

Viewpoint

Forced homeward: the COVID-19 implications for housing

Introduction

The COVID-19 pandemic has made ‘home’ an absolute focal point of our lives. While the lockdown restrictions are beginning to ease, it is also becoming clear that we will be ‘consuming’ our homes much more than in pre-pandemic levels in the foreseeable future, and we will need to adapt to some significant and more enduring changes in how we use our homes and in our perceptions of living and working at home. The concurrent use of homes by all householders across multiple generations (including school-age children and working adults) throughout the day may lead to different user behaviours and more intense use or ‘consumption’ of the home. This may entail different patterns in housing demand. However, those demand patterns cannot be matched with proportionate changes in housing supply as several housing markets around the world, such as the UK housing market, are severely supply-constrained and typically slow to adjust. Usually, such demand–supply mismatch leads to rapid price fluctuation in the short run (Thanos and White, 2014), causing much anxiety in the market for all stakeholders and uncertain impacts on housing outcomes for many residents. The economic fundamentals, such as growth in population, income and jobs, and policy interventions such as interest-rate changes, fiscal expenditures, land-use policies, affordable housing and so on, will weigh heavily on the final outcomes. In this Viewpoint, we examine the potential changes in housing preferences due to the COVID-19 pandemic and highlight the challenges for policy making.

Anupam Nanda is Professor of Urban Economics and Real Estate, University of Manchester, SEED, PEM, Oxford Road, Manchester, M13 9PL, United Kingdom; Sotirios Thanos is a Senior Lecturer in Real Estate and Urban Economics, University of Manchester, SEED, PEM, Oxford Road, Manchester, M13 9PL, United Kingdom; Eero Valtonen is a Lecturer, University of Manchester, SEED, PEM, Oxford Road, Manchester, M13 9PL, United Kingdom; Yishuang Xu is a Lecturer, University of Manchester, SEED, PEM, Oxford Road, Manchester, M13 9PL, United Kingdom; Razieh Zandieh is Lecturer in Urban Design and Planning, University of Manchester, SEED, PEM, Oxford Road, Manchester, M13 9PL, United Kingdom; email: anupam.nanda@manchester.ac.uk; sotirios.thanos@manchester.ac.uk; eero.valtonen@manchester.ac.uk; yishuang.xu@manchester.ac.uk; razieh.zandieh@manchester.ac.uk

Changes in choice of housing location

Housing location is a key factor for meeting people's daily needs. The presence of amenities and services (e.g. shops, supermarkets, healthcare facilities, schools, pubs, restaurants, parks, exercise facilities and so on), as well as the overall quality of the neighbourhood (e.g. safety and aesthetics), provides opportunities for satisfying a wide range of human utilitarian and recreational needs. Basic economic theory tells us that since households are making their decisions in a world of scarce resources, each household has to make a trade-off between spending on housing and on other goods. According to the monocentric-city model, location decisions are driven by transport costs which increase when distance from the city centre, typically where jobs are located, get longer. Thus the theory says that in a monocentric city, the price of housing (per square metre) decreases at a decreasing rate when distance from the city centre increases (see Brueckner, 2011, for a comprehensive discussion). The solid line in Figure 1 represents the bid rent curve. If we assume that, due to the pandemic, the preferences of people lean towards bigger houses which tend to be located further away from the city centre and towards the countryside, the bid rent curve would shift to a position represented by the broken line in Figure 1. The shift does not only reflect factors contributing to changes in house size preferences, but also the potential long-term changes in working patterns with reduced importance on access to jobs in the city centre, e.g. due to working from home for most days of the work week and the possible emergence of suburban employment hubs. When faced with a deep economic crisis

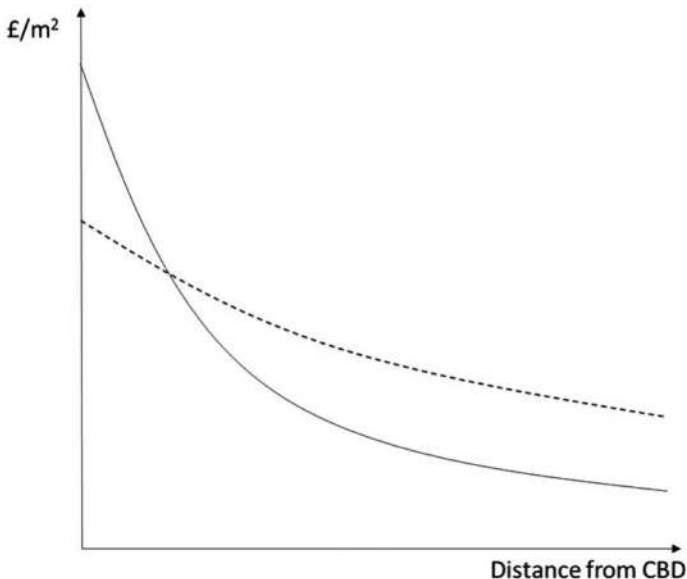


Figure 1 Bid rent curves before (solid line) and after (broken line) COVID-19
Source: Adapted from Brueckner (2011, 47)

like the one that is emerging now, it is likely that the values of properties everywhere might decrease (i.e. the broken line in Figure 1 will also shift downward, being lower at every part of the diagram than the pre-COVID solid line) but they will decrease more significantly closer to the city centre, as reflected by the slope. This could spell difficult investment potential in the short run for recently developed, often high-rise, 'luxury' apartment buildings in UK city centres