulations protecting tenants' rights in many jurisdictions are regarded as oppressive and risky (Scanlon & Kochan, 2011).

However, the private rental market has undergone structural change over the two past decades, to the point of becoming a new frontier for finance capital (Rolnik, 2013). On the demand-side, the market's size has expanded due to three key drivers. First, the worldwide wave of housing price inflation in metropolitan regions has produced a "global urban housing affordability crisis" (Wetzstein, 2017) that has restricted access to home-ownership for previously solvent social groups, and aggravated social inequalities (Le Goix, Giraud, Cura, Le Corre, & Migozzi, 2019). Second, economic and social change in post-industrial economies has transformed housing needs. Greater employment flexibility/mobility, and the change in household formation (single-person and non-conventional households, rising marital age, increasing divorces, population ageing, etc.) have entailed a gradual disengagement from home-ownership (Scanlon & Kochan, 2011). Third, the private rental sector has become increasingly attractive to a wide range of households that place a strong emphasis on the lifestyles of inner-city locations. From young workers to higher-income tenants, some dwellers choose to live in the vibrant, if unaffordable, downtown neighborhoods near their place of work, while others prefer to save for a future home purchase while living in less expensive areas (Hulse & Yates, 2017).

The revival of the private rental sector is nevertheless due, to a large extent, to the growing concern of public authorities for the rental market. State initiatives have mainly focused on supply-side policies, aimed at creating a favorable climate for financial investment in rented housing. This is evident not only in the widespread deregulation of rental protection and the privatization of public housing estates, but it also shows up in the broader shift in the liberalization of planning policies, regulations and redevelopment projects, contributing to increasingly densely populated urban areas (August & Walks, 2018). Among the industrialized countries, few cities have experienced such a dramatic rescaling of their urban fabric as Tokyo has in the past decades. The next section of the paper will document how REITs are taking part in this process.

3. The Growth of Japanese Residential REITs in the Post-Bubble Era

3.1. Establishing REIT channels to revitalize the struggling economy

The establishment of the J-REIT regime in the early 2000s took place in the context of a sudden change in Japan's urbanization pattern after the collapse of the previous economic bubble. The severe recession ended the period of steady GDP growth that had underpinned the suburbanization of home-ownership. Tokyo had become a financial and commercial hub in the 1980s through of the internationalization of Japan's productive systems and the development of the financial sector, and aspired to evolve into a major economic center in Asia (Machimura, 1992). The triggering of the bank debacle not only put an end to this ambition, paving the way for the rise of Hong Kong and Singapore as regional financial hubs, but it also opened up a long phase of deflation known as the "lost decade", then later "the lost 20 years". At the same time, Japanese society became aware of the extent of its ageing population, although this had already been underway since 1973. In 1990, the fertility ratio fell to 1.54 children per woman, below the level of the "Year of Hinoeuma" (1966) when births were postponed due to superstitious beliefs. This observation came as a shock by revealing the structural erosion of the Japanese fertility that had been healthy for nearly two decades. It was therefore seen as inevitable that the Japanese population would experience negative growth, which was later confirmed in 2008.

Faced with these major economic and demographic challenges, after a few years of delay the Japanese government undertook a series of measures to create the conditions for a new wave of capital growth and investment in Tokyo's built environment. This began with the recognition that Tokyo was a world city and the country's only economic engine, and as such, it should be supported to promote wider national economic development (Child Hill & Kim, 2000; Leary & McCarthy, 2013; Buhnik, 2017). The consensus was that urban regeneration in particular was needed to enhance Tokyo's competitiveness against emerging Asian rivals (Tsukamoto, 2013). In the mid-1990s, the Metropolitan Government changed Tokyo's

development vision from being a "city of the world" to that of a "city friendly to residents" (Kamo, 2000) and thereby undertook a major campaign to "bring home and work closer together" (Ito, 2000). The official aim of this policy was ostensibly to address the adverse effects of the mono-functional office land use in central Tokyo, but the main concern was actually to revitalize the city's struggling land market by encouraging real estate diversification (Aveline-Dubach, 2014).

Indeed, it was of the utmost importance to ensure the stabilization of land values in Tokyo, particularly in business districts where prices in some places had fallen by 70% from their peak level. As the banking sector was struggling with underperforming loans that were largely collateralized by undervalued land assets, large-scale mixed-used urban redevelopment projects were regarded as crucial to saving the Japanese financial system and restoring confidence in the nation's economy (Fujita, 2011; Tsukamoto, 2012). The Ministry of Construction, which is continuously under the influence of real estate conglomerates and related lobbies, took a series of incremental measures to increase building density and decrease the time for administrative approval of development permits. The concept of "effective land use" (*tochi yûkô katsuyô*) was applied as a key principle in urban planning policies in order to directly increase land values through higher building densities.

As documented by Sorensen and colleagues (Sorensen, Okata & Fujii, 2010; Sorensen, 2011), these initiatives started between 1995 and 1997 with a change in the calculation mode of floor-area ratios (FARs) and the building envelopes previously in force. This was followed in 1999 by the privatization of the process to examine building permits. The deregulation of FARs took a further, more significant, turn under the Koizumi administration (2001-2006), with the creation of a Regeneration Office under the direct supervision of the Prime Minister. This "Headquarters for the Rejuvenation of Cities", was given the task of designating special areas for the construction of high-rise buildings in major metropolitan regions, particularly the capital. Tokyo's central wards saw the rapid emergence of densely built large-scale urban redevelopment areas where the administrative procedures and authorizations for construction were outsourced to private firms. The densification policy was made all the more effective by the election of Governor Ishihara at the head of the Tokyo Metropolitan Government (1999-2012), who actively supported the physical restructuring of Tokyo's center

and waterfront promoted by the property conglomerates (Waley, 2013; Saito & Thornley, 2003). High-rise residential towers of 30 to 50 stories thus became familiar in an urban fabric once dominated by 3 or 4-storey buildings (Sorensen et al., 2010). In Eastern Tokyo, land use policies allowed for the sudden conversion of industrial land into residential use, which gave rise to an impressive growth of densely populated high-rise residential blocks. This spectacular re-centering of building construction reinforced the effects of demographic decline, and aggravated urban shrinkage and housing vacancy on Tokyo's urban margins (Phelps & Ohashi, 2018; Kubo & Yui, 2015, 2019).

