



Underinsurance as Adaptation: Household agency in places of marketization and financialization

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Underinsurance as Adaptation: Household agency in places of marketization and financialization

Abstract

The underinsurance of property is pervasively and persuasively promoted as an indicator of risk and riskiness and, in western nations, is assumed to be aligned with socio-economic disadvantage. Yet, the solution – in its most simple form, buying more insurance – lacks critical interrogation of what the problem actually is. To better understand underinsurance, we map house and contents underinsurance across two municipalities and observe that the existing delineation of disadvantage and advantage between these two places is muted in relation to insurance – underinsurance does not straightforwardly map onto disadvantage. We provide an alternative explanation: that underinsurance is not a risk for households *per se* and does not represent riskiness on behalf of these households. Rather it is indicative of household agency that produces place-specified responses within the processes of financialization and marketization. We observe that the growth in renting, driven in part by housing financialization, is associated with property underinsurance. The history of renting as temporary and marginal informs renter decision-making to not insure, and thus, current financialized changes in housing co-produce rather than ameliorate underinsurance. We also conclude that in negating or resisting insurance marketization, households garner everyday financial and material adaptive capacity by underinsuring.

Keywords

Disadvantage, financialization, housing, insurance, marketization, place, underinsurance

Introduction

All action is collective since it is distributed; what vary are the mechanisms for attributing the source of the action (Çalışkan and Callon, 2010: 10).

Underinsurance is understood as having no insurance to cover adverse events or having an insurance policy that does not provide adequate coverage. This ‘problem’ of underinsurance is gaining prominence, with persuasive arguments for action promulgated by both the insurance sector and governments in market-based economies and underpinned by what

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3 appear to be startling gaps between what is insured and what is deemed insurable. Yet, the
4 solution – in its most simple form, buying more insurance – lacks critical interrogation of
5 what the problem actually is. Explanations of underinsurance – or identification of
6 mechanisms for attributing the source of the problem (Çalışkan and Callon, 2010: 10) – have
7 received little attention.
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12 In this paper, we examine underinsurance in the context of financialization and marketization
13 and, drawing on an empiric of property insurance, pose an explanation emanating the vantage
14 point of households. There is a substantial body of work that considers insurance as collective
15 or socio-material. Ossandón (2014: 291) observes, for example, that insurance is ‘relational
16 work’ and ‘...routinely mixes areas of social life commonly seen as opposing each other’. For
17 French and Kneale (2015) insurance manifests ‘bricolage qualities’. It is constituted through
18 economic, political, moral and judicial processes (Ewald, 1991; Zelizer, 2017), actuarial and
19 non-actuarial ‘calculations’ (Collier, 2008; Ericson and Doyle, 2004; Lehtonen and Van
20 Hoyweghen, 2014; Lobo-Guerrero, 2010; McFall, 2015), and the uneven distribution of
21 power between insurers and insurees (Lobo-Guerrero, 2014). Insurance is also infused with
22 affective promise, drawing together feelings of love, fear and security (McFall, 2011), hope
23 (French and Kneale, 2009), trust (Lobo-Guerrero, 2013) and uncertainty, anxiety and distrust
24 (Booth and Harwood, 2016).
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35 The bricolage qualities of underinsurance are less well explored, hence taking direction from
36 the introductory quote from Çalışkan and Callon (2010), we approach underinsurance as an
37 outcome of processes embodying multiple and entwined human and non-human agencies – it
38 is not determined by one form of agency, such as that of the rational individual. Thus,
39 manifestations and explanations for underinsurance are inevitably numerous and dependent
40 on where, what and whom is the focus of attention. If households, for example, are the focus
41 of attention, then agency manifests through the financial, material and householder
42 dimensions that constitute the household.
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49 As we describe below, spurring our interest and focusing our attention in this regard are two
50 category errors (re)produced in the universalising association between disadvantage and
51 riskiness: The mapping of insurance status onto advantage/disadvantage; and the mapping of
52 riskiness onto insurance status. Hence, central to the development of our explanation is the
53 *placement* of underinsurance through mapping, particularly in relation to socio-economic
54 indicators of disadvantage. Echoing Hall’s (2010) observation that there is little work into the
55 way finance technologies are (re)produced in specific places, French et al. (2011) argue:
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3 that for the concept of financialization to serve as an effective
4 rallying point for researchers working on the social consequences of
5 money and finance... and as a means by which to intervene in
6 contemporary policy debates, it needs to address a glaring lacuna at
7 the heart of the financialization project; that is, its relative uncritical
8 approach to the role of space and place within monetary and
9 financial processes (French et al., 2011: 805).

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11 To address this lacuna in the context of underinsurance, we adopt Cameron's (2007)
12 recommendation for the role of human geographers in policy and practice: to match and
13 enrich simplified quantitative maps of exclusion and disadvantage, with the 'critical,
14 theoretical and historical complexity' of a second discursive 'map' (Cameron, 2007: 525). In
15 this, we employ a mixed methods approach but not one that enacts a conservative politics by
16 subordinating the qualitative to the quantitative (Denzin and Lincoln, 2011). Instead, our
17 discussion represents a spatial reality emerging through a dialectic between spatial mapping
18 and ideas pertaining to the financialization of everyday life and marketization. Here, we
19 understand the former as how 'households are tied into ever more complicated relationships
20 with the international financial system' (Hall, 2011: 405)ⁱ, and the latter, as the process of
21 'gradually expanding the empire of commodities and imposing the financial world's modes
22 of evaluation on more and more sectors of activity' (Callon, 2016: 17).

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24 In contributing to a growing body of social science research considering insurance from the
25 vantage point of households (e.g. Booth and Harwood, 2016; Lehtonen, 2017), we explain
26 underinsurance as a form of household adaptation within context of everyday life. By not
27 insuring, households exert agency within the processes of financialization and marketization
28 and create non-insurantial opportunities. Rather than the distant, contingent benefit promised
29 by insurance (Johnson, 2013), these opportunities (re)produce everyday uncertainty in more
30 tangible and negotiable ways.

31 32 **Underinsurance**

33 Insurance sector reporting on property underinsurance depicts a significant gap between what
34 is insured and what is deemed insurable. The *A World at Risk: Closing the insurance gap*
35 report identifies a global underinsurance gap of US\$162.5 billion (Lloyd's, 2018).

