

— THROUGH THE OPTICS OF FINANCE: Speculative Urbanism and the Transformation of Markets

MICHAEL GOLDMAN, DEVIKA NARAYAN

Abstract

This article contributes to debates on the financialization of global South economies by looking closely at how India's real estate markets became entwined with global financial networks. We offer an analytical frame that centers on the strategies of global finance and its ability to transform its form and mode of operation when faced with a supposed 'limit', both spatially and temporally. Finance capital, we argue, derives its power from working with state actors and ambitious borrowers—across borders, sectors and conditions—to spawn new investment opportunities and, over time, a financialized type of urban transformation. In 2005, India deregulated foreign investment into land and real estate, a watershed moment that radically altered the financial and urban speculative logics of the sector. Private equity firms made vast investments into urban projects, anticipating massive returns, and even though the bubble quickly burst, India continues to attract finance capital. We explain this conundrum by tracking the new techniques and investment tools of private equity ('following the financial strategy'), arguing for an analytical approach attuned to the relentless dynamism and hyper-mobility of finance capital (an inter-scalar and conjunctural dynamics approach').

Introduction

Until recently, scholarship on financialization primarily focused on the shifting structure of advanced capitalist economies. Although the literature has expanded beyond the global North, fundamental questions remain as to the role of 'emerging markets' or 'peripheral economies' in the expanding terrain of finance capital in the global economy. This article contributes to a growing literature on cities and financialized markets, focusing on India's real estate industry and its changing urban landscape.

In 1991, India initiated the liberalization of its postcolonial economy, extending an invitation to foreign direct investment. But it was only in 2005 that foreign capital was allowed to invest directly in Indian land and real estate. This set of reforms opened up the floodgates to global private equity, a move that overlapped with the global urbanism discourse gaining traction worldwide (Ong and Roy, 2010; Ancien, 2011; Goldman, 2011; Sassen, 2014). Like China, India also declared a commitment to building 100 'smart cities' linked by major transport and commercial infrastructure that would remake the mostly rural landscape into a twenty-first-century metropolitan nation. These ambitions demanded and justified massive infusions of foreign private capital. Despite the unprecedented urban expansion—which saw the construction of a record number of skyscrapers, elite residential enclaves, and high-tech campuses—by 2015, the Indian economy was suffering under the weight of indebtedness: city governments,

This research project started in 2007, with funding and collegial support from the American Institute of Indian Studies (AIIS), University of Minnesota's Global Programs and Strategy Alliance (GPS), the V.K.R.V. Rao Professor Chair at the Institute of Social and Economic Change (ISEC) Bangalore, the National Institute of Advanced Studies (NIAS) within IISc-Bangalore, and the National Science Foundation award # BCS-1636437. In 2018, an early draft of this article was presented at the American Association of Geographers (AAG) conference. We are very grateful to Sanjiv Aundhe and Amay Narayan for sharing their insights and providing the financial data and analysis included here. We are also very much indebted to Rachel Schurman for her editorial input on multiple drafts and her intellectual contribution. Special thanks go to our generous colleagues and interlocutors, to name just a few: Carol Upadhyा, Leo Saldanha, Bhargavi Rao, Hemangini Gupta, Kaveri Medappa, Vinay Baird, Manjunath, Vinay Gidwani, Helga Leitner and Eric Sheppard.

real estate and banking firms alike were unable to pay their bills (Subramanian and Felman, 2019). Against this backdrop, our study investigates the strategies of private equity (PE) and developer firms operating in India, and the new financial undercurrents running through the real estate sector. It offers an analytical frame to explain the new volatilities and disruptions experienced globally from this latest wave of urban financialization.

How does the emergent literature on the financialization of global South economies contend with such unprecedented and unstable developments? The concepts of *subordinate* and *peripheral* financialization emerge as key explanatory tools for finance capital's new direction in the global South. Although scholars recognize that global South economies are embedded in and constitutive of global circuits of accumulation, there is a tendency to assume the prevalence of the core/periphery binary, in which the South becomes peripheralized or subordinated by Northern capital. This epistemic approach runs the risk of presenting finance power as emanating solely from the global North and being imposed on a uniformly weak periphery. Implicitly, it relies on a comparative approach that utilizes *universal* Northern logic for the *particular* Southern case, without considering how these power relations may be mutually constituted, or indeed cut across the presumed North/South divide (Chakrabarty, 2000).

From our multi-year study based on interviews with insiders from the finance and real estate sectors and analysis of industry documents and financial data, we argue that the compact between private equity and developers in India is best understood as occurring over two distinct phases, in which speculative real estate markets were first *created* during a boom cycle (2005–2010) and then *consolidated* and *transformed* during a subsequent bust cycle (2011–present). This article presents an analysis of the changing financial strategies between these two periods and their ripple effects. Like Searle (2014), we challenge the assumption that the interests and practices of foreign and domestic elites in the real estate sector neatly overlap, or that the process of extraction is smooth. However, we take this line of argument further by emphasizing that even the friction between players is dynamic and transformative. Instead of relying on the explanatory power of the core/periphery or North/South frame, our analysis focuses on how diverse forms of financial arbitrage are mobilized to create and destroy markets, boundaries, limits, opportunities and liabilities, with a variety of socio-spatial effects.

From studying *in situ* the workings of finance capital and its key features of liquidity, mobility and arbitrage, we propose that what may appear as durable things such as infrastructure projects, capital holdings, financial instruments and borders might be better understood as processes that 'actively construct space and time', as Henri Lefebvre once theorized (Lefebvre, [1974] 1999; see also Harvey, 1996; Hart, 2018). We argue that financialization is neither a single process nor an event but an ongoing set of speculative, adaptive and malleable power relations among actors, working toward speculative gains in a rapidly globalizing industry they help to configure.¹ Hence, we offer an *inter-scalar and conjunctural dynamics approach* to the discussion (Gramsci, 1971; Hall, 1988; Peck, 2017; Leitner and Sheppard, 2020).² We take our cue from the actions of finance capital itself, appreciating that the largest firms work simultaneously within and across national borders, playing one project against another, plying their trade under the radar of regulators, and always in conjunction with local elites, even if they may have different interests and expectations.

¹ We thank an anonymous IJURR reviewer for suggesting this cogent phrasing.

² The concept of conjuncture has traveled far, but most trace it to Gramsci's notion of political strategizing for the 'coming together' of events and processes that conjures a moment of change—perhaps crisis—and political opportunity, considered within a context of structural permanence and historicity. Leitner and Sheppard (2020), Peck (2017) and Sheppard *et al.* (2015) build upon the concept by thinking through both the spatial and the relational—described as the spatio-temporal—dimensions to the conjunctural.

One of the key forms of global finance that invests in infrastructure and cities around the world is private equity. Although many PE firms (e.g. Goldman Sachs, KKR, Blackstone, BlackRock, GIC) have prestigious addresses in New York City, London and Singapore, most of their trades and limited liability companies (LLCs) are based in tax havens elsewhere—as is their clients’ capital—such that it becomes difficult and possibly counter-productive to ‘nationalize’ these firms or to suggest that their allegiance or place of origin is somehow American or British or even solely in the global North. Finance capital is quite different today from what it used to be 20 years ago, and certainly 40 years before: private equity firms have not only capitalized on the recent series of financial crises around the world, they have produced new (and often opaque) financial tools and new markets out of the ashes of these crises that tend to nourish their profitability.

For this reason, we take a conjunctural approach, observing that the financial tools and strategies of these firms shifted dramatically just before and after the 1997 Asian financial crisis and the 2008 global financial crisis. We also aim to understand finance capital and financial firms in their own terms, as they work to remain liquid and mobile through their inventive financial tools—structured debt, initial public offerings (IPOs), real estate investment trusts (REITs) and special purpose vehicles (SPVs), for example—even if they have invested in infrastructure that appears completely fixed and permanent in its physical form. Since we find that the firms’ strategies rarely focus on one site or project in isolation, but instead are related to other investments elsewhere, we use a relational and inter-scalar approach for our analysis.

The next section reviews the latest scholarship on Southern financialization and introduces our analytical framework, after which we present the two phases of speculative urbanism in India, before drawing out the larger implications at the end.³

Alternative readings of financialization in the global South

We begin by distinguishing between two strands of analysis on the financialization of ‘emerging economies’. The first of these offers a *structural analysis* of uneven flows of capital between the North and South (Arrighi, 1994; Epstein, 2005; Lapavitsas, 2014). The second borrows from scholarly debates such as regulation theory to explore issues of *institutional scale*.

According to scholars offering a structural analysis, finance capital effectively relegates many Southern economies to a *peripheral* and *subordinate* position that exacerbates longstanding inequities in the global economy (Karwowski and Stockhammer, 2017; Pereira, 2017; Mawdsley, 2018; Aalbers, 2019; Budenbender and Aalbers, 2019; Socoloff, 2019). Lapavitsas, for example, focuses on the 1997–8 Asian financial crisis in order to demonstrate how capital from highly indebted governments flowed out of Southeast Asian economies to repay development loans to the World Bank and others. At the same time, foreign private capital abruptly stopped investing, and only returned in the form of large-scale portfolio capital (which includes private equity) under the asymmetric power dynamics of cheapened assets and desperate indebted borrowers. Lapavitsas calls this net outflow of capital ‘reverse accumulation’, a process that described many Asian countries and enriched surplus-capital countries of the global North. Thus, contrary to the wishes and precepts of the Washington Consensus, countries in the global South hit by this financial crisis experienced ‘subordinate

³ Speculative urbanism describes the logic starting in the late twentieth century that is built upon: *new forms of finance*, particularly ‘alternative finance’ from the shadow banking sector; the dynamics of *inter-state reforms* that disinvest the state from land, housing, finance and public infrastructure sectors, shifting authority onto capital markets while playing a more prominent role as intermediary and broker; the rise of *transnational networks of policy experts* that launch *inter-referencing campaigns* for governments to emulate the Shanghai or Singapore models of global urbanism and build ‘world-class’ infrastructure; and the production of an *urban subjectivity* or *speculative governmentality* reliant on intensified forms of risk-taking and speculation to keep up with global-city ambitions and rents (Goldman, 2011; 2020; Birla, 2015; Sood, 2018).

financialization’—a condition in which finance capital moves in greater size and at greater speed, creating heightened volatility through which it extends its power with a *subordinating* effect on the institutions and aspects of everyday life (Lapavitsas, 2014: 249).

