

# Financial Geographies of Real Estate and the City

A Literature Review

Manuel B. Aalbers

KU Leuven/University of Leuven, [manuel.aalbers@kuleuven.be](mailto:manuel.aalbers@kuleuven.be)

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## Introduction

Financial geography is often understood as the geographies *of* money and finance, but this paper takes a different understand in which financial geography is a lens that can be applied to a range of topics (Aalbers, 2018a). This approach follows my historiography of financial geography, which suggests that financial geography is not simply a sub-sub-discipline embedded in economic geography; the field of financial geography is equally rooted in the sub-disciplines of political and urban geography (Aalbers, 2015a) and in this literature review I will look at a frontier of financial geography, that is, the intersection of economic and urban geography.<sup>1</sup>

My goal here is not to foreground ‘the city’ or ‘the urban’ as the privileged site of applying a financial geography lens, but rather a pragmatic choice to demonstrate how a financial lens can help to enrich different fields of geographical research. My conceptualization of the city is equally pragmatic: for the purpose of the literature review in this paper, I use it primarily as a container term to include studies of urban governance, housing, real estate and the built environment. This review is not the place to discuss the nature of ‘the urban’. It is also worth pointing out what I have not included here: studies of financial centres, such as the City of London, Wall Street, Raffles Place or Bandra Kurla. Research of financial centres and districts is, in a way, the recognized core of geographies of money and finance, not the frontier I want to prioritise here.

In the following sections, I will first discuss financial geographies of housing, with a focus on mortgage debt, securitization and the rise of corporate landlords, but also the financialization of construction firms and social housing non-profits. Subsequent sections zoom in on financial geographies of 1) commercial real estate and large urban projects; and 2) the local state and (semi-)public sector. Finally, I draw some conclusions based on the cumulation of findings, diversity of perspectives, and spatialities and temporalities of financialization. In this literature review I have tried to include literature from non-English speaking countries where possible.

## Housing

Housing connects local geographies of home, community and indebtedness to national and global geographies of mortgage funding, securitization and interlinked crises (Aalbers, 2009a; Moos and Skaburskis, 2010; Sokol, 2017). In the aftermath of the global—or North-Atlantic—financial crisis, financial geographies of housing took a flight. In this section, I discuss four strands of this literature. A fifth strand, not

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<sup>1</sup> This literature review is a merged and expanded version of two ‘Progress Reports’ that will be published in *Progress in Human Geography* (Aalbers, 2018b; 2019a).

discussed here in-depth, consists of studies on the super-rich—or, ‘transnational wealth elites’ (Fernandez et al., 2016)—and increasingly also upper middle class households, buying properties in cities where they do not hold primary residence, such as Vancouver (Ley, 2010; 2017), Sydney/Melbourne (Paris, 2017; Rogers et al., 2015), London (Atkinson et al., 2017); and New York (Fernandez et al., 2016).

Table 1 References on household indebtedness and mortgage debt, by region

<b>(sub-)continent/country</b>	<b>Key references</b>
United States	Aalbers, 2008; Ashton, 2008; Bieri, 2017; Crump et al., 2008; Dymski et al., 2013; Fligstein and Goldstein, 2015; Langley, 2008; Newman, 2012; Schwartz, 2009; Wyly et al., 2004; 2009
Canada	Gaudreau, 2017; Kalman-Lamb, 2017; Walks, 2013; 2014; Walks and Simone, 2016
Latin America	Bredenoord and Cabrera, 2014; López-Morales, 2016; Monkkonen, 2012; Mosciaro and Aalbers, 2017; Pereira, 2017; Reyes, 2018; Rolnik, 2013; Soederberg, 2015; Vidal, 2018; Zapata, 2018
Ireland	Byrne and Norris, 2018; Downey, 2014; Hearne, 2017; Murphy and Scott, 2013; Waldron, 2016
United Kingdom	Cook et al., 2009; Crouch, 2009; Langley, 2008; Montgomerie and Büdenbender, 2015; Robertson, 2017; Silver, 2018; Watson, 2010; Wood, 2017
North-western-Europe	Aalbers, 2008; 2009b; Mortensen and Seabrooke, 2009; Poppe et al., 2016a; Tranøy, 2009; Wijburg, 2018; Wind et al., 2017
Central- and Eastern-Europe	Bohle, 2014; Büdenbender and Lagna, 2018; Dübel, 2014; Egedy, 2012; Halawa, 2015; Lewicki 2013; Pellandini et al., 2015; Pósfai, 2018; Pósfai and Nagy, 2017; Rodik and Žitko, 2015; Samec, 2018; Sellar and Pástor, 2015; Stenning et al., 2010
Southern-Europe	Aalbers, 2007; Alexandri and Janoschka, 2018; Charnock et al., 2014; Coq-Huelva, 2013; Di Felicianantonio, 2016; Palomera, 2014; Patatouka, 2014; Santos et al., 2015; Vives-Miró et al., 2018
Africa	Campbell, 2013; Gillespie, 2018; Kutz and Lenhardt, 2016; Migozzi, 2018; Mokhtar, 2018
Middle East	Aslan and Dinçer 2018; Krijnen, 2015; 2016; Weiss, 2014
East Asia	Chua, 2015; Forrest and Hirayama, 2009; Smart and Lee, 2003; Wu, 2015; Zhang et al., 2018
Australia and New Zealand	Colic-Peisker and Johnson, 2010; Hulse and Reynolds, 2017; Morris, 2018; Mortensen and Seabrooke, 2009; Murphy, 2011; Yates and Berry, 2011

A first set of studies looks at increased household indebtedness and rising mortgage debt around the globe (Table 1). This is not to suggest that the experiences in all these regions and countries are the same, but merely to indicate that this is a topic of research across the globe. In fact, several studies are devoted to analysing the diversity of experiences. Schwartz and Seabrooke (2009) speak of ‘varieties of residential capitalism’. Others have tried to develop alternative classifications of varieties of housing finance (Blackwell and Kohl, 2018a; 2018b; Fernandez and Aalbers, 2016; Fuller, 2015). A subset of the literature has evaluated how the meanings of homeownerships and debt have been put under pressure during and after the financial crisis (Aalbers, 2015; Appleyard et al., 2016; Cook et al., 2013; Dewilde and Ronald, 2017; Di Feliciano, 2017a; Druta and Ronald, 2017; Forrest and Yip, 2011; Hawes, 2016; Lennartz et al., 2016; Lersch and Dewilde, 2018; Palomera, 2014; Poppe et al., 2016b; Saegert et al., 2009; Soaita and Searle, 2016; Waldron and Redmond, 2016; 2017).