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37 Developing countries, such as Bangladesh and China account for 96 per cent of global
38 underinsurance, and several countries are described as having 'slipped' into underinsurance
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3 between 2012 and 2018 – Japan, Russia, Sweden and the United Arab Emirates. As well as
4 indicating market opportunities for the insurance sector, these levels of underinsurance
5 appear to represent a significant financial and social problem.
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9 However, there is little critical insight into patterns and longitudinal trends that constitute the
10 rates of underinsurance reported by the insurance sector (e.g. Lloyd's, 2018). Rapid
11 contextual changes make underinsurance hard to track. Expanding markets in Asia (Sturm
12 and Oh, 2010) and the evolution of new insurance technologies and risk modelling (Johnson,
13 2014) mean that places, people and things that once lay beyond the reaches of insurance and
14 insurers are now insurable. As such, national insurance gap data may appear to describe an
15 urgent contemporary issue, particularly considering the rising cost of disasters (de Vet et al.,
16 2019), but these kinds of underinsurance calculation are about more than identifying a
17 problem in need of a solution. These data also represent new forms of knowledge production
18 in which the phenomenon of underinsurance is concurrently created and ascertained.
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26 This (re)production of underinsurance by the insurance sector appears to be reflected (and
27 refracted) by governments in market-based economies – sometimes in partnership with
28 insurers – looking to address household underinsurance (e.g. State Government of Victoria,
29 2019). In the past, not having property insurance was a given and this is still the case in many
30 parts of the world. Now, through marketization, more attention is being paid to uninsured
31 people and places and there is a concerted effort to problematize this lack through calculation
32 and labelling.
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39 The 'problem' of underinsurance is becoming more pronounced in market-based economies
40 as it also represents a challenge to securitization. Without insurance, assets are 'unsafe' and
41 risks 'unabsorbed':
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45 At the core of securitisation is a process of risk shifting to
46 households, and it is the capacity of households to absorb new
47 financial risks that enables both these securities backed by household
48 payments to circulate as 'safe' assets, and for this safety to give
49 finance a material anchoring in social relations (Bryan et al., 2016:
50 46).
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55 Households are being positioned as key players in maintaining global financial stability, both
56 in providing their own budget stability and asset security and providing new and growing
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3 fixed income streams that can be bundled into securitized financial assets (Bryan and
4 Rafferty, 2018).

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7 Situating underinsurance within marketization identifies it as part of networks that are
8 arranged through:

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11 rules and conventions; technical devices; metrological systems;
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13 logistical infrastructures; texts, discourses and narratives (e.g. on the
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15 pros and cons of competition); technical and scientific knowledge
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17 (including social scientific methods), as well as the competencies
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19 and skills embodied in living beings (Çalışkan and Callon, 2010: 3).

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21 The conjoining creation and calculation of underinsurance seeks ‘to make objects incapable of
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23 expressing novelty or unexpected characteristics that is, to render them passive’ (Çalışkan and
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25 Callon, 2010: 6). In this, underinsurance is a socio-technical device in pacifying and
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27 normalising new, and perhaps novel insurance ‘goods’ and markets. In rendering active and
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29 unbounded relations into discernible and passive goods – in this case, insurance –
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31 underinsurance is enacted as part of the conception, production and circulation of goods and
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33 markets.

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35 As Zelizer (2017) recounts in relation to the emergence of the life insurance industry, insurers
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37 have long been proactive in creating and maintaining markets and they have mobilised a
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39 range of devices or actors in this process of marketization. Like strategies in the 1800s that
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41 mobilised clean cut door-to-door sales men and notions of respectability (McFall, 2011;
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43 Zelizer, 2017) and actuarial calculations of household structural and moral ‘dangerousness’
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45 (O’Malley and Roberts, 2014), underinsurance discourse and associated knowledge
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47 production contribute to pacifying relations of risk and uncertainty into insurance goods or
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49 products or, more specifically, extending the insurability of human and non-human entities.
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51 In this underinsurance itself is not being marketized, rather it is a socio-technical device in
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53 the processes of insurance marketization. Its current prominence pertains to ‘the collective
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55 action structured by socio-technical devices and intended to establish successful bilateral
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57 commercial transactions and to promote their proliferation’ (Callon, 2016: 28).

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59 As well as acting within marketization, the ‘problem’ of underinsurance also highlights the
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uncomfortable perpetuation of inequality in financializing societies (Leyshon and Thrift
2007). In western nations, there is a well-established relationship between socio-economic
status and property insurance uptake. Australians on lower incomes, for example, are less

