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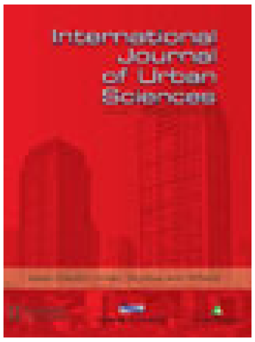

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A fresh look at contemporary perspectives on urban housing affordability

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ABSTRACT

The literature on housing affordability has grown rapidly since Hulchanski [1995, p. 489. The concept of housing affordability: six contemporary uses of the housing expenditure-to-income ratio. *Housing Studies*, *10*(4), 471–491] declared that housing researchers should avoid using the term since it is not a robust concept and measurement often lacks validity. In the ensuing 24 years, however, scholars have continued to debate the definition and measurement of housing affordability as well as the prevalence and type of 'housing affordability problems' in various countries. This paper is a think piece which takes a fresh look at housing affordability as a concept which has persisted despite considerable contestation and scepticism about its use. It provides a critical and multi-disciplinary assessment of housing affordability starting with early conceptualization of the nexus between economic principles and social norms about housing and living standards to a reworking of housing affordability in the twenty-first century as an urban issue affecting lower and middle-income households in cities, as a consequence of the financialization of housing and urban restructuring. It argues that the housing affordability concept has been repurposed such that the focus is less on understanding housing expenditures in contributing to poverty and disadvantage within the domain of social policy and more on the urban policy challenges of growing inequities in access to urban resources. The paper highlights the challenges for urban policy in adopting and adapting rather than rejecting a multi-dimensional concept of housing affordability and consequently the importance of new ways of measuring urban housing affordability.

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Housing affordability; urbanization; budget standards; financialization; commuting poverty; composite measures

Highlights

- Traditionally, housing affordability was linked to understanding poverty (social policy).
- Financialization and gentrification linked to ongoing urbanization have led to new types of spatial inequalities.

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- These spatial inequalities include access to housing (assets); also to transport and energy.
- Housing affordability measurement has become even more multidimensional than it was.
- Urban policies need to start addressing the 'old' and 'new' housing affordability problems.

1. Introduction

Hulchanski (1995) in an often-cited review of the deployment and measurement of housing affordability in the mid-1990s argues that: 'housing affordability' has become a common way of summarizing the nature of housing difficulties in many nations', replacing the housing problems of the preceding decades, namely: 'the "slum problem", the "low-rent housing problem", the "housing shortage" or the "housing need" definitions' (Hulchanski, 1995, p. 471) Linneman and Megbolugbe (1992, p. 369). writing at much the same time confirm that housing research in advanced-economic nations had shifted its focus towards housing affordability, homeownership and privatization in the 1980s when 'middleclass households', especially young urban professionals were starting to have to pay unreasonable housing costs in relation to their income and in some instances were severely hampered in their access to homeownership. In many Western- and Northern-European countries, in contrast, issues of supply, quality and targeting of support to less well-off households dominated housing research at this period as the rate of homeownership continued to increase in the 1980s and 1990s (Boelhouwer & van der Heijden, 1992).

The Global Financial Crisis (GFC) heralded more widespread concerns about housing affordability in a broader range of advanced economies, as for example in the European Union (EU).[1] Although the EU-average of more than 1 in 10 of population spending more than 40%[2] of their total disposable household income on housing costs including energy costs has changed little since 2007,[3] differences have arisen across population groups. An estimated 37.9% of population on lower incomes spent more than 40% of income on housing/energy costs in 2017 (up from 34.2% in 2007). For younger people (18–24 years of age) the equivalent rate in 2017 was 12.7%, while 26.3% of tenants renting at market price in 2017 were also in this situation.

In Europe and elsewhere, these trends in housing affordability have been discussed primarily as an intergenerational issue consequent on rapidly rising house prices in the 2000s, with the exception of the period immediately after the GFC. A growing literature on 'generation rent' has documented how first-time entrants to the housing market have not been able to access homeownership and end up in the rental sector where they are likely to remain for long periods (Arundel & Ronald, 2016; Eaqub & Eaqub, 2015; Lennartz, Arundel, & Ronald, 2015; McKee, 2012; McKee, Moore, Soaita, & Crawford, 2017). These accounts also highlight the income differentials that underlay issues of age and tenure.

Mapping by Li (2014) shows that the number of articles in 26 selected journals with the topic of 'housing affordability' has increased, particularly since the GFC. More recently, Ezennia and Hoskara (2019) provided an updated review of the English-language literature on housing affordability measurement published between 2000 and 2018. These reviews indicate that scholarly discussion of housing affordability is apparent in the advanced economies (North America, Europe, Australasia) across the field of housing/urban studies as well as economics and social sciences.

