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Private rental investment and socio-spatial disadvantage in Sydney, Australia

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Abstract

This article unpacks the connection between a growing cohort of small-scale but purposive property investors and urban socio-spatial restructuring. We analyse private rental housing as a tenure share to demonstrate its spatial correlation with the suburbanisation of socio-economic disadvantage in Sydney, Australia, between 1991 and 2016. Then, we show how investors drive this emerging pattern by reference to the geography of property owners' stated investment objectives—low capital outlay, rental yields, and capital growth prospects. We contend that the link between their small-scale activities and the city's changing socio-spatial structure is an overlooked consequence of private rental sector (PRS) housing financialisation. Importantly, our focus on behaviours exhibited by small-scale rental property owners in PRS financialisation transcends existing analyses that have concentrated on corporate entity activity in this space. That focus also contrasts with framings of private rental growth as a residual outcome of developments elsewhere in the housing market. Such work is significant because it demonstrates the impacts of real estate investment on urban form.

KEYWORDS

financialisation, housing markets, inequality, property investors, suburbanisation, urban structure

1 | INTRODUCTION

This article links two noted phenomena in contemporary urban housing patterns evident in Australia and also resonant in comparator countries, both of which are significant in geographical scholarship and allied fields. The first, dubbed "investification" (Hulse & Reynolds, 2018), involves property acquisition in disadvantaged neighbourhoods pricing out would-be owner-occupiers and, in so doing, compounding socio-economic detriment in those communities. The second, dubbed "generation landlord" (Pawson & Martin, 2020; Ronald & Kadi, 2018), refers to the shifting financialised culture and motivations of small-scale rental property owners. A counterpart to the more widely acknowledged "generation rent" and the growing representation of private rental housing in countries such as Australia and the United Kingdom, this cohort of non-corporate property investors shows increasingly purposive strategies aimed at maximising returns on investment and investing outside neighbourhoods with which they have personal familiarity.

Private rental sector (PRS) financialisation has been linked to growth in corporate entities' holdings

(Fields & Uffer, 2014; Wijburg et al., 2018). However, the role of members of the emerging "generation landlord" cohort highlights the point that an absence of these corporate actors by no means precludes PRS financialisation, nor its housing market and spatial inequality impacts. Our housing market analysis shows that realising generation landlord's financial objectives will lead to investification in urban neighbourhoods of persistent disadvantage. The analysis thus provides direct evidence to answer an outstanding question asked by Hulse and Reynolds (2018)—what is it about such areas that explains their magnetic attraction for rental investors?

Referring to limited existing research on small-scale rental property owner behaviours in the liberal welfare regime context below, our findings suggest some change from satisficing, or even *incidental*, investment in rental housing to maximising, or more *purposive* and financialised, activity. That is, there has been a trajectory towards more deliberative property acquisition decision-making that privileges prospective capital gain, rental yield, or a combination of both. So, while continuing to be heterogeneous, actions by rental property investors are coalescing around these financial objectives.

These analyses of the geography of PRS growth in Sydney from 1991 to 2016 demonstrate three generalisable insights: first, PRS growth is not uniform across a city; second, such growth closely aligns with observed suburbanisation of disadvantage; and third, that growth also aligns with low capital outlay and high operating yields sought by property investors maximising, rather than satisficing, their returns on investment. We show that these insights reflect the basic fact that property price varies more across Sydney than either rents or capital growth.

While demand-side factors contribute to the geography of PRS growth—for example, tertiary education institution location—in our view, the "global wall of money" and changing cultural attitudes linked to "generation landlord" are more significant influences (Aalbers, 2016). The result is that, in seeking out urban contexts where their financial objectives are best realised, property investors are being drawn to neighbourhoods with lower house prices associated with longstanding socio-economic disadvantage. In turn, this tendency drives investification observable there, thus reshaping wider geographies of urban socio-economic opportunity and inequality.

In section 2, we review the literature on metropolitan structure and the changing geography of urban socio-economic disadvantage, on contemporary change in private rental, and on PRS investor motivations. Describing research methods at the outset of each empirical section, we then focus on the Sydney housing market case study. In section 3 we demonstrate the connection between the geography of disadvantage and the geography of PRS growth. Then, we draw the link between the geographies of rental yield and low capital outlay and the geography of PRS growth. Finally, in the conclusion at section 4, we elaborate on the implications of these insights, particularly as they relate to the ways in which property investors effectively shape urban structure and spatial inequalities as major housing market players in countries such as Australia.

Key insights

Small-scale rental property owners pursuing high rental yields from a low capital outlay are linked to an uneven growth rate of private rental as a tenure share within different parts of Sydney, Australia, and so to the subsequent geography of social disadvantage within the urban region.

2 | KEY DEBATES IN URBAN SOCIO-SPATIAL RESTRUCTURING AND HOUSING MARKET CHANGE

2.1 | The changing urban geography of socio-economic disadvantage

The socio-economic polarisation of urban populations—or the hollowing out of the middle class and consequent growth of a precariat and elite—has been a noted trend in urban studies for many years. Sassen's (1991) Global City treatise was a notable forerunner of contemporary analyses (for example, Hochstenbach & Musterd, 2017). Likewise, others have noted the growing concentration of disadvantaged people residing in disadvantaged places and vice versa for advantaged people (for example, Cassiers & Kesteloot, 2012; Shi & Dorling, 2020).

These trends are sometimes summarised as involving populations displaced by inner-city gentrification being relocated to less favoured places (for example, Hochstenbach & Musterd, 2017). This process has been observed across liberal housing markets (Randolph, 2017) and is termed the "suburbanisation of disadvantage" in Australia (Randolph & Holloway, 2005; Randolph & Tice, 2016) and the "great inversion" in North America (Ehrenhalt, 2012). Broadly, this process seems to be a function of post-industrial urban economic restructuring, particularly a twenty-first century tendency for spatial centralisation of employment in growing industries such as technology, media, finance, and insurance and dispersal of lower paid jobs

in administration, retail, accommodation, and food services (Hulse, Reynolds, & Martin, 2019).

In the United Kingdom, Bailey and Minton (2018) have found that this shift reduced over-representation of disadvantage in the inner city and thus reduced overall concentration of disadvantage. Equally, they observed that disadvantaged populations were not spreading uniformly to the urban periphery. In other contexts, the suburbanisation of disadvantage has been concentrating such populations in selected parts of the periphery (Hunter, 2014; Kneebone, 2014; Pawson & Herath, 2015). Given the aforementioned post-industrial jobs distribution, the least mobile component of the population is being sifted into weaker job markets, a process that will only compound disadvantage in aggregate (Hulse et al., 2014). In addition to reduced job opportunities, this trend can include disadvantages in terms of access to services (Kneebone, 2014), opportunities for upward social mobility (Pawson & Herath, 2015), educational outcomes (Smith et al., 2019), infrastructure investment (Wiesel et al., 2018), and overall higher levels of poverty (Hochstenbach & Musterd, 2017).

As Hulse and Reynolds (2018) have outlined, neighbourhoods of persistent socio-economic disadvantage are often sites of significant levels of investment property acquisition (see also Houston & Sissons, 2012). However, understanding suburbanisation of disadvantage simply as a consequence of existing renting households displaced from inner cities does not explain the overall growth of the PRS. Cortright and Mahmoudi (2014) have suggested that researchers have examined displacement instead of understanding the poor outcomes of those remaining neighbourhoods of continuing disadvantage (see also Mallach, 2018). Likewise, Brummet and Reed (2019) have found direct displacement through gentrification (cf. Shaw & Hagemans, 2015) sometimes overstated.