The range of theoretical inspirations in this literature is equally diverse. We find many Marxist (especially of the Harveysque kind) and post-structuralist perspectives—sometimes in dialogue—but also Keynesian, Gramscian, Bourdieudian and other angles. Many studies note how homeownership is increasingly ‘financialized’: not only is access to homeownership increasingly tied to access to finance, but in many countries mortgage or other housing loans are also increasingly given to social groups formerly excluded from homeownership and financial markets. One result is increasing indebtedness across the board, but particularly among more vulnerable groups, including but not limited to ethnic/racial minorities, migrants, elderly women and a range of social groups vulnerable to labour market shocks. Yet, contrary to mainstream economists, geographers hold that more mortgage finance does not lead to more construction but more likely to house price inflation (Aalbers, 2016a; Kohl, 2018).

Outside Anglo-Saxon countries, perhaps most studies on the financialization of homeownership come from Brazil. In particular, the *Minha Casa Minha Vida* (MCMV, My House My Life) housing programme is heavily scrutinized (Klink and Denaldi, 2014; Marques and Rodrigues, 2013; Soares et al., 2017). The first two phases of the programme resulted in 3.9 million units by 2014 with the goal of building 27 million units by the end of 2018 (Governo do Brasil, 2015). Researchers have argued that the programme, launched in March 2009, was primarily a subsidy for construction firms to avert the looming economic crisis (Fernandes and Novy, 2010; Fix, 2011; Rolnik, 2015; Sanfelici, 2013). Furthermore, although MCMV has created ownership rights for many households who lacked such rights, it has also sucked a lot of low- and moderate-income people into more mortgage debt than many can afford on (extremely) low income and weak—if any—labour protection. Arguably, MCMV is the largest homeownership and construction/mortgage subsidy scheme ever launched in the world.

It is often assumed that financialization processes are less pronounced or advanced in the Global North than in the Global South. Not only are these claims contestable, they also miss the point. Housing financialization, or any other form of financialization for that matter, is not primarily about showing which place is more financialized; it is about understanding the *process* by which financial actors, markets, practices, measurements, and narratives are increasingly becoming dominant (Aalbers, 2017a; 2017b). Although the differences between Global North and South countries are substantial, the literature suggests that differences within both North and South are equally substantial, calling into question the usefulness of introducing a new binary to study the variation in housing-related debt.

A second, much smaller set of studies has looked at the implementation and geographical diffusion of mortgage securitization. Originating in the US (Ashton, 2008; Gotham, 2006; 2012; Immergluck, 2009), over the years mortgage securitization has been implemented by a wide range of countries, including the UK (Wainwright, 2012), the Netherlands (Aalbers et al., 2011), Canada (Walks and Clifford 2015), Mexico (Soederberg, 2015), the Middle East (Bassens, 2012; Bassens et al., 2013), France, Italy and Spain (Wainwright, 2015), Hong Kong (Fung and Forrest, 2011), and, although slightly different, Brazil (Fix, 2011; Royer, 2014). These studies stress how the rolling out of securitization from the US to other parts of the world has been far from a seamless process (Aalbers and Engelen 2015), opening up a dialogue to policy mobility studies. In every country, regulation needed to be (re-)designed and implemented to enable securitization. In other words, mortgage securitization is deeply shaped by the state and can only exist thanks to the market making capacities of the state. Recently, the European Commission pushes the trend towards mortgage securitization further. In its plans for a Capital Markets Union, securitization is promoted as ‘simple, transparent, safe’, although geographers have argued that it is anything but (Engelen and Glasmacher, 2018; Fernandez and Aalbers, 2017b).

A third, rapidly increasing number of studies focuses on the financialization of rental housing. The wholesale ‘financialized privatization’ (Aalbers, 2016a) of German’s public, non-profit and company housing stock has been widely studied, in part because it, arguably, represents the largest privatization and financialization wave of housing stock anywhere, culminating to the sale of approximately 3 million units (of which 2.6 million social housing units) in the ten years prior to the North-Atlantic financial crisis (Aalbers and Holm, 2008; Botzem and Dobusch, 2017; Diamantis, 2013; Heeg, 2013; Holm, 2010; Korthals-Altes, 2018; Kitzmann, 2017; Kofner; 2012; Uffer, 2011; Unger, 2016; Wijburg and Aalbers, 2017a; 2017b). Many researchers may find it hard to believe, but this is not only faster but also larger than the approximately 1.5 million housing units privatized under the Right-To-Buy scheme introduced by the Thatcher government in 1980 (of which 1 million in the first nine years) (BBC, 2005). The German social housing sector, where most of these privatizations took place, shrunk from 4 million units in the late 1990s to less than 1.5 million in 2007. Meanwhile, the listed real estate fund Vonovia, Germany’s—and possibly the world’s—largest landlord currently owns almost 400,000 units and is looking to expand abroad, in particular in neighbouring countries such as France.