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3 likely to have house and contents insurance (Booth and Tranter, 2018), and in the United
4 Kingdom low income has been identified as an indicator of house and contents
5 underinsurance (Whyley et al., 1998). For government-sponsored flood insurance that covers
6 damage to property in the United States, uptake is positively associated with educational
7 attainment (Atreya et al., 2015). Therefore, disadvantaged communities – communities
8 identified in terms of higher unemployment, higher low-skilled occupations, lower incomes
9 and lower educational attainment (Australian Bureau of Statistics, 2019) – would appear
10 more likely to have higher levels of underinsurance, with underinsurance a ‘problem’ aligned
11 with welfare concerns.
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19 Labels like disadvantage and exclusion help give voice to marginalized and poor
20 communities (Cameron, 2005). They also create normative categories that can pathologize
21 people and places (Cameron, 2007). Being defined in terms of exclusion (financially, socially
22 or otherwise) can amount to a characterization of difference, immorality and redundancy, and
23 as defining places the inhabitants of which have relinquished their moral obligations for
24 competitiveness and consumption (Cameron, 2006). Failure to become a financialized,
25 responsabilized subject or community can be equated or conflated with moral deviancy (Pike
26 and Pollard, 2010). This is juxtaposed with the mainstream marking of inclusion as
27 ‘normality, morality, responsibility, independence and competitiveness’ (Cameron, 2006:
28 401).
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37 Previous research demonstrates how easily insurance, or more specifically underinsurance,
38 can be mapped onto these normative boundaries. Lo (2013a) identifies social norms and
39 expectations as contributing to decisions to insure. Some residents of a wildfire-prone area
40 read moral deviancy in those without insurance, describing themselves and familiar
41 neighbours as ‘good insured-type people’ (Booth and Harwood, 2016: 50). Other researchers,
42 who assume individual rational agency, project a sense of irrationality on those who do not
43 insure, inferring a need to discipline such individuals and communities into better behaviour
44 (e.g. Block, 2006; Kunreuther and Pauly, 2009). Those without insurance are at risk or are in
45 and of themselves risky (O’Malley and Roberts, 2014), and those with insurance are not
46 living in risk, or at least living in significantly less risk.
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55 The insurance sector figures for underinsurance introduced above pose an immediate
56 challenge to these characterizations. It would be ludicrous to suggest that developing nations
57 suffer from collective moral deviancy, and that Japan and Sweden have recently suffered a
58 loss in moral fibre. Explanations based on disadvantage status would also be a long bow to
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3 draw in relation to the 41 per cent of Australian renters without contents insurance (Booth et
4 al., 2015), half of residents in the State of Victoria identified as having no property insurance
5 coverage or inadequate coverage (State Government of Victoria, 2018), and 82 per cent of
6 bushfire-affected households in the Blue Mountains, New South Wales being inadequately
7 insured (Legal Aid NSW, 2014).
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12 These category errors that (re)produce a universalising association between disadvantage and
13 riskiness reveal some bricolage qualities of underinsurance, particularly how it is constituted
14 within the moral terrains of financialization and marketization. As a socio-technical device
15 underinsurance is constituted through powerful insurance ontologies and epistemologies –
16 orders of truth and knowledge determined and legitimized by insurers and associated judicial
17 and political processes. It embodies everyday qualities of morality and affect: delineating the
18 ‘good insured self’ from the deviant uninsured self, and evoking uncertainty and
19 stigmatization of uninsured places and people.
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27 A study of middle-class residents in a wildfire-prone area also found that everyday factors
28 rather than the more distant machinations of the insurance sector and market contribute to
29 insurance decision-making (Booth and Harwood, 2016). For those with property insurance, a
30 range of trade-offs inform decision-making. These can involve issues of affordability,
31 fulfilling familial expectations, identifying many possessions as irreplaceable, hedging bets
32 about likely forms of loss, and uncertainty about insurers coming through as promised.
33 Decision-making is ‘momentary rather than monetary; as constituting an entanglement of
34 insurantal moments constructed within uncertainty and anxiety, rather than fiscal
35 accountancy’ (Booth and Harwood, 2016: 50). For some non-insured residents, insurance is a
36 risk in and of itself: a lack of trust of profit-driven insurers and a lack of certainty in the
37 capacity of insurance produces a sense of insecurity that some choose to avoid.
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46 Focusing on the underinsurance bricolage signposts other explanations of underinsurance,
47 with a range of factors imbuing household decision-making. It also avoids critiques of
48 marketization that represent a ‘tug-of-war’ between freedom and tyranny:
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52 Some argue that marketization allows individuals to escape the
53 tyranny and liberticidal constraints of social life. Others maintain
54 that by extending the reign of merchandise, marketization leads, on
55 the contrary, to the programmed disappearance of community life
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3 and solidarity behaviours; on the one hand, freedom, on the other,
4 injustice and inequalities (Callon, 2016: 33).
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7 Neoliberalism more generally does not produce a singular, deterministic reality that invites a
8 clear-cut choice between dissent and assent (Williams et al., 2014). Its manifestation is
9 spatially and temporally variegated, and produces complexities, contradictions and openings
10 that exceed neoliberal aspirations. Through the financialization of everyday life, insurance –
11 in theory – should be becoming more normalized. However,
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16 financialization inevitably fails to live up to its promise to generate
17 long-term security – but in doing so the spatial contradictions,
18 limitations and discrepancies of financialized capitalism have
19 remained much less well explored (French et al., 2011: 808).
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23 Placing underinsurance through our two-layered mapping (spatial and discursive) provides
24 an opportunity to further explore the bricolage qualities of underinsurance, as they manifest
25 for households within a specific place.
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29 **Study area**

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31 Our underinsurance empiric is based on the small and adjoining cities of Hobart and
32 Glenorchy in Australia's island state of Tasmania. Our selection of the Glenorchy-Hobart
33 area is determined not so much by significance but exemplar. Glenorchy-Hobart area is, by
34 and large, ordinary when compared to many other places with an uneven distribution of
35 socio-economic advantage and disadvantage. However, the juxtaposition of Hobart – the
36 most advantaged municipality in the state, with Glenorchy – one of the more disadvantaged
37 (Australian Bureau of Statistics, 2019)ⁱⁱ, graphically serves the purpose of this paper.
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44 Tasmania has a population of ½ million, around half of which resides in the Greater Hobart
45 region (Australian Bureau of Statistics, 2019). Greater Hobart encompasses seven local
46 government areas including the cities of Glenorchy and Hobart. Hobart is Tasmania's capital
47 city and covers a land area of 78 km², with a population of 52,191. It is predominantly
48 middle-class, and as a local government area is the state's least disadvantaged and most
49 advantaged area (Australian Bureau of Statistics, 2019). Glenorchy covers a land area of 121
50 km² and has a population of 46,790. It's farming and industrial history defines its working-
51 class demographic, and out of a total of 29 municipalities, it is the state's 8th most
52 disadvantaged. Its residents are more likely to have lower incomes and educational
53 attainment, higher unemployment, and hold unskilled occupations than the other 21
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Tasmanian local government areas, including Hobart (idcommunity, 2018). As illustrated in Figure 1 and based on the Index of Relative Socioeconomic Disadvantage (IRSD) (Australian Bureau of Statistics, 2019), as well as being distinct in terms of disadvantage status, both municipalities include a degree of internal variegation.