PRS growth in urban peripheries is not well studied, particularly in terms of the "tenure conversion" of established dwellings from owner-occupation into private rental. Some notable exceptions include neighbourhood studies showing that local impacts of such conversion can include growing social disadvantage (Lee, 1994) or community dysfunction (Sage et al., 2012). And some recent studies have identified a positive link between an expanding PRS and new forms of gentrification in England and Canada (August & Walks, 2018; Paccoud, 2017; Paccoud & Mace, 2018). Overall, though, our sense is that the tenure shift, and a growing PRS, are overlooked as contributory factors in prevailing concentrations of disadvantage. Further, the extent to which PRS geography is driven by deliberative property investor preferences and investment decisions, rather than by a simplistic "market" response to demand side influences, remains largely unacknowledged.

2.2 | Private rental growth

An expanding PRS has been a noted housing system trend across many jurisdictions in the post-millennial—and especially the post-financial crisis—era. These jurisdictions include Belgium, Ireland, New Zealand, Spain, the United Kingdom, and the United States (Martin et al., 2018). Across them, several contributory factors are widely shared and, in some cases, are long-standing; they include patterns of migration and household formation, financial liberalisation, and the retrenchment of governments from the direct provision of rental housing (de Boer & Bitetti, 2014; Hulse & Pawson, 2010).

As PRS markets have expanded over the past 25 years in countries such as the United Kingdom and Australia, they have also restructured. Given gradually declining social housing representation in Anglophone and some non-Anglophone OECD countries (Chen et al., 2016), on one hand, there has been a corresponding growth of lower income earners in the PRS. In Australia, for example, Hulse and Yates (2017) have found that low-income PRS households were growing faster than the PRS overall. Despite overall PRS growth, more competition in the inner and middle areas of Australia's large cities also meant PRS properties affordable to lower income earners were being increasingly confined to outer suburbs and regional centres (Hulse, Reynolds, Nygaard, et al., 2019). At least in the United Kingdom and Australia, the PRS has also seen an increase in families with children (Scanlon et al., 2014) and longer term renting (Pawson et al., 2017).

On the other hand, in some jurisdictions, there appears to be a tendency for the PRS to move "upmarket," a phenomenon identified in both the United Kingdom and Australia (Hulse & Yates, 2017; Pawson, 2012). This tendency is partly associated with a recent decline in home ownership especially notable in the Anglophone world, in which "liberal market" housing systems are the norm (Bourassa & Shi, 2017; Ronald & Kadi, 2018). That decline reflects the growing numbers of aspirant homeowners whose access to that tenure has been blocked or delayed. Arundel and Doling (2017, p. 2) have argued that conditions generating these demand pressures—greater precarity in employment, greater employment mobility, and wages growth lower than house price growth—reduce "the pool of people whose circumstances fit well with the ability to take on … a housing loan." This rise of the precariat (Standing, 2012) underpins Forrest and Hirayama's (2015, p. 239) argument that whereas "home ownership suited the stability and security of the Fordist era … private renting is better calibrated to the fluidity and 'flexibility' of the neoliberal and post-crisis eras."

Observed changes on the supply side of the PRS are no less significant—perhaps even more so. An

expanding PRS supply may sometimes be inadvertent: reflecting a build-up of rented-out homes not originally purchased for that purpose, for example, because of a housing market downturn (Kadi et al., 2020). Recent PRS growth has, however, undoubtedly largely resulted from burgeoning small-scale residential property acquisition for the express purpose of rental use, even in countries such as the United States, with its institutional investment traditions (Fields & Uffer, 2014).

Post-1980s finance sector developments have been crucial in enabling more purposive PRS property acquisition, at the level of both local retail lending and global money markets. One dimension has involved injecting corporate equity through "pension funds, private equity, hedge funds and other 'fictitious commodities'" (Rolnik, 2013, p. 1058). However, financialisation is variegated (Aalbers, 2017), even unhelpfully chaotic as a concept (Christophers, 2015). Even within equity investment, Wijburg et al. (2018) have noted that there is some distinction between those with long-term revenue-generating priorities versus those focusing on short-term capital gains.

Another, more relevant dimension, then, is that related to looser lending practices, which have had a significant impact on individual house purchases. In the 1990s and 2000s, financial innovation saw banks—the major sources of housing credit in Anglophone countries—augment their funding sources beyond their own capital and depositors' funds, through mortgage securitisation and wholesale lending by non-bank financial institutions. The same innovations also saw non-bank institutions enter the retail housing credit market in competition with banks, resulting in offers of lower rates and larger loan sizes. Lenders expanded markets for housing credit, through sub-prime lending to previously ineligible borrowers (Rolnik, 2013).

Importantly, lenders also expanded housing credit access for established property owners, enabling existing residential property equity to be leveraged for consumption or investment—including, notably, in rental properties (Martin et al., 2018). Lower borrowing costs and larger loans translate to larger loan serviceability and so to higher house prices, meaning existing homeowners-cum-investors have, as against would-be home-buyers, the advantage of accumulating deposits for their next purchase from tax-advantaged home equity gains (Ryan-Collins, 2019). In the Australian case, an additional loan serviceability advantage enjoyed by investors, of deducting interest costs from taxable income, fosters this housing market advantage. These policy and market settings have entirely coincided with more PRS investment. For example, by 2019, more than two million Australians (about one in nine adults) owned a share in rental property (ATO, 2019). Largely debt financed, they owed AU$566 billion against these investments, an increase of 29% over five years (ABS, 2018b).

2.3 | Small-scale rental property owners and purposive investment

In Australia and comparable jurisdictions, PRS housing is overwhelmingly held by individual property owners (Martin et al., 2018). In understanding how PRS investment functions as a driver of housing system change, it is necessary to better understand the characteristics of small-scale rental property ownership, the behaviours of small-scale property investors, and the factors that influence those behaviours.

Existing research evidence on this stakeholder cohort is, however, sparse. Seelig et al. (2009) have found that rental property owners tended to be financially unsophisticated, preferring property over other possible asset-classes, partly because of relative familiarity or reflecting intuitive satisfaction of owning a tangible commodity. Similarly, a 2008 study of rental property owners in Scotland found that most rental units purposely acquired were smaller dwellings in "blocks at the lower end of the valuation spectrum" (Crook et al., 2009, p. 73). Moreover, the vast majority of such properties were owned by someone living nearby. The preference for localness was later attributed to a risk management mindset among rental property owners, most of whom were small-scale, non-professional players contending with "the complexities of the submarkets where they operate and the information asymmetries involved" (Crook et al., 2012, p. 3347).

A more recent study in the United Kingdom about buy-to-let investors (Soaita et al., 2017) identified a particular cohort of property investors engaged in highly financialised expansion. Explaining their property acquisition decision-making, this cohort targeted strategic locations where disproportionate capital gains were expected, thus enabling them to extract the created value "from the property … to finance a new purchase" (Soaita et al., 2017, p. 629). Generalising across their whole rental property owner sample, however, the authors concluded that decision-making tended to be primarily influenced by ideological beliefs rather than rational calculation. Thus, as they saw it, property investment decision-making rationales may be "an extrapolation of the internalised orthodoxy of homeownership rather than a business activity; a matter of belief rather than accounting" (Soaita et al., 2017, p. 616).

The preference for building wealth through PRS investment rather than other investments, and the particular housing markets in which this investment will be realised, are both likely the result of multiple factors. First, for most rental investors who are themselves owner-occupiers, there is likely a greater awareness of wealth accumulation through the growing value of their own homes, which is often the source of the capital being invested. This broader acceptance of the financialisation of home (Aalbers, 2008) then translates to a greater willingness to consider housing

assets generally as a channel for investment. Second, over the past 10 to 20 years, rental property owners have been influenced by an expanding plethora of "property investment advisors, residential investment magazines and home investment and renovation television shows" (Hulse et al., 2012, p. 22). This discursive shift, even in popular entertainment, exacerbates the repositioning of the home as a wealth generating asset. And third, this growing sector of support services has been, in turn, enabled by the growing availability of online property information over the past decade: property databases, sales price histories, virtual property tours, investment blogs, and information sharing via social media (Hulse, Reynolds, Martin, et al., 2019; Martin, 2018).