The sale of portfolios of rent-stabilized housing in New York City has also attracted the attention of geographers (Field, 2015; 2017a; Teresa, 2016; for an extremely detailed account, see the work of the journalist Bagli, 2013). More recently, researchers' attention in Canada and the US has been grappled by the acquisition of single-family homes that were foreclosed during the global financial crisis and are now turned into real estate assets by private equity and other financial firms (Abood, 2016; Call, 2014; Chilton et al., 2018; Fields, 2018a; Fields et al., 2016; Immergluck and Law, 2014a; 2014b). Increasingly, such processes also take place outside Germany and the US, including Brazil (Santoro and Rolnik, 2017), China (He, 2019), Spain (García-Lamarca, 2017b), Canada (August, 2018; August and Walks, 2018) and the UK (Beswick et al., 2016). The financialization of student housing in Canada (Revington and August, 2008) and Poland (Mendel, 2016) is another emerging issue. The impact of those different emerging corporate landlords on tenants has been varied, rarely entirely positive and sometimes outright destructive. The first wave of private equity and hedge funds investing in (formerly) affordable housing was characterized by 'buying low and selling high' while often neglecting tenants' needs (Fields and Uffer, 2016); while the second wave of REITs and other listed real estate funds have been more mixed, with some landlords inducing displacement and gentrification, and others gaming the system of rental regulations, while not necessarily compromising housing quality or affordability (Bernt et al., 2017; Beswick et al., 2016; Wijburg et al., 2018). Vives-Miró et al. (2018) demonstrate that in Spain, despite a strong narrative of mortgage foreclosure, most of the evictees are tenants rather than homeowners.

Fourthly, a small number of recent studies have focused less on the financialization of homeowners and tenants and more on the financialization of housing companies. Sanfelici and Halbert (2016), Calbet (2017), Romainville (2017) and, in quite a different way, also Orderud (2011), Raymond (2017), Van Loon (2016) and Wissoker (2016) have studied how housing construction and development firms are increasingly financialized. For the case of Brussels, Romainville (2017) shows how construction and development firms increasingly look like financial firms, applying a range of strategies typically associated with financial institutions, such as relying more on portfolio income than on profits accruing directly from development or developers more active in trading financial products than in developing housing. Housing associations, that is non-profit housing landlords, and housing cooperatives in the Netherlands, Sweden, Denmark, France and the UK have been studied by Aalbers et al. (2017), Westerdahl (2017), Bruun (2018), Gimat (2017), Wainwright and Manville (2017), Möller (2017), Smyth (2018) and Beswick and Penny (2018), who show how the restructuring of the (local) state is one of the main factors leading to intensified relations between the financial sector and housing associations, resulting in finance-driven housing (dis-)investments and, in at least one case (Aalbers et al., 2017), to the transformation of a former public housing company into a derivatives trading house that needed to be bailed out by the Dutch government and other Dutch housing associations.

Finally, others have studied housing microfinance (Ferguson and Smets, 2010; Grubbauer, 2018; Smets, 2006; Soederberg, 2017), housing finance as a form of harm (Aalbers, 2016b), the finance-led housing paradigm promoted by the World Bank (Van Waeyenberge, 2018; see also Rolnik, 2013), urbanization through informal finance (Kim, 2018; Woodworth and Ulfstjerne, 2016), the potential impact of blockchain and other digital technologies on the financialization of housing (Fields, 2018b; Proskurovska and Dörry, 2018), the financialization of informal housing (Desai and Loftus, 2013; Rolnik, 2013; see also Erman, 2016), of care homes (Horton, 2017; Kilian, 2017), of social reproduction (Roberts, 2016), of allotment gardens (Gagyí and Vigvári, 2018), and of domestic space on television (Bruce and Druick, 2017; Druick, 2017; Leyda, 2016; 2018; McElroy, 2017; Meissner, 2017; Ouelette, 2017). Interestingly, academic work on the financialization of housing has also influenced the reports of two consecutive UN Special Rapporteurs on the Right to Adequate Housing (2012; 2017; see also Rolnik, 2014) and several civil society and activists' campaigns (e.g. European Action Coalition, 2018).

## Commercial Real Estate

Real estate development and large urban projects are topics that have often been studied extensively in the interdisciplinary field of urban studies. Outside mainstream urban economics, urban political economy approaches, building on the contributions of, among others, David Harvey, Henri Lefebvre, Susan Fainstein and Christian Topalov have been common. Although finance has always been central to real estate development—in part because it is such a finance-intensive activity—recent scholarship that applies a financial geography lens has focused on how finance has changed real estate development.

An important shift here is that projects are increasingly developed with an investor rather than a user in mind. It may be hard to imagine now, but a few decades ago most commercial real estate was sold to either end users—in the case of office buildings primarily the companies occupying the buildings—or to companies who were directly owning and managing the buildings. Since the 1970s and in particular since the turn of the century, we see that commercial real estate is increasingly owned by (international) real estate funds who own large portfolios of properties, sometimes concentrated in one country or macro-region but increasingly globally. Many funds specialize in office buildings, the largest chunk of commercial real estate, but others focus on shopping/retail and leisure/hotels. Although such funds are not new, they currently are not only much larger in number but also manage much larger portfolios, often for large investors, including pension funds which are among the largest investors in the world (Clark, 2000). Pension funds and other institutional investors have owned real estate for decades (in some case nationally, in others internationally), but whereas they used to own (and often also manage) real estate directly, they now typically put money in large real estate funds that own and manage globally diversified real estate portfolios (Lizieri, 2009; Theurillat et al., 2010; Van Loon and Aalbers, 2017).