Bonizzi *et al.* (2019) make a similar structural argument about how the subordinated position of emerging country economies (ECEs) vis-à-vis advanced capitalist economies (ACEs) affects the recent global process of financialization. They conclude that in emerging economies:

Not only has financialization been mediated by ECEs’ global subordination, but these same processes of financialization may serve to cement or even deepen their subordination in the global hierarchy of nations (*ibid.*: 10).

In all spheres of the advanced capitalist economies, the authors argue, finance privileges advanced capitalist firms and longer-term investments. When finance does flow into the global South or ECEs, it takes the form of short-term capital funded in the currencies of the global North. ‘Hence ECEs are structurally subordinated to ACEs’ (*ibid.*: 1).

Finally, Fernandez and Aalbers (2020) explain how financialization occurs in the global South, working from the assumption that it is a fundamentally different experience than in the global North. Similar to others who argue for the peripheralization thesis, the focus is primarily on a single sector and uses national-level data about capital flows. The authors find that the South falls into a subordinate position while having to catch up with the North, with the power differential situated along national lines. The fact that many loans and lines of credit are in Northern currencies such as the dollar lends credence to their argument that the ‘global monetary structure’ obstructs Southern countries’ attempts to overcome advanced capitalist (i.e. Northern) barriers.

Pursuing this question of global South financialization from another angle, a second set of scholars focus on *the institutional scale* using regulation theory, among others, to look at the role of state actors, international organizations and social forces that shape the norms and policies enabling or constraining financialization (Kaika and Ruggiero, 2013; Halbert and Rouanet, 2014; Bear, 2015; Rouanet and Halbert, 2016; Searle, 2018; Aalbers, 2019; Socoloff, 2019). These scholars argue that the periphery is characterized by a heterogeneity of regimes of accumulation and forms of regulation. Becker *et al.* (2010) find that ‘blocked productive accumulation’ is overcome by strategic financial actors offering innovative financial tools that promote greater liquidity. In other cases, they find ‘mass-based financialization’, where the introduction of credit cards and home mortgages has transformed the relations of middle-class populations to debt and consumption, much to the delight of retail, housing, and finance capital. Many refer to the rise of a shadow banking sector that works with, but is independent of, the official state-regulated banking structure, alerting us to the fact that a large proportion of financial transactions are unaccounted for and work around many state regulatory and oversight activities (Jones, 2015).

With regard to the Indian context, scholars examining recent events have identified the important role that institutional intermediaries play in promoting the idea of a potential gold rush for land and real estate to skeptical investors, both domestic and foreign. One of the accomplishments of these relationships, according to Halbert and Rouanet (2014), has been to ‘filter away risks’, making domestic real estate developers (and home buyers) liable for new financial risks, so that Indian real estate investments could become more reliable sources of accumulation for global investors. These scholars take a methodological approach of ‘following the money’, highlighting the point that the greatest mystery to most of us, scholars and citizens alike, is how the world of finance functions. From this perspective, Searle (2018) investigates how global finance and domestic real estate ‘hammer away’ their differences in the valuation of hitherto

unmeasured and un-marketed assets in order to create the illusion of market certainty for investors.

A third set of scholars, by contrast, see limits to the prevailing notion that everything in the global South can be financialized (Christophers, 2015). Pereira, for example, concludes from his study of housing finance in Brazil that financialization is 'intrinsically limited by the country's peripheral position within global circuits' (Pereira, 2017: 605). Financialization in the global South is characterized as peripheral or subordinate by using indicators such as the lack of secondary markets, unclear liability and bankruptcy rules, and overly regulated banking systems that prohibit such high-risk/high-reward financial tools as have long been common in the North (Becker *et al.*, 2010; Rodrigues *et al.*, 2016; Pereira, 2017). Pereira finds that these limits manifest in the fact that around the time of the 2008 crisis and recession, popular demand for housing in Brazil was sizeable and threatened the political establishment, to which the state responded with a state-backed and managed national housing program ('Minha Casa Minha Vida') that received only a lukewarm reception from the financial community. For Pereira and others, 'peripheral' suggests a major obstacle that has produced little global financial interest in the peripheral economy of Brazil. Yet, if we follow the money—or as we propose, 'follow the financial strategy'—in the context of Brazil's stalled financialization, we would find that at the same time that foreign equity capital was visibly absent from the state-financed housing boom, segments of global finance were investing heavily in sectors suffering from mounting debt and 'capital scarcity', such as the 'world-class' infrastructure for the 2014 World Cup and the 2016 Olympic Games (Gruneau and Home, 2016).

In sum, the major shortcoming of this peripheralization approach is that the scale and unit of analysis tends to be the national economy, focusing on a single sector in which assets, financial instruments and strategies are portrayed as stable, fixed in both time and space. Studies on urban financialization need to do more to engage with the role of business and the characteristics, actions and strategies of finance capital. This includes the world of alternative finance and non-bank financial companies (NBFCs) such as hedge funds, private equity funds, insurance providers, non-bank lenders and asset managers. Although these forms of finance are unregulated by most national and international agencies and thus hard to trace (and tax), they are the major financiers of high-risk/high-reward investments around the world. Together, they comprise what the conservative International Monetary Fund (IMF) and US Federal Reserve call the 'shadow banking system', flying 'below the radar of traditional bank regulation' (McCulley, 2007). The range of firms in the shadow banking system include high-profile Wall Street firms as well as insurance companies that act like megabanks, such as AIG, Prudential, GE Capital and MetLife.

These organizations do not act like your average bank lender. For example, NYC-based Goldman Sachs conducts most of its trades through its office in London where such trades are not taxed or traced, and most of its capital sits comfortably (albeit virtually) in tax havens in Panama, Singapore, Mauritius and the Cayman Islands where most of the world's major financial transactions originate. Moreover, Japanese, Chinese and Singaporean PE funds have been investing in commercial and residential projects in India throughout the past decade, as they have too in the US and various parts of Europe, Africa and Asia. PE funds recruit wealthy institutional clients (including governments and pension funds) from all over the world, they invest in each other's funds, and their executives often sit on each other's boards of directors. These alliances, investments, havens and sources of capital are relational and interconnected, and ownership and origins are blurred; they cannot be easily placed in the global North or global South, nor do they exclusively reflect nationalized characteristics.

Furthermore, speculative finance is rarely interested in one place or city or piece of infrastructure, and neither is it nested within a single nation with any permanence

or allegiance. PE firms do not adhere to these sectoral and regional demarcations. Blackstone, for instance, aggressively buys depreciated office space in India at the same time that it buys a majority stake in a US company in the business of ancestry DNA and consumer genetics (Oguh, 2020). By using the optics of finance capital, we see the main characteristics of PE firms as liquidity, mobility and arbitrage: their time horizon in any investment is a fraction of that which the nation-state expects (to help it build a global city, for example) and often ends long before the cement is poured. Where some scholars may see *limits* of financialization, we see finance's preferences and strategies. Adopting the subordination perspective risks glossing over the lived experiences of financialization of both the local (Southern) elites eager to work with and profit from foreign investment capital and the urban majority who are trying to game the system so as to get a construction job or rent a home. Studies of the financialization of the global South should avoid a 'methodological nationalism' in which it is assumed that national borders prevent flows and reflect cultural characteristics such as not-yet-modern or underdeveloped or even highly financialized (Goswami, 2003; Brenner, 2004).

An inter-scalar, relational approach

Given these considerations, we develop an approach that emphasizes the *relational and conjunctural aspects of inter-scalar processes* that operate across sectors, borders, actors and sites (Sheppard *et al.*, 2015; Hart, 2018). In India, both before and after the 2008 financial crisis, global private equity players mobilized assets from different continents as collateral for their investments, hedging the various currency, interest rate and market differences around the world to their advantage. What appears as scarce or financially imprudent at one moment in one sector in one country can be feasible and logical elsewhere or at another moment. From the perspective of finance, what happens in Madrid is linked to events in Rio de Janeiro, and vice versa, especially when the same global firms have branches in and circulate capital through investments in both places. Location matters, but in the context of finance, location is relational and also a strategic tool of arbitrage (Ho, 2009; Bear *et al.*, 2015; Upadhyay, 2020). For instance, we have learned that as the largest private equity firms captured the markets of 'depressed' assets of unsold housing and unfilled office space in India, they were already leveraging these and similar assets as collateral for investments in the US, Spain, Sweden, Turkey and the Czech Republic. This approach places critical inquiry within a spatio-historical and conjunctural analysis to reveal both the concrete and abstract inter-connections that can help us see how they shape broader processes (Hart, 2018: 389).

Apart from the relationality between disparate geographies, this inter-scalar lens needs to be foregrounded in a second way. We argue for a perspective that highlights the *switch* in financial activity that occurs between sectors and between financial instruments. We find that in India, private equity firms redirected investments into commercial real estate once the housing market failed to deliver the expected returns. At the same time, private equity firms also began to offer debt finance to over-leveraged developers instead of buying their equity. So, not only did the *sector* of investment shift—from housing to commercial property—but so too did the financial *instrument*—from equity to debt. Switches between sites and tools of speculation unsettle scholarly claims that there are obvious limits to financialization in global South countries: the form of investment morphs in the face of an approaching and manufactured 'limit'. Focusing on specific sites or sectors in isolation or as discrete events misses the relationality of capital's mobility. Bracketing a seemingly bounded city, site or context produces what Michael Burawoy calls disciplinary 'blind spots'.⁴ To understand these inter-scalar relational and

⁴ Notes from Burawoy's 'Exploring Blind Spots' presentation at the University of Minnesota and keynote address at the Nordic Sociological Association conference, 2013.

spatio-temporal dynamics better, we adopt the optics of capital and study the financial tools and the institutional practices it creates to capture value and profit *through* liquidity and exit (Gotham, 2009; Aalbers, 2017), irrespective of borders, as if by a 'sublime trick of the imagination' (Baucom, 2005). In short, our analysis focuses on sites *in-transit* and *as-process*.