More recently, completing a survey of property investors in disadvantaged parts of Sydney, Pawson and Martin (2020) have provided new evidence of a shift in disposition away from the unsophisticated, risk-averse small-scale property owners of previous decades. This emerging cohort was typically well-educated, on high incomes, and living in other, wealthier, parts of the city. Recent investors were found to be often experienced, purposive in their investment strategy, long-term in their thinking, informed by a sector of support services, and comfortable investing beyond their own neighbourhoods. The long-term focus notably parallels the "financialisation 2.0" cohort that looks beyond capital gains, as described by Wijburg et al. (2018). Pawson and Martin (2020, p. 18) have concluded that investors:

> Virtually all had debt-financed their investments and, despite an emphasis on capital gains, they were generally attentive to rental returns … With little expressed intention to trade or flip properties short-term, we see a strategy of using capital growth to lever into further property acquisitions, and rental income to enhance investor ability to service loans.

Although limited, the literature on investor motivations reviewed above hints at two conclusions, applicable at least in Anglophone countries. On one hand, small-scale rental property owners remain heterogeneous in motivation and conservative in choice of investment property (particularly maintaining a portfolio local to their place of residence). On the other hand, however, there is emerging evidence of an expanding cohort looking to maximise investment returns and employing a growing amount of broader market analyses and auxiliary expertise to this end.

If the past 10 to 20 years has indeed seen a marked swing towards a more purposive property investor cohort, how might its members' resulting property acquisition behaviours affect PRS stock composition and geography? This question forms the point of departure for our empirical analysis as reported below.

3 | PRIVATE RENTAL, DISADVANTAGE, AND HOUSING MARKET PERFORMANCE IN SYDNEY

3.1 | The geographies of the PRS and disadvantage

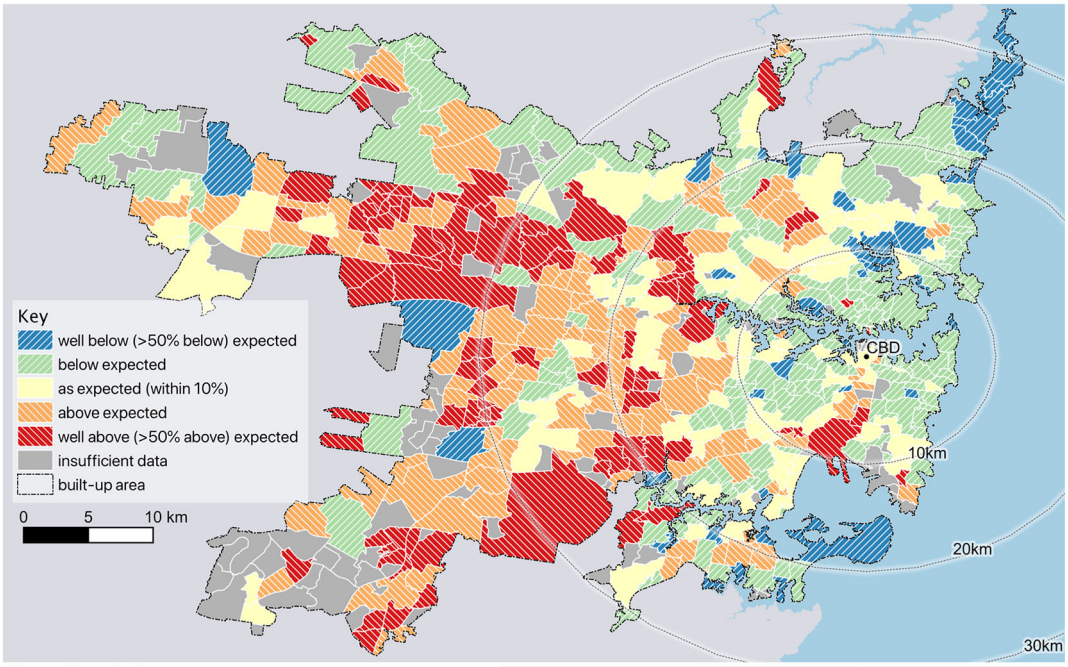
In many housing markets, the PRS has recently been expanding, both absolutely and proportionately. In Australia, by 2017/2018, 27% of households were private renters, up from 20% some 20 years earlier (ABS, 2019). This growth represents a net flow of established, previously owner-occupied and newly built dwellings (primarily apartments) that are directly entering the rental market.

The analysis in this section draws on the 1991 and 2016 Australian censuses, using privately renting households as a proportion of all households (of known tenure) as a proxy for market rental dwellings, with concordance of the data using 2011 suburb boundaries within the 2016 contiguous built-up metropolitan area.[1]

Figure 1 shows the shift-share from 1991 to 2016 of private rental in each metropolitan Sydney suburb, synonymous with "neighbourhood" in this context. That is, it shows the extent to which the actual growth of PRS as a share of all housing in each suburb compares with an expected growth over that period, based on both the tenure share in each suburb at the beginning of the period and the metropolitan-wide change in tenure share over the period. Measuring shares controls for overall rates of household growth—both metropolitan-wide and in a given suburb.

The shift-share technique is "a means of decomposing change" (Loveridge & Selting, 1998). This decomposition is important when analysing the geography of changing private rental between 1991 and 2016, given the disproportionate growth of rental as a tenure share over that period—both across this defined metropolitan Sydney area and more widely, as discussed above.

The relatively long timescale examined here accommodates the inertial characteristics of tenure that make short-term changes small and thus, difficult to discern from "noise" stemming from data imperfections and short-run market fluctuations. This timeframe also aligns with existing published analyses of socio-economic restructuring in urban Australia (Pawson & Herath, 2015; Randolph & Tice, 2016). However, it does have some limitations, both because it obscures within-period discontinuities, and because it results in a significant proportion of dwelling growth over the period being outside the initial (1991) urban footprint, and thus



Above: By suburb
Right: By distance from CBD and 1991 disadvantage index (Q1 most disadvantaged)

Source: ABS 1991 and 2016 Census, analysis by authors

	Q1	Q2	Q3	Q4	Q5	All quintiles
<10km	97%	97%	86%	81%	80%	**90%**
10-20km	104%	119%	95%	105%	107%	**105%**
20-30km	107%	130%	116%	110%	96%	**106%**
>30km	158%	132%	130%	138%	131%	**137%**
All distances	**108%**	**109%**	**94%**	**93%**	**92%**	**100%**

FIGURE 1 Shift-share analysis—difference between expected and actual change in private rental, Sydney 1991–2016.

in suburbs with insufficient 1991 households to establish a shift-share metric (shaded grey in Figure 1).

Figure 1 shows the clear spatial dimension to this aspect of housing market restructuring. Most evidently, the quarter century to 2016 saw a tendency towards the PRS in inner-metro suburbs largely growing below expectation, matched by an above-expected expansion in the PRS in middle and, especially, outer suburbs in Sydney's south and west. Tenure shift cannot be expected to align to suburb boundaries and thus be susceptible to the modifiable areal unit problem. However, the univariate Moran's *I* (0.32), calculated in GeoDa (Anselin et al., 2006), indicates that the shift-share metric for the 10 nearest neighbours, weighted by proximity of a given suburb, is a reasonable predictor of that suburb's metric, and so different areal boundaries would not result in a significantly different spatial pattern.

The final column of the table embedded in Figure 1 presents the shift-share metric by distance from the central business district (CBD) rather than by individual suburb. It shows that within 10 kilometres (km) of the CBD, PRS growth is below expectation (90% of expected), but this rises progressively to the >30 km ring, where PRS growth was 137% of expected. The intermediate rings are heterogeneous, resulting in their close to expected shift-share overall. However, there are clusters of shift-shares well above expectation within these rings.