Building on the pioneering work of Harvey (1982), Haila (1988) and Coakley (1994), a number of ‘real estate geographers’ have focused on how real estate—chunky, spatially fixed—has been turned in a (quasi-)financial asset—‘unitized’, liquid—through a range of regulatory and socio-technical changes and constructions (Ashton et al., 2016; Aveline-Dubach, 2014; Dörry, 2010; Fields, 2018a; Gotham, 2006; 2012; Guironnet et al., 2016; Kaika and Ruggiero, 2016; Lizieri, 2009; Merrifield, 1993; Theurillat, 2017; Van Loon and Aalbers, 2017; Yrigoy, 2018). This includes the invention of mortgage securitization (see previous section) and real estate investment trusts (see below), but also the development and use of advanced real estate valuation, benchmarking, categorization, market signals, rating, calculative practices, and conventions that help to translate between scales and sectors (Boulay, 2012; Crosby and Henneberry, 2016; David and Halbert, 2014; Guironnet et al., 2016; Henneberry and Roberts, 2008; Hofman and Aalbers, 2018; Robin, 2018; Rydin, 2016; Smith and Munro, 2008; Weber, 2015). The incommensurability of real estate with its “location, location, location” mantra was brought in line with finance’s borderless fiction in a range of many small (and some bigger) steps that made local real estate legible and therefore investable on a global scale. This has not been limited to office buildings, but also includes logistical real estate (Raimbault, 2016) and hotels (Yrigoy, 2014; 2016). More recently, we see crowdfunding appearing as a way to finance city building (Bieri, 2015; Langley and Leyshon, 2017; Mörtenböck and Mooshammer, 2018).

Within the literature on the financialization of commercial real estate, a number of studies have focused on the creation of ‘new’ or ‘emerging’ markets in Asia and Latin America (David, 2012; Dörry and Heeg, 2009; Halbert and Rouanet, 2014; Kleibert and Kippers, 2016; Rouanet and Halbert, 2016; Searle, 2014; 2016; Socoloff, 2015; Theurillat, 2017; see also Brill, 2018 on South Africa and the UK) as well as those that sprang virtually out of nowhere in the real-world laboratories of post-socialist countries in Central- and East-Europe (Bitterer and Heeg, 2013; Büdenbender, 2017; Büdenbender and Aalbers, 2019; Pósfai, 2018; Samec, 2018), thereby enabling a dialogue with the market making literature in geography and the social studies of finance approach (for overviews, see Boeckler and Berndt, 2013; Corpataux and Crevoisier, 2015; French et al., 2011; Hall, 2011). These studies on ‘emerging’ commercial real estate markets have confirmed that there is nothing natural about markets and that they need to be imagined and performed before and while they can be enacted, institutionalized and made in both the material and financial sense. Intermediaries, such as real estate consultants, play an important role in, first, creating the illusion of a market and, second, the rise of that market. These intermediaries do not only intermediate in the sense of bringing local land and real estate together with international capital and investors, but also by bridging between local and global understandings and languages of land, development, politics and investment.



The literature on commercial real estate also stresses the role of the state in creating and remaking real estate markets. Like securitization, instruments like real estate investment trusts (REITs) need to be legally enabled before they can be active. US federal law created REITs in 1960 (Gotham, 2006) and since the late 1960s they have been rolled out to other countries, with countries like the Netherlands (1969), Australia (1971) and within the Global South, Brazil (1993) as early adopters (Pereira, 2017; Sanfelici and Halbert, 2018). Most countries that have introduced REITs, however, did so in the few years before and especially following the North-Atlantic financial crisis (e.g. Aveline-Dubach, 2014; 2016; Haila, 2000; 2015; Wijburg and Aalbers, 2017b). In a country like France, the state perceived the arrival of foreign investors as a potential threat to the French property companies and implemented a new tax regime that allowed these companies to launch publicly listed real estate vehicles known as a *Société d'Investissement Immobilier Cotée* (SIIC) in 2003. The French case exemplifies how listed real estate markets have been created to maintain liquidity in volatile and increasingly connected global property markets (Nappi-Choulet, 2012; 2013; Wijburg and Aalbers, 2017b). In Spain (2009) and Ireland (2013), two countries hit hard by the crisis, the introduction of REITs is framed as a part of the solution to the crisis because these new investment vehicles are buying up large portfolios of real estate properties that the state had acquired in their bailout of the banks (Waldron, 2018; García-Lamarca, 2017b). Both countries used 'bad banks' or 'asset management companies' to first acquire assets from banks and then to offload these in real estate markets (Byrne, 2015; 2016; Gutiérrez and Domènech, 2017; Kelly, 2015). In this sense, Waldron (2018) refers to them as market makers.

## The Financialization of Urban Governance

The local state has traditionally received a great deal of attention within urban geography and the interdisciplinary field of urban studies more widely speaking. Municipal finance has also been studied, especially in the US (e.g. Erie et al., 2011; Sbragia, 1996; Sugrue, 2014), but has received a new impetus in the urban financialization debate. A key point of contestation has become the use of financial instruments in entrepreneurial urbanism, urban entrepreneurialism, neoliberal urbanism or urban neoliberalism. Mirroring the wider discussion on how financialization relates to neoliberalization, the urban debate also has problems conceptualizing the relationship. Fainstein (2016) suggests that financialization is intrinsic to neoliberalization and that "public-private partnerships are the institutional form of speculative development" (Fainstein and Novy, 2019). Peck and Whiteside (2016: 239) suggest "entrepreneurial strategies are increasingly realized through financially mediated means and in conjunction with credit market actors, agencies, and intermediaries" but also discuss financialized urban governance as something that succeeds entrepreneurial urban governance. Van Loon et al. (2018), on the other hand, argue that "financialized urbanism is not a new phase of (or following) entrepreneurial urbanism, but rather the means through which entrepreneurial

urbanism was enabled in the first place.” Peck and Whiteside (2016), like Hendrikse and Sidaway (2014), Engelen et al. (2014), and Savini and Aalbers (2016), see finance capturing urban governance; whereas Weber (2010), Theurillat and Crevoisier (2013; 2014), Gonzalez and Oosterlynck (2014), Ashton et al. (2016) and Van Loon et al. (2018) see municipalities inviting and using finance to accomplish their goals. The case may be that both processes happen at the same time and are, at least in part, a result of the differentiated opportunities and threats that local governments face, and, consequently, are un/able to channel finance to meet their goals. Singla and Luby (2018) have tested several hypotheses regarding the types of cities that rely on financial derivatives such as interest rates swaps; for the 50 largest US cities, they conclude “that the characteristics of government most associated with debt-related derivative use are declining financial condition, increased financial experience and/or financial sector influence, and prior use of interest rate swaps.”