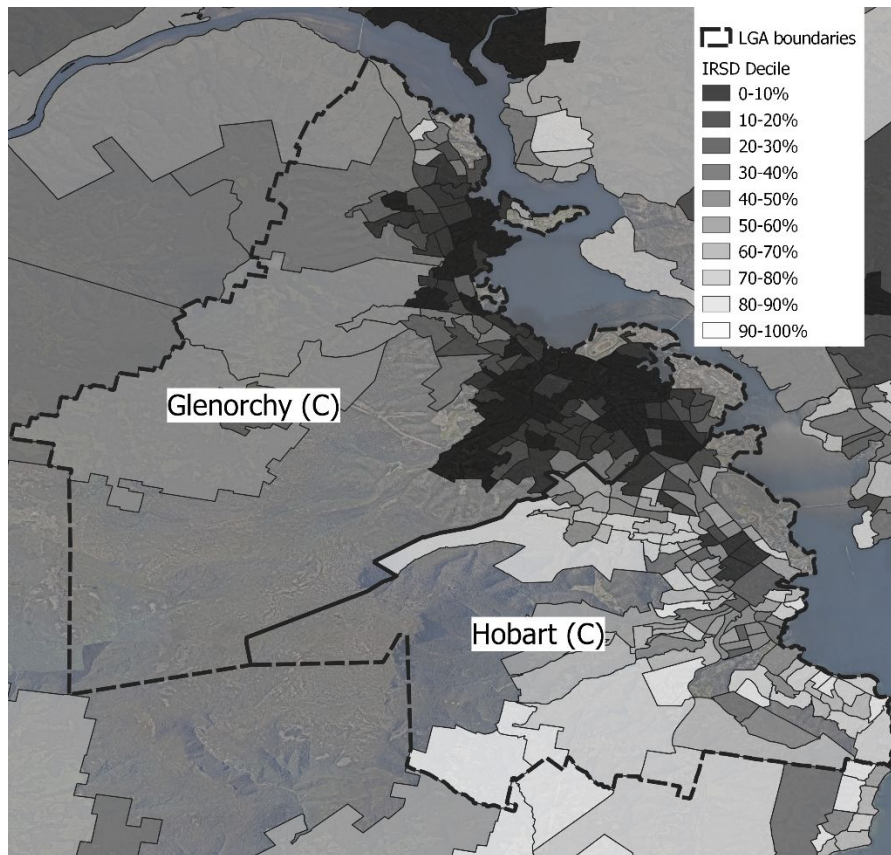


Figure 1. Map of socioeconomic disadvantage in Glenorchy-Hobart.

As measured by the Index of Relative Socioeconomic Disadvantage (IRSD) (Data source: Australian Bureau of Statistics, 2019). Each shaded polygon represents a census Statistical Area 1 (SA1) unit containing around 150 households.

In Glenorchy, 63 per cent of dwellings are owner occupied and 34 per cent, rented. In Hobart, 61 per cent of dwellings are owner occupied and 35 per cent, renters (Australian Bureau of Statistics, 2019). These patterns reflect national figures: Australia-wide 62 per cent of dwellings are owner occupied and 29 per cent rented. In this context, the insurance of property is, by and large, a private affair – there are no national-scale property or disaster insurance schemes (McAneney et al., 2016). Governments and non-government organisations

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3 provide some financial support to households who's property is impacted by large-scale
4 disaster events, but most rely on insurance to recover houses and contents impacted by these
5 and other adverse events (de Vet et al., 2019). For homeowners, around 84 per cent for
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provide some financial support to households who's property is impacted by large-scale disaster events, but most rely on insurance to recover houses and contents impacted by these and other adverse events (de Vet et al., 2019). For homeowners, around 84 per cent for Australians have house insurance, 85 per cent, contents insurance, and 79 per cent, both house and contents insurance (Booth and Tranter, 2018). For renters, around 60 per cent have contents insurance, with the insurance of the buildings the responsibility of landlord-investors.

Data and Methods

As previously introduced, house and contents underinsurance can refer to both not having an insurance policy and having an inadequate policy. Here we use 'underinsurance' as a descriptor for not having house and/or contents insurance. To spatially map this underinsurance, we began by exploring the relationship between demographic factors and insurance status using questions in the 2015 Australian Survey of Social Attitudes (AuSSA), an omnibus postal survey of Australian adults (Blunsdon, 2016). The 2015 AuSSA used a random sample of names and addresses from the Australian Electoral Roll to generate a sample that was representative of the Australian population. Each participant was posted an explanatory letter, followed by a questionnaire and up to three reminders. 1211 responses were received (a response rate of 26 per cent).

The specific survey question on insurance status was: 'Thinking about your main place of residence, which of the following best describes the type of insurance cover that you or someone who lives with you has purchased? The residence is currently covered by ... House and contents insurance; Contents insurance only; House insurance only; Neither house nor contents insurance.'

The question that guides our statistical analysis, that will allow us to map underinsurance patterns, is: 'What are the key sociodemographic indicators of property insurance coverage in Australia?' In response to previous findings (withheld for peer review), we examine the following hypotheses for higher levels of underinsurance:

- (1) Those with lower socioeconomic status
- (2) Those who not are married or living with a partner
- (3) Younger Australians
- (4) Renters

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3 This previous research has also indicates that living in a large city is significant, but we did
4 not examine this as this variable in the AuSSA is self-reported and not able to be
5 meaningfully connected to spatial data.
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9 As insuring property involves two different types of insurance (house and contents) and
10 insurance choice and options are influenced by housing tenure (owner occupier and renting),
11 we consider contents insurance for renters and house and contents insurance for owner
12 occupiers. In other words, both renters and owner occupiers require property insurance to
13 recover from adverse events – renting households need contents insurance and owner-
14 occupied households need house and contents insurance. Since our focus is on the
15 (under)insurance of homes as a mechanism for repair and replacement after an adverse event
16 rather than comparing across insurance types (i.e. house vs contents), we combine these two
17 types for our analysis of underinsurance.
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21 We developed new models of underinsurance to test our hypotheses, derived from previously
22 identified factors driving underinsurance (e.g. withheld for peer review) and that were also
23 available in 2016 Australian census data (Australian Bureau of Statistics, 2019). The response
24 variable selected was a dichotomous variable (1/0) of renters having contents insurance and
25 owner occupiers having house and contents insurance, or not having either of these. To test
26 the importance of socioeconomic status, predictor variables of having tertiary education,
27 having a household income < AUD\$650 per week, being employed and having a mortgage
28 were used. To test the importance of age, predictor variables of being aged 20–34 and, being
29 aged 55+ (with a referent of being aged 35–54) were used. To test the importance of marital
30 status, predictor variables of having a spouse and being separated or divorced (with a referent
31 of neither being in a live-in relationship nor separated) were used.
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35 Logistic regressions with a binomial error distribution and logit link function were
36 performed, using the *glm* function in R v3.5.1. Separate models were run testing each
37 hypothesis, and a full model including all predictor variables was run. Models were compared
38 using Akaike's Information Criteria (AIC), a widely used information theory-based measure
39 for comparing the fit of different models that preferences models with fewer predictor
40 variables but that retain explanatory power (Burnham and Anderson, 2004). 'Better' models
41 selected are those with lower AIC values.
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45 To create a spatial map of underinsurance – and given that there is no publicly available data
46 on which households have house and/or contents insurance, or not – we developed a method
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3 to extrapolate the patterns of underinsurance evident in the AuSSA data. To do this we
4 combined the results of the full model of underinsurance with spatially explicit 2016
5 Australian census data (Australian Bureau of Statistics, 2019). For this spatial mapping,
6 regression coefficients were converted to probabilities by taking the exponent of each
7 coefficient to generate the odds ratio, then using the formula $probability = odds / (1 + odds)$.
8 For each Statistical Area 1 (SA1) unit (containing approximately 150 households) the
9 proportion of residents or households was determined for each predictor variable from raw
10 census data (Supplementary material, Table 1). The level of underinsurance (proportion of
11 people predicted not to have insurance) was then predicted separately for renters and owner
12 occupiers for every SA1, and a single map generated by weighting the predictions by the
13 proportion of renters and owner occupiers per SA1.