The return of residential functions to Tokyo's central areas was accompanied by the expansion of new neighborhood retail stores and other local services. Condominium-style housing, which had only been a first step to homeownership and suburban single-family residential living (Ronald & Hirayama, 2006), became increasingly appreciated for its convenience and ability to respond to changes in household structures and lifestyles.

Yet these large-scale urban projects had to be financed at a time when the banking sector, plagued by an accumulation of underperforming loans, could not meet the demand for real estate credit. Yet, the drop in land prices was nevertheless likely to boost real estate returns. In 1997, the establishment of special purpose vehicles in real estate was approved by the government, and unlisted funds backed by American investment banks began to operate in Tokyo's property markets. Japanese real estate groups soon followed suit, acquiring the skills of real estate asset management through partnerships with US-based financial firms. When REIT channels were established on the Tokyo stock exchange in 2001, domestic real estate conglomerates used these platforms to transfer part of their properties while keeping control over J-REITs' asset management structures. This allowed them to realize immediate gains, scale down their balance sheets, and redeploy capital into redevelopment projects (Ooi, Newell, & Sing, 2006). In this process, the residential housing market enjoyed steady growth by benefitting from the deregulation of rental agreements in 1999 (Hirayama, 2010) and suffering from less turbulence than other sectors during the Global Financial Crisis.

3.2. The rise of rental condominiums during profound economic and demographic crisis

The sustained expansion of residential REITs reflects the confidence of asset managers and investors in the growth potential of the Tokyo's private rental sector. The demand for rental housing in Tokyo is driven by the same factors as found in other metropolitan areas of post-industrialized economies, but Japan's path to a finance-led growth regime and acute demographic transition are distinctive in this regard. Home-ownership has become a challenge for the younger generation despite the significant decline in Tokyo's housing prices since 1990. The purchasing power of first-time buyers has been considerably weakened by the decline of State support (the dissolution of the Government Housing Loan Corporation in 2007) and changing employment conditions. According to Yamada and Hirano (2013), workers previously enjoyed a stable working environment through two major arrangements: employment security and company management security. The first, which concerned essentially regular male employees of large corporations, was ensured by a compromise whereby workers committed themselves to loyalty and dedication to their company, in exchange for lifetime employment and seniority systems for wages and promotions. The second was known as the "main banking system", whereby companies formed privileged partnerships and cross-shareholdings with banks, which in turn granted them various conditions for credit relief in the event of economic difficulties. The liberalization of financial markets radically altered these two arrangements. Large companies have come to rely on market-based financing. As they have become more vulnerable to economic downturns, they adapted their workforces to business changes by limiting job security to carefully-selected employees (Yamada and Hirano, 2013). The dismantling of corporate security also included the gradual disappearance of corporate welfare housing. Large corporations used to own low-cost housing units rented to their employees, families and promising young staff — the so-called "golden eggs"— to increase their productivity (Tanaka, Tanaka, & Kumada, 2001). In 1993, this type of accommodation accounted for 6.4% of the housing stock in the Greater Tokyo area, almost as much as public housing (7.1%). Two decades later, the share of company housing dropped to 2.3%.⁵ Corporate restructuring forced companies to sell these "non-core

⁵ Statistics of the Ministry of General Affairs, <https://www.stat.go.jp/>.

assets” on a massive scale, driving their young regular employees into the private rental market.

The growth of the private rental sector has also been highly influenced by demographic change. Declining birth rates and late marriages have led to an increase in the number of small households (singles and couples), undermining the standard family model that was the backbone of home-ownership (Ronald and Hirayama, 2009). Declining population rates further discouraged young households from investing in housing as a store of value for old age. Although the Greater Tokyo region is still experiencing a positive population growth rate (0,47 percent from 2015 to 2019 according to United Nations’ estimates), which is expected to remain positive until 2020-2025, housing prices will inevitably deteriorate as the current younger generation reaches retirement age. As a result, the proportion of owner-occupiers under 40 has regressed to 34% of Tokyo’s metropolitan area.⁶ This leaves a large pool of potential tenants for buy-to-let investment, even though a fraction has limited income and unstable employment.

However, as in many other countries, the supply of private rental housing in Tokyo is typically provided by small-scale landlords, individuals or SMEs. For the latter, ownership of a residential building is mainly sought as collateral for bank loans. While no political agenda has been put in place to improve the quality of rental housing stock for this economic group, the sector has become an important avenue for diversification among Japanese property developers.

Of the 12 REIT entities surveyed, 10 are controlled by a property development group, which is itself often part of a larger conglomerate involved in trading, finance or railway transport (Mitsui, Itochu, Nomura, Tokyū, etc.). Under such schemes, the REIT entity can take advantage of the entire value chain of the sponsor group throughout the life-cycle of the properties. The REIT uses the so-called “pipeline” of the group, namely properties that are constructed within the group, according to REIT standards.⁷ In general, the sponsor group manages the properties

⁶ Share of households whose main earner is under 40. Source Ministry of Land Affairs and Communication, “Housing and Land Survey of Japan”, 2013.