Following Gillian Hart's incisive analytics (2018), we treat a socio-temporal space (such as a city or a set of global-city projects) less as a thing impacted than as a process (Lefebvre, [1974] 1999), and the influence of seemingly 'external' forces such as global finance as processes working in and *across* sites and scales. The North/South categorization can pre-determine how the 'universal tendency' of the North works and how the 'empirical case' in the global South is impacted (Hart, 2001). Instead of pursuing the often asked but problematic question of how global finance *subordinates* a place and how an economy becomes *peripheralized*, we emphasize the relational dynamics among different actors and forces that generate uneven and combined processes of financialization, urbanization and possibly even subordination at different historical conjunctures. After all, forms of subordination and domination occur along lines of differentiated social groups (i.e. race, class, gender, caste) and across national and economic boundaries rather than only within the imagined containers of a siloed city, nation or economy (Mitchell, 2002; Goswami, 2003).

Focusing on the relational dimension helps us understand the power of arbitrage (which works across sites) and the practices involved in keeping capital liquid and mobile (that is, anticipating and setting the conditions for the next move). It reminds us to situate a place-based set of practices within a larger context of the working of the multi-sited global firm and the full map of its trades and deals. It is through these transboundary channels that finance capital gains value, as it switches and shifts in and out of residential real estate at one moment and is reinvested in commercial office space in the next, anticipating value increases and market consolidation. However, trying to navigate this vast terrain as researchers by using old-fashioned methodological tools honed by national or infrastructure-as-fixed data sets will elide more than it reveals.

One final point about this peripheralization thesis needs to be mentioned. Many cities in the global South have exploded with the growth of 'world-class' infrastructure, which has also created a wealthy middle class with disposable income (Ong and Roy, 2010; Ghertner, 2015; Shatkin, 2017). During this era of variegated speculative urbanism, the Indian economy has been catapulted into the position of the fifth largest economy in the world. These scholarly perspectives struggle to accommodate such developments, and we question how this rapid growth and unprecedented expansion can be simply interpreted as Southern peripheralization.

Similar to Socoloff's study (2019) of local coalitions of developers and elites poised to generate an (elite) consensus on the desirability of financialization, we focus on the agentic practices of developers, financiers and state officials in their efforts to create a speculative urban marketplace (Buckley and Hanieh, 2014). By following the shifting strategies of financial players, we can better understand both what Kaika and Ruggiero (2013) call 'financialization as a lived process' and what Aalbers refers to as the variegated nature of real estate financialization (Aalbers, 2017; 2019). But we also heed Christophers' warning that the concept of financialization is so overused that it can easily lose meaning (Christophers, 2015).

To address this concern, we ground our analysis in two very specific moments of real estate financialization in India. We identify two phases in its real estate sector characterized by distinct alignments among financiers, consultants and developers. With regard to the role of international finance capital, we identify a stark contrast between its *market-making 'boom' phase* (2005–2010) and its *market consolidation 'bust' phase* (2011–present). The business logic that defines these two waves reveals the constitutive dynamics of speculative practices, changing economic interests, and the

unique modalities through which finance capital operates in a rapidly changing real estate market.

The findings presented here come from a research project carried out over a 10-year period utilizing interviews with more than 200 informants, participant observation, ethnography, and firm-based and national economic data analysis, organized by the lead author, to which the second author contributed. Interviewees include farmers, laborers, government officials at multiple levels, investors (local and international), business managers, land brokers, aggregators, and scholars of the region's economy and ecology. More than 35 informants were interviewed for the empirical sections of this article, some of them multiple times. They work for real estate developers, research and consulting firms and senior government offices; they include land brokers, intermediaries, lenders, borrowers, investors, economists, journalists and business management professionals. This research and analysis focuses on the upper end of the market—large developers, projects and deals. We employed the services of two financial analysts to help us gather and analyze data from a national-level data set on banking and finance as well as firm-level data on debt, borrowing, earnings and housing inventories (Aundhe, 2019; Narayan, 2019). We conducted participant observation at a series of elite government-corporate conferences in Bengaluru, New Delhi, Mumbai and New York City on the theme of financing urban infrastructure. We also participated in public and academic workshops that became productive opportunities for information exchange (Goldman *et al.*, 2017). These engagements helped us to better understand the interlinkages among Bengaluru's speculative land market, the involution of rural life, and the intimate role of state and financial actors and institutions in India and beyond.⁵

Phase One: market creation and 'capital dumping' (2005-2010)

Our research shows that the first phase of the financialization of India's urban real estate market, from 2005 to 2010, is marked by high-volume speculation based on the potential of a new market in upscale residential housing projects. As soon as the laws changed to relax oversight and approval procedures, foreign private equity firms pumped vast amounts of capital into real estate projects. In 2005, thanks to a major policy shift, foreign investors were allowed to invest directly in India's land and real estate sector.

From 2005 to 2010, the number of PE deals exploded from just a handful to 286, and a record US \$5 billion was committed to real estate projects in 2007 and 2008 alone, leading to a much higher than average investment per deal. At that time, one third of the total PE investments in India poured into real estate firms developing a total of 82,900 acres, twice the area of the whole of Chennai, India's fourth-largest city (Annamalai and Doshi, 2012). City-specific developers capitalized on the frenzy at its peak by choosing to list their shares on the stock market, and business magazines published cover stories featuring company promoters in the most positive light. Shares were issued at a premium and companies managed to raise millions of dollars by parting with only a small fraction of the total shares. Demand for these shares was high, and at the time of initial public offerings (IPOs) in the sector, oversubscription was common. DLF, the country's largest developer, diluted only 10% of its total stock in 2007 and still managed to raise 9,500 crore rupees (US \$1.33 billion), which led to a total market capitalization of 95,000 crore rupees, a spectacular rise for the industry at that time. Sobha, a major Bengaluru-based company, issued 12% of its stock, and the initial issuance was so popular that its stock was oversubscribed 102 times (interviews, 2017–2018).

⁵ The research has been supported by a Senior Fellowship from the American Institute of Indian Studies, University of Minnesota faculty research grants, and a multi-year National Science Foundation grant (# BCS-1636437) with four other co-Principal Investigators working in Bengaluru and Jakarta on the relational-conjunctural project 'Speculative Urbanism: Land, Livelihoods, and Finance Capital'.

This aggressive market-making phase was defined by capital-flush private equity rushing to enter the Indian market alongside a handful of established developers wanting access to this new source of capital. Our interviewees—executives and consultants in real estate and finance—define the Indian real estate market between 2005 and 2010 as ‘exuberant’, ‘bullish’ and ‘euphoric’. PE funds aggressively invested in real estate projects and the performance of fund managers was evaluated on the basis of how much capital was ‘dumped’ into the sector. Thus, PE firms incentivized reckless investments that only reinforced exaggerated expectations. Representatives of global private equity were eager to move profits out of the unstable highs of mortgage-backed securities in the US and Europe in anticipation of a period of levelling out in those markets. However, India was uncharted territory, and this created welcome opportunities for Indian developers keen to receive plenty of capital to buy prime land and engage in land banking, at a time when they were failing to honor their existing commitments to home buyers.

A critical aspect of this speculative market was the increased investment into land banks and the *disincentivizing* of the construction and completion of projects. A senior investment broker, acting on behalf of large PE funds, discussed how international private equity pumped huge amounts of capital into the local market to the extent that builders were no longer driven to execute the project:

Private equity players came in a big way as soon as the gates opened in 2005. They saw it as an emerging market. They thought they would make a quick buck. They love emerging or frontier markets. They came in saying we want to put in US \$50 or US \$100 million and the developers in India who were pretty unorganized and unregulated just told them huge stories with grand promises. So, PE funds started dumping their capital. Buying 50% or 60% of stakes. What they never realized is that these projects would never be completed in the proposed timeframe and that Indian developers no longer had skin in the game. During the boom period from 2005 to 2008, private equity came in with the money and developers took the money and cashed out (interview, 5 September 2017).

He explained that private equity assumed that buying a 50% stake in a project would align the interests of the two partners; however, once the developer received the funds it allowed them to ‘cash out’. Inundated with fresh capital, developers were no longer incentivized to adhere to traditional business plans, expedite approval requests or, in some cases, carry out project construction. With money in hand, the interests of the foreign investors and local developer diverged and developers were not constrained by the same business logic and temporal pressures as PE funds. To quote this same PE representative again:

The developer thinks: ‘*Mera paisa to agaya. Agar banega to banega, nahi to nahi*’ ('My money has come. If it's constructed, it's constructed. If not, then it's not'). Sticking to the business plan isn't mandatory. The (local) guy who you had aligned with had already pulled his money out. He was now in no rush. The joke is, when they first came into the business, the PE guys said: ‘Look we have the money, you have the experience, together we are a lethal combination’. And the developers said: ‘Well now we have the money, hope you had a good experience’!

During this first phase of speculation, developers held the upper hand as crucial intermediaries and as points of entry into a potentially lucrative market. They were able to dictate the terms of the agreements, insisting and persuading investors that the exorbitant land valuations were fair.

Flush with cash, large land assemblers mobilized their on-site brokers and strong men to find and acquire land from adjacent farmers so as to bundle their farmland into sizeable plots for developers in the future, a painstaking and time-consuming process (interviews, 2015–2018). On urban peripheries, land disputes between villagers and with land brokers interrupted the life cycle of many projects. There was a surge in court cases as big promises of money were made to family or village members in the hope of creating a fissure between neighbors or families whose members were resistant to selling at the price proposed (interviews, 2010–2018; *The Hindu*, 2014). During this post-2005 period, with foreign investors hungry and eager, developers with cash in hand were expected to quickly acquire and aggregate land for urban development, as if all the farm owners would roll over and forfeit their land claims so easily. Many did not (Goldman, 2020).

In Phase One, within the urban real estate sector, 50% of PE funds were directed to the residential segment and 26% to mixed-use projects (i.e. housing plus retail and office space). Only 1% of total foreign investments went to industrial projects. In this period, private equity bet heavily on housing and contributed to the discourse around accelerating the wealth creation and consumption patterns of a newly globalizing India.

Despite being a limited market with relatively few buyers, the profit margins in luxury homes, villas and gated communities were substantial. Consultants explained to us that the variation in the cost of production across market segments (i.e. low, middle, luxury) is minimal, since the cost of the raw materials, labor, electrical fixing and plumbing are more or less comparable across all sectors within the housing market. By adding a few touches at relatively little extra cost—luxury icons such as a clubhouse and a swimming pool, opulent fittings and upscale flooring—the selling price of the project shoots up. The largest developers sold only a fraction of their luxury units yet made a much higher profit than from lower-valued housing schemes. Unsold inventory is built into their business model, explains an industry consultant; they are prepared to *not* sell all their inventory. He asked rhetorically: ‘Why would you be altruistic and build affordable housing on land that can give you much higher profits?’ (interview, 1 September 2017).