A key starting point for the research was the observation that PRS dwellings expanded faster in time in socio-economically disadvantaged areas of Australia's major cities than in other parts of these metropolitan areas (Hulse et al., 2014). Indeed, in these middle rings, the areas exceeding expectation are generally the disadvantaged suburbs. In interpreting Figure 1, PRS growth is exceeding expectation in two main segments of Sydney: the outer western and south western suburbs, which have long been areas of socio-economic disadvantage (Gleeson, 2006).

Further exploring the relationship between PRS growth and the socio-economic geography of Australia's major cities, the final row of the embedded table in Figure 1 compares PRS growth recorded in Sydney according to the suburbs' levels of relative socio-economic disadvantage. Disadvantage level in each suburb is measured using the 1991[2] Index of Relative Socio-economic Disadvantage (IRSD) (ABS, 2016). It confirms that the PRS has grown more than expected (at 108%–109%) in areas ranked in two most disadvantaged quintiles by IRSD, and less than expected in the remaining quintiles (at 92%–94%).

Figure 1 also summarises relative PRS growth in areas organised by a combination of suburb

disadvantage and distance from the CBD. Most pertinent to us, it shows that the most disadvantaged areas (Q1) on the urban periphery (>30 km) have seen the highest levels of PRS growth—more than 50% above expectation using this metric. The suburbs in this cohort were relatively disadvantaged in 1991 and have, over the subsequent 25 years, seen a rise in private renting. Discussed more below, in the context of Australia's lightly regulated rental sector, this trend equates to an increase in housing market precarity for residents.

Another observation discernible from Figure 1 is a pattern of inner-metropolitan gentrification, and loss of private rental in disadvantaged areas. That is, in inner-metro areas (<10 km from CBD) that were the bottom quintile of suburb disadvantage in 1991, the PRS fell just short (97%) of expected growth. Conversely, there is also demonstrable growth in the PRS in outer areas (>30 km) with lower levels of disadvantage in 1991 (Q4 and Q5). A limit of the method is that the greater movement in the outermost ring is potentially fluctuation due to the smaller numbers of dwellings here in 1991.

Two conclusions emerge. First, the changing geography of private rental in Sydney closely maps to the changing geography of disadvantage as previously documented (Pawson & Herath, 2015; Randolph & Tice, 2016). Second, the decreasing share of private rental in inner-metro areas is more than offset by the growing share in existing disadvantaged areas on the urban periphery. The causes of this particular pattern are examined below.

3.2 | The geography of housing market performance

The changing geography of PRS housing in Sydney supports the suggestion that rental property acquisition has become more purposive rather than incidental, that is, influenced by the investor's home location familiarity or convenience. In this section, we show the Sydney geography of three factors sought by purposive investors: low capital outlay, high rental yield, and high capital growth potential. Purposive investors will be interested in any combination of these, preferably all: where overall returns are maximised through a combination of low capital outlay, high capital growth, and high operating yields. Self-evident as motivating factors are high yields and high capital growth—that is, maximising return on investment; low capital outlay perhaps less so.

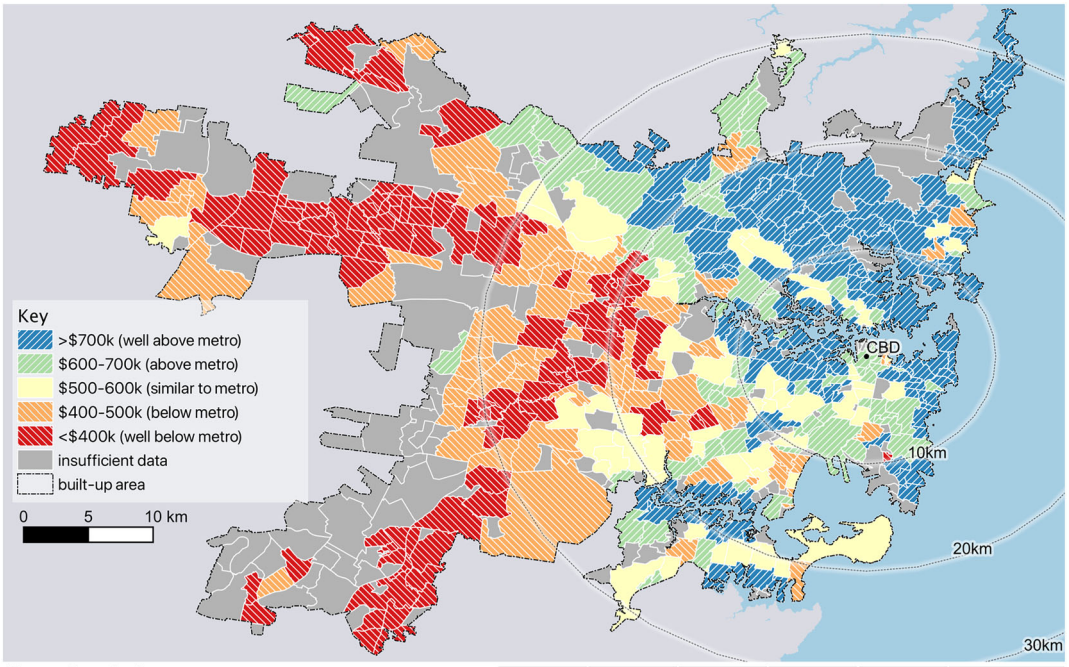
Research from the United Kingdom cited above suggests that rental investors tend to purchase lower value properties, and Australian analysis shows that PRS dwellings are concentrated at low-mid market levels, where markets are thickest and most liquid: making it easier to buy and sell (Hulse & Yates, 2017). This trend could reflect the presence of buyers simply seeking the most affordable foothold in the property market and who require a smaller capital investment or of repeat investors seeking lower priced properties as their borrowing capacity declines. Alternatively, lower priced properties could translate to greater rental yields, which may be attractive. That is, if purchase prices spread more than rents (Hulse et al., 2014), the lower end of the market will generate, in relative terms, higher rents for a given capital outlay.

We draw on government-held data to demonstrate the extent to which these three property market characteristics vary within the Sydney market and to which their geography aligns with the growth in PRS and the distribution of disadvantage. One dataset is of all dwelling sales in metropolitan Sydney (at the time managed by Property NSW), and a second is of all bonds, or security deposits, lodged as part of a new tenancy (at the time managed by Housing NSW). For this section, and the next, we focus on a more recent timeframe: 2011–2016, for which such data are most readily available.

Analysis paralleling Figure 1 confirmed the shift share has a similar geography over this shorter timeframe. The change between 2011 and 2016 is too small to discern, but the 2006–2016 shift-share indicated patterns similar to the 25-year period, analysed above. That is, much as shown in Figure 1, areas that are more disadvantaged and more peripheral (the bottom left of the table) still exceeded the expected growth of the PRS between 2006 and 2016 most consistently and by the greatest extent. One somewhat confounding difference after 2011 is the effect of rapid apartment development growth, predominantly rented and built along rail lines through relatively advantaged northern suburbs. That difference is discussed more below.

Figures 2–4 present the three key characteristics, described above, of Sydney's recent housing market geography with potential relevance to observed patterns of tenure change. While the figures show data from 2011 to demonstrate investment patterns are not a recent response to changing PRS demand, the observed patterns were typical of all years between 2011 and 2016. The median sale price within each suburb indicates expected capital outlay (Figure 2), the median annual rent for each suburb divided by the median price indicates the expected rental yield (Figure 3), and the difference between the first quartile sale price and the median sale price indicates the capital growth potential (Figure 4). The tables embedded in the three figures show the average suburb-level metric weighted by suburb size rather than direct measures within the geographies each cell represents. This approach better accounts for spatially uneven sales and bonds data, which are not an issue in the smaller, contiguous suburbs.