⁷ The proportion of properties supplied by the sponsor group is nevertheless variable, ranging from 30% to 70%.

for a period of 6 to 10 years (often through an unlisted fund) before selling them to the REIT. Once the buildings are acquired by the REIT, their maintenance is entrusted to a specialized subsidiary of the group, and when the properties become too old, they are often sold back to the sponsor. A significant portion of the REITs' properties were built during the years of the condominium boom (1995-2008), which means that the average age of portfolio assets are between 10 and 15 years (Figure 2). This is considered to be quite old in Japan, where the traditional "scrap and build approach" (Ronald, 2008a) renders residential buildings that are more than 20-30 years old obsolescent. REIT properties are often disposed of after this term to avoid reducing portfolio performance with high building renewal costs.

3.3. Matching financial investors' expectations with highly risk-averse rental strategies

In addition to influencing the age of a property, asset managers develop risk-adjusted strategies to maximize their investment returns. In the current context of demographic decline, risk mitigation is primarily achieved by investing heavily in the Greater Tokyo region, the only part of Japan that is expected to experience continued population growth in the coming years. With few exceptions, residential J-REITs allocate approximately 80% of their portfolio value in this region. Other major cities such as Osaka and Nagoya still have a positive population balance, but they are expected to soon face declines. Yet, despite the risk of property value deterioration, asset managers choose to diversify investments in regional buildings because their higher yields help to boost portfolio performance.

Even within the Greater Tokyo region, the location strategies of asset acquisitions are very selective. Most REITs focus on the 23-ward area (see Figure 3), investing less than 12% of their portfolio value in large suburban cities such as Yokohama or Chiba. The eastern wards are very popular with REIT investment, because the release of large parcels of industrial land makes it easier to build higher buildings. The main target, however, remains Tokyo's five central wards (recently augmented by the Southern Shinagawa ward), where residential uses had virtually vanished during the bubble era, and which now receive more than 30% of the portfolio value. Asset managers are looking for high entry barriers to take long-term positions in the most resilient sites of the country. Since property values are based on walking distance from major transit nodes, asset managers take a close look at the access times of the target buildings.

Name of the REIT	Type	Date of IPO (place)	Sponsor (sector)	Number of assets (residential)	Building age	Spatial distribution	Market cap. in JPY billion**
Orix J-REIT Inc.	Diversified Office 54% Retail 16% Residential 10% Logistics 6% Hotel 14%	2002 (TSE)	Orix Group (asset management)	111 (13)	12	Tokyo 5 wards 24% Tokyo other 18 wards 56% Greater Tokyo region 6% Other regions 14%	53
Premier investment Corporation	Diversified Office 66% Residential 33% Other 1%	2002 (TSE)	NTT Urban Development Corporation (property development)	58 (33)	15	Tokyo wards 5 80% Tokyo other 18 wards 20%	60
United Urban Investment Corporation	Diversified Retail 31% Office 32% Hotel 21% Residential 7% Other 9%	2003 (TSE)	Marubeni Corporation (sogo shosha)	119 (22)	9	Tokyo 5 wards 3% Tokyo other 18 wards 29% Greater Tokyo region 6% Other regions 62%	45
Invincible Investment Corporation*	Diversified Hotel 80% Residential 20%	2004 (Osaka) 2006 (TSE)	Fortress Holdings (asset management)	132 (64)	18	Tokyo 5 wards 20% Tokyo other 18 wards 55% Greater Tokyo region 6% Other regions 19%	60
Heiwa Real Estate REIT*	Diversified Residential 57% Office 43%	2005 (TSE)	Heiwa Real Estate Corp. (property development)	104 (78)	12	Tokyo 5 wards 37% Tokyo other 18 wards 32% Greater Tokyo region 8% Other regions 23%	100
Starts Proceeds Investment Corporation*	Residential 100%	2010 JASD AQ Osaka)	Start group (property development)	107	17	Tokyo 5 wards 12% Tokyo other 18 wards 26% Greater Tokyo region 34% Other regions 28%	45
Daiwa House REIT Investment Corporation*	Diversified Logistics 49% Residential 36% Retail 11% Other 4%		Daiwa House group (property development)	216 (133)	12	Tokyo 5 wards 38% Tokyo other 18 wards 33% Greater Tokyo region 11% Other regions: 18%	181
Japan Rental Housing Investments Inc. *	Residential	2006 (TSE)	Daiwa Securities group (financial services)	180	15	Tokyo 5 wards 16% Tokyo other 18 wards 29% Greater Tokyo region 11% Other regions 44%	145
Nippon Accomodation fund*	Residential	2005 (TSE)	Mitsui Fudōsan (property development)	124	12	Tokyo 5 wards 44% Tokyo other 18 wards 44% Greater Tokyo region 4% Other regions 8%	273
Mori Hills REIT	Diversified Office 93% Residential 6% Retail 1%	2006 (TSE)	Mori Building Company (property development)	12 (2)	25	Tokyo 5 wards 100% (Roppongi)	16
Advance Residence Investment Corporation*	Residential	2010 (TSE)	Itochu Corporation (sogo shosha)	261	12	Tokyo 5 wards 32% Tokyo other 18 wards 42% Greater Tokyo region 8% Other regions 18%	415
Kennedix Residential Next Investment Corporation *	Diversified Residential 77% Healthcare 22% Hotel 1%	2012 (TSE)	Kennedix group (asset management)	141 (118)	12	Tokyo 5 wards 30% Tokyo other 18 wards 30% Greater Tokyo region 8% Other regions 32%	125
Comforia Residential REIT*	Residential	2013 (TSE)	Tokyu Land Corporation/Tokyu Fudosan Holding (property development)	120	11	Tokyo 5 wards 41% Tokyo other 18 wards 49% Greater Tokyo region 3% Other regions 7%	186
Nippon REIT Investment Corporation	Diversified Office 77% Residential 19% Retail 4%	2014 (TSE)	Sojitz Corporation (sogo shosha)	90 (23)	43% less than 15	Tokyo 5 wards 26% Tokyo other 18 wards 39% Other regions 35%	35
Tosei REIT Investment Corporation	Diversified Office 49% Residential 40% Retail 11%	2014 (TSE)	Tosei Corporation (property development)	36 (20)	75% more than 20	Tokyo 5 wards 32% Tokyo other 18 wards 68%	13
Sekisui House REIT*	Diversified Residential 52% Office 40% Hotel 8%	2014 (TSE)	Sekisui House group (property development)	115 (109)	10	Tokyo 5 wards 23% Tokyo other 18 wards 43% Greater Tokyo region 11% Other regions 23%	120