To sum up the phase between 2005 and 2010, investors offered developers capital in the early stages, and this capital was spent largely on land acquisition and the promotion of numerous luxury projects, less so on construction and project completion. Funds predominantly flowed into the residential market and investors sought an exit through IPOs. This market-making phase, defined by the abundance of foreign capital, transformed the business practices of the Indian real estate sector by enabling large-scale land acquisition, hoarding and over-production.

As the next section shows, however, this phase of market-making does not lend itself to a neat analysis of how PE capital successfully extracts from and dominates local actors. The balance of power is not that straightforward or static. Typically, analysis of speculative cycles stresses the windfall profits of the early financial investors who cash out swiftly. Here, though, we find that capital dumping allowed the *builders* to cash out. Investors found that in the real world, there were just too many obstacles to acquiring land and building luxury at the pace they expected to turn over their capital. A series of transaction obstacles—the difficulty of grabbing land and holding onto it when land prices skyrocket and land owners expect their own share of the profiteering, the perpetual problem of acquiring cement and steel affordably, the stalling of government agents in licensing and supporting any rapid-paced developments without their own compensation—combined to thwart PE plans and gains. Scholarship should not assume *a priori* that it is simple to extract hefty profits in any place and then quickly exit: as more people (and institutions) become enamored with the speculative urban condition of possibility in and around Indian cities, they too demand a piece of this speculative pie. From the standpoint of PE players, things did not go according to plan. As we will show, from these setbacks, a new set of logics and financial strategies arose.

Finance and real estate in crisis: the short-lived bubble bursts

Wild speculation proved to be unrealistic, and investment funds performed poorly. By 2010, relations between PE investors and developers soured, from which emerged a consensus that private equity had 'burnt its fingers'; a recurring phrase in our interviews. Many projects were riddled with long delays in construction.

Interviewees from the private equity side explained that in retrospect, equity was terribly over-valued. The collective desire for hyper-valued assets greatly overrode the longer-term interest in producing more realistic valuations so as to prevent future losses. Inflated value is not a simple miscalculation or the outcome of a technical error. In a speculative scenario, a confluence of interests occurs. Third-party rating agencies and property consultants conducting property valuations were, to quote a private equity representative, 'hand in glove' with developers. Similarly, the director of a major global consulting firm elaborated on the ways in which converging interests resulted in what he candidly called 'a cartel situation'. Consulting agencies performed the allegedly neutral task of property valuations while also brokering the deal between investor and developer, which this director acknowledged was a 'conflict of interest' (interview, 10 September 2017). Rating agencies are hired by the same firms they are rating with the task of legitimizing the speculative imagination. They inflate the value of these investments as well as their future prospects, which contributes to a wider public impression that such speculation will be safe, profitable and enduring.

Meanwhile, developers became increasingly burdened by debt and their share prices fell. An exemplary case comes from the experience of a respected high-end developer in Bengaluru, which we call Top-Star. Having ridden the high winds of rapid expansion only to become saddled by sizeable amounts of debt, Top-Star hired prominent financial analysts to help it raise cash. From 2005 to 2015, the price of an acre of land in Bengaluru rose at many sites from 10 lakh rupees per acre to 10 crore rupees (US \$1.5 million), representing a 900% increase over 10 years. During this period, Top-Star, a family-run business that had started 10 years earlier with just one building development, was constructing more than 20 large-scale residential projects covering three million square feet. Moreover, it promised another 75 projects across eight Indian states, with a land bank of more than 3,000 acres. The firm rode the boom and invested big: from 2001 to 2008, growth was phenomenal, and the number of staff increased from a few hundred to 10,000. 'But so did its debt grow', a consultant close to the firm noted. The firm became unwieldy with too many incomplete projects, too much debt, and anxious lenders and home subscribers nipping at its heels (interviews, 2016–2018).

Top-Star hired financial analysts to help figure out how to stop the bleeding, and of course, the only option provided was an initial public offering (IPO). Top-Star's share price started at Rs. 640 (US \$10). After the IPO, the share price rose immediately to Rs 1,240, but it then plummeted to Rs. 65. In other words, after the IPO spike in price, the initial foreign investors sold out as planned; this was followed by a crash in the share price, and the original Indian investors and the company were left holding substantially devalued shares.

The breakdown of the cozy relationship between developers and investors is best expressed by the mode through which foreign private equity (in non-IPO scenarios) tried to recoup sinking investments. The property consultant Jones Lang LaSalle (JLL) analyzed the methods and strategies of private equity exits at the end of Phase One and found the following: typically, private equity would exit through the IPO route or via a third party that buys the equity investment at a higher valuation; in this period, however, 70% of the PE funds exited via 'promoter buy-backs'. This means local developers themselves were obliged by agreement with private equity to buy the shares back, even at a loss (JLL 2011, 2014). The JLL report noted that 'the secondary market has no depth', and therefore there was little demand for the stocks PE firms had invested in.

Within most contracts there was a 'safety net' clause stating that if the projections failed to materialize, the promoter (developer) would repay the initial investment

with the guarantee of an increased share value locked in. These ‘promoter buy-back’ commitments reveal the extent to which projections of asset value appreciation were far off the mark, and the buy-back guarantee explains why PE investors were willing to enter this new market in the first place. (A weak secondary market is a condition that would normally keep private equity away, while a strong secondary market is precisely the condition that allows private equity an easy exit.) This situation led to acrimonious battles between the two parties. As one of our PE representatives explained:

Every buy-back comes after incessant begging or threatening. The buy-backs are forced. Half our deals are in the courts. The buy-backs were not profitable [for investors], they were a disaster (interview, 5 September 2017).

He added that the buy-back clause violates Indian law since it illegally guarantees a future price and purchase of unlisted shares, otherwise known as oligopolistic practices of coercion and price fixing. In some Indian court cases, PE firms respond to that accusation by claiming that their funds had been mismanaged and/or embezzled. In other cases, they threatened builders with personal and firm-level audits. In essence, the fallout between developers and investors became as dramatic as their courtship had been just a few years earlier.

It is possible to interpret this fallout as reflecting the ‘limit’ of financialization in India. In other words, the limited secondary markets, the downward valuations of local firms, and the growing quantum of unsold units together indicate an absence of demand and consequently that there is an inherent limit to the operation of finance capital. We argue against such a reading. As the next section shows, financialized logics were not thwarted so much as radically reformulated. These discordant dynamics set the conditions for new financial strategies to appear and for the second round in the making of India’s financialized real estate market. In Phase One, private equity conjured up a market that complemented Indian developers’ own expanded agenda. In Phase Two, private equity returned with new financial tools and power that enabled it to shift out of this plummeting residential housing market into new markets, some of which they themselves inspired.

Phase Two: from market creation to consolidation in a bust cycle (2011–present)

In this second investment phase, fewer PE firms returned, but those that did successfully focused on deploying new strategies and creating non-competitive markets. The largest ones—GIC-Singapore, KKR, Blackstone, Brookfield Asset Management, Carlyle Group—came to dominate Phase Two. Given the numerous failed investments, weak sales and paralyzed projects, what could possibly maintain private equity’s interest in the minefields of Indian cities? *The basic answer is that new low-risk opportunities were being offered by over-leveraged developers and banks in a newly remade marketplace shaped by fewer dominant players.* Phase Two is marked by a dramatic overhaul of the strategy by foreign finance capital and in particular by private equity taking advantage of the over-leveraged real estate sector. Table 1 summarizes the key points of comparison between the two phases.

Since those days of cat and mouse, PE firms returned to India deploying a new set of tools, and much more leverage. When asked what was different the second time around, a Mumbai-based investor in 2017 explained:

The euphoria of 2005–2008 has not come back. This next phase of the contemporary debt-driven period is marked by a completely different strategy, in a different financial environment: *the cats have left and returned as vultures* (interview, 12 June 2017).

TABLE 1 Two phases of finance-developer relations

Market-making–boom cycle (2005–2010)	Market consolidation–bust cycle (2011 onwards)
Large-scale land acquisition	High rates of unsold inventory
Capital dumping (easy and cheap access to capital)	Capital scarcity/raised costs of capital
Oversubscribed shares of developer firms	Sharp declines in share price: 50% of nation's developers go bankrupt
Private equity enters through developers' IPOs and equity investment into SPVs	PE offers high-interest structured debt and invests in liquid bank assets (NPAs)
High investment in luxury housing	High investment in commercial real estate
Converging interests among Private equity, developers, intermediaries, and speculative buyers	Antagonistic relations between developers, PE, and buyers.

SOURCE: Authors' research

Relations between finance and real estate in Phase Two are defined by a series of new strategies on the part of private equity to regain control of the market and secure steady, predictable rates of return. While some scholars might read the withdrawal of private equity from residential real estate in India as indicating a limit to financialization in underdeveloped marketplaces—never get burnt twice—finance capital itself reveals a much more nuanced set of strategies. Thus, stalled projects, incomplete construction and low sales in the housing market do not reflect the failure of PE-led financialization or its inherent limits. Instead, it demonstrates the value of a ‘follow the financial strategy’ methodological approach that traces shifts between sectors, strategies and regions. At an actor-specific level, these switches also demonstrate the ever-dynamic power relations between developers and investors, showing the tenuous, adaptive and malleable relationship between speculative capital and local elite developers.

In this second phase, PE firms largely refrained from investing in equity and early stages of projects. Interviews, reports and press articles reveal that the key strategies private equity deployed were to withdraw from large projects which were flagging and instead issue structured debt, invest in the new national-level market of depressed assets, and shift capital from residential housing to ‘under-valued’ and over-leveraged commercial (i.e. office and retail) properties. In dealing with developers, private equity primarily returned in the form of structured debt, thereby reducing PE firms’ liabilities from the tumultuous world of urban real estate and guaranteeing themselves a steady rate of return via debt-plus-interest payments and transaction fees (Ghosh, 2015). PE firms now offer developers loans with fixed interest rates of 20%. The tables turned in Phase Two as finance capital recrafted the rules in order to offload the risks of investment more securely onto developers in this volatile speculative market.