More recent literature on housing affordability, particularly since the GFC Crisis, has begun to reframe housing affordability as an urban issue. There have been calls for recognizing and researching what has been called the 'so-far under-recognised and under-researched – emergent global crisis of urban housing affordability' (Wetzstein, 2017, p. 3159). This is occurring within the context of a megatrend of global urbanization in the form of increasing numbers of large cities and an unending mobility to the cities. In the 2010s, affordability in housing has been back on the agendas of the United Nations in the form of Sustainable Development Goals,[4] the Habitat III New Urban Agenda (United Nations, 2016) and the EU Urban Agenda.[5]

The contribution of this article is a multi-disciplinary think piece, which aims to provide a fresh look at the concept of housing affordability in the context of intensive urbanization. To be clear, this article is not a systematic review of the literature on housing affordability, which others have attempted (e.g. Ezennia & Hoskara, 2019; Li, 2014), an increasingly challenging task in view of the volume of scholarly and policy publications. This article contributes to the scholarly 'state of the art' on the topic revisiting some past issues and highlighting some new ones. To set the scene, the next section highlights the literature on the assessment of housing affordability measures starting with the early empirical studies of housing expenditures in the context of poverty studies to influential conceptualizations based on the nexus between economic principles and social norms and finally consideration of 'housing plus' affordability taking into account energy/water affordability. Section 3 first signals the increasing complexity of urbanization which affects housing affordability in different ways. Section 4 then considers multi-dimensional measures to address the complexity that embraces not only the affordability problems of the 'poor', but also the urban affordability problems of the low and middle-income groups as well as younger generations.

2. Housing affordability from early beginnings to the beginning of the twenty-first century: measurement and normative judgements

2.1. Early beginnings: housing expenditures, cost of living and poverty

Early measurement of housing affordability was grounded in research into the cost of living and poverty, with implications for national social policies. Two German statisticians, Engel and Schwabe, started the measurement of housing costs in the form of empirical observation of household costs of living in industrializing nineteenth-century society (Hulchanski, 1995; Praum, 2016). Based on empirical measurement, 'laws' were formulated about the relationship between household expenditure and income.

Engel published his results of a study of 153 Belgian families in 1857. 'Engel's Law' posited that the lower the family income, the higher share of costs for basic goods such as food was required. Although housing costs (rent and fuel) in his study turned out to be proportional (12%) to income, this result was not emphasized. On the other hand, Schwabe (Praum, 2016), was the first who explicitly studied housing costs, using data on 15,000 households from Berlin. He concluded for 1868 that housing costs were not directly proportional to income but their share 'rose' from two percent of income for high-income households to 28% for low-income households.

Based on these and other empirical observations, each study derived its own 'law', and by the end of the 1880s, the rule of thumb was (wrongly) based on Engel's proportionality finding from Belgium and applied to the US: tenants needed one week's wage per month to pay for their rent, fuel and electricity (Hulchanski, 1995, p. 475), introducing a normative standpoint. The so-called ratio approach proved longstanding in the US. By the 1920s a maximum of 25% became institutionalized when it was introduced in mortgage lending to homeowners (Praum, 2016).[6]

A little later than the original nineteenth-century cost of living studies in continental Europe, which were adopted and adapted into the US, B. Seebohm Rowntree[7] started poverty studies in York (UK) in 1899. He reported his results for more than 11,500 households in his 1901 publication entitled *Poverty: A Study of Town Life*. According to Malpass (2012), one of the important results reproduced Schwabe's Law.[8] Malpass (2012) concluded that one of the more important findings was that those living in poverty would not be able to change their situation. Bad quality housing often affected health negatively, which then affected negatively possibilities to earn additional income. This introduced the idea that affordability was inextricably tied to issues of housing quality.

Rowntree (1901; Malpass, 2012) was the first to construct a so-called poverty line using budgets to determine necessary expenses in rent, food (based on minimum calories needed for different diets and according to male/female/child distinction) and other expenses (such as for clothing and fuel). This approach allows measurement of the prevalence of households living in poverty and identification of types of households most affected. For rent, Rowntree used actual rent paid rather than a norm, as he was not able to determine a standard. This largely normative exercise showed that 15.4% of the population in wage-earning households in York were living in 'primary poverty' (9.9% of population in York); i.e. not having enough income to cover the necessities (p. 399).

In brief, relative measures of housing expenditure-to-income in this early work were based on empirical observation rather than any development of theory. This is in contrast to early work on poverty lines in which budgets were developed based on absolute amounts for necessary consumption for different household types (if deemed possible), and subsequently set as the standard.

2.2. Second half of the twentieth century: housing expenditures, normative standards and social policy

In the US (prior to the late 1960s), and in the UK prior to the late 1980s, housing experts accepted the ratio of housing costs to incomes as the appropriate affordability indicator – only querying whether a single ratio could set a normative standard (see Stone, 2006a, p. 164). In the US in the late 1960s and early 1970s, there was considerable debate about budgets (total income needed for all necessities), as an aspect of concern with poverty and urban problems (The War on Poverty initiated by President Johnson), which subsequently declined. This type of a debate took place in Australia in the 1970s with the Commission of Inquiry into Poverty rediscovering poverty and housing stress in the midst of affluence (Commission of Inquiry into Poverty, 1975) and the UK in the 1990s (i.e. Bramley, 1990a, 1990b, 1994; Hancock, 1993; Whitehead, 1991). These developments led to a new examination of the role of housing expenditures in relation to costs of living and poverty which provided more nuance to debates about housing affordability.

Lerman and Reeder (1987, p. 389) in the US argue that the financial side of the equation needs to be coupled with a 'quality-based' measure for a societal-determined necessity such as housing. Such a measure enables a distinction between households for whom income is 'too low' and therefore functions as a limit/constraint to finance the necessities (decent consumption) from those for which housing consumption is considered as 'too' high because of their preferences.[9] Similarly Stone (1990) in the US argued that while housing affordability is arguably only one dimension of housing deprivation (along with housing standards, security of tenure, lack of safety and inaccessibility) and logically distinct from these, in reality, most households who experience one or more of these problems 'do so because they cannot afford satisfactory housing and environments' (see Stone, 2006b, p. 40).