Samty Residential Investment Corporation	Residential	2011 (TSE)	Samty Group (property development, based in the Osaka region)	93	9	Tokyo 5 wards 1% Tokyo other 18 wards 3% Greater Tokyo region 18% Other regions 78%, primarily Osaka region	50
Nomura Real Estate Master Fund*	Diversified Office 45% Residential 15% Retail 16% Logistics 17% Other 3%	2012 (TSE)	Nomura Real Estate group (property development)	287 (151)	13	Tokyo 5 wards 27% Tokyo other 18 wards 50% Greater Tokyo region 15% Other regions 8%	134
Star Asia Investment Corporation	Diversified Office 35% Residential 15% Logistics 30% Hotel 20%	2016 (TSE)	Star Asia Investment Corporation (real estate investment, targeting US investors)	34 (7)		Tokyo 5 wards 55% Tokyo other 18 wards 17% Greater Tokyo region 8% Other regions 20%	18
Marimo Regional Revitalization REIT	Diversified Residential 44% Retail 44% Office 8% Hotel 3%	2016 (TSE)	Marimo (property development, specialized in regional cities)	26 (12)	14	Tokyo 5 wards 6% Greater Tokyo region 26% Other regions 68%	6
Sakura Sogo REIT	Diversified Office 44% Retail 40% Residential 12% Other 5%	2016 (TSE)	Galileo and Nippon Kanzai groups (real estate asset management)	17 (4)		Tokyo 5 wards 25% Greater Tokyo region 33% Other regions 42%	3
Takara Leben Real Estate Investment Corporation	Diversified Office 81% Residential 9% Hotel 7% Other 3%	2018 (TSE)	Takara Leben Group (property development)	27 (6)	14	Tokyo other 18 wards 45% Other regions 55%	3
Total (Japan)				1,680			2,086

* Interviewed REITs

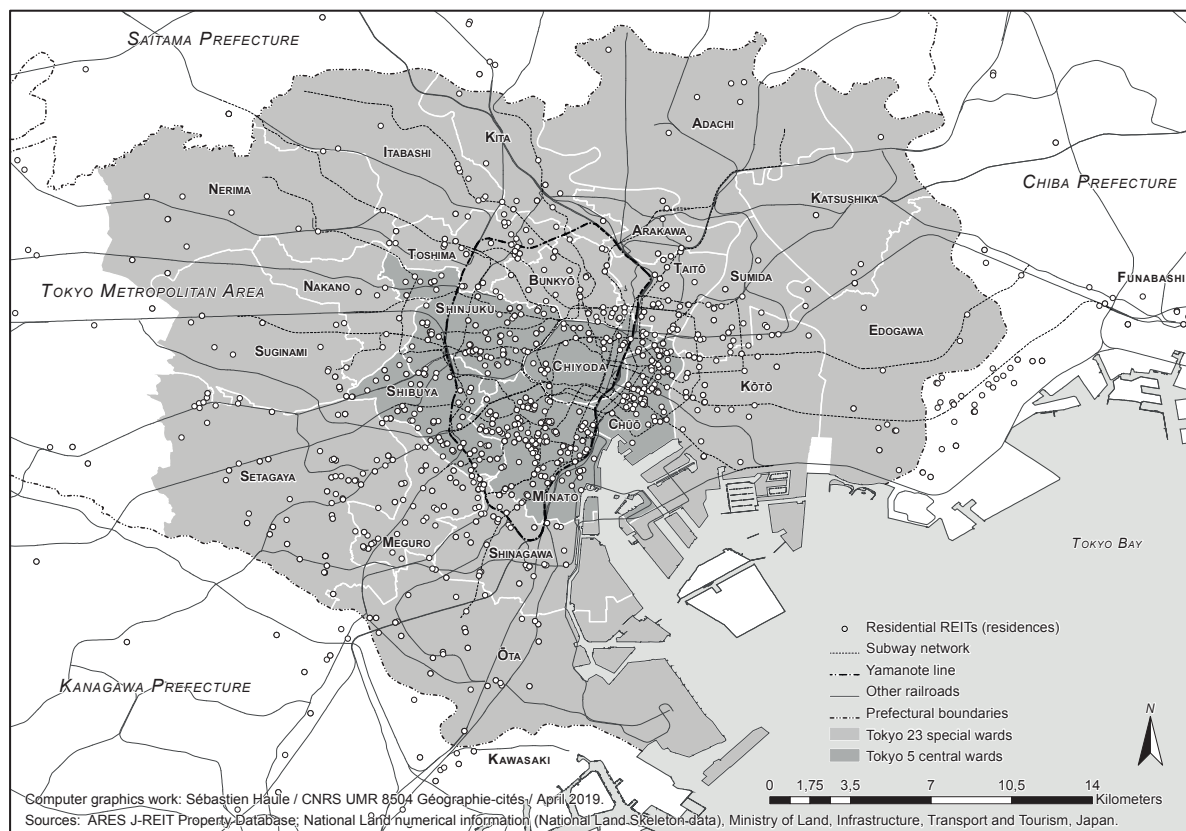
** Rough estimation of the market capitalization for residential REITs only, based on the ratio of residential asset value

For residences located in the inner-city, the walking time to the nearest subway or railway station is thus generally set at 5-7 minutes.