With a keen eye toward capitalizing on debt, private equity focused on the emergent markets of depreciated assets, under-occupied commercial office space, unfinished housing projects, and unsold real estate inventory (Knight Frank, 2017). Across India, developers’ portfolios overflowed with unproductive and unsold assets, with developers forced to raise funds just to re-finance existing loans. India’s largest developer, DLF, held outstanding debt of 26,800 crore rupees (US \$4 billion) by 2018, and has been selling off major assets at a substantial discount, with large chunks of it sold to foreign PE firms.

‘India’s Bad Debt is Looking Better to Investors’, declared a headline in *The New York Times* (Raghavan, 2017), reporting that India’s banks were carrying almost US \$20 billion worth of bad loans in 2017. These were dubbed ‘toxic assets’ by the equity firms buying them up cheaply; a phenomenon similar to what was occurring in Spain, Greece, Ireland and Turkey (Smyth and Gittelsohn, 2013). Once bankruptcy laws and insolvency codes were rewritten in India, Indian debtors were held to the fire of stringent pay-back rules. By early 2019, the size of non-performing assets (NPAs), or unrecoverable loans,

for India's public banks shot up from US \$20 billion to US \$50 billion (Business Standard 2018; interview with investment banker, 28 July 2019). Aside from purchasing the banks' toxic assets, major financial firms were hoovering up depressed assets from the largest sector in debt to the banks: real estate. India's new market of NPAs was created through a series of bold and fast moves by the central government under the guidance of foreign financial analysts as well as PE firms which then rushed in to capture their own piece of this primed market for themselves (Ghosh and Chandrasekhar 2017; Kaul 2018; Paul 2018).

By 2018, India's non-banking financial companies (NBFCs), once a major source of capital for builders, had become extremely reluctant to offer debt to real estate players, given that their risky foray into real estate in the previous phase had left them dangerously over-leveraged. Global private equity gladly filled this gap, becoming one of the sole institutional sources of finance for cash-strapped developers (Babar, 2019). Data from consultant reports show that while the amount of private equity flowing into the sector in absolute terms may have reduced in the second phase, it accounts for a much larger portion of total inflows. In 2010, PE funds accounted for 24% of total inflows to real estate, while banks accounted for close to 60%. By 2016, this pattern was reversed, with PE funds accounting for 75% of the total, while bank lending fell to 24% (Narayan, 2019). Once banks and other financial institutions grew more circumspect in their willingness to lend to builders, private equity secured its place as the main source of institutional finance. In sum, in Phase Two we see how quickly PE capital first helped to fuel the speculative fires of over-valued markets, next consolidated its position as a key source of finance, and then helped shape the new market in non-performing assets, which spread across India's business sectors as a new investment opportunity for PE firms' own portfolios. Not only does Blackstone today dominate this marketplace for NPAs in India, but India has become Blackstone's most profitable portfolio, earning the company higher profit rates in India in 2019 than from its investments in the US and Europe.

The largest global PE firm in India, Blackstone, jumped on these opportunities by deploying a record US \$10.4 billion over the decade and US \$6.6 billion in the most recent four years of Phase Two. Blackstone profited handsomely from these large deals, exiting India by 2019 with an astounding US \$4.5 billion. In the process, Blackstone became India's largest landlord. (By 2020, Blackstone became the world's largest corporate landlord, despite having only started to acquire real estate in 2010, with absolutely no prior experience in the sector.) Across India, Blackstone owned a record 114 million square feet of office space, albeit with limited liability for the asset's *fixed* nature. When Blackstone floated India's first real estate investment trust (REIT) it was met with so much anticipation that the shares were heavily oversubscribed and purchased at above-market prices. The value of this REIT for Blackstone is that it generated a huge inflow of capital from Indian investors excited to buy shares, enabling Blackstone to cash out of its own investments in these buildings, thus turning what was a fixed asset for the company into a purely liquid one that can then exit the Indian marketplace. These strategies among others allowed Blackstone to keep its relationship to fixed (illiquid) assets at a minimum. The size of these deals and the desperate need for 'scarce' capital combined to give firms like Blackstone a substantial advantage. In the words of the head of Blackstone's real estate arm, Turin Parikh, in a 2019 interview with *Forbes* magazine: 'Our philosophy is, we don't like to do small, discreet deals. If we like a particular thing then we do it in scale and in a concentrated manner so that we can influence the outcome and we spend time and resources to make it work' (Sarkar, 2019). With this statement, Blackstone's executive neatly articulates the defining strategy of monopoly capital.

On the side of the developers, three clear trends emerge during this phase: the buildup of unsold inventory, falling profit margins, and an industry-wide consolidation that squeezes out smaller players. The following analysis comes from the financial

statements of the top twelve developers across India over the past decade, with a special focus on the top developers in Bengaluru, a city considered one of the hottest spots for speculative investment (Vivek, 2018). One trend we find is that of increased liabilities (i.e. debt) for all developers over the past decade and a trend between 2009 and 2015 of a fall in the ratio between total liabilities and total sales (Narayan, 2019). Our analysis of firm-level profit-and-loss data also shows that the profit margins of Bengaluru's largest firms have fallen dramatically since 2012. Among the largest developers, the profit margins of Puravankara and Sobha have halved and that of Prestige has fallen by a third.

Furthermore, these reports reveal that the amounts firms are spending on repaying debt, paying interest and giving dividends to shareholders add up to much more than their cash revenues (Narayan, 2019). Early on, access to capital allowed these firms to expand and set unrealistic prices, but the mounting stock of unsold luxury housing and extremely weak sales did not result in the price corrections that conventional pricing theory would predict (Kaul, 2019). Instead, sales and inventory trends reveal a significant disjuncture: builders continue to produce units at a pace that far exceeds what the market can absorb. Indeed, the growth of inventory measured by both volume and value has far exceeded the growth in sales (Aundhe, 2019). The over-supply of unsold commercial real estate in India's eight top-ranked cities rose steeply from 346 million square feet in 2009 to 784 million square feet in 2018, at an annual compounded growth rate of 9.5%. This mirrors the extremely high volume of unsold residential inventory (1,248 million square feet) across India. Figure 1 shows how the stock of unsold commercial and residential units for four of the largest companies in Bengaluru grew after 2010.

While sales volumes in 2019 are ~1.3 times what they were in 2009, inventory volumes have more than tripled (to ~3.3 times). When measured by value, the divergence is even starker, with sales value increasing only ~1.6 times, while inventory value has ballooned to ~4.7 times what it was a decade ago (Annamalai and Doshi, 2012). The value of unsold stock is now four times the value of sold stock in India's top eight cities (*Financial Express*, 2019). In the larger cities such as Chennai and Bengaluru, and smaller ones such as Cochin/Kochi, new buildings in the center of the city are considered to be only 70% occupied, while along the fast-growing periphery only 20–30% of homes are apparently occupied (interviews, 2016–2018). This occupancy problem for new housing comes at a time of surging unsatisfied demand for truly affordable housing for lower socio-economic groups (Basole, 2019).

Weak sales and rising inventory would cause companies alarm in virtually every other segment of the economy. Unsold stock is typically a reflection of wasted investment (i.e. a drain on profits) and capitalist enterprises strive to closely track and predict demand so as to avoid such pile ups. The real estate sector seems peculiarly indifferent to these pressures, however. We argue that external sources of finance and large land banks allow developers to remain impervious to the actual purchasing ability of consumers. Large developers rely on expensive private equity to buttress their staying power in the face of low sales. So much so, that the trend of builders' setting high prices and sitting on inventory has resulted in government directives to reduce prices.

A final trend that defines Phase Two is consolidation among developer firms. While developers' untenable burden of debt and liability has created an immense opportunity for finance capital, smaller developers are being squeezed out of the market, resulting in greater consolidation among the few remaining developers (Aundhe, 2019).⁶

⁶ In 2016, the Real Estate Regulation Act (RERA) was passed by the Indian Parliament in part to protect home buyers from the malpractices of developers. For example, RERA prohibits developers from diverting funds raised for one project into another, which was once an extremely common practice (as was the case in Phase One). Financial rules of this kind have hit small and medium-sized developers hard and at the same time have enabled large developers and their investors to acquire greater market share, leading to market consolidation and concentration.

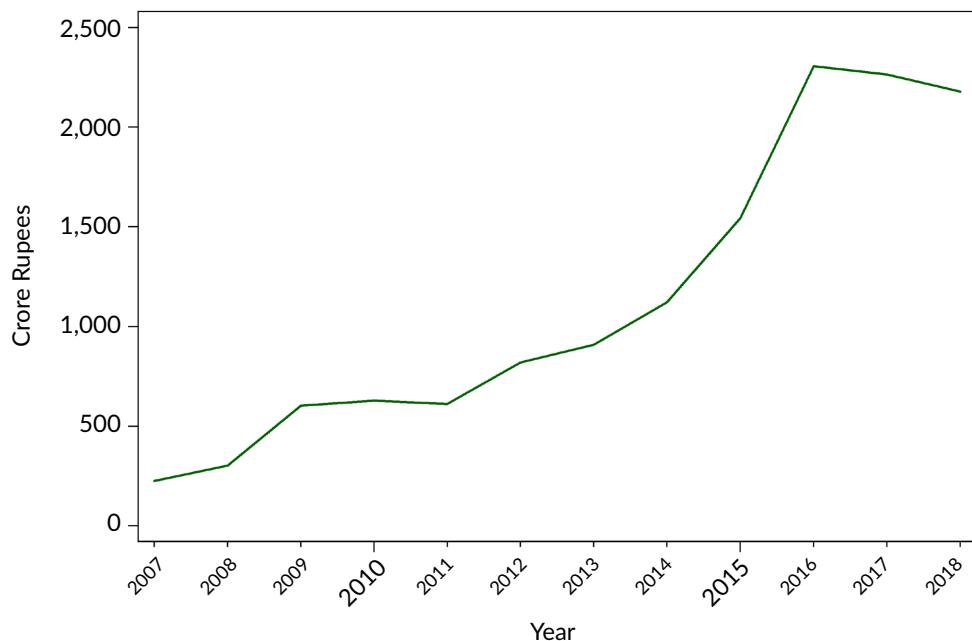


FIGURE 1a The growth of unsold inventories: Brigade Enterprises (source: data from annual reports, documented by Amay Narayan)