The first and perhaps most expected finding, shown by Figure 2, is that median residential property price

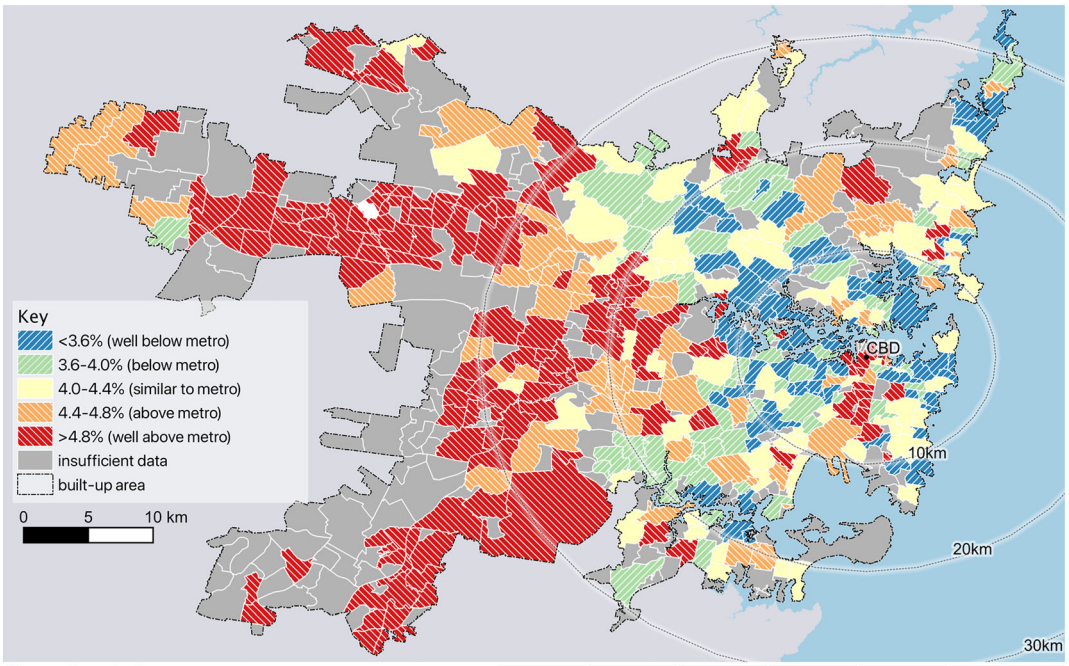


Above: By suburb
Right: Suburb average, weighted by households, by distance from CBD and 1991 disadvantage index (Q1 most disadvantaged)

Source: Property NSW sales data, analysis by authors

	Q1	Q2	Q3	Q4	Q5	All quintiles
<10km	$641k	$633k	$805k	$831k	$980k	**$768k**
10-20km	$416k	$507k	$570k	$667k	$806k	**$616k**
20-30km	$358k	$439k	$476k	$483k	$682k	**$535k**
>30km	$300k	$361k	$487k	$411k	$457k	**$406k**
All distances	**$446k**	**$529k**	**$602k**	**$633k**	**$754k**	**$605k**

FIGURE 2 Median residential property sale price, Sydney 2011.

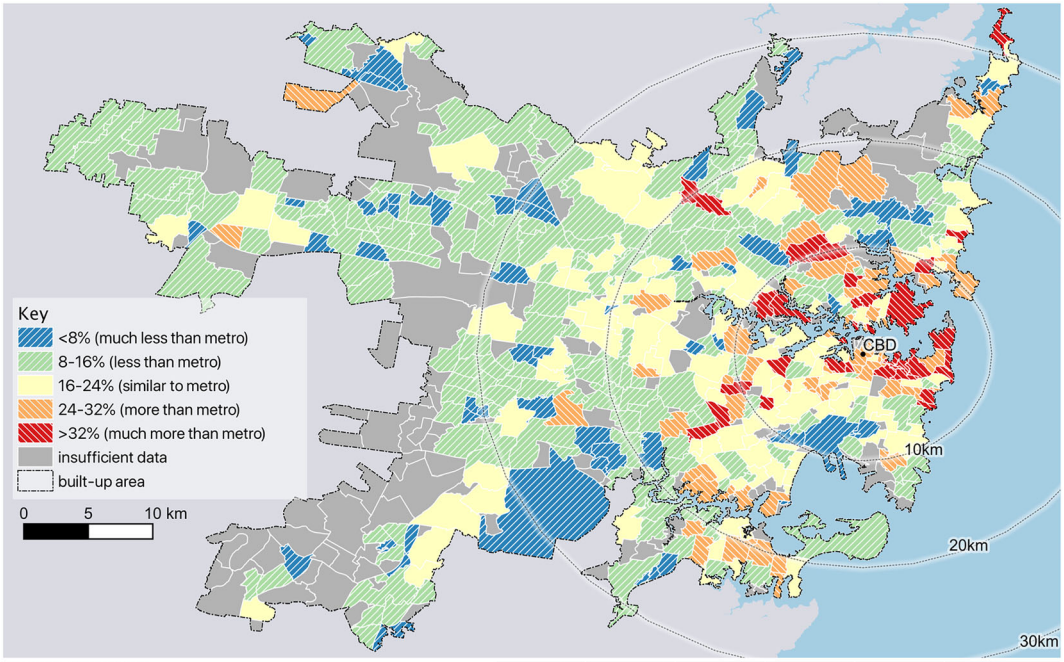


Above: By suburb
Right: Suburb average, weighted by households, by distance from CBD and 1991 disadvantage index (Q1 most disadvantaged)

Source: Property NSW sales data, Housing NSW rental bond data, analysis by authors

	Q1	Q2	Q3	Q4	Q5	All quintiles
<10km	4.3%	4.2%	3.8%	3.5%	3.5%	**3.9%**
10-20km	5.0%	4.4%	4.1%	3.8%	3.9%	**4.2%**
20-30km	5.1%	4.7%	4.5%	4.7%	4.1%	**4.5%**
>30km	5.8%	5.3%	4.9%	5.0%	4.9%	**5.2%**
All distances	**5.0%**	**4.5%**	**4.3%**	**4.1%**	**4.0%**	**4.4%**

FIGURE 3 Median residential property rental yield, Sydney 2011.



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Source: Property NSW sales data, analysis by authors

	Q1	Q2	Q3	Q4	Q5	All quintiles
<10km	24%	17%	22%	28%	29%	**24%**
10-20km	18%	16%	19%	17%	17%	**18%**
20-30km	15%	12%	16%	17%	14%	**15%**
>30km	14%	14%	14%	12%	11%	**13%**
All distances	**18%**	**16%**	**18%**	**20%**	**18%**	**18%**

FIGURE 4 Quartile 1 price discount relative to median price, Sydney 2011.

strongly varies across Sydney, with the lowest prices in the west and southwest, locations with the highest disadvantage rates.

Figure 3 shows that, likewise, there is a strong spatial variation in rental yields. Interrogation of the data behind the figure revealed that this trend is because median rents vary less across Sydney than the median sale price; that is, the centre-to-periphery gradient for rental prices is flatter than for purchase prices, (consistent with Hulse et al., 2014). The averages shown in the table embedded in Figure 3 are weighted by number of households, which might not align with the weighting of tenant households. However, analysis of suburb medians suggest this is not the case, even in terms of direct measures of the sales and rents within the regions that each cell represents.