Another strategy to reduce risk is to limit the vacancy of dwellings by selecting highly solvent tenants. To this end, partnerships are forged with large companies (in sectors such as finance, IT and services) so as to generate a pool of "reliable" permanent renters. Agreements can be concluded directly with companies through long-term leases for one or more housing units, occasionally an entire building. Asset managers naturally prefer these contracts, but these only cover a quarter to a third of the rented units, as companies are reluctant to bear the vacancy risk. A large part of the agreements is concluded directly with the staff of the companies, and the remaining part with professionals (physicians, lawyers, etc.) who are insured in the event of default. Most of the companies' tenants are singles or DINKs ("dual income, no kids" couples) between the ages of 30 and 40. They are often graduates of major universities, and include a significant proportion of women. As the younger generation

declines, competition between companies intensifies to capture these "golden eggs", hence the crucial importance of providing them with good housing conditions. Having sold most of their welfare housing, companies provide housing allowances to enable their staff to live in the inner city. The proximity of the home to work makes it possible both to meet the lifestyle expectations of these young employees and to make their workforce more profitable.

Figure 3. The location of residential REITs in the Tokyo Metropolitan Area



Source: data from ARES, cartography and computer graphic work by Sébastien Haule

Residential REITs have a major interest in positioning themselves in the provision of housing for the employees of large corporations. There are three main reasons for this. First, since the vast majority of these young tenants are singles or DINKs, REITs can obtain the highest yields by focusing on small units. Their portfolios thus comprise a vast majority of one-room units of 30 square meters, and to a lesser extent, "compact" dwellings of 50-60 square meters for DINKs. Only a few units (often less than 15%) are provided to families, and are small in size (70m²). As a result, the average number of dwellings per residence is around 70 to 80, which

allows for economies of scale in management. The second reason to favor employees of large corporations is the payment of a housing allowance. As REITs must ensure attractive returns for financial investors (cap rates currently from 3 to 5%), their rents are above the average level of the market, generally in the range of JPY 100,000 to 150,000 (USD 1,000 to 1,350) for a one-room condo. It follows that the housing allowance provided by the companies, often between JPY 40,000 and 50,000 (USD 360 to 450), is essential for many tenants to make ends meet. Finally, REITs benefit from the fact that young employees enjoy inner-city lifestyles, spend little time at home and are attracted to information technology connectivity. This significantly reduces the costs of ancillary space and service provisioning. For example, when local urban planning regulations do not require parking, only bicycle or two-wheel parking spaces are provided. Instead of guard services, the residences are equipped with large boxes for parcel delivery and a range of smart devices to ensure security such as dimple keys and security cameras—particularly popular with female tenants.

REITs further cut costs by achieving economies of scale in portfolio management. The design of the buildings is standardized and their maintenance is pooled within the portfolio. Inside the condominiums, the quality standards are lowered compared to similar housing units for owner-occupation, notably with thinner walls and doors, less sophisticated kitchens and bathroom equipment. It is important to note that the objective is not only to reduce costs, but also to mark the difference in housing tenure between renting and home-ownership. Despite the expected devaluation of property prices in the long-term, the ideology of home-ownership is still prominent in Japan, and sponsor development groups maintain their priority on housing sales.

Owing to their effective profit maximization strategies, residential J-REITs have performed relatively well throughout their life, considering the difficult context in which they operate. In 2018, their annual return was 6.95% (as compared to a mere 0.01% for postal savings and 0.12% for Japan 10 Year government bond yield), breaking down into 4.87% rental income and 2.08% capital value⁸. Their capital is mainly held by domestic financial institutions looking

⁸ According to the AJPI annual return performance index for REIT investment (ARES <https://j-reit.jp/en/market/>, checked on 10 November, 2019).

for stable investment opportunities (Trust banks, regional banks, mutual funds) while foreign players, representing on average 10% of the capital, prefer to focus on the more profitable J-REIT office shares.

4. Conclusion

The experience of Japanese residential REITs converges with the findings of the literature on global corporate landlords which views State action as primordial. As in other jurisdictions where REIT regimes have been established, the Japanese State has helped to conceptually transform residential properties into liquid financial commodities and provided generous tax treatment to investors — mainly Japanese financial institutions. State policies at both national and local levels have combined to stimulate demand in Tokyo's real estate, thereby creating the conditions for an attractive rental housing market despite the country's acute demographic decline. This transition was achieved by: i) channeling the country's demographic and economic forces towards the capital region at the risk of devaluing other metropolitan areas; ii) intensifying construction in Tokyo's central wards through the massive liberalisation of planning and construction codes, even if it meant aggravating urban shrinkage and residential vacancy on the urban fringe, and ; iii) promoting the condominium as a new residential model (as part of the policy to “bring home and work closer together”), thus making the provision of rental condominiums more attractive to potential tenants and more rewarding for financial investors through greater cash-flow streams.

While the State has been paramount to incentivize the REIT market, the social importance of property ownership has prevented the growth of demand in the private rental sector, especially among the upper middle-class groups. Consequently, J-REITs' sponsor groups have forged arrangements with large domestic firms to host their employees. This has helped to maintain attractive returns of REITs' shares through above-market rents subsidized by company housing allowances. As the paper demonstrates, Japanese property conglomerates have seized residential REIT channels to create a lucrative fee-based business and to diversify their activities across the entire market's value chain, while strengthening their control over the sought-after areas of downtown Tokyo.