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15 We acknowledge some limitations with our data, including the lack of data on rental
16 properties and house insurance. We do not know if these properties are insured by landlord-
17 investors or not, and how this may be associated with socio-demographic variables and
18 contribute to the mapping. As we conclude below, there is need for more research in this
19 regard.

20 21 22 **Results**

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24 The results of this study confirmed some of our hypotheses (Table 1). The full model shows
25 that people are less likely to be underinsured if they have a spouse ($p < 0.001$, $z = -4.5$), and
26 more likely to be underinsured if they were renting ($p < 0.001$, $z = 5.3$) or had a low income
27 ($p < 0.01$, $z = 3.4$). When comparing partial models exploring different hypotheses, the Housing
28 Tenure model was the best predictor of underinsurance (AIC=781), closely followed by the
29 Marital Status model (AIC=787), then by the Socioeconomics model (AIC=818). Indicators
30 of Socioeconomic Status other than income (educational attainment and being employed)
31 were not significant in any model. Similarly, the other indicator of Marital Status (being
32 separated) were not significant in any model, nor the other indicator of Housing Tenure
33 (having a mortgage). While no age variables were significant in the full model of
34 underinsurance, being over 55 was a significant ($p < 0.05$, $z = -2.5$) predictor in the Age model
35 (AIC=857). Being aged 20-34 was not significant in any model. Bivariate relationships
36 showed similar patterns (Figure 2), although being separated and being aged 20-34 were
37 associated with higher levels of underinsurance.

Table 1. House and contents underinsurance (odds ratios).

Model	Full	Tenure	Socioeconomics	Age	Marital Status
Renter	4.6***	6.3***	--	--	--
Mortgage	1.8	1.6	--	--	--
Graduate	0.9	--	0.9	--	--
Low income	2.6***	--	3.2***	--	--
Employed	1.0	--	1.3	--	--
Aged 20–34	0.7	--	--	1.2	--
Aged 55+	0.8	--	--	0.6*	--
Spouse	0.3***	--	--	--	0.2***
Separated or Divorced	1.1	--	--	--	1.3
Nagelkerke pseudo-R2	0.35	0.17	0.12	0.05	0.16
AIC	677	781	818	857	787
N	962	1066	1039	1083	1062

Notes: ***p<0.001 ** p<0.01 * p<0.05

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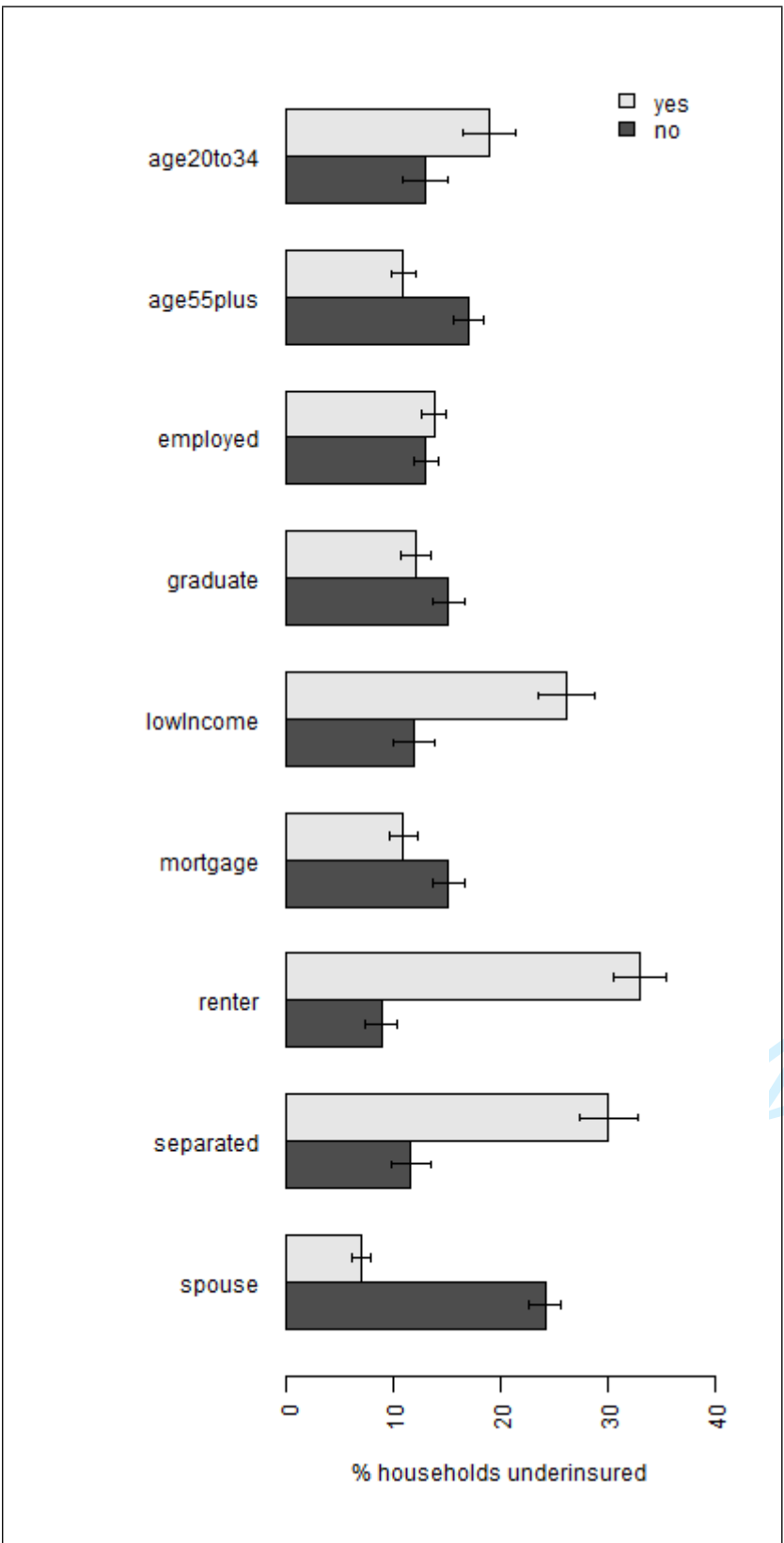