Figure 4 shows capital growth potential; which is relatively flat and, if anything, suggests more scope for capital growth in high-value, established markets. This trend is consistent with observations about the inner city's aforementioned housing diversity and gentrification, but also is likely to be a function of the lower elasticity of supply relative to demand in established, wealthy suburbs. That is, the difficulty in building new dwellings is because of Sydney's intensive land use and topography and large harbour, which makes properties comparatively scarce, and so prices rise faster when demand grows across the city.

This last measure indicates a property-level potential for capital growth. That is, the first-quartile to median discount can be thought of as the numerical equivalent of the old adage: "the savvy housebuyer targets the worst house on the best street!" This outcome could simply reflect housing typology diversity within a suburb, but similar patterns were found when limiting analysis to only houses or only apartments. An alternative measure would be a suburb-level potential for capital growth driven not by the property's attributes relative to neighbours so much as by the changing neighbourhood attributes relative to the metro area, among them new infrastructure, jobs growth, or other gentrifying trends. Importantly, using available sales data, much like the measure for capital growth shown in Figure 4, there were no discernible spatial patterns in suburb-level capital growth, however, such growth was measured—year on year, overall from 2011 to 2016, average annual outcome over 2011 to 2016, and so on.

This property-level potential for growth is presented because it was more reliable than direct measures of suburb level potential for capital growth, among them year-on-year differences in median price for each suburb. Compositional differences of the properties sold each year evidently affected a suburb's median sale price, even when restricting a sample to only houses or only apartments.

Despite these empirical limits, the lack of clear spatial pattern in capital growth is consistent with commercial capital growth metrics, with high and low performing suburbs spread around the metropolitan area (for example, MacSmith, 2020; Razaghi, 2021). As such, while capital growth is likely still a driver for purposive investors, as outlined in Section 2.3, it does not fully explain the spatial patterns of investment into disadvantaged areas. That is, because capital gains do not have as pronounced a spatial variation as rental yields, the pursuit of both rental yields and capital gains by the purposive investor results in investment geography aligning with the geography of rental yields, and so disadvantage.

Confirming these interpretations of the maps, the univariate Moran's *I* values for the three variables are 0.51 for median price, 0.58 for rental yield, and 0.37 for capital growth potential. That is, compared with price point and yield capital growth has less spatial autocorrelation (is not as strongly predicted by nearby suburb values). Also, using bivariate Moran's *I* values, both median price (−0.31) and rental yield (0.38) are more spatially autocorrelated with the distribution of rental growth over the 25-year period (the shift-share metric), than is the capital growth measure (0.22). This is strong evidence that these market characteristics—price point and gross rental yield—are directing the spatially specific growth in the PRS rather than capital growth potential per se.

These spatial correlations between lower initial capital outlay and higher rental yields and the shift share measure do not, in themselves, distinguish demand- and supply-side drivers in the geography of PRS growth. These locations are likely sites of greater labour market precarity and the prevalence of industries and jobs with lower skills and wages, consistent with evidence of an economic shift away from suburban manufacturing to central business sectors. Higher yields and lower capital outlays could then be functions of relative demand for lower-cost rental and owner-purchased properties. However, in conjunction with noted shifts in attitudes and financing advantages for members of "generation landlord," these locations can also be seen as target sites for liberalised credit for investment that has entered the housing market, facilitated by digital property and other sites that enable assessment of initial capital outlays and calculation of rental yields (Hulse & Reynolds, 2018). The result is that these sites are the most advantageous for investors compared with owner-purchasers who also have to factor in quality-of-life issues in these areas and thus, the result is also consistent with descriptions of investification.

4 | CONCLUSION

In summary, our findings connect several important trends in housing and urban structure to profound shifts in Sydney's geography.

First, the findings contribute to current debates about the financialisation of housing. Investment in housing in Australia has been underpinned largely by small scale, rather than corporate, property investors. Nevertheless, in the investment drivers of these suburban property investors, one can clearly see the effects of housing financialisation—in this instance, the increase of purposive investment to maximise returns. Even where dominated by such small-scale players, modern rental housing markets have been increasingly shaped by data-informed yield-maximising investment behaviour. As far as rental investors are concerned, this trend appears to indicate a key shift from the historic dominance of less purposive rental property owners. The more aggressive pursuit of returns on investment through rental yields and capital gains has increased the appeal of markets that property investors have little direct experience of and might previously have eschewed, particularly in terms of areas of suburban disadvantage. Supported by broader shifts in cultural attitudes about housing investment and by increasingly highly developed industries peopled by property investment advisors and digital property information providers, small-scale residential property investment activity in suburban Sydney has impacts on housing markets similar to those that have been credited to corporate players in other countries (Fields & Uffer, 2014).

Second, and perhaps more importantly, these findings show an otherwise unreported result about the financialisation of housing: growing spatial disadvantage in major cities underpinned by changing geographies of PRS investment. Financialised rental investment disproportionately targets areas of optimum returns, even when geographically removed from investors' home localities (Pawson & Martin, 2020). The result has been to increase pressure on housing markets in low value, often socio-economically disadvantaged, suburban areas. The corollary is that homeownership in these suburbs is increasingly strained by cycles of precarity for would-be owner-purchasers and sustained price growth pressure from investors. Moreover, by better understanding the investors' roles as market drivers rather than as market followers, our research challenges any sense that the pattern of PRS expansion into disadvantaged areas is solely driven by demand-side factors. In short, it puts paid to the idea that low income renters somehow simply "choose" to locate in disadvantaged suburbs, or that PRS expansion is subsidiary to market developments in other tenures, particularly homeownership. Rather, the research suggests that private rental is far from a passive residual result of activity elsewhere in the market. In fact, investors' purposeful activities have profound impacts on urban social structure, and the findings contribute to our understanding of the suburbanisation of disadvantage observed across many

metropolitan contexts in a range of countries over recent decades. The urban structure that results likely increases risks of locational effects of poverty such as preventable disease, crime, job security, and productivity (Hulse et al., 2014).

Third, in Australia, where owner–tenant relations are lightly regulated and tenants are not well protected legally (Martin et al., 2018), these findings add to debates about tenure-based disadvantage. Structures of social welfare built around homeownership have been well documented (Stebbing & Spies-Butcher, 2016), as have tax and other wealth redistribution policies that privilege homeowners through capital gains exemptions and imputed rent deductions (Pawson et al., 2020). As Forrest (2018) has argued, the cumulative effects of these structures go beyond asset-based welfare towards a more pernicious asset-based social stratification. Our findings support and extend that argument, showing that social stratification based on asset ownership, or its absence, both compounds and in turn is compounded by spatial disadvantage.

The findings raise additional questions outside the scope of the present empirical work. The first is whether, if left to play out, processes of investification in disadvantaged suburbs such as those depicted here would be self-perpetuating or self-equilibrating. A self-perpetuating outcome would see investor acquisitions inhibit homeownership in disadvantaged neighbourhoods, and so increase a shift to private rental and investor acquisitions. A self-equilibrating outcome would see investor acquisitions push property prices in disadvantaged neighbourhoods towards city-wide averages, dissipating yields and capital outlay advantages, and so discourage further investment there.

A second question is about the effects of policy interventions that influence investor decisions and wider housing markets, and indeed the likelihood of these hypothetical outcomes eventuating. In Sydney's case, recent prudential regulations on investor lending increased borrowing costs and so curtailed investor activity (Kent, 2018); note that the UK Government had pared-back landlord tax advantages to similar effect (Collinson, 2015; Wilcox et al., 2017). In the last decade, too, urban consolidation policies in Sydney have resulted in significant growth in apartment developments closer to the CBD (Troy et al., 2020). Many such apartments are rented by low-income householders (Martin et al., 2018), potentially offsetting the suburbanisation of disadvantage. More broadly, this new growth—both on the suburban fringe and in urban renewal contexts—shows consistent patterns of disproportionately entering the PRS, suggesting property investors are dictating which developments actually get built. The significance of this analysis, therefore, is to demonstrate the broader social impacts resulting from the spatial patterns of cities, like Sydney, that are the result of such market-led planning.