A stream of the literature at the intersection of geography and political science analyses the financialization of the local state. Municipalities have always been involved in issuing debt and receiving loans from banks. But in the last decades, financial actors, state bureaucracies, professional and local government associations as well as consultancies have jointly pushed in this direction, although there is also agency on the municipal level in the form of policy experimentation to respond to reduced fund allocations and uphold certain public services (Hendrikse, 2015; Möller, 2016). The Hammersmith and Fulham debacle in the UK and the Orange County debacle in the US (Pryke and Allen, 2000; Tickell, 1998) were early illustrations of a trend that has unfolded more widely in recent years, as illustrated by the cases of Chicago (Weber, 2010), Detroit (Peck and Whiteside, 2016), California (Pacewicz, 2016), London (Beswick and Penny, 2018), Pforzheim (Hendrikse and Sidaway, 2013), and Italian municipalities (Lagna, 2015) among many others. Financialization, on the one hand, changes the organizational culture of local governments, and on the other, entails moving towards more sophisticated techniques, such as derivatives instruments, to manage interest rates and risk (Hendrikse and Sidaway, 2013), or reconfiguring the governance of municipal entities into private or public–private partnerships to capitalize on future income streams from public services and utilities (Allen and Pryke, 2013; Ashton et al., 2016; Whitfield, 2016). The newly financialized municipal debt management is a ‘bricolaged’ response to fiscal constraints and financial market euphoria (Deruytter and Möller, 2019).

It could be argued that urban policy has become a financial instrument (Lake, 2015), or at any rate some urban policies are turned into financial instruments. Besides securitization and REITs (see previous sections), there is a wide range of new financial instruments that have been implemented (Table 2). In different ways, these financial instruments turn possible future revenues or taxes into something that can be cashed in earlier, often to enable investments in the short-run. Although praised by some economists and public policy scholars, geographers and urban planners are more critical to how these financial instruments affect cities. In many cases it means investments are diverted to those that deliver financial results rather than those that benefit local communities.

Table 2 Urban policies through financial instruments

Financial instrument	References
Tax increment financing (TIF), in the US	Fisher, 2015; Kirkpatrick, 2016; Pacewicz, 2013; 2016; Teresa, 2017; Weber, 2010; Weber and Goddeeris, 2007
TIF in the UK	Baker et al., 2016; O'Brien and Pike, 2017; Ward, 2018; see also Bryson et al., 2017 who suggest the first TIF scheme was introduced in 1875
Social impact bonds in the US	Lake, 2015
Social impact bonds in the UK	Dowling, 2016
New market tax credits in the US	Lake, 2015
Opportunity bonds in the US	Gotham, 2016
Special impact financing in the US	McCubbins and Seljan, 2018
Revenue and tax anticipation notes, certificates of participation and fiscal stabilization bonds in the US	Peck and Whiteside, 2016
Tender option bonds in the US	Kirkpatrick, 2016
Revenue bonds and local asset backed vehicles in the UK	Strickland, 2017
Lender option borrow option in the UK	Möller, 2016
A range of different types of interest rate derivatives across the Global North	Möller, 2016
Interest rate swaps, constant maturity swaps and swaptions in Germany and Italy	Hendrikse and Sidaway, 2014; Lagna, 2015
Financial engineering instruments in the European Union's Cohesion Policy	Dąbrowski, 2014; Anguelov et al., 2018
Transferable development right in Taiwan	Yang and Chang, 2018
<i>Certificados do Potencial Adicional de Construção</i> (Certificates of Additional Building Rights or CEPACs) in Brazil	Fix, 2011; Mosciaro and Zhang, 2018; Mosciaro et al., 2019; Pereira, 2015; Stroher, 2017; Klink and Barcellos de Souza, 2017; Klink and Stroher, 2017
Local financing platforms in China	Pan et al., 2017
<i>Dipiao</i> (land ticket securitization) in China	Mosciaro and Zhang, 2018; Zhang, 2018

## Real Estate Financialization as a State Strategy

Within the field of urban studies, large urban projects have long been criticized for neglecting and displacing local populations. What has changed under financialized accumulation is that many such projects are not even designed with other local groups in place, but increasingly appear decontextualized from local needs and conditions. This is not a black/white shift but rather one in different shades of grey. The role and power of local government is key here. Whereas some municipalities able to route global investment into local government plans (Anselmi, 2015; Theurillat and Crevoisier, 2013)—the ‘negotiated city’ (Theurillat et al., 2016b)—others merely facilitate the needs and wishes of an ever-changing set of investors (Savini and Aalbers, 2016) or play a passive role (Büdenbender and Aalbers, 2019)—the ‘financialised city’ (Theurillat et al., 2016b). More commonly, local government officials note that investors increasingly call the shots and redraw urban plans to suit financial interests rather than vice-versa (Anselmi, 2015; Guironnet et al., 2014; 2016; Hofman, 2017; Kaika and Ruggiero, 2016; Mosciaro, 2018). Guironnet et al. (2016) report how developers have not only internalized investors’ expectations (see Weber, 2015) but also circulate them to local planning authorities. Indeed, state strategies and practices are restructured in order to facilitate the transformation of ‘urban products’ as financial assets (Ashton et al., 2016). Furthermore, the financialization of real estate has also accelerated the standardization and commodification of design and architecture (Aveline-Dubach, 2013; Bieri, 2013).