Figure 2. Per cent of households underinsured by social background. Standard error bars are shown.

When these models are combined with 2016 Australian census data to predict underinsurance (Figure 3), the clear patterns of disadvantage mapped on to administrative boundaries appear muted (Figure 1). Instead, relatively high levels of underinsurance are evident in the most advantaged areas of the City of Hobart, and relatively low levels of underinsurance are visible in the most disadvantaged areas of Glenorchy. Instead, the strongest driver of patterns appears to be patterns in tenure – renters are much more likely to be underinsured than owner occupiers. For example, one SA1 district in Glenorchy (6101505) has a high proportion of residents with low incomes (43 per cent), low employment (18 per cent) and a low number of university graduates (10 per cent) but also very low predicted levels of underinsurance (16 per cent). Another SA1 district in Hobart (6102708) has a high level of employment (77 per cent), a small number of low-income earners (13 per cent) and a high proportion of university graduates (36 per cent), but also a relatively high level of predicted underinsurance (24 per cent) (Table 2).

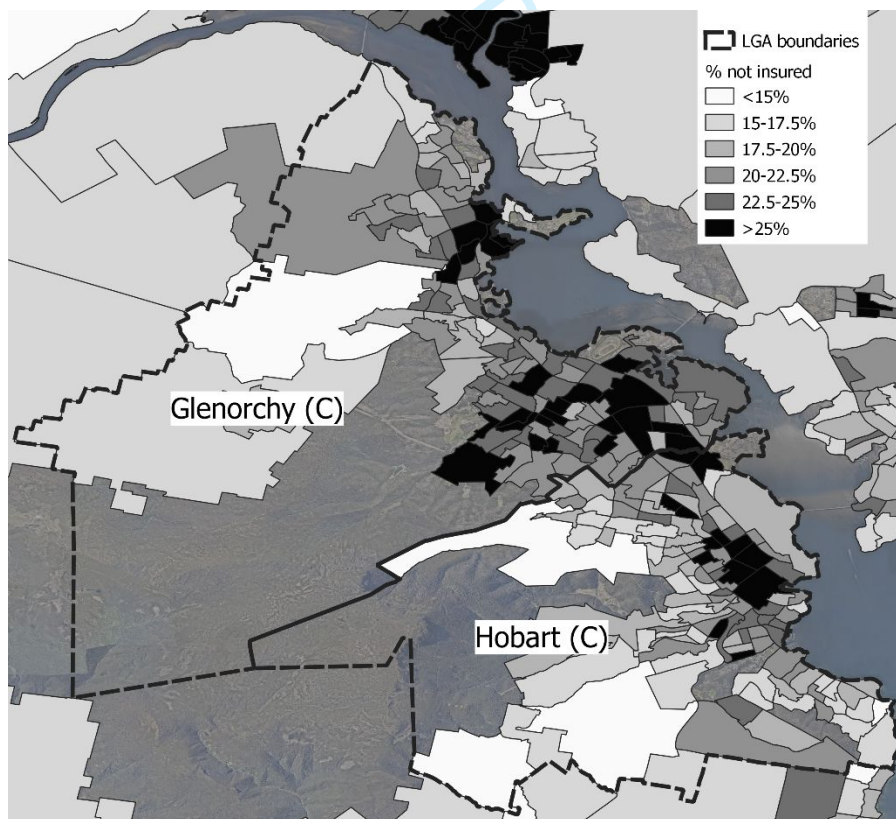


Figure 3. Map of underinsurance for Glenorchy-Hobart.

Darker shading indicates higher modelled levels of underinsurance. Each shaded polygon represents a different census Statistical Area 1 (SA1) unit.

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Table 2. Socio-demographic profile and predicted levels of underinsurance in selected SA1 areas

SA1	6101505	6101412	6103215	6103104	6102708	6101415	6103217	6101909
LGA	Glenorchy	Glenorchy	Hobart	Hobart	Hobart	Glenorchy	Hobart	Glenorchy
IRSD Decile¹	2	6	10	10	6	1	8	1
Population¹	312	225	330	303	464	272	459	326
Renters %¹	4	4	3	16	57	58	66	67
University graduates %¹	10	12	50	49	36	4	30	11
Income <AUD\$650/wk %¹	43	9	8	8	13	40	16	36
In employment %¹	18	63	62	57	77	40	47	51
Underinsured %	16	14	14	15	24	31	26	33

1. Australian Bureau of Statistics (2019)

For Review Only

Underinsurance as adaptation

Our spatial mapping demonstrates that underinsurance does not necessarily map onto disadvantage – the clear delineation of disadvantage and advantage between Glenorchy and Hobart (Figure 1) is muted when mapping underinsurance (Figure 3). This finding confirms one of the two category errors that we identified as (re)produced in the universalising association between disadvantage and riskiness: there is not a necessary relationship between underinsurance and disadvantage. The pattern of underinsurance, when collectivized at the level of suburbs, exceeds the moralization and stigmatization constituted within the linking of insurance status with disadvantage. In this we do not claim that welfare-oriented concerns about underinsurance are unwarranted or false. As our findings show, lower income remains a significant factor associated with underinsurance. However, other indicators of disadvantage – educational attainment and employment status – are not significant and thus, the nature of a socio-economic derived explanation for underinsurance is fallacious.