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CONFLICT OF INTEREST STATEMENT

None.

ETHICS APPROVAL

The project received approval from UNSW's Built Environment Human Research Ethics Advisory Panel (HC155118).

DATA AVAILABILITY STATEMENT

N/A.

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ENDNOTES

[1] 2011 suburb boundaries were used because correspondence data to aggregate from smaller 1991 collector districts was available (ABS, 2018a) and because they almost entirely align with 2016 suburb boundaries.

[2] 1991 IRSD was synthesised for 2011 suburb boundaries using a population weighted average of the IRSD scores for the constituent 1991 collector districts (ABS, 1993).

REFERENCES

Aalbers, M. B. (2008). The financialization of home and the mortgage market crisis. *Competition and Change*, *12*(2), 148–166. https://doi.org/10.1179/102452908x289802

Aalbers, M. B. (2016). *The financialisation of housing, a political economy approach*. Routledge. https://doi.org/10.4324/9781315668666

Aalbers, M. B. (2017). The variegated financialization of housing. *International Journal of Urban and Regional Research*, *41*(4), 542–554. https://doi.org/10.1111/1468-2427.12522

ABS. (1993). Census of population and housing: Socio-Economic Indexes for Areas (SEIFA), Australia—Data only, 1991. Australian Bureau of Statistics.

ABS. (2016). Technical paper: Socio-Economic Indexes for Areas (SEIFA) (2033.0.55.001). Australian Bureau of Statistics.
ABS. (2018a). ASGS geographic correspondences (2011). Australian Bureau of Statistics.
ABS. (2018b). Table 12. Housing loan outstandings to households (owner occupation and investment housing). Australian Bureau of Statistics.
ABS. (2019). Table 1, Housing occupancy and costs, Australia 1994–95 to 2017–18. Australian Bureau of Statistics.
Anselin, L., Syabri, I., & Kho, Y. (2006). GeoDa: An introduction to spatial data analysis. *Geographical Analysis*, *38*(1), 5–22. https://doi.org/10.1111/j.0016-7363.2005.00671.x
Arundel, R., & Doling, J. (2017). The end of mass homeownership? Changes in labour markets and housing tenure opportunities across Europe. *Journal of Housing and the Built Environment*, *32*(4), 649–672. https://doi.org/10.1007/s10901-017-9551-8
ATO. (2019). Table 5: Individuals-selected income items, 2015–16 to 2016–17 income years. Australian Tax Office.
August, M., & Walks, A. (2018). Gentrification, suburban decline, and the financialization of multi-family rental housing: The case of Toronto. *Geoforum*, *89*, 124–136. https://doi.org/10.1016/j.geoforum.2017.04.011
Bailey, N., & Minton, J. (2018). The suburbanisation of poverty in British cities, 2004–16: Extent, processes and nature. *Urban Geography*, *39*(6), 892–915. https://doi.org/10.1080/02723638.2017.1405689
Bourassa, S. C., & Shi, S. (2017). Understanding New Zealand's decline in homeownership. *Housing Studies*, *32*(5), 693–710. https://doi.org/10.1080/02673037.2016.1228851
Brummet, Q., & Reed, D. (2019). The effects of gentrification on the well-being and opportunity of original resident adults and children (Working Paper 19-30). Federal Reserve Bank of Philadelphia.
Cassiers, T., & Kesteloot, C. (2012). Socio-spatial inequalities and social cohesion in European cities. *Urban Studies*, *49*(9), 1909–1924. https://doi.org/10.1177/0042098012444888
Chen, J., Stephens, M., & Man, Y. (Eds.). (2016). *Future of public housing*. Springer.
Christophers, B. (2015). The limits to financialization. *Dialogues in Human Geography*, *5*(2), 183–200. https://doi.org/10.1177/2043820615588153
Collinson, P. (2015, July 11). Osborne drops tax bombshell that will wipe out bulk of buy-to-let profits. *The Guardian*.
Cortright, J., & Mahmoudi, D. (2014). Lost in Place: Why the persistence and spread of concentrated poverty—Not gentrification—Is our biggest urban challenge. City Observatory.
Crook, A. D. H., Ferrari, E., & Kemp, P. A. (2012). Knowing the area: The management of market and business risks by private landlords in Scotland. *Urban Studies*, *49*(15), 3347–3363. https://doi.org/10.1177/0042098012442415
Crook, A. D. H., Kemp, P. A., & Ferrari, E. (2009). Views and experiences of landlords in the private rented sector. Scottish Government.
de Boer, R., & Bitetti, R. (2014). A revival of the private rental sector of the housing market? Lessons from Germany, Finland, the Czech Republic and the Netherlands(Economics Department Working Papers). OECD.
Ehrenhalt, A. (2012). *The great inversion and the future of the American City*. Alfred A. Knopf.
Fields, D., & Uffer, S. (2014). The financialisation of rental housing: A comparative analysis of New York City and Berlin. *Urban Studies*, *53*(7), 1486–1502. https://doi.org/10.1177/0042098014543704
Forrest, R. (2018). Housing and asset based stratification in the enrichment economy. *Critical Housing Analysis*, *5*(2), 4–13. https://doi.org/10.13060/23362839.2018.5.2.438
Forrest, R., & Hirayama, Y. (2015). The financialisation of the social project: Embedded liberalism, neoliberalism and home ownership. *Urban Studies*, *52*(2), 233–244. https://doi.org/10.1177/0042098014528394
Gleeson, B. (2006). *Australia's heartlands: Making space for hope in the suburbs*. Allen and Unwin.
Hochstenbach, C., & Musterd, S. (2017). Gentrification and the suburbanization of poverty: Changing urban geographies through boom and bust periods. *Urban Geography*, *39*(1), 26–53. https://doi.org/10.1080/02723638.2016.1276718
Houston, D., & Sissons, P. (2012). The changing geography of privately rented housing in England and Wales. *Urban Studies*, *49*(4), 795–819. https://doi.org/10.1177/0042098011405689
Hulse, K., Burke, T., Ralston, L., & Stone, W. (2012). The Australian private rental sector: Changes and challenges (Positioning Paper No. 149). Australian Housing and Urban Research Institute.
Hulse, K., & Pawson, H. (2010). Worlds apart? Lower-income households and private renting in Australia and the UK. *International Journal of Housing Policy*, *10*(4), 399–419. https://doi.org/10.1080/14616718.2010.526403
Hulse, K., Pawson, H., Reynolds, M., & Herath, S. (2014). Disadvantaged places in urban Australia: Analysing socioeconomic diversity and housing market performance (Final Report no. 225). Melbourne, Australian Housing and Urban Research Institute.
Hulse, K., & Reynolds, M. (2018). Investification: Financialisation of housing markets and persistence of suburban socio-economic disadvantage. *Urban Studies*, *55*(8), 1655–1671. https://doi.org/10.1177/0042098017734995
Hulse, K., Reynolds, M., & Martin, C. (2019). The everyman archetype: Discursive reframing of private landlords in the financialization of rental housing. *Housing Studies*, *35*, 981–1003. https://doi.org/10.1080/02673037.2019.1644297
Hulse, K., Reynolds, M., Nygaard, C., Parkinson, S., & Yates, J. (2019). The supply of affordable private rental housing in Australian cities: Short-term and longer-term changes(AHURI Final Report No. 323). Australian Housing and Urban Research Institute. https://doi.org/10.18408/ahuri-7112201
Hulse, K., & Yates, J. (2017). A private rental sector paradox: Unpacking the effects of urban restructuring on housing market dynamics. *Housing Studies*, *32*(3), 253–270. https://doi.org/10.1080/02673037.2016.1194378
Hunter, P. (2014). Poverty in suburbia: A Smith Institute study into the growth of poverty in the suburbs of England and Wales. Smith Institute.
Kadi, J., Hochstenbach, C., & Lennartz, C. (2020). Multiple property ownership in times of late homeownership: A new conceptual vocabulary. *International Journal of Housing Policy*, *20*(1), 6–24. https://doi.org/10.1080/19491247.2019.1697514
Kent, C. (2018). The limits of interest-only lending: Address to the housing industry association breakfast. Reserve Bank of Australia.
Kneebone, E. (2014). The growth and spread of concentrated poverty, 2000 to 2008–2012. Brookings Institution Press.
Lee, P. (1994). Housing and spatial deprivation: Relocating the underclass and the new urban poor. *Urban Studies*, *31*(7), 1191–1209. https://doi.org/10.1080/00420989420081021
Loveridge, S., & Selting, A. C. (1998). A review and comparison of shift-share identities. *International Regional Science Review*, *21*(1), 37–58. https://doi.org/10.1177/016001769802100102
MacSmith, J. (2020, August 1). Australia's hottest growth suburbs revealed. realestate.com.au
Mallach, A. (2018). *The divided city: Poverty and prosperity in urban America*. Island Press. https://doi.org/10.5822/978-1-61091-782-7
Martin, C. (2018). Clever Odysseus: Narratives and strategies of rental property investor subjectivity in Australia. *Housing Studies*, *33*(7), 1060–1084. https://doi.org/10.1080/02673037.2017.1414161