Akers (2015) analyses how Detroit prioritizes the exchange value of the city over its use value. He argues that the city is governed as a series of markets. Market-based models and maps, typically presented as ‘qualitative’ and therefore ‘objective’ yet based on assumptions deeply embedded in real estate markets and rationales, are applied as if cities *are* markets or commodities and the municipality’s task is facilitating this process (Aalbers, 2014a; 2014b; Akers, 2015; Rutland, 2010). The result is the reproduction of local uneven development and outright exclusion for city services in selected neighbourhoods. In the case of the US, Wang (2018: 17, emphasis in original) refers to the US state as a “*predatory state*, which functions to modulate the dysfunctional aspects of neoliberalism and in particular the realization problem in the financial sector.” It is not simply the financial sector that exploits city residents and neighbourhoods—and predominantly racial minorities and the places they inhabit (Aalbers, 2011; 2012a; Ashton, 2008; Crump et al., 2008; Immergluck, 2009; Newman, 2012; Squires, 2004)—but increasingly also local government that sees its residents—and in particular those that are poor and black—are exploitable. Wang (2018: 69) refers to the combination of predatory lending and parasitic governance as “racial capitalism” (see also Villanueva et al., 2018).

A wider international trend that the literature highlights is how state agencies have made rising land and real estate prices a policy priority (Coq-Huelva, 2013; Dörry, 2011; Liu et al., 2016; Pan et al., 2016; Van Loon et al., 2018; Tsing, 2010). Public land has been mobilized—or even created (AlShehabi and Suroor, 2016)—to accomplish such goals (Artioli, 2016; Besussi, 2016; Christophers, 2017; Denis, 2011; Haila, 2015; Heeg, 2013; Hyötyläinen and Haila, 2018; Kaika and Ruggiero,

2016; Lin, 2014; Lin and Zhang, 2015; Mbiba, 2017; Mironova and Stein, 2018; Mosciaro et al., 2019; Pow, 2017; Savini, 2017; Shatkin, 2016; 2017; Thiele, 2016; Theurillat, 2017; Ward and Swyngedouw, 2018; Whitfield, 2016; Zhang, 2018). Mbiba (2017) speaks of 'urban land grabbing' through a combination of 'corporate accumulation by dispossession' and state practices. This process is not limited to public land: consortiums of international investment firms and sovereign wealth funds have taken control of (formerly) public infrastructure (Adisson, 2017; Ashton et al., 2012; 2016; Deruytter and Derudder, 2018; Hall et al., 2018; Hebb and Sharma, 2014; Kirkpatrick and Smith, 2011; Knight and Sharma, 2016; Langley, 2018; O'Brien and Pike, 2015; 2017; 2018; O'Brien et al., 2017; O'Neill, 2013; 2017; Strickland, 2016; Theurillat et al., 2016a; Torrance, 2008; 2009; Whitfield, 2016) and utilities such as water (Allen and Pryke, 2013; Bayliss, 2014; Bresnihan, 2016; Christophers, 2018; Loftus et al., 2016; March and Purcell, 2014; Ponder, 2017; Pryke and Allen, 2016). In some cases, this may reach beyond the municipal level. In Belgium for example, utility companies have not been fully privatized but rather transformed into intermunicipal companies that not only operate at arm's length of local government but some also appear to function as some sort of state-internal shadow banks (Deruytter and Bassens, 2017). Weber (2010: 252) speaks of the 'investor-orientation' of local government. Mayer (2016: 221) argues that "Privatization has turned into financialization, as urban resources have become speculative stock." Adisson (2017: 14) argues that "State restructuring dynamics appear not only as contextual factors that contribute to the rise and spread of [urban development projects] *in general*" but instead "shifting boundaries between state and market, new public management rationales and the rescaling of the state are transforming the institutional framework of public properties *in particular*, and consequently give rise to a specific process in the remaking of publicly owned sites" (emphasis in original).

The role of the state appears to be contradictory. On the one hand, researchers note that state capacities to deal with financialization of the city are already lost, or at least limited (Fields and Uffer, 2016). In many of these cases, we also see how urban policy does not only become financialized through the use of financial instrument and rationales, but is also moved away from urban planning and housing departments and into either finance departments or into separate units outside of 'normal' democratic control (Erie et al., 2011; Lake, 2015; Mosciaro et al., 2019). The state is far from absent in the process of creating variegated patterns of urban financialization. Some state agents actively—but not always consciously—create the conditions for the financialization of housing and other assets, sectors and markets (Aalbers, 2017a), while other state agents may try to limit financialization pressures. The government is transformed through finance (Ashton et al., 2016; Hendrikse, 2015) but also uses finance to extend state power (Gotham, 2016). States are bringing the architecture of financial markets inside the state (Bryant and Spies-Butcher, 2018) to a degree that Waldron (2018) argues that the state and financial sector are interdependent. The state played a central role in the 'resolution' of the crisis: bank losses were socialized, austerity urbanism (Peck, 2012) was rolled out, but at the same time, we see "the development of financial instruments and

policies that connect the financial and real estate markets in a more direct way” (Waldron, 2018: 216). In a seminal paper, Smart and Lee (2003) argue that in a financialized regime of accumulation, the state but also households treat real estate as central to their reproduction strategies. Haila (2000; 2015) refers to these states as ‘property states’. Büdenbender and Golubchikov (2017: 75) have argued that real estate plays a role in geopolitical circulations in at least three ways: “(1) external influences over domestic real estate markets; (2) the implications of outward real estate investment; and (3) state-led mega-projects conveying externally the power of the state.”