The arrangements between J-REITs and large corporations share commonalities with sale and lease-back strategies, insofar as the sale of corporate welfare housing assets is replaced by a leasing offer also intended for employees. Likewise, it is the same shareholder value logic that drives companies to divest their housing welfare assets so as to refocus on core business issues. Through the supply of REIT condominiums, employers can also better attract and take advantage of a highly skilled workforce by offering their promising young employees accommodation adapted to an urban lifestyle.

Although the “capture” of J-REITs’ main residential supply by big employers is a serious means for attracting financial investment, it confines the trusts to a niche market despite the increasingly diversified needs for rental housing in Tokyo. Indeed, there is a profound mismatch between the mainstream demand in the private rental sector (emanating from non-permanent employees, SME employees, senior citizens, foreigners, etc.) and REITs’ provision of above-market condominiums with highly risk-averse criteria regarding tenant profiles. Particularly problematic is that J-REITs focus on the provision of small housing units. While companies provided welfare housing for families, this form of housing is rarely supplied by J-REITs. In Tokyo, the rental market as a whole tends to specialize in more profitable small housing units (Kubo & Yui, 2011), which, according to Ronald and Hirayama (2009), hinders family formation. From this perspective, residential J-REITs may actually exacerbate the declining birthrate trends in the capital region.

In conclusion, this paper provides an understanding of global landlords’ practices from a new perspective, by highlighting their capacity to forge and expand their alliances with large corporations and domestic developers in a highly challenging economic and demographic environment. Moreover, by pointing to the mediation of large corporations in the private rental market, the paper brings these neglected actors into the framework of financialized rental housing, and puts the analysis into the broader context of employment. However, to widen our understanding of the outcomes of financialization, further analysis would be required regarding the practices of unlisted funds in Tokyo’s rental condominium market, especially with reference to job-housing relations and family formation.

References

- Aalbers, M. B. (2016). *The financialization of housing: A political economy approach*, 1st ed., London: Routledge.
- Alexandri, G., & Janoschka, M. (2018). Who loses and who wins in a housing crisis? Lessons from Spain and Greece for a nuanced understanding of dispossession. *Housing Policy Debate*, 28(1), 117–134.
- August, M., & Walks, A. (2018). Gentrification, suburban decline, and the financialization of multi-family rental housing: The case of Toronto. *Geoforum*, 89, 124–136.
- Aveline-Dubach, N. (2014). New Patterns of Property Investment in “Post-Bubble” Tokyo: The Shift from Land to Real Estate as a Financial Asset. In N. Aveline-Dubach, S.-C. Jou, & M. Hsiao (Éd.), *Globalization and New Intra-Urban Dynamics in Asian Cities* (p. 265–294).
- Aveline-Dubach, N. (2016). Embedment of “Liquid” Capital into the Built Environment: The Case of REIT Investment in Hong Kong. *Issues & Studies*, 52(4), 1–32.
- Aveline-Dubach, N. (forthcoming), The financialization of real estate in megacities and its variegated trajectories in East Asia. In A. Sorensen & D. Labbé (eds) *International Handbook of Megacities and Megacity Regions*, Edward Elgar Publishing.
- Aveline-Dubach, N. (2020), China’s Housing Booms: a Challenge to Bubble Theory. In D. Pumain (Ed.), *Theories and models of urbanization*, Geography, Economics and Computing Sciences, London and New York: Springer International Publishing.
- Baker, H. K., & Chinloy, P. (2014). *Public real estate markets and investments*. Oxford: Oxford University Press.
- Baum, A. E., & Hartzell, D. (2012). *Global property investment: strategies, structures, decisions*, Oxford: Wiley-Blackwell.
- Bernt, M., Colini, L., & Förste, D. (2017). Privatization, financialization and state restructuring in eastern Germany: the case of Am Südpark. *International Journal of Urban and Regional Research*, 41(4), 555–571.
- Beswick, J., Alexandri, G., Byrne, M., Vives-Miró, S., Fields, D., Hodkinson, S., & Janoschka, M. (2016). Speculating on London’s housing future. *City*, 20(2), 321–341.
- Boisnier, C. (2015). *Les Sociétés Foncières: entre finance et ville durable*. Paris: Editions L’Harmattan.
- Brenner, N., & Theodore, N. (2002). Cities and the geographies of “actually existing neoliberalism”. *Antipode*, 34(3), 349–379.