Martin, C., Hulse, K., & Pawson, H. (2018). The changing institutions of private rental housing: An international review(Final Report No. 292). Australian Housing and Urban Research Institute. https://doi.org/10.18408/ahuri-7112201

Paccoud, A. (2017). Buy-to-let gentrification: Extending social change through tenure shifts. *Environment and Planning A: Economy and Space*, *49*(4), 839–856. https://doi.org/10.1177/0308518x16679406

Paccoud, A., & Mace, A. (2018). Tenure change in London's suburbs: Spreading gentrification or suburban upscaling? *Urban Studies*, *55*(6), 1313–1328. https://doi.org/10.1177/0042098017712832

Pawson, H. (2012). The changing scale and role of private renting in the UK housing market. In H. Pawson & S. Wilcox (Eds.). *UK housing review 2011/12*. Chartered Institute of Housing.

Pawson, H., & Herath, S. (2015). Dissecting and tracking socio-spatial disadvantage in urban Australia. *Cities*, *44*, 73–85. https://doi.org/10.1016/j.cities.2015.02.001

Pawson, H., Hulse, K., & Morris, A. (2017). Interpreting the rise of long-term private renting in a liberal welfare regime context. *Housing Studies*, *32*(8), 1062–1084. https://doi.org/10.1080/02673037.2017.1301400

Pawson, H., & Martin, C. (2020). Rental property investment in disadvantaged areas: The means and motivations of Western Sydney's new landlords. *Housing Studies*, *36*, 621–643. https://doi.org/10.1080/02673037.2019.1709806

Pawson, H., Milligan, V., & Yates, J. (2020). Home ownership and the role of government. In *Housing policy in Australia*. Palgrave Macmillan. https://doi.org/10.1007/978-981-15-0780-9_5

Randolph, B. (2017). Emerging geographies of suburban disadvantage. In J. Hannigan & G. Richards (Eds.). *The handbook of new urban studies*. Sage. https://doi.org/10.4135/9781412912655.n11

Randolph, B., & Holloway, D. (2005). The suburbanization of disadvantage in Sydney: New problems, new policies. *Opolis*, *1*(1), 49–65.

Randolph, B., & Tice, A. (2016). Suburbanizing disadvantage in Australian cities: Sociospatial change in an era of neoliberalism. *Journal of Urban Affairs*, *36*(sup1), 384–399. https://doi.org/10.1111/juaf.12108

Razaghi, T. (2021, January 30). Where Sydney house prices are rising and falling the most. domain.com.au

Rolnik, R. (2013). Late neoliberalism: The financialization of homeownership and housing rights. *International Journal of Urban and Regional Research*, *37*(3), 1058–1066. https://doi.org/10.1111/1468-2427.12062

Ronald, R., & Kadi, J. (2018). The revival of private landlords in Britain's post-homeownership society. *New Political Economy*, *23*(6), 786–803. https://doi.org/10.1080/13563467.2017.1401055

Ryan-Collins, J. (2019). Breaking the housing–finance cycle: Macroeconomic policy reforms for more affordable homes. *Environment and Planning A: Economy and Space*, *53*, 480–502. https://doi.org/10.1177/0308518x19862811

Sage, J., Smith, D., & Hubbard, P. (2012). The diverse geographies of studentification: Living alongside people not like us. *Housing Studies*, *27*(8), 1057–1078. https://doi.org/10.1080/02673037.2012.728570

Sassen, S. (1991). *The global city: New York, London, Tokyo*. Princeton University Press.

Scanlon, K., Fernández, M., & Whitehead, C. (2014). A lifestyle choice for families? Private renting in London, New York, Berlin and the Randstad. Get Living London.

Seelig, T., Thompson, A., Burke, T., Pinnegar, S., McNelis, S., & Morris, A. (2009). Understanding what motivates households to become and remain investors in the private rental market (Final Report no. 130). Australian Housing and Urban esearch Institute.

Shaw, K. S., & Hagemans, I. W. (2015). 'Gentrification without displacement' and the consequent loss of place: The effects of class transition on low-income residents of secure housing in gentrifying areas. *International Journal of Urban and Regional Research*, *39*(2), 323–341. https://doi.org/10.1111/1468-2427.12164

Shi, Q., & Dorling, D. (2020). Growing socio-spatial inequality in neoliberal times? Comparing Beijing and London. *Applied Geography*, *115*, 102139. https://doi.org/10.1016/j.apgeog.2019.102139

Smith, C., Parr, N., & Muhidin, S. (2019). Mapping schools' NAPLAN results: A spatial inequality of school outcomes in Australia. *Geographical Research*, *57*, 133–150. https://doi.org/10.1111/1745-5871.12317

Soaita, A. M., Searle, B. A., McKee, K., & Moore, T. (2017). Becoming a landlord: Strategies of property-based welfare in the private rental sector in Great Britain. *Housing Studies*, *32*(5), 613–637. https://doi.org/10.1080/02673037.2016.1228855

Standing, G. (2012). The precariat: From denizens to citizens? *Polity*, *44*(4), 588–608. https://doi.org/10.1057/pol.2012.15

Stebbing, A., & Spies-Butcher, B. (2016). The decline of a homeowning society? Asset-based welfare, retirement and intergenerational equity in Australia. *Housing Studies*, *31*(2), 190–207. https://doi.org/10.1080/02673037.2015.1070797

Troy, L., Randolph, B., Pinnegar, S., Crommelin, L., & Easthope, H. (2020). Vertical sprawl in the Australian City: Sydney's high-rise residential development boom. *Urban Policy and Research*, *38*(1), 18–36. https://doi.org/10.1080/08111146.2019.1709168

Wiesel, I., Liu, F., & Buckle, C. (2018). Locational disadvantage and the spatial distribution of government expenditure on urban infrastructure and services in metropolitan Sydney (1988–2015). *Geographical Research*, *56*, 285–297. https://doi.org/10.1111/1745-5871.12245

Wijburg, G., Aalbers, M. B., & Heeg, S. (2018). The financialisation of rental housing 2.0: Releasing housing into the privatised mainstream of capital accumulation. *Antipode*, *50*(4), 1098–1119. https://doi.org/10.1111/anti.12382

Wilcox, S., Perry, J., Stephens, M., & Williams, P. (2017). UK housing review: 2017 briefing paper. Chartered Institute of Housing.

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