Following Smart and Lee’s argument that the state’s relationship to real estate is central to financialized capitalism—urbanization is driving accumulation (Lefebvre, 1974; Soederberg and Walks, 2018)—we see that the literature stresses the centrality of real estate to political economies in both Global North and South. State actors use powers of governance, regulation and in some cases also direct ownership to create this centrality of real estate in order to legitimize but also to empower the state (Krijnen, 2018; Shatkin, 2016; 2017). Indeed, the local state is no longer merely the enabler of property speculation but has become a speculator itself (Mosciaro et al., 2019; Weber, 2015; cf. Lauer mann, 2018), “an executor of financialization” (Beswick and Penny, 2018: 15). In some cases the state favours certain national developers (Aveline-Dubach, 2017; Theurillat, 2017; Theurillat et al., 2016a) or developers are part of the state apparatus (Hsing, 2010; Karatepe, 2016; Mosciaro et al., 2019; Özdemir, 2011; Shatkin, 2017).

## Conclusion

The financialization of housing has resulted in asset-based wealth for the middle, and in some countries also working, classes, although this now appears limited to some generations, with younger people increasingly excluded not only from permanent employment but also from (affordable) housing (Aalbers, 2015b; Dewilde and Ronald, 2017; Forrest and Yip, 2011; Manzo et al., 2018). It could be argued that the rise in mortgage debt is the key expression of the financialization of housing. Mortgage debt is the dominant form of debt, and is supported not only by a range of financial products and government stimuli but also by the ideology of homeownership (Aalbers and Christophers, 2014; Ronald, 2008). However, we can also witness housing financialization in other domains, such as social and private rental housing. Like mortgage debt and the securitization thereof, rental housing is increasingly seen as an investment class, as assets that are typically considered low-risk while delivering a good return-on-investment compared to other such assets. Institutional investors are looking for mid- to long-term investment objects (increasingly through indirect investment in real estate) and a range of other ‘financialized’ actors such as private equity firms and hedge funds who are interested in ‘buying low and selling high’ and typically hold large housing portfolios for a few years at a time.

The absorption of capital by real estate is one of the defining characteristics of the current financialized, real estate-driven regime of accumulation (Fernandez and Aalbers, 2016; Smart and Lee, 2003). Henri Lefebvre (1974), David Harvey (1978) and others have theorized the connections between urbanization and capitalism, arguing that the built environment has become essential to both creating and storing surplus value (for recent re-articulations, see Aalbers, 2008; Christophers, 2011; Coq-Huelva, 2013; Fernandez and Aalbers, 2017a; Gotham, 2012; Haila, 2015; Moreno, 2014; Weber, 2015; Wyly et al., 2009). Building on this literature, Buckley and Hanieh (2014) have argued that in some cases, such as Dubai, urbanization can be seen as a process of financial re-engineering. Furthermore, it could be related to what Crouch (2009) and Watson (2010), respectively, have dubbed ‘privatized Keynesianism’ and ‘house price Keynesianism’, i.e., both a way to fuel the economy by propping up consumption and to ‘compensate’ labor for decades of negligible or even negative real income growth.

The debt-led accumulation model, which underpins the financialization of real estate, producing tradable financial assets, feeding financial markets, on the one hand, and supporting private consumption on the other, is clearly not a formula for stability. Real estate is not only central to the reproduction of the current highly financialized system (both as a form of collateral and a source for private consumption), but it also is its weak link as real estate markets have been turned into Ponzi schemes (Fernandez and Aalbers, 2016; Walks, 2010). O’Callaghan et al. (2018) remind us that moments of crisis are also moments when private property relations may be renegotiated. Social movements have formed that are explicitly framed against the financialization of housing and the city (Aalbers, 2012b; Di Feliciano, 2017b; 2017c; Fields, 2017b; García-Lamarca, 2017a; Mayer, 2016; Vives-Miró et al., 2018). In addition, the ‘grounding’ of cities (Engelen et al., 2016) and the ‘resocialization’ of infrastructure are also debated (Schipper and Belina 2009).

A number of other lessons from financial geographies of the city can be drawn regarding the temporality and spatiality of financializing the urban. Firstly, the financial crisis that started in 2007 has not resulted in an overall definancialization of the city. In some places it appeared to be a bump that had to be overcome and as a case like Ireland suggests, the ‘solution’ to the crisis of financialization was predominantly to implement financial instruments and favour financial rationales and actors in more rather than fewer domains (e.g. Bresnihan, 2016; Byrne, 2016; Kelly, 2015; Waldron, 2018). Austerity urbanism (Peck, 2012) was rolled out in many places. This is not simply continuing or furthering neoliberalism, but is implemented through more intensified financialization of urban governance and lives. Indeed, if anything, we have witnessed an increase in the diversity and density of financial deals and instruments. Yet, we should be careful in stressing the complexity of finance as it may suggest it is somehow disconnected from the real economy or from real places, which is of course not the case (Pike and Pollard, 2010).

Despite a number of common trends, the literature also highlights the diversity and variegation of experiences. But it would be too easy to conclude that the

financialization of land, housing and real estate is exclusively a Global North phenomenon. On the one hand, these processes are theorized in terms of the subordinate or peripheral financialization in the semi-peripheries of the Global North, for example Portugal and Central- and Eastern-Europe (Becker et al., 2010; Büdenbender, 2017; Büdenbender and Aalbers, 2019; Golubchikov and Phelps, 2011; Pósfai, 2018; Rodrigues et al., 2016). On the other hand, the literature on financialized state strategies that favour real estate development and investment are primarily coming from middle-income countries that are typically seen as part of the Global South, such as Latin America, the Middle East and East Asia (Buckley and Hanieh, 2014; Hsing, 2010; Karatepe, 2016; Krijnen, 2016; 2018; Mosciaro et al., 2019; Özdemir, 2011; Smart and Lee, 2003). This literature also points our attention to the use of speculative images to legitimize and financialize large-scale urban development projects (Mosciaro et al., 2019; Shatkin, 2016; 2017; Watson, 2014; Zhang and He, 2019).