Previous references to the place-specificity of property insurance have drawn upon socio-economic status and how insurance contributes to (re)producing familiar types of communities and places – disadvantaged and advantaged. This includes speculation of urban ‘splintering’ driven by insurance availability – the creation of enclaves of disadvantage and wealth in disaster-prone areas (Johnson, 2015), and socio-economic divides being hardened through the spatial distribution of underinsurance (Booth and Tranter, 2018). Housing tenure has not been considered. However, in our analysis it is housing tenure that is the strongest predictor of underinsurance. Renters who do not have contents insurance contribute significantly to our mapping of underinsurance, with the even ratio of owner occupiers to renters (2:1) across both municipalities an influential factor in the distribution of underinsurance.

In countries like Australia, the United Kingdom and the United States, owning a home has been both the norm and the ideal (Bate, 2018). This has informed the focus of housing tenure research and policy, with ownership receiving far more elucidation, scrutiny and intervention than renting: ‘little attention has been given to the cultures and practices of homemaking among renters’ (Bate, 2018: 11). Renting has generally assumed to be a temporary and marginal occurrence, however recent trends are drawing attention to this tenure type as socially and economically significant and influential (Bate, 2018). Over the past decade, in Australia, the rental sector has grown by 38 per cent, and 2.1 million households are now

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3 renting (Hulse et al. 2018). Households are also now renting for longer (Martin et al., 2018)
4 though leases are commonly only 6 or 12 months in duration (Bate, 2018).
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7 The factors driving the growth in the rental sector in Australia, and in countries like the
8 United Kingdom and United States (Bate, 2018), are complex and spatially variagated
9 (Martin et al., 2018). The financialization of housing – investment in housing assets as
10 privatised welfare and a form of financial security (Aalbers, 2017) – is one significant
11 contributor, with ‘middle-Australia’ now possessing an asset base dominated by housing i.e.
12 investment properties in the rental market (Bryan and Rafferty, 2018; Gurran and Phibbs,
13 2016). However, the imagined security has not been forthcoming.
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19 Significant income fluctuations are now evident across all socio-demographic bands in
20 Australia, and ‘while some live more financially stressed and precarious lives than others, we
21 all live on a risk continuum... We are all subject to a range of financial risks...’ (Bryan and
22 Rafferty, 2018: 103). The wealthiest have greater means to absorb personal or global
23 financial shocks, but they are still exposed (increasingly exposed) to financialized risks –
24 albeit in different ways and to different degrees to other cohorts. ‘Middle-Australia’ is the
25 most exposed to financial stress and risk due to its housing dominated asset base and no
26 growth in insurance uptake because of limited discretionary funds (Bryan and Rafferty,
27 2018). Low income earners have more diversified assets and contrary to popular perception,
28 those that have insurance (of all types) spend more of their income, proportionately, on it.
29 They have also significantly increased their insurance commitments over the last decade.
30 While this appears largely driven by government incentives for private health insurance
31 (Bryan and Rafferty, 2018), it indicates a shift regarding which households have discretionary
32 spending power. Low income earners may be more at risk of poverty, but not necessarily of
33 financial stress and risk (Bryan and Rafferty, 2018).
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46 With housing financialization contributing the growth in the rental sector, our findings point
47 towards a related growth in underinsurance with many renters choosing not to insure.
48 Financialization, as French et al. (2011) observe, inevitably manifests contradictions and
49 limitations – in this case, the financialized actions of some co-producing a financialized
50 responses to insurance. This relationship is not linear and causal, with the historic and
51 cultural norms that have led to low levels of contents insurance amongst renters dovetailing
52 with housing trends to produce a rise in households without property insurance. When renting
53 was short term and generally undertaken by people expected to move into home ownership,
54 they likely had a low asset base and were thus, low risk should an adverse event impact their
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3 possessions. There remains a tendency to assume that renters are low risk; risking a loss of
4 limited personal possessions but not the loss of a substantial housing asset (withheld for peer
5 review).
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9 Unlike many other western countries where the largest cohort of renters tend to be low
10 income earners, Australian renters are evenly spread across all income categories (Martin et
11 al., 2018). In addition, Australians identified as not accessing and possessing financial
12 services and products such as insurance, include people also distributed fairly evenly across
13 educational attainment and income categories, as well as a significant number of people in
14 full time employment and a high number of young Australians (mostly not students) (Centre
15 for Social Impact, 2014). The exception is those with income less than AU\$300 per week
16 who are much more likely to not access and possess financial services and products, because
17 of financial constraints and perhaps a smaller asset base. There is also little doubt that
18 underinsurance – choosing not to purchase house and/or contents insurance – is used by some
19 in managing household financial pressures (Booth and Harwood, 2016). This includes these
20 lowest income earners and ‘middle Australians’ experiencing financial stress (Bryan and
21 Rafferty, 2018).
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32 For renters, and as noted above, the discretionary nature of property insurance can also be
33 influenced by a historically constituted sense of transience (Bate, 2018). These households
34 may have fewer assets because of frequent moves (note lease length above), and/or devalue
35 their possessions when compared to housing assets. Booth and Harwood (2016), for example,
36 observe a sense of irreplaceability borne of personal possessions that are hand-me-downs,
37 second hand or homemade. While insurers may define these as insurable, some households
38 deem these uninsurable i.e. they cannot be replaced because of their sentimental and
39 emotional value or are deemed unworthy of financial investment in insurance to ensure their
40 replacement. These decisions and the complexity of everyday factors that inform them,
41 exceed financialized and marketized logics and capacities.
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49 More generally, there is also evidence that underinsurance can address the perceived risk of
50 being bound and dependent upon insurers and insurance (Booth and Harwood, 2016). High
51 levels of distrust in insurers and associated uncertainty about how and if insurance will work
52 in the face of an adverse event, means that some achieve a sense of security by not
53 purchasing insurance as this negates alignment with untrustworthy insurers. There is also
54 evidence that some with adequate wealth and assets to enable recovery independent of
55 insurers, chose not to insure (Collins, 2011).
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3 Hence, what our research suggests is that rather than (re)producing familiar patterns of socio-
4 economic disadvantage-advantage, the relationship between housing tenure and insurance
5 points towards the emergence of new cohorts that are more or less financialized. Following
6 the observation that financialization ‘clearly has the potential to exacerbate unevenness
7 across individuals, social groups, and organisations in space and place’ (Pike and Pollard,
8 2010: 34), we observe in relation to property insurance, that financialization appears to
9 (re)produce responses (for example, to not insure) that are constituting novel places.