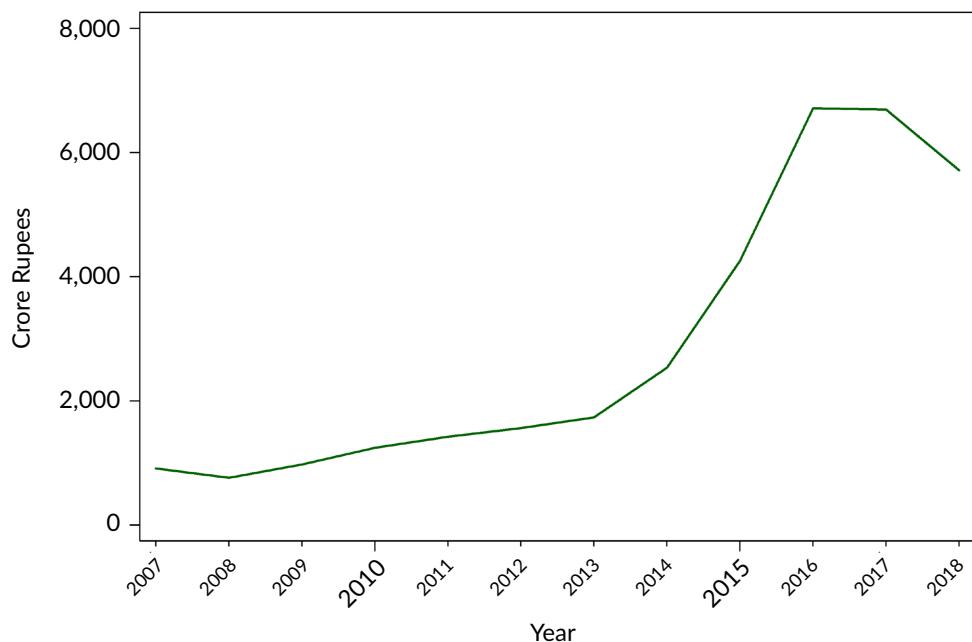


FIGURE 1b The growth of unsold inventories: Prestige Estates (source: data from annual reports, documented by Amay Narayan)

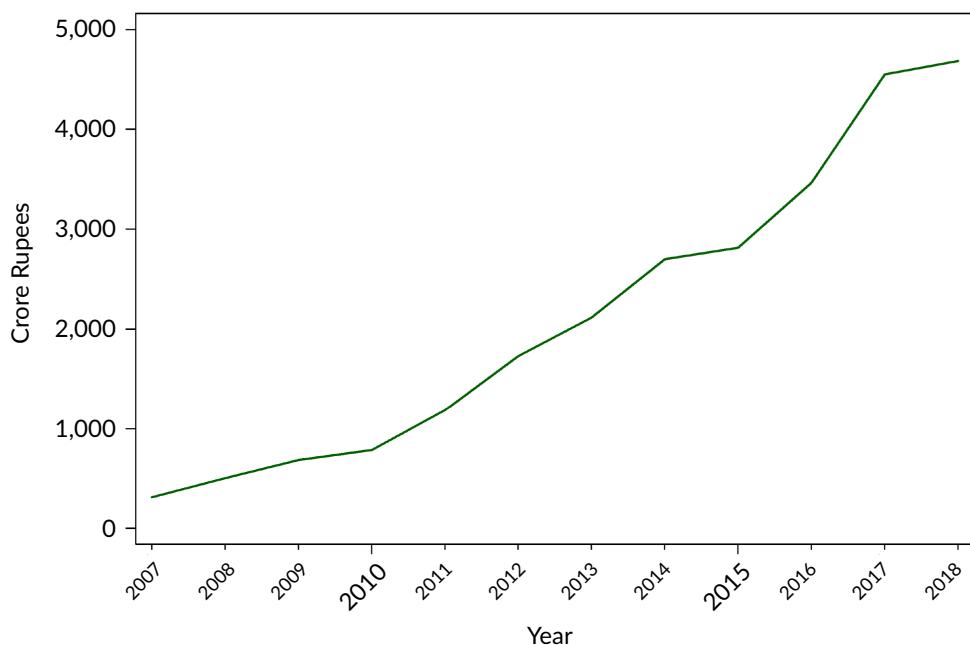


FIGURE 1c The growth of unsold inventories: Puravankara Ltd (source: data from annual reports, documented by Amay Narayan)

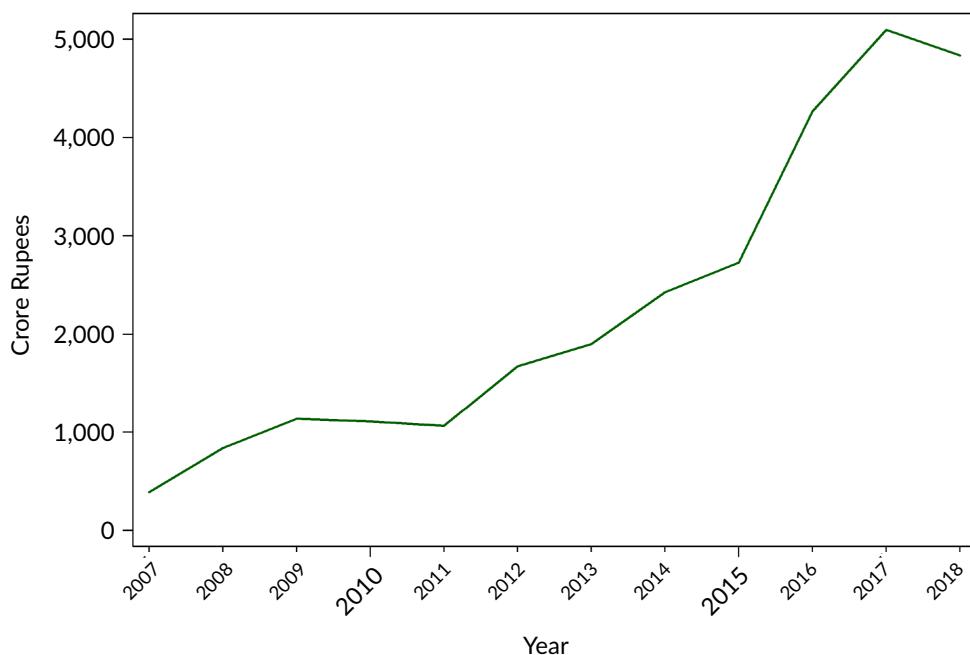


FIGURE 1d The growth of unsold inventories: Sobha (source: data from annual reports, documented by Amay Narayan)

By 2018, more than 50% of the developers in nine of India's largest cities had folded—a shocking collapse and reconfiguration of the industry.

A longtime employee of a land-aggregating firm explained the pressure and risks on smaller enterprises, as depicted in Table 2:

We are the biggest land banker in Bangalore, and yet even for us, it has gotten difficult, and with such high interest on the borrowed capital, to still make enough money. Most players have dropped out, the business has become too risky. Many of the local players can no longer compete. The drive to acquire land for future luxury projects [even while existing ones are empty or half-built] keeps private equity interested, but it only raises the stakes for developers, forcing them to consolidate or disappear (interview, 22 June 2016).

Industry consolidation has narrowed the possibilities for small and medium-sized companies to produce affordable housing, however much the demand for basic housing continues to grow.⁷

Thus, by 2018, distressed asset purchases had become financial investors' biggest business in India. As soon as one of the largest non-banking financial companies, IL&FS, collapsed, alarm bells rang and triggered the 'pincer grip' conditions of sky-high credit lending rates alongside a paucity of credit that has ultimately undercut the whole national economy (*Economic Times*, 2018). Small and medium-sized domestic finance and real estate firms have fallen into deep trouble. As early as 2016, the central government stepped in with life preservers in the form of new bankruptcy laws and the creation of asset reconstruction companies (ARCs) that brought together public banks and private equity firms to buy these toxic assets at much reduced prices and then securitize them as high-risk/high-reward assets on the international markets. Quickly, global private equity firm Brookfield jumped into the fray, partnering with the State Bank of India (SBI) to launch a one-billion-dollar distressed asset fund. They were soon followed by India's Piramal and the US's Bain Capital (also with a one-billion-dollar fund), Apollo Global Management, and Caisse de dépôt et placement du Québec (Canadian pension fund) coupled with Mumbai-based Edelweiss Group, with Wall Street's Carlyle Group as its minor owner. (Here we see the blurring of the distinction between domestic and foreign, North and South, with a new synthetic business model.) A high percentage of these distressed assets originated in the very same sectors that the World Bank and Asian Development Bank had been promoting two decades earlier as the key sectors to help India build its twenty-first-century global cities: real estate, construction-related industries and finance (Goldman, 2014).

TABLE 2 Consolidation and rapid decline in the number of developers across India

City	2011-12	2017-18	Change
Bengaluru	646	251	-61.10%
Mumbai	364	248	-31.90%
Calcutta/Kolkata	235	83	-64.70%
Gurgaon/Gurugram	82	19	-76.80%
Pan-India	3,538	1,745	-50.70%

SOURCE: PropEquity (2018), documented by Sanjiv Aundhe

⁷ By 2019, there were US \$63 billion worth of 'zombie buildings': unfinished and empty real estate buildings drowning in debt (Ghosh and Pandya, 2019). When the banks first stopped lending, the NBFCs kicked in and lent big (at great risk and exposure) to help developers and firms in the construction and materials industries keep the debt collectors at bay, albeit subject to hefty interest rates (Subramanian and Felman, 2019).

These complex, multi-sited and often hidden shifts affirm the utility of following the movement and behavior of finance rather than restricting the analysis to a single scale, sector, site or form of capital. The love affair between finance capital and developers started with an ebullient courtship to work together to build the ‘world-class’ infrastructure and housing needed for the much-desired global city—an urban imaginary conjured by a host of actors including the Asian Development Bank, McKinsey & Company, USAID, Global Cities policy networks, Goldman Sachs, and scores of Indian government agencies keen on reaping the benefits of a more prosperous city. They were also keen to become rentier intermediaries in this new cash-flush environment. Once the expected returns failed to materialize, however, the techniques, tools and strategies of private equity rapidly changed. Our analysis captures the fragile, relational and inter-scalar aspects of financialization where transformations in the modality of finance occur with remarkable speed. The logic and dominance of private equity requires that its investments remain liquid and mobile. The *modus operandi* is to seek out, and create, opportunities of scarcity and distress, upend stable business models, and then capture future asset value increases as they circulate through infrastructure and the various financial instruments under its immediate control, with its effects rippling across cities and governance structures globally.