David Harvey's work on capital switching and spatio-temporal fixes (Harvey, 1978; 1982; 2001), which in a way unites the temporality and spatiality of accumulation through the built environment, has inspired many researchers to explore switching and fixing between and within cities, but also between Global North and Global South. It is not only urban land, and the real estate on it, that is transformed into a financial asset; the same is happening to rural land (Fairbairn, 2014a; 2014b; 2015; Gunnoe, 2014; Gunnoe and Gellert, 2011; Henry and Prince, 2018; Magnan, 2015; Ouma, 2018; Sippel et al., 2017; Sommerville, 2018). The debate about land grabbing of rural land, primarily in the Global South, shows many similarities with the debate about the financialization of the city. As Knuth (2015: 164) suggests, "financialisation has produced institutions that increasingly take a global view of accumulation strategies, visions that include land and property in new ways." A dialogue between the debates on urban and rural land brings into focus not only spatiality, but also temporality. The financialization of rural land swelled during the financial crisis as investors were not only switching capital between countries but also between different modes of land (Cotula, 2012; Fairbairn, 2014a; Ghosh, 2010; Van der Ploeg, 2010; McMichael, 2012). And like commercial real estate and later also rental housing, rural land has also been transformed into REITs (Fairbairn, 2014a; Gunnoe, 2014; Painter, 2010).

It would, however, be too easy to argue that investment has simply switched from city to countryside and that it can easily switch back again as there appears to be a longer-term interest in investing in both urban and rural land. It may be useful to think of two distinct, yet interrelated, processes here that take place in sequence as well as at the same time. We mobilize the heuristic of financialization 1.0 and 2.0 here (Wijburg et al., 2018). Financialization 1.0 refers to the original acquisition of different forms of decommodified and not-fully commodified land and real estate by private equity funds and other opportunistic investment funds that use aggressive strategies to invest short- to mid-term with the aim of buying low and selling high, i.e. pure speculation. Financialization 1.0 is the globally mobile and restless form of finance that pushes for the primitive accumulation of land and real estate.



Financialization 2.0, on the other hand, refers to long-term investment which releases the land and real estate “into the privatized mainstream of capital accumulation” (Harvey, 2005: 145). More precisely, it entails a stage of capital accumulation in which land is no longer treated as a purely speculative good but rather as a long-term investment object for investment funds. Financialization 2.0 links up to the renewed interest in rentiership in political economy and urban studies (Andreucci et al., 2017; Birch, 2017; Gunnoe, 2014; Haila, 2015; Hudson, 2012; Piketty, 2014; Sayer, 2016; Ward and Aalbers, 2016; Ward and Swyngedouw, 2018) Yet, the “critical point here is that financialization 1.0 and 2.0 are part of the same cycle of accumulation by dispossession, despite the fact that both stages are qualitatively different and involve different market actors and investment practices” (Wijburg et al., 2018: 1114).

The literature of the financial geographies of the city has highlighted both the commonalities and differences between the contemporary treatment of land and financial assets, residential and commercial real estate, public and private/privatized—and entrepreneurial and financialized—urban governance; within both Global North and Global South, and both urban and rural contexts. Finally, the literature notes an emerging gentrification-touristification-financialization nexus (Aalbers, 2019b; Mendes, 2017; Mendes and Jara, 2018; Vives-Miró et al., 2018). The role of the state, and the local state in particular, in all of this is variegated and often ambiguous, and will—no doubt—be the topic of future studies applying a financial geography lens to study land, housing, real estate, infrastructure and urban governance.

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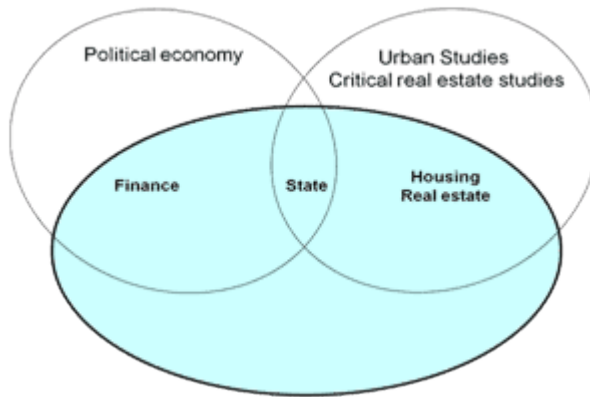
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## The Real Estate/Financial Complex (REFCOM)



Real estate and finance were at the roots of the global economic crisis that started in 2007. States and their many institutions have also been seen as complicit to the crisis. The connections between real estate (both residential and non-residential), finance and states still remain under-researched and under-theorized. Work in various political

economy traditions has done a great deal of research into the connection between finance and states, but they have often ignored a crucial sector: real estate. There is also a tradition of work focusing on the interaction between real estate and states, usually concentrating on the involvement of municipalities in real estate projects. Finance is often ignored in this tradition. Moreover, this tradition has its roots in urban studies and is very micro focused, while the various political economy traditions are very macro focused. In other words, we not only need a stronger connection between finance and real estate, we also need a stronger connection between different scales: local/urban, national and global.

We here propose a new metaphor that can help us to centre attention on the connection between real estate, finance and states: the real estate/financial complex, akin the military/industrial complex. Both complexes should be seen as triangles since states are also part of the equation. This is an internationally comparative research project, with case studies in Europe, Asia and the Americas, focusing on the different scales of the real estate/financial complex, from urban projects to national structures and from firms to global markets.

This research project is made possible by Starter Grant number 313376 of the European Research Council (ERC) and additional funding by the KU Leuven / University of Leuven and is further expanded through a Joint PhD programme with Politecnico di Milano. Together, we will map the Real Estate/Financial Complex in: Belgium, Brazil, China (both Mainland and Hong Kong), France, Germany, Italy, the Netherlands, Russia, Spain, Poland, United Kingdom and United States.

More information here: <http://ees.kuleuven.be/refcom>

And: <http://www.facebook.com/REFcomplex>