- Buhnik, S. (2017). The dynamics of urban degrowth in Japanese metropolitan areas: what are the outcomes of urban recentralisation strategies? *Town Planning Review*, 88(1), 79-92.
- Chiapello, È. (2017). La financiarisation des politiques publiques. *Mondes en développement*, (2), 23-40.
- Child Hill, R., & Kim, J. W. (2000). Global cities and developmental states: New York, Tokyo and Seoul. *Urban Studies*, 37(12), 2167-2195.
- Chilton, K., Silverman, R., Chaudhry, R., & Wang, C. (2018). The impact of single-family rental REITs on regional housing markets: A case study of Nashville, TN. *Societies*, 8(4), 93.
- Coakley, J. (1994). The integration of property and financial markets. *Environment and planning A*, 26(5), 697-713.
- Corpataux, J., & Crevoisier, O. (2005). Increased Capital Mobility/Liquidity and its Repercussions at Regional Level Some Lessons from the Experiences of Switzerland and the United Kingdom (1975-2000). *European Urban and Regional Studies*, 12(4), 315-334.
- Crevoisier, O., Theurillat, T., & Araujo, P. (2011). Les territoires de l'industrie financière: quelles suites à la crise de 2008-2009? *Revue d'économie industrielle*, (134), 133-158.
- Crook, T., & Kemp, P. A. (2014). *Private rental housing: Comparative perspectives*. Cheltenham : Edward Elgar Publishing.
- Crowe, C., Dell'Araccia, G., Igan, D., & Rabanal, P. (2013). How to deal with real estate booms: Lessons from country experiences. *Journal of Financial Stability*, 9(3), 300-319.
- Fretigny, R. (2015). *Financer la cité: la Caisse des dépôts et l'économie politique du développement urbain*, PhD Thesis, University Lyon 2.
- Fujita, K. (2011). Financial crises, Japan's state regime shift, and Tokyo's urban policy. *Environment and Planning A*, 43(2), 307-327.
- Gilbert, A. (2016). Rental housing: The international experience. *Habitat International*, 54, 173-181.
- Gotham, K. F. (2006). The Secondary Circuit of Capital Reconsidered: Globalization and the US Real Estate Sector1. *American Journal of Sociology*, 112(1), 231-275.
- Gotham, K. F. (2009). Creating liquidity out of spatial fixity: the secondary circuit of capital and the subprime mortgage crisis. *International Journal of Urban and Regional Research*, 33(2), 355-371.
- Guironnet, A., Attuyer, K., & Halbert, L. (2012). Building cities on financial assets: The financialisation of property markets and its implications for city governments in the Paris city-region. *Urban studies*, (9).

- Halbert, L., Henneberry, J., & Mouzakis, F. (2014). The Financialization of Business Property and What It Means for Cities and Regions. *Regional Studies*, 48(3), 547–550.
- Harvey, D. (2004). The ‘new imperialism: accumulation by dispossession. *Socialist register*, 40, 63–87.
- Houghton, G. & Allmendiger, P. (2016). Think tanks and the pressures for planning reform in England. *Environment and Planning C: Government and Policy*, 34(8), 1676–1692.
- Henneberry, J., & Mouzakis, F. (2014). Familiarity and the determination of yields for regional office property investments in the UK. *Regional Studies*, 48(3), 530–546.
- Henneberry, J., & Roberts, C. (2008). Calculated inequality? Portfolio benchmarking and regional office property investment in the UK. *Urban Studies*, 45(5-6), 1217–1241.
- Hirayama, Y. (2010). The role of home ownership in Japan’s aged society. *Journal of Housing and the Built Environment*, 25(2), 175–191.
- Hulse, K., & Yates, J. (2017). A private rental sector paradox: unpacking the effects of urban restructuring on housing market dynamics. *Housing studies*, 32(3), 253–270.
- Oizumi, E. (2006). Transformations in housing construction and finance. In Y. Hirayama & R. Ronald, *Housing and social transition in Japan* (p. 59–84). London and New York: Routledge.
- Ito, Y. (2000). *Information on Tokyo’s regeneration [in Japanese]*, Tokyo: Kodansha.
- Jones, C. (2007). Private investment in rented housing and the role of REITS. *European Journal of Housing Policy*, 7(4), 383–400.
- Kamo, T. (2000). An aftermath of globalisation? East Asian economic turmoil and Japanese cities adrift. *Urban Studies*, 37(12), 2145–2165.
- Krijnen (2016) *The urban transformation of Beirut: An investigation into the movement of capital* (Doctoral dissertation, Ghent University).
- Kubo, T., & Yui, Y. (2011). Diversification of the condominium supply in central Tokyo: Supply strategies of ‘compact’ condominiums [in Japanese]. *Geographical Review of Japan*, 84, 460–472.
- Kubo, T., Yui, Y., & Sakaue, H. (2015). Aging suburbs and increasing vacant houses in Japan. *Urban Geography of Post-Growth Society*, 123–145.
- Kubo, T., & Yui, Y. (2019). *The Rise in Vacant Housing in Postgrowth Japan*. Singapore: Springer Nature.
- Kutz, W. (2016). The Eurozone crisis and emerging-market expansion: capital switching and

the uneven geographies of Spanish urbanization. *International Journal of Urban and Regional Research*, 40(6), 1075-1093.

Kutz, W., & Lenhardt, J. (2016). "Where to put the spare cash?" Subprime urbanization and the geographies of the financial crisis in the Global South. *Urban Geography*, 37(6), 926-948.

Le Goix, R., Giraud, T., Cura, R., Le Corre, T., & Migozzi, J. (2019). Who sells to whom in the suburbs? Home price inflation and the dynamics of sellers and buyers in the metropolitan region of Paris, 1996–2012. *PloS one*, 14(3), e0213169.

Liu, P. (2010). Real estate investment trusts: Performance, recent findings, and future directions. *Cornell Hospitality Quarterly*, 51(3), 415-428.

Lizieri, C. (2009). *Real estate investment in global financial centers: risk, return and contagion*. Working Papers in Real Estate & Planning. 11/09. Working Paper. University of Reading, Reading. pp23.

Lizieri, C., & Finlay, L. (1995). International property portfolio strategies: problems and opportunities. *Journal of Property Valuation and Investment*, 13(1), 6–21.

Machimura, T. (1992). The Urban Restructuring Process in Tokyo in the 1980s: Transforming Tokyo into a World City. *International Journal of Urban and Regional Research*, 16(1), 114-128.

Marcuse, P., & Madden, D. (2016). *In defense of housing: The politics of crisis*. London and New York: Verso Books.

Nappi-Choulet, I. (2012). Le logement, laissé-pour-compte de la financiarisation de l'immobilier. *Esprit*, (1), 84–95.

Newell, G. (2011). *The Benefits of an Allocation to Asian Real Estate for Institutional Investors*. Singapore: APREA.