Conclusion: new financial logics of public arbitrage and the speculative state

In this article, we have shown the fast-changing strategies of global finance in Indian real estate in the post-2005 era, with its shifting relations of power and technologies of investment. Within just a few years, private equity went from recklessly dumping capital and creating a speculative frenzy to doubling down and leveraging the liquidity crunch and depressed markets it left in its wake. These patterns and trends are symptomatic of the latest turn in speculative urbanism in many cities around the world, a phenomenon that urban scholars are only beginning to explore. We have added to the discussion by highlighting the specific dynamics that have led to the rapid shift in relations between financiers and developers in India, including the consolidation of power for select financiers and developers. We have shown how and why finance moved from one sector to another, strategically bouncing from housing to office space, from equity to debt, from shares in infrastructural goods to toxic debt, to the making and benefit of oligopolistic actors in finance, with the full support of state administrators, regulators and legislators. What we have left unsaid is that these same PE firms are re-directing their ‘Indian’ earnings to indebted and vulnerable infrastructural opportunities in Spain, Germany, Turkey, the US and China. *In other words, Indian cities fuel and finance speculative projects elsewhere.* Therefore, it is not clear if the North/South dyadic analytics of ‘subordinate financialization’ explains these conditions as well as our analytics of the speculative and disruptive logics of finance.

We found that inter-scalar nodes of speculation have become entwined in global networks of finance capital over the past decade, through dependence on quick switches between equity and debt and cross-border and cross-sector movements based on the enviable capacity of private equity to remain liquid and mobile in all its manifestations. Urban sites and spaces have become more unstable due to finance capital’s increasing ability to offload onto others its liabilities and risks (Tooze, 2019). The dynamics of debt borrowing for developers and consumers has invoked a speculative urban strategy compelling cities and investor classes to acquire more public and private land as incentives—and collateral—for speculative markets. Tensions between the scarcity of public and private land for affordable housing and the speculation-fueled costs of land and housing have intensified across metropolitan and rural regions worldwide (Rolnik, 2019).

The logic of finance capital thrives on these relational, inter-scalar and arbitrage-driven practices, enabling it to drive down values in one place and drive them

up elsewhere. These practices engender scarcity and abundance, often to the advantage of private equity. The low sales and financial pressure on developers in one place attract finance capital from another, even as it holds itself ready for a quick exit and always remains liquid, irrespective of the economic or social success or failure of any physical infrastructural project. We have demonstrated how devaluation has attracted the largest firms through increased leverage, sparking cyclical up-and-down valuations with greater frequency and intensity. This is the highly volatile market-making and market-consolidating power that Indian real estate's recent love affair with global private equity has produced.

Although this new economy of urban speculation has many more engines than this article can present, we do recognize the significant role of the state. Similar to Michael Levien's work on the state's role in dispossession and land acquisition for real estate ventures (2018), and Laura Bear's scholarship on state austerity politics (2015), we find that urban transformations driven by speculative capital are endorsed by states eager to enable the most robust financial firms to ply their trade in all sectors of society to which they can gain access. In twenty-first-century India, as is true elsewhere in the North and South, the state developed its own speculative neoliberal stance by requiring municipalities and state agencies to borrow from capital markets and re-orient their priorities away from building, distributing and managing public goods. As the state became more intimately involved in institutionalizing the logic of speculative urbanism, it mobilized the 'new public management' discourse and embraced the role of rentier intermediary, encouraging capital markets to take over the money-raising responsibilities of the state and yet also to remain liquid and exit their commitments and responsibilities at will (Christophers, 2019). Consequently, finance has assiduously offloaded most risks and liabilities onto those who build, use and manage public infrastructure. These endeavors have only heightened the power asymmetries among state agents, financiers and the urban majority.

Finally, we argue that these arbitrage practices are not simply based on disparities between global geographies; rather, they are predicated on the ability of finance to abruptly move and change its form and technique of operation as it works with new and established power geometries. Although we focus on the logics catalyzed by global finance, we do not present large local developers as victims of foreign finance. Far from being victims, large developers benefit from the consolidation occurring as small and medium-sized players get pushed out of the market. Further, we emphasize how new financial logics are mutually constituted in the process of shifting alignments and asymmetries among various actors. For instance, while large developers are cash-starved and have become more reliant on private equity, they refuse to lower prices to increase sales or to pause their expansion. They are more dependent than ever on global finance because local actors—the banks and consumers who bore the brunt of the excesses of the first phase—now refrain from supporting the reckless practices of speculative developers.

Hence, our story is less about the overwhelming power of global North actors and the peripheralization of the South, and more about the variegated institutionalization of finance and its speculative urban logics. This focus is important, not only because of the ways private equity thrives in India while based in numerous countries elsewhere, but also because the capital inflows into these firms' unregulated funds come from projects and investors located all around the world, including in India. Moreover, their special project vehicles are logically housed within the cavernous cracks of a broken twentieth-century model of nation-states, neither in the core nor the periphery, but wherever they can work unencumbered, such as in tax havens in the Cayman Islands, Singapore and Mauritius. The fact that these 'global' PE funds are managed locally by Indian managers, many of whom had previous careers in local real estate companies,

makes it equally difficult to superimpose a neat North/South dichotomy on the world of finance.

Taken together, our analysis reveals finance capital as a contingent set of processes that actively construct space and time through adaptive and speculative relationships working within an interconnected set of marketplaces they themselves help to configure. We present the rapidly shifting financial dynamics in Indian real estate as a ‘vantage point’ (Hart, 2018) from which to see the inter-scalar, relational and conjunctural dimensions of speculative urbanism.

Michael Goldman, Department of Sociology and the Institute for Global Change, Department of Sociology, University of Minnesota-Twin Cities, 1070 Social Science Building, 267 19th Ave S, Minneapolis, 55455, United States, mgoldman@umn.edu

Devika Narayan, Department of Sociology and the Institute for Global Change, University of Minnesota-Twin Cities, 1070 Social Science Building, 267 19th Ave S, Minneapolis, 55455, United States, naray116@umn.edu

References

Aalbers, M.B. (2017) The variegated financialization of housing. *International Journal of Urban and Regional Research* 41.4, 542-54.

Aalbers, M.B. (2019) Financial geographies of real estate and the city. FinGeo working paper 21 (January), KU Leuven.

Ancien, D. (2011) Global city theory and the new urban politics twenty years on: the case for a geohistorical materialist approach to the (new) urban politics of global cities. *Urban Studies* 48.12, 2473-93.

Annamalai, T.R and M. Doshi (2012) Beyond capital: private equity and real estate development in India. *The Journal of Private Equity* 15.3, 62-76.

Arrighi, G. (1994) *The long twentieth century: money, power and the origins of our times*. Verso, London.

Aundhe, S. (2019) Financialisation of real estate in Bangalore. Working paper (October), Speculative Urbanism Project, Bengaluru.

Babar, K. (2019) PE enter realty space vacated by cash-starved NBFCs. *The Economic Times*, 17 April [WWW document]. URL <https://economictimes.indiatimes.com/industry/banking/finance/pe-enter-realty-space-vacated-by-cash-starved-nbfc/articleshow/66914733.cms?from=mdr> (accessed 15 February 2021).

Basole, A. (2019) State of working India. Centre for Sustainable Employment, Azim Premji University, Bangalore, KA [WWW document]. URL <https://cse.azimpremjiuniversity.edu.in/state-of-working-india/> (accessed 15 February 2021).

Baumol, I. (2005) *Specters of the Atlantic: finance capital, slavery, and the philosophy of history*. Duke University Press, Durham, NC.

Bear L. (2015) *Navigating austerity: currents of debt along a South Asian river*. Stanford University Press, Stanford, CA.

Bear, L. (2020) Speculation: a political economy of technologies of imagination. *Economy and Society* 49.1, 1-15.

Bear, L., R. Birla and S. Puri (2015) Speculation: futures and capitalism in India. *Comparative Studies of South Asia, Africa and the Middle East* 35.3, 387-91.

Becker, J., J. Jager, B. Leubolt and R. Weissenbacher (2010) Peripheral financialization and vulnerability to crisis: a regulationist perspective. *Competition and Change* 14.3/4, 225-47.

Birla, R. (2015) Speculation, illicit and complicit: contract, uncertainty, and governmentality. *Comparative Studies of South Asia, Africa and the Middle East* 35.3, 392-407.

Bonizzi, B., A. Kaltenbrunner and J. Powell (2019) Subordinate financialization in emerging capitalist economies. Greenwich Papers in Political Economy 23044, University of Greenwich.

Brenner, N. (2004) *New state spaces: urban governance and the rescaling of statehood*. Oxford University Press, Oxford.

Buckley, M. and A. Hanieh (2014) Diversification by urbanization: tracing the property-finance nexus in Dubai and the Gulf. *International Journal of Urban and Regional Research* 38.1, 155-75.

Budenbender, M. and M. Aalbers (2019) How subordinate financialization shapes urban development: the rise and fall of Warsaw's Stużewiec Business District. *International Journal of Urban and Regional Research* 43.4, 666-84.

Chakrabarty, D. (2000) *Provincializing Europe*. Princeton University Press, Princeton, NJ.

Christophers, B. (2015) Limits to financialization. *Dialogues in Human Geography* 5.3, 183-200.

Christophers, B. (2019) The rentierization of the United Kingdom economy. *Environment and Planning A: Economy and Space*. <https://doi.org/10.1177/0308518X19873007>

Economic Times (2018) IL&FS: the crisis that has India in panic mode. 3 October [WWW document]. URL <https://economictimes.indiatimes.com/industry/banking/finance/banking/everything-about-the-ilfs-crisis-that-has-india-in-panic-mode/articleshow/66026024.cms?from=mdr> (accessed 15 February 2021).

Epstein, G.A. (2005) *Financialization and the world economy*. Edward Elgar, Northampton, MA.

Fernandez, R. and M. Aalbers (2020) Housing financialization in the global South: in search of a comparative framework. *Housing Policy Debate* 30.4, 680-701.