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11 The manifestation of these places disrupts linear and deterministic understandings of
12 financialization and the creation of financialized subjects. Households are renegotiating or
13 reproducing financialization on their own terms, or at least (re)producing this process in
14 relation to other everyday factors that exceed the machinations of global financial systems.
15 Financialization is described as “commercially inspired selfhood” that conditions individuals
16 to take on greater financial responsibilities and risks’ (Pike and Pollard, 2010: 32) and as
17 creating ‘financially self-disciplined subjects’ (French et al. 2011: 804). Here it also includes
18 the possibility (the probability) of unconditioned or *adisciplined* subjectivities.

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20 While the process of marketization strives to wrestle dynamic relations into passive goods,
21 some households exert agency on whether a ‘good’ is recognized as valuable in its pacified
22 form. In other words, household-manifest agency that is intended to sustain households (and
23 not necessarily markets) embodies financial, material and householder dimensions, and
24 brings its own logics and devices to work within the processes of financialization and
25 marketization. Underinsured households are not necessarily and inevitably ‘a problem in need
26 of a solution’ but can represent a freeing of ‘passive goods’ – of activating rather than
27 pacifying relations that can be variously arranged and assembled in other ways, elsewhere.

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29 Thus, underinsurance constitutes a ‘privileged object for analysing how goods become
30 pacified’ (Çalışkan and Callon, 2010: 8) *and* a privileged object for considering how
31 pacification may fail or be resisted. It represents a nexus of resistance or assertion constituted
32 within the processes of financialization and marketization; these processes are co-creating
33 other non-insurantal possibilities. These possibilities are not necessarily ones premised on
34 risk management and can entail their own risks – financial (including a reliance on other
35 forms of support if losses are suffered) and moral (as sitting apart from the ‘good insured-
36 type people’). However, unlike an insurance policy, these possibilities appear likely to
37 (re)produce everyday uncertainty in more tangible and negotiable ways. In this,
38 underinsurance constitutes a form of adaptation; of households making changes in response
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3 to present or future socio-ecological challenges (Biermann, 2015). It is not, in and of itself,
4 risky or a representation of riskiness – supporting our observation of the category error of
5 mapping riskiness onto insurance status.
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9 New and evolving insurance technologies are often perceived to enhance the adaptive
10 capacities of householders and regions, enabling recovery, incentivising mitigation and
11 enabling the stability and growth of financial systems (e.g. Hudson et al., 2016; McGee et al.,
12 2014; Surminski et al., 2016). In this, adaptation is frequently deployed within a form of
13 governance that normalises neoliberalism (O’Hare et al., 2016). Yet, insurance has also been
14 identified as contributing to the maintenance of a problematic socio-ecological status quo. It
15 co-produces maladaptative responses through, for example, dictating the reconstruction of
16 disaster-prone buildings and urban environments rather than enabling rebuilds with mitigative
17 capacities (O’Hare et al., 2016). From the vantage point of households, the adaptive
18 capacities created by household underinsurance embody *a*financialized and *a*marketized
19 logics that are at odds with those constituting insurance as a neoliberal adaptive mechanism.
20 In this regard, when it comes in contributing to everyday financial and material adaptation,
21 underinsurance appears to hold far more adaptive capacity than insurance.
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32 **Conclusion**

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34 The patterns of house and contents underinsurance that we illustrate spatially and discursively
35 indicate place-specified responses within the processes of financialization and marketization.
36 Households exert agency in deploying underinsurance in response to everyday challenges,
37 and underinsurance is not a risk *per se* for households and does not, in and of itself, represent
38 a manifestation of riskiness. Thus, our map of underinsurance is not a ‘risk’ map, but one that
39 represents spatially variegated and ‘distinctive ecologies of financial knowledge, practices
40 and subjectivities’ (French et al. 2011: 812).
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47 There is need for greater understanding of the relationship between housing tenure, and social
48 and financial security and vulnerability relating to property insurance. This includes further
49 investigation of the intersection of the financialization of housing, for which there is a
50 substantial body of work (e.g. Aalbers, 2017; Gurran and Phibbs, 2016; Searle and Smith
51 2010), and insurance as located within the processes of financialization. As we observe,
52 housing financialization is ‘growing’ an *a*financialized pattern of underinsurance; property
53 underinsurance is co-produced rather than ameliorated through financialization. There is also
54 an opportunity to investigate a range of factors in relation to renting and insurance. Despite
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assumptions of renters as low risk, there are indications that while the risks of underinsurance differ between housing type, they are potentially no less significant for renters than for owners. Following a disaster event, for example, in addition to a potential loss of contents, renters without adequate insurance can face homelessness or having no option but to live in a damaged property (withheld for peer review). Avenues of further research on renting and insurance include: the place specificity of adverse events and risk perceptions; the specificities of different types of property insurance (house, contents and landlord-investor insurance, and how contents insurance may differ for owner occupiers and for renters); risk-related interactions between renters, landlord-investors and property management agencies; tenancy laws and contractual factors; the mobility and everyday practices of renters; and, the emergence of new technologies in property management. All these warrant closer quantitative and qualitative attention that could shed further light on the everyday risks and adaptative capacities of households and how these are constituted through insurance.

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ⁱ French et al. (2011) identify three definitions of financialization of which the financialization of everyday life is one and observe, ‘the label financialization may be slightly misleading, for the concern is not with financial intermediaries per se, not with the growing power of financial intermediation, but rather with the growing reliance, directly or indirectly, on capital markets, securitized products and contracts, and institutions allied to a transaction-driven mode of financial activity’ (French et al., 2011: 807). Pike and Pollard (2010) offer two additional understandings but identify a general agreement that financialization is ‘associated with widening and deepening the reach of financial interest in ways that pervade the agency, spaces, and places of existing and new actors and sites’ (Pike and Pollard, 2010: 33).

ⁱⁱ This ranking comes from the Australian Bureau of Statistics SEIFA Index of Disadvantage. Relative disadvantage is measured through Census data on income, education attainment, unemployment and occupation skill levels. More disadvantaged areas have, overall, lower income, lower educational attainment, higher unemployment and more unskilled occupations (idCommunity, 2018).