Ooi, J. T., Newell, G., & Sing, T. (2006). The growth of REIT markets in Asia. *Journal of Real Estate Literature*, 14(2), 203.

Ooi, J. T., Ong, S.-E., & Neo, P.-H. (2011). The wealth effects of property acquisitions: Evidence from Japanese and Singaporean REITs. *Real Estate Economics*, 39(3), 487–505.

Phelps, N. A., & Ohashi, H. (2018). Edge City Denied? The Rise and Fall of Tokyo's Outer Suburban "Business Core Cities". *Journal of Planning Education and Research*, 0739456X18773471.

Renaud, B. (1997). The 1985 to 1994 Global Real Estate Cycle: An Overview. *Journal of Real Estate Literature*, 5(1), 13–44.

Rolnik, R. (2013). Late neoliberalism: the financialization of homeownership and housing rights. *International Journal of Urban and Regional Research*, 37(3), 1058–1066.

Ronald, R. (2007). Comparing Homeowner Societies: Can we Construct an East-West Model? *Housing Studies*, 22(4), 473–493.

Ronald, R. (2008a). Between investment, asset and use consumption: The meanings of homeownership in Japan. *Housing Studies*, 23(2), 233–251.

Ronald, R. (2008b). *The ideology of home ownership: Homeowner societies and the role of housing*. New York: Palgrave MacMillan.

Ronald, R., & Hirayama, Y. (2006). Housing commodities, context and meaning: Transformations in Japan's urban condominium sector. *Urban Studies*, 43(13), 2467–2483.

Ronald, R., & Hirayama, Y. (2009). Home alone: the individualization of young, urban Japanese singles. *Environment and Planning A*, 41(12), 2836–2854.

Rowlands, R., & Gurney, C. M. (2000). Young peoples? Perceptions of housing tenure: a case study in the socialization of tenure prejudice. *Housing, theory and society*, 17(3), 121–130.

Rutherford, R. C. (1990). Empirical Evidence on Shareholder Value and the Sale-Leaseback of Corporate Real Estate. *Real Estate Economics*, 18(4), 522–529.

Saito, A., & Thornley, A. (2003). Shifts in Tokyo's world city status and the urban planning response. *Urban Studies*, 40(4), 665–685.

Scanlon, K., & Kochan, B. (2011). *Towards a sustainable private rented sector: The lessons from other countries*. LSE London, The London School of Economics and Political Science.

Slater (2016), The housing crisis and liberal Britain, free market think tanks and the production of ignorance. In K. Birch & J. MacLeavy, *Handbook of Neoliberalism* (p 370–381). London and New York: Routledge.

Sorensen, Andre. (2011). Uneven processes of institutional change: path dependence, scale and the contested regulation of urban development in Japan. *International Journal of Urban and Regional Research*, 35(4), 712–734.

Sorensen, André, Okata, J., & Fujii, S. (2010). Urban renaissance as intensification: Building regulation and the rescaling of place governance in Tokyo's high-rise mansion boom. *Urban Studies*, 47(3), 556–583.

Stephens, M. (2003). Globalisation and Housing Finance Systems in Advanced and Transition Economies. *Urban Studies*, 40(5-6), 1011-1026.

Tanaka, M., Tanaka, K., & Kumada, Y. (2001). Change in management environment and the transition of company housing. *Regional Studies*, 32(3), 65–81.

Theurillat, T., & Crevoisier, O. (2014). Sustainability and the anchoring of capital: negotiations surrounding two major urban projects in Switzerland. *Regional Studies*, 48(3), 501–515.

Theurillat, T., Rérat, P., & Crevoisier, O. (2015). The real estate markets: Players, institutions and territories. *Urban Studies*, 52(8), 1414–1433.

Tsukamoto, T. (2012). Neoliberalization of the developmental state: Tokyo's bottom-up politics and state rescaling in Japan. *International Journal of Urban and Regional Research*, 36(1), 71–89.

Tsukamoto, T. (2013). Urban regeneration and neoliberal state reform, changing roles of cities in the Japanese developmental state. In M. E. Leary & J. McCarthy, *The Routledge Companion to Urban Regeneration* (p. 88-97). London and New York: Routledge.

Waldron, R. (2018). Capitalizing on the State: The political economy of Real Estate Investment Trusts and the 'Resolution' of the crisis. *Geoforum*, 90, 206–218.

Waldron, R. (2019), Financialization, Urban Governance and the Planning System: Utilizing 'development viability' as a policy narrative for the liberalization of Ireland's post-crash planning system. *International Journal of Urban and Regional Research*, 43 (4).

Waley, P. (2013). Pencilling Tokyo into the map of neoliberal urbanism. *Cities*, 32, 43–50.

Weber, R. (2002). Extracting value from the city: neoliberalism and urban redevelopment. *Antipode*, 34(3), 519–540.

Wetzstein, S. (2017). The global urban housing affordability crisis. *Urban Studies*, 54(14), 3159–3177.

Wijburg, G. (2018). *The differential impact of real estate financialization on the political economies of Germany and France*. PhD thesis, Leven University.

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*. <https://doi.org/10.1016/j.geoforum.2019.01.012>

Wijburg, G., & Aalbers, M. B. (2017). The alternative financialization of the German housing market. *Housing Studies*, 32(7), 968–989.

Wu, F. (2015). *Planning for growth: urban and regional planning in China*. New York: Routledge.

Yamada, T., & Hirano, Y. (2013). How has the Japanese mode of regulation changed? The whereabouts of companyism. In R. Boyer, H. Uemura, & A. Isogai, *Diversity and Transformations of Asian Capitalisms* (p. 15-30). London and New York: Routledge.