Financial Express (2019) Real estate crisis: Indian lenders sleepwalking to trouble on builder debt, 17 February [WWW document]. URL <https://www.financialexpress.com/economy/real-estate-crisis-indian-lenders-sleepwalking-to-trouble-on-builder-debt/1490004/> (accessed 15 February 2021).

Ghertner, A. (2015) *Rule by aesthetics: world-class city making in New Delhi*. Oxford University Press, New York, NY.

Ghosh, P. (2015) Structured debt preferred PE route for realty investment. *Financial Express* 13 April [WWW document]. URL <https://www.financialexpress.com/market/structured-debt-preferred-pe-route-for-realty-investment/63134/> (accessed 15 February 2021).

Ghosh, J. and C.P. Chandrasekhar (2017) A crisis is building up in India's real estate sector. The Hindu Business Line 25 September [WWW document]. URL <https://www.thehindubusinessline.com/opinion/columns/c-p-chandrasekhar/a-crisis-is-building-up-in-indias->

real-estate-sector/article9872650.ece (accessed 15 February 2021).

Ghosh, S and D. Pandya (2019) \$63 billion of zombie buildings sound warning for Indian banks. Bloomberg.com, 4 October [WWW document]. URL <https://www.bloomberg.com/news/articles/2019-10-04/63-billion-of-zombie-buildings-sound-warning-for-indian-banks> (accessed 15 February 2021).

Goldman, M. (2011) Speculative urbanism and the making of the next world city. *International Journal of Urban and Regional Research* 35.3, 555-81.

Goldman, M. (2014) Development and the city. In F. Mirabtab and N. Kudva (eds.), *Cities of the global South reader*, Routledge, New York, NY.

Goldman, M. (2020) Dispossession by financialization: the end(s) of rurality in the making of an urban land market. *Journal of Peasant Studies*. <https://doi.org/10.1080/03066150.2020.1802720>

Goldman, M. and D. Narayan (2019) Water crisis through the analytic of urban transformation: an analysis of Bangalore's hydrosocial regimes. *Water International* 44.2, 95-114.

Goldman, M., V. Gidwani and C. Upadhyia (2017) Problem statement. Special issue—Urban transformation in Bangalore. Seminar 694 [WWW document]. URL https://www.india-seminar.com/2017/694/694_the_problem.htm (accessed 22 October 2020).

Goswami, M. (2003) *Producing India*. Duke University Press, Durham, NC.

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, 355-71.

Gramsci, A. (1971) *Selections from the prison notebooks*. International Publishers, New York, NY.

Gruneau, R. and J. Home (eds.) (2016) *Mega-events and globalization: capital and spectacle in a changing world order*. Routledge, New York, NY.

Halbert, L. and H. Rouanet (2014) Filtering risk away: global finance capital, transcalar territorial networks and the (un)making of city-regions. *Regional Studies* 48.3, 471-84.

Hart, G. (2001) Development critiques in the 1990s: cults de sac and promising paths. *Progress in Human Geography* 25.4, 649-58.

Hart, G. (2018) Relational comparison revisited: Marxist postcolonial geographies in practice. *Progress in Human Geography* 42.3, 371-94.

Harvey, D. (1996) *Justice, nature and the geography of difference*. Blackwell, Cambridge, MA.

Ho, K. (2009) *Liquidated: an ethnography of Wall Street*. Duke University Press, Durham, NC.

JLL (Jones Lang LaSalle) (2011) Reaping the returns: decoding private equity exits in India. [WWW document]. URL <http://jllapsesites.com/real-estate-compass/2011/12/jones-lang-lasalle-releases-report-pe-exits-indian-real-estate/> (accessed 10 February 2021).

JLL (Jones Lang LaSalle) (2014) India's residential sector through the looking glass. [WWW document]. URL <http://www.jllapsesites.com/research/indias-residential-sector-through-the-looking-glass/> (accessed 10 February 2021).

Jones, G. (ed.) (2015) *Banking crises: perspectives from the new Palgrave dictionary of economics*. Palgrave Macmillan, New York, NY.

Kaika, M. and L. Ruggiero (2013) Land financialization as a 'lived' process: the transformation of Milan's Bicocca by Pirelli. *European Urban and Regional Studies* 23.1, 3-22.

Karwowski, E. and E. Stockhammer (2017). Financialisation in emerging economies: a systematic overview and comparison with Anglo-Saxon economies. *Economic and Political Studies* 5.1, 60-86.

Kaul, V. (2018) The great Indian NPA mess: banks, govt and industrialists worked together to kick bad loans down the road. First Post 21 September [WWW document]. URL <https://www.firstpost.com/business/the-great-indian-npa-mess-banks-govt-and-industrialists-worked-together-to-kick-bad-loans-can-down-the-road-5220771.html> (accessed 15 February 2021).

Kaul, V. (2019) India's real estate sector is tied up in knots. *Deccan Herald* 27 October 2019 [WWW document]. URL <https://www.deccanherald.com/specials/sunday-spotlight/india-s-real-estate-sector-is-tied-up-in-knots-771415.html> (accessed 15 February 2021).

Knight Frank (2017) Analysis of institutional funding in real estate. Knight Frank, Mumbai, MH [WWW document]. URL <https://www.knightfrank.com/news/analysis-of-institutional-funding-in-real-estate-010470.aspx> (accessed 15 February 2021).

Lapavitas, C. (2014) *Profiting without producing: how finance exploits us all*. Verso, London.

Leitner, H. and E. Sheppard (2020) Towards an epistemology for conjunctural inter-urban comparison. *Cambridge Journal of Regions, Economy and Society* 14.3, 491-508.

Lefebvre, H. ([1974] 1999) *The production of space*. Blackwell, Malden, MA.

Levien, M. (2018) *Dispossession without development: land grabs in neoliberal India*. Oxford University Press, New York, NY.

Mawdsley, E. (2018) Development geography II: financialization. *Progress in Human Geography* 42.2, 264-74.

McCulley, P. (2007) 'Teton Reflections'. PIMCO Newsletter, New York, September.

Mitchell, T. (2002) *Rule of experts*. University of California Press, Berkeley, CA.

Narayan, A. (2019) A brief survey of the real estate sector in India: aggregate and firm-level financial trends. Speculative Urbanism Project working paper (March).

Ogul, C. (2020) Blackstone to acquire ancestry.com for \$4.7 billion. Reuters, 5 August [WWW document]. URL <https://www.reuters.com/article/us-ancestry-m-a-blackstonegroup/blackstone-to-acquire-ancestry-com-for-4-7-billion-idUSKBN25K0R4> (accessed 18 February 2021).

Ong, A. and A. Roy (eds.) (2010) *The worlding of cities: Asian experiments and the art of being global*. Blackwell, Cambridge, MA.

Paul, A. (2018) Examining the rise of non-performing assets in India. PRS Legislative Research, New Delhi, 13 September [WWW document]. URL <https://www.prsonline.org/content/examining-rise-non-performing-assets-india?page=1> (accessed 22 October 2020).

Peck, J. (2017) Transatlantic city, part 1: conjunctural urbanism. *Urban Studies* 54.1, 4-30.

Pereira, A. (2017) Financialization of housing in Brazil: new frontiers. *International Journal of Urban and Regional Research* 41.4, 604-22.

PropEquity (2018) Real estate update: New Delhi.

Raghavan, A. (2017) India's bad debt is looking better to investors. The New York Times 29 May 2017 [WWW document]. URL <https://www.nytimes.com/2017/05/29/business/dealbook/indias-bad-debt-is-looking-better-to-investors.html> (accessed 15 February 2021).

Rodrigues, J., A.C. Santos and N. Teles (2016) Semi-peripheral financialization: the case of Portugal. *Review of International Political Economy* 23.3, 480-510.

Rolnik, R. (2019) *Urban warfare: housing under the empire of finance*. Verso, London.

Rouanet, H. and L. Halbert (2016) Leveraging finance capital: urban change and self-empowerment of real estate developers in India. *Urban Studies* 53.7, 1401-23.

Sarkar, P. (2019) How Blackstone made India its largest market in Asia. Forbes India 7 June [WWW document]. URL <https://www.forbesindia.com/article/boardroom/how-blackstone-made-india-its-largest-market-in-asia/53849/1> (accessed 15 February 2021).

Sassen, S. (2014) *Expulsions: brutality and complexity in the global economy*. Harvard University Press, Cambridge, MA.

Searle, L.G. (2014) Conflict and commensuration: contested market making in India's private real estate

development sector. *International Journal of Urban and Regional Research* 38.1, 60-79.

Searle, L.G. (2018) The contradictions of mediation: intermediaries and the financialization of urban production. *Economy and Society* 47.4, 524-46.

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

Sheppard, E., V. Gidwani, M. Goldman, H. Leitner, A. Roy and A. Maringanti (2015) Introduction: urban revolutions in the age of global urbanism. *Urban Studies* 52.11, 1947-61.

Smyth, S.R. and J. Gittelsohn (2013) Blackstone begins rental housing empire in Spain. Bloomberg.com, 7 November [WWW document]. URL <https://www.bloomberg.com/news/articles/2013-11-07/blackstone-begins-rental-housing-empire-in-spain> (accessed 15 February 2021).

Socoloff, I. (2019) Subordinate financialization and housing finance: the case of indexed mortgage loans' coalition in Argentina. *Housing Policy Debate* 30.4, 585-605.

Sood, A. (2018) Speculative urbanism. In A.M. Orum (ed.), *Wiley Blackwell Encyclopedia of Urban and Regional Studies*, Wiley Blackwell, Oxford and Hoboken, NJ.

Subramanian, A and N. Felman (2019) India's great slowdown. What happened? What's the way out? CID Working Paper 370 (December), Harvard University.

The Hindu (2014) Special courts to be set up to try land grabbing cases. 5 February [WWW document]. URL <https://www.thehindu.com/news/national/karnataka/special-courts-to-be-set-up-to-try-land-grabbing-cases/article5654141.ece> (accessed 15 February 2021).

Tooze, A. (2019) *Crashed: how a decade of financial crises changed the world*. Penguin Books, New York, NY.

Upadhyay, C. (2020) Assembling Amaravati: speculative accumulation in a new Indian city. *Economy and Society* 49.1, 141-69.