A definition of housing affordability that picks up on this discussion about quality-based affordability is the often-quoted definition by Maclennan and Williams (1990, p. 9) who say that: '"Affordability" is concerned with securing some given standards of housing (or different standards) at a price or rent which does not impose, in the eyes of some third party (usually government) an unreasonable burden on households'. As one of the key participants of the UK-debate Whitehead (1991) argues that the shift in discourse from housing need to housing affordability was associated with a move to a more market-based system of housing provision in the UK, which had had a large social rental sector. Although the shift is rhetorical, she argues that housing became seen more as a private good in a market system rather than a merit good. But Whitehead (1991, p. 872) also argues a standard of decent quality is needed to reflect the social aspects of housing.

The most cited paper of this period about the measurement of housing affordability (according to Li, 2014) is by Hancock (1993) who also picks up on the trade-offs underlying the measurement of affordability. Hancock states that the 'essence of the concept of affordability' (p. 129) is the opportunity cost of housing expenditures – 'what income to be foregone in order to obtain housing and whether that which is foregone is reasonable or excessive in some sense' (Hancock, 1993, p. 129). This draws attention to two points. First, to the trade-offs that people make; i.e. they may prefer more housing consumption or more non-housing consumption, which leaves them below the norm for one or the other. Second, she argues that 'definitions of affordability must distinguish between the individual's conception of what is and is not affordable and society's judgement' (Hancock, 1993, p. 131).

Hancock is critical of Maclennan and Williams (1990) and Bramley (1990a, 1990b) for using ratio definitions of affordability, since these are silent on acceptable opportunity costs of housing or non-housing consumption. She tests out four different definitions of housing affordability empirically in Glasgow, essentially arguing for a residual income approach[10] to affordability. In a later review, Bramley (2012) argues that most scholars who start from first principles argue like Hancock for a residual income approach. Similarly, Hulchanski (1995, p. 474) laments 'a comedy of errors', particularly when one ratio was used as the standard regardless of the type of household.

Summarizing the timeline, from the early beginnings in Europe, housing affordability measurement was embodied in the cost of living and poverty studies in advanced economies (Hulchanski, 1995; Praum, 2016). From the 1980s on, it became – sometimes ill-defined, as in the case of the expenditure-to-income ratio – used as a policy concept, as illustrated here based on the developments in a number of English-speaking countries. From the 1990s, scholars began to develop this more widely leading to influential conceptualizations based on the nexus between economic principles and social norms (Hancock, 1993; Linneman & Megbolugbe, 1992; Maclennan & Williams, 1990; Stone, 1990).

2.3. Twenty-first century: normative standards on housing and non-housing expenditures

The introduction of norms set the scene for the discussion of issues not only about the affordability measurement but also about the normative basis of quality-based housing affordability. On the measurement side, the advancements in data collection and computer power have facilitated the use of budgets which are sensitive to household type and size. They also allow for the collection of different and more types of data. Studies often distinguish housing costs into multiple components; i.e. is it the rent, the mortgage cost or another cost component that is considered unaffordable such as property rates, insurance, water or energy costs?

Fuel[11] (often used interchangeably[12] with energy) costs are one type of cost. Fuel poverty is thereby understood as the situation in which one is not able to 'afford adequate services … clearly demonstrated when the home is cold or fuel debts accumulate' (Boardman, 2010, p. 256). The term poverty is used in the sense that the type of cost pushes the person in question into poverty; i.e. fuel costs are considered too large for the household budget. Fuel poverty has been on the agenda, notably longer in the UK than elsewhere (Bouzarovski & Cauvain, 2016; Haffner & Boumeester, 2015; Thomson & Snell, 2013; Thomson, Snell, & Liddell, 2016).[13] In the case of water affordability, a similar 'poverty reasoning' could be developed (Murphy & Hearne, 2018). As with housing affordability, there are discussions in the literature on fuel and water 'poverty' about cost and quality norms (Vanhille, Goedemé, Penne, Van Thielen, & Storms, 2018).

Stone (2006b, p. 42) argued for a theoretically informed and a robust definition of housing affordability; stating that 'an affordability standard is a normative concept, which must have some independent logical or theoretical basis against which households' actual circumstances can be measured' (Stone, 2006b, p. 42). He was an advocate for a residual income approach to housing affordability, which is explicitly normative (the 'only truly logical normative approach' – Stone, 2006b, p. 44), which he applied consistently to the US (Stone, 1990, 2006a, 2006b) and also other countries including the UK (Stone, 2006c) and Australia (e.g. Burke, Stone, & Ralston, 2011; Stone, Burke, & Ralston, 2011).

A residual income approach relies on the availability of robust budget standards for non-housing consumption (food, clothing, utilities, etc.) for each household size/type. Stone (2006b) uses these standards to ask whether there are sufficient funds for housing expenditures after these costs have been met using a 'shelter poverty' sliding scale which he developed, and which is grounded in space and time (Stone, 2006b, p. 45). Shelter poverty measures actual income and housing costs against a monetary normative standard for non-shelter items rather than shelter costs. The budget standard approach measures material deprivation, which is a central element in income poverty. Using this approach in the US and elsewhere highlighted the problems facing larger households, renters (paying market and in some cases regulated rents), households headed by people of colour and households headed by women (Stone, 2006b, pp. 49–56). More recent research using this approach has found that the affordability problems of social renters in Flanders and the Netherlands have also been underestimated (Heylen & Haffner, 2013). Much of this work on budget standards for non-housing consumption deploys more than one normative standard, e.g. a basic need standard and a modest but adequate standard indicating the extent of societal participation (see also Burke et al., 2011).

Explicating norms about what is considered acceptable and what is not is a difficult exercise and can never be completely objective, as indicated above, when both individual and societal norms are considered (Hancock, 1993). In both instances, the design of norms will depart from perceived needs. Ytrehus (2000) identifies two approaches from the literature that take the social and cultural context into account: the relative and the absolute one. The former defines deprivation (i.e. unaffordability) in comparison to a standard in a society that expresses a situation of no deprivation, but the disadvantage of the relative approach is the lack of a defined absolute minimum. In contrast, minimum norms form the starting point of an absolute approach, which assumes 'universal standards of needs satisfaction' (Ytrehus, 2000, p. 171), like the basic need and modest but adequate standards referred to before.[14]

Bramley (2012) in reviewing this phase of scholarship optimistically refers to long-running 'but now wholly resolved debates' about different approaches to measuring affordability and setting standards or norms – i.e. affordability ratios vs residual income approach (Bramley, 2012, p. 134). In brief, while there had been robust debates about measurement from the late 1980s, they centred on the contribution of housing expenditures to income poverty within the domain of social policy, highlighting particular types and sizes of households at the bottom of the income distribution who were in income poverty after paying for housing and experiencing material hardship (see also Chen, Hao, & Stephens, 2010; Diaz McConnell, 2012).

3. Housing affordability in the twenty-first century: new urban dimensions

If housing affordability was seen primarily in the twentieth century as a social policy issue centring on the relationships between housing, non-housing expenditures and income poverty, the aftermath of the GFC (2009 onwards) has seen revival of discussions about housing affordability as a consequence of house price and rent increases and urban restructuring. This is not primarily a debate about housing and poverty but about new types of inequalities in housing assets/wealth; intergenerational and spatial inequities which are the domain of urban policy rather than social policy which is largely a-spatial. In fact, arguably, many of the concerns about housing policy across a range of advanced economies have been absorbed into discussions about the role of big cities as drivers of economic growth (e.g. EU Ministers responsible for Urban Matters, 2016; World Bank, 2009). Notably, the United Nations' New Urban Agenda (Habitat III) defined a new roadmap to make global urbanization an engine of sustained and inclusive economic growth as well as ensuring social and cultural development and environmental protection[15] (United Nations, 2016). In this section, we examine some of the scholarships on underlying processes of financialization and urban restructuring in the metropolitan areas of advanced economies which have led to new concerns about housing affordability including for middle-income households.

3.1. Financialization

Scholarship on 'financialization' predates the financial crisis and, as with housing affordability, the concept has been criticized as an 'imprecise buzzword' across the social sciences (Ioannou & Wójcik, 2018, p. 1). The financialization literature attempts to explain the move from industrial capitalism based on commodity production and trade to financial capitalism in which profits are made primarily through financial transactions (Krippner, 2005, p. 174). It also includes a more explicit institutional reading of the increasing role of financial motives, markets, actors and institutions (Epstein, 2005, p. 3) as well as extension of financial markets and calculative practices into the lives of what hitherto had been predominately non-financial actors, such as households (e.g. Allon, 2010). This literature has increased substantially since the GFC drew attention to the personal, societal and economic risks as national/regional housing markets became embedded in global financial capitalism (see reviews in Aalbers, 2016; Allon, 2010; Ioannou & Wójcik, 2018; Sawyer, 2013; Van der Zwan, 2014).

A more specific 'financialization of housing' literature has highlighted ways in which global capital flows are intermeshed with housing markets in ways that have implications for local places and local households. These processes may play out differently in different national and sub-national contexts in what Dewilde (2018, p. 18) describes as global processes 'refracted when passing through institutional prisms'. As Forrest and Hirayama (2015, p. 234) suggest this recent wave of housing and urban literature has connected analyses of the dynamics of housing markets into broader political economy debates and 'highlighted the growing significance of residential real estate in the evolution of contemporary capitalism'.

What then are some of the linkages between two 'fuzzy' but highly influential concepts: financialization and housing affordability? The first and most obvious one is the effect on mortgage lending and capacity to purchase housing for ownership (or investment), in view of recognition of the role of housing mortgage markets in precipitating the GFC (Landis & McClure, 2010; Yates & Berry, 2011). Wider access to mortgage loans led to higher house prices and, writing in the middle of the US sub-prime crisis before the GFC, Aalbers (2008, pp. 160–161) cautions that broader access to credit and larger mortgage loans does not lead to improved access to homeownership but higher house prices and greater risk and insecurity. Capitalization of this extra demand into house prices because of a rather inelastic supply will explain such an outcome.

The effects of the crisis were to tighten criteria for access to housing finance to households and investors, for example, through lower loan to valuation ratios and requirements for extra documentation. In theory, this makes it harder for marginal and younger borrowers to take out housing loans although falling interest rates following the GFC have softened this effect somewhat. Van der Zwan (2014, p. 121) cautions that financialization enabled access to finance for consumption including home mortgages by groups that had previously been discriminated against on the basis of race and gender which 'was an achievement for large segments of the population who were previously excluded from the world of home mortgages and credit cards' (p. 122). Despite the pernicious effects of the aftermath of the GFC on these groups, which the term 'housing affordability problems' is inadequate to describe, she argues that it is hard to imagine a powerfully alternative to this 'financial imaginary' of access to finance. What can perhaps be concluded is the effect of financialization in attenuating risk for home buyers and small-scale housing investors not only in terms of personal/household events such as unemployment but also broader structural factors which are beyond their control.

Whilst much of the financialization of housing literature has focused on mortgage lending, more recent scholarship recognizes that financialization affects rental housing as well (Aalbers, 2015; Byrne, 2019; Dewilde, 2018; Fields, 2014, 2017; Forrest & Hirayama, 2015). This has highlighted how large corporate real estate firms bought up foreclosed single-family homes in the US to build up large portfolios as an asset class with rental income that can be securitized in the same way as mortgage payments (Fields, 2018) and how private equity firms bought privately owned but subsidized rental properties to 'liberate' unused value in real estate in New York (Fields, 2014, 2017) and Berlin (Fields & Uffer, 2016), resulting in displacement of existing tenants or at least considerable rent rises. There are also implications here for young people accessing housing, the phenomenon of 'generation rent' referred to earlier. The not-for-profit (social) housing sector is also not immune from transforming value into revenues: housing associations (with regulated rents and access by administrative criteria) in the UK (Aalbers, 2016) and the Netherlands (Aalbers, Van Loon, & Fernandez, 2017) have increasingly sought private finance with concomitant exposure to the opportunities and risks of global finance and associated risks of affordability pressures for tenants by way of rent increases if the price of such finance increases and/or macro-prudential regulation or government policies limit the supply of finance to these housing providers.

While much of the literature on financialization is Anglo-American due to the contribution of the US housing crisis to the GFC and the focus on countries whose financial systems were particularly affected by it (such as the UK and Ireland),[16] there have been other financial crises which have impacted housing affordability, including the Asian Financial Crisis of the late 1990s. Inflated residential real estate values affect affordability for households whether they are homeowners or renters but as argued by Kennett, Forrest, and Marsh (2013, p. 11) 'It is the central tension between more pervasive commodification and effective risk management in residential property markets which has provided the key ingredient for economic downturn and vulnerability.'

Theorizing the links between real estate/housing markets and financial capital at an urban scale, Theurillat, Rérat, and Crevoisier (2015) distinguish between real estate capitalism and financialized capitalism. In the former which they argue began in about 2001, financial institutions such as real estate funds, Real Estate Investment Trusts (REITs) and domestic/foreign pension funds showed renewed interest in investment in the built environment in the inner cores of major cities. Funds were invested via large real estate developers and construction groups securing rental returns that delivered enhanced profits (Theurillat et al., 2015, p. 1422). In financialized capitalism, ownership of real estate including housing passes to institutions and their shareholders who are at arm'slength from individual developments and receive increased rent and capital value on a portfolio basis. This type of financialized capitalism is the result of increased mobility of global capital via real estate investment vehicles and liquidity achieved through securitization of real estate assets.

With a flood of 'cheap money' around the globe moving into real estate in large metropolitan areas under financialized capitalism in the post GFC period, land/house prices have increased rapidly in western countries often reaching new highs in the 2010s (The Economist, 2019, p. 85). Despite larger loan sizes chasing higher house prices, household incomes have been mostly flat (Ioannou & Wójcik, 2018), resulting in 'housing affordability problems' going further up the income scale to include middle-income households in major metropolitan areas. Wetzstein (2017) refers to this as another global crisis in the making, the Global Urban Housing Affordability Crisis which has winners (homeowners, investors, speculators) and losers (those in overcrowded housing, renters, those without sufficient money for other expenses) – a crisis which is likely to get worse. He argues that the new crisis is global in scale and applies to capital cities, global cities, high-amenity cities, economically viable cities, Asia-Pacific rim cities, university cities, new employment hubs and cities of consumption (Wetzstein, 2017, p. 3161).

3.2. Urban restructuring: gentrification in major metropolitan centres and ripple effects

A further driver of increases in urban housing affordability problems, as described in the previous section, is the movement of households into major metropolitan areas, in particular well located inner areas which attract higher-income households. This is perhaps best captured through developments in the gentrification literature (also acknowledged by Theurillat et al., 2015, p. 1427). Where the original gentrifiers were middle-class owner-occupiers moving into low-value areas, Paccoud (2017, p. 849) argues that small scale (buy to let) investors have taken over from ownership gentrification in most central areas of the most urban council areas in England. Further, there is a greater focus on new build housing (e.g. Davidson & Lees, 2005) initiated by private sector interests as well as government programs as contributors to gentrification; e.g. docklands-type developments.

Recent literature has also emphasized super-gentrification originally identified by Lees (2003, p. 2487) in the case of Brooklyn Heights in New York City and defined as 'the transformation of already gentrified, prosperous and solidly upper-middle-class neighbourhoods into much more exclusive and expensive enclaves'. This occurs in select areas of global cities such as London and New York City where there is 'intense investment and conspicuous consumption by a new generation of super-rich "financiers"' (Lees, 2003, p. 2487) fed by fortunes from the global finance and corporate service industries. Super-gentrifiers are concerned about status as well as investment and get huge incomes from the finance sector. They move into already gentrified areas and push out middle-class original gentrifiers (e.g. Butler & Lees, 2006). A latest version of this is by Burrows and Knowles (2019) who looked at changes in London between 2007 and 2017 finding that profound socio-spatial changes and new intensities in the financialization of housing are reshaping London as a 'plutocratic city' such that even middle-class households cannot afford to live in many areas of the city.

There is some discussion of the ways in which housing affordability problems in metropolitan areas can have wider ripple effects to smaller cities. For example, De Nederlandsche Bank (2017) provides a description from the Netherlands where the ripple effect is regarded as new phenomenon following the recovery of the housing market after the GFC, particularly in the capital city of Amsterdam. Spillover effects are identified into suburban areas stabilizing house prices, while smaller, peripheral municipalities are doomed to shrink. De Nederlandsche Bank (2017) concludes that this has become a housing market of three speeds: rising, stable and declining house prices. Theurillat et al.'s (2015) empirical work on Switzerland examines rural municipalities as well as medium-sized cities.

The main evidence currently, however, is in media discussion of residents relocating from metropolitan areas to smaller cities with concomitant upward pressure on house prices and rents in the cities that they move to which has implications for local residents. This is indicated in a number of countries with headlines such as: 'America's Housing Crisis Is Spreading To Smaller Cities' (Michael Hobbes, Huffington Post 5 May 2018); 'Housing Affordability Crisis Spreads to Rural America' (Tim Henderson, Government the States and Localities Magazine, 25 March 2019); 'Moving to the country the answer to housing affordability for some, but prices are rising' (Catherine McAloon ABC online, 24 January 2018) and 'Smaller Cities Are a Big Worry in China's Too-Hot Property Market' (Dominque Fong, The Wall Street Journal, 15 August 2018).

In brief, new types of gentrification, including super-gentrification, affect housing affordability in parts of large global cities and are evidence of the connection between financialization of housing and real estate translated into global capital flows which 'land' in particular geographic places. Gyourko, Mayer, and Sinai (2013) argue that in such cities growing dispersion in house prices is largely the result of aggregate population growth and the skewing of incomes nationally interacting with preferences for location and differences in local supply conditions. High house prices and rents crowd out lower-income households and whole metropolitan areas become 'superstars' with residency in preferred cities and towns effectively auctioned off to the highest bidder. The people who gain are existing landowners in those places benefitting from the rise in prices/rents and those who lose are the young and those who cannot afford higher prices and rents. This type of house price growth in superstar cities is not due to increased amenity/services or greater productivity but to inflows of global capital (Gyourko et al., 2013, p. 189). In other words, the focus of housing affordability has shifted to large metropolitan areas in Europe, North America, Australasia and also Asia (e.g. Singapore, Hong Kong, Tokyo) which have experienced such inflows of global capital into the real estate sector, including residential real estate which now accommodates an increasingly high income and wealthy group of residents.

4. Implications for urban housing affordability research and measurement

As a result of these urban processes in 'successful' cities which attract global capital and higher-income people, land prices, house prices and rents increase, and location matters more than previously, as lower and many middle-income households are increasingly priced out of well-located areas in large cities. This leads to new and compounding inequities beyond income poverty debates, as we discuss next.

4.1. Identifying types of inequities: the importance of location

For lower-income households, the implications can be severe if the result is the concentration of poor households and commuting disadvantage on the urban periphery far from jobs and services. This is captured to date in the suburbanization of poverty literature which finds that in the 2000s many lower-income households have little option but to find cheaper housing further and further from inner cities. The suburbanization of poverty has been documented in Australia (e.g. Baum & Gleeson, 2010; Randolph & Freestone, 2012; Randolph & Tice, 2014); the US (e.g. Holliday & Dwyer, 2009; Kneebone, 2014; Kneebone & Garr, 2010) and England/Wales (e.g. Hunter, 2014).

Middle-income households also find it increasingly difficult to afford housing in central, metropolitan areas with good jobs, transport and cultural facilities. This is not a problem of poverty: they can afford to buy or rent further from the metropolitan centre, but rather indicative of increasing spatial inequalities in access to city resources (for example, De Nederlandsche Bank, 2017). Li, Qin, and Wu (2018) provide an analysis of Chinese 'superstar cities', such as Beijing, Shanghai, Shenzhen, and Xiamen, where a serious housing affordability problem has developed, resulting from a shortage of supply in the 'space market' and a potential mispricing in the asset market. Within these cities, the housing affordability problem leads to longer commuting time due to the separation of home and workplace.

A further inequity results from sharply differentiated house prices and affordability pressures within major metropolitan centres and is known as 'spatial lock in'. People who move to more affordable areas may not be able to move subsequently, even if their needs change, e.g. change in employment or family circumstances because they cannot afford higher house prices or rents in other areas, which may have increased disproportionately (e.g. Hulse, Burke, Ralston, & Stone, 2010).

The types of inequity discussed in this section have broad implications for measurement of urban housing affordability which we consider next.

4.2. Measurement of multiple dimensions of urban housing affordability issues

Households moving to the urban fringe or adjacent rural areas face additional costs (and time) spent commuting which add to living costs. Commuting poverty must be considered an urban problem, if it is a trade-off between expensive housing versus low commuting costs or the other way around; but it is considered a broader type of poverty than housing expenditure only. According to Stark (2017), both of the Lucas (2004, 2012) publications started the debate about commuting poverty in the social sciences (see also Lucas, Mattioli, Verlinghieri, & Guzamn, 2016). Housing costs have been extended to include or state separately fuel and commuting costs in the realization that these types of cost impact on housing affordability as well. Stark (2017) calls commuting poverty partly a variation of fuel poverty, there where people cannot buy gasoline (called 'oil vulnerability'). It will be a broader interpretation, if limited mobility is caused by bad infrastructure, long distances, long commuting time and high costs (Woodcock, Banister, Edwards, Prentice, & Roberts, 2007).

These broader implications of urbanization require consideration of the cost of commuting in addition to (separate) measurement of housing, energy and water costs, as elaborated in Sections 2 and 3. The new urban affordability measures increasingly need to be multidimensional. An example is the so-called Location Affordability (LA) Index (LAI) of the US Department of Housing and Urban Development (HUD), which takes housing and 'transportation' costs into the picture to determine location affordability for potential tenants in market renting. Taken the index as a starting point, Walter and Wang (2016, p. 670) developed a 'search tool' for housing voucher (low-income) recipients to help them search for suitable housing options based on three types of characteristics. Availability, quality and the LA score for 'housing supply', while 'accessibility to opportunity' scores access to public transport, employment and facilities (Walter & Wang, 2016, pp. 672–673). Last, but not least the indicator for 'neighbourhood quality' not only includes physical, urban and socioeconomic variables, but also 'environmental and health indicators'. Such a tool cannot be called anything else than an advanced measure of affordability of a bundle of housing properties. Separating the different components allowed the researchers to observe 'a spatial mismatch between accessibility and affordability for low-income households' (p. 670).

The LAI is not the only attempt to calculate multiple affordability measures, the so-called composite measures that, given the increasing urban nature of unaffordability problems, have mainly been developed in the twenty-first century (Bogdon & Can, 1997; Bramley, 2012; Gan & Hill, 2009; Li, 2014; Napoli, 2017; Tang, 2012). Multiple measures highlight different dimensions of affordability recognizing that the multiple dimensions of affordability need multiple measurements; i.e. a house price-to-(household) income ratio will pinpoint affordability problems in a different way than the expenditure-to-income ratio or a budget approach. The latter two approaches show other housing costs (e.g. maintenance), as well as taxation and subsidy effects (if applicable, given data availability).

Traditional affordability measures focus on consumer demand but other work illustrates the importance of measuring the supply of housing available to households on different incomes in a spatially nuanced way. The US Department of Housing and Urban Development (HUD) developed an approach in the 1990s for measurement of shortages of affordable rental housing which took into account not only supply but also availability and adequacy (Nelson, 1994; Vandenbroucke, 2007). Availability in this context measures stock affordable for lower-income households which is occupied by middle-higher income households, indicating some of the displacement effects of gentrification discussed earlier. Subsequent work has queried whether indicators of adequacy based on the American Housing Survey are sufficient to highlight poor quality housing that is connected to housing affordability problems (Eggers & Moumen, 2013). An adaptation of this work is a series of Australian studies that have measured changes in the supply of affordable and available rental housing for lower-income households at a variety of spatial units since 1996, although no data are available which would enable an assessment of adequacy (e.g. Hulse, Reynolds, & Yates, 2014; Wulff, Reynolds, Dharmalingam, Hulse, & Yates, 2011). Other work also includes affordability measures that aim to show the share of housing stock that is affordable to given households (Chung, Leventis, Doerner, Roderer, & Barba, 2018; see also Bogdon & Can, 1997) or show the share of stock traded (Gan & Hill, 2009). Increased availability of data and sophisticated analyses using advanced computing power allow for demand-side measures based on affordability for particularly groups to be related to supply side measures which are based on norms about what constitutes an affordable supply for these groups and, ultimately, returning to a point made by Whitehead (1991), with the available supply depending on the level of resources that a society would want to invest in housing.

In summary, the examples of effects of urban affordability problems discussed in this section present issues for urban policy that require new types of measurement[17] which are more explicitly spatial. Such measurement must deal increasingly with complexity, for example, Fingleton (2008) builds an argument (model) that more supply may not solve the housing affordability problem, if the increase in housing supply is accompanied by an increase in demand, when employment is increasing at the same time. This could apply to jobs-rich areas in large metropolitan centres with 'hot' housing markets. In this process, more dense developments may occur to meet perceived shortages, raising land prices and removing older style cheaper housing that might otherwise have filtered down to be affordable to a lower-income group.

5. Conclusion

The purpose of the article is to provide a think piece on housing affordability based on consideration of some key contemporary themes distilled from a variety of literatures and discussion of some of the nuances around housing affordability, particularly in respect of measurement. There are always risks in going for a broad rather than a deep coverage, but in reconsidering housing affordability it is important to connect long-standing scholarship on housing affordability and income poverty with more recent scholarship on financialization, gentrification and urbanization which are reshaping cities, at least in advanced economies. The advantage of this approach is that: (1) it adds additional dimensions to housing-related poverty (such as energy, fuel and commuting poverty) and (2) highlights some of the ways in which urbanization is shaping the capacity of lower and middle-income households to afford to access and retain adequate and decent housing with access to city resources (jobs, transport, facilities, services).

We have charted discussion of housing affordability from poverty to 'poverty plus' to new types of urban inequalities associated with ongoing processes of urbanization/financialization/gentrification in advanced economies. These have included (1) wealth effects for those who own residential properties either as occupiers or investors as a result of differential price development (winners vs losers); (2) intergenerational effects in respect of future generations whose access to housing may depend on the housing wealth of their parents; and (3) increasing spatial inequalities to the extent that only higher-income households can afford to live in the most advantaged core areas of big cities. These changes affect not only lower, but also middle-income groups with a shift upwards on the income ladder requiring a new framing of housing affordability in a metropolitan context. This new framing responds to new economic conditions in the twenty-first century particularly in relation to the effects of highly financialized capitalism in the real estate markets of large cities. There is also a flow on effects to residents of towns and villages surrounding big cities who are affected by higher prices associated with property purchases in their areas by metropolitan households.

Explicating and measuring housing affordability inevitably involves norms about what is considered acceptable and what is not. Establishing norms for affordable, decent and adequate housing ideally must recognize the bundle of attributes that housing provides which include quality, security and location in relation to jobs, transport, facilities and services, with the latter having become increasingly important in the 2000s at least in large metropolitan areas. Households who hold different norms from societal/political norms may trade off some other essential consumption items to reach these housing norms or trade-off key dimensions of housing to ensure essential consumption to some degree. But there is a limit to the extent to which lower-income households can do this.

This is a timely reminder that although debates have broadened, and the measures extended, housing affordability is still important in conceptualizing and measuring poverty and disadvantage for lower-income households. However, while poverty and disadvantage are clearly about the distribution of key material resources, they also include relational aspects (such as discrimination) which may not be related directly to housing affordability (see Wolff & De-Shalit, 2007).

Nevertheless, housing affordability has become an important issue for urban policy and understanding and addressing housing affordability is at heart a political issue about the distribution of urban resources. While a focus on social policy was and remains a necessity, this is often a-spatial. Recent scholarship shows distinct locational aspects – access to resources, jobs, facilities in cities – has become an urban question which affects not only housing expenditures but also opportunities for earning income and generating wealth through the capacity to afford housing within a city.

What we understand by housing affordability in the twenty-first century has become much more complex and multidimensional than in the nineteenth and twentieth centuries. There are many challenges for urban policy in adopting and developing a multidimensional concept of housing affordability. This makes measurement more complex, but the concept itself still has value, if we accept this complexity. Transparent measurement of these multiple dimensions of affordability is the first step towards urban policies which recognize and start to address the 'old' and 'new' housing affordability problems. If left unchecked, they not only have the potential to undermine the economic efficiency of cities, but also the standard of living and quality of life of their residents.

Notes

1. EU stands for the European Union, a union of 28 countries.
2. The share of housing expenses to income is commonly called the expenditure-to-income ratio. The terms expenses, expenditure and costs are often used interchangeably in the housing literature as a measure of cash flows/outlays.
3. An estimated 10.7% in 2007 and 10.4% in 2017 (Eurostat, n.d.-a). The cross-sectional data in this section are from the European Union Statistics on Income and Living Conditions (EU-SILC), collected annually by Eurostat (Eurostat, n.d.-a), the European Union statistical office. Eurostat has named this rate housing cost overburden rate (Eurostat, n.d.-b).
4. https://sustainabledevelopment.un.org/sdg11 (last accessed 8 July 2019; see below).
5. https://ec.europa.eu/futurium/en/urban-agenda-eu/what-urban-agenda-eu (last accessed 8 July 2019). This development can be seen as similar to the way in which industrialization at the end of the 19th century put access to decent and affordable housing on the urban agenda, leading to the introduction of various housing acts in Western European countries (Boelhouwer & van der Heijden, 1992).
6. The 25%-norm also entered subsidization rules for housing in the 1970s (Praum, 2016). Furthermore, in the 1970s the search for alternatives for the single ratio benchmark paused and the incoming Reagan Administration in 1981 reset the affordability benchmark for housing assistance subsidies, from 25% to 30% of adjusted household income (Dreier, 2000, p. 352; Hartman, 1986, p. 369).

7. Known from the Rowntree chocolate factory in York, UK.
8. 'Whereas the average proportion of income devoted to rent and rates (property tax) was just under 15 per cent, the least well off paid out 29 per cent' (Malpass, 2012, p. 402).
9. Later Thalmann (2003, p. 291) was to call this dilemma 'house poor' or 'simply [income] "poor"'. A quality norm will allow to determine over- and underconsumers in relation to quality-based affordability (see also: Thalmann, 1999).
10. The next section discusses this approach.
11. According to Moore (2012, p. 19), the concept was introduced by Bradshaw and Hutton (1983), while it bloomed in the UK from the 1990s on.
12. Thomson et al. (2016, p. 7).
13. The European Union has picked up these concerns and started the EU Energy Poverty Observatory that is to monitor the progress on indicators elaborating the state of play concerning fuel poverty: lack of heating/comfortably warm dwellings, excess winter mortality, arrears on utility bills, etc. (https://www.energypoverty.eu/about/what-energy-poverty; last accessed 8 July 2019).
14. The theory of need that Doyal and Gough (1991) developed and that is being used for the design of budgets, for example, starts from the assumed basic universal needs of health and autonomy in order to reason and derive such universal standards that allow for participation in society (see also Vrooman, 2009; Storms, Goedemé, Van den Bosch, & Devuyst, 2013). These standards are being developed by experts and/or consensually with those with (experiential) knowledge (Fisher, 2007).
15. The Agenda was adopted at the third United Nations Conference on Housing and Sustainable Urban Development ("Habitat III") in Quito, Ecuador, on 20 October 2016 and subsequently endorsed by the United Nations General Assembly at its 68th plenary meeting of the 71st session on 23 December 2016 (http://habitat3.org/the-new-urban-agenda/; last accessed 10 July 2019).
16. A notable exception are Wijburg and Aalbers (2017) who suggest that financialized capitalism in Germany is following an alternative pathway, which gave rise to the observation that Germany was not following global trends (see also Wijburg, Aalbers, & Heeg, 2018).
17. A new development in the measurement of housing costs, but not necessarily connected to urbanization issues, is the measurement of costs in time rather than at one moment in time (Borrowman, Kazakevitch, & Frost, 2017; Chen et al., 2010; Gan & Hill, 2009; Rowley, Ong, & Haffner, 2015; Wood & Ong, 2011). The interest here is to observe whether housing affordability problems are to be considered structural rather than shorter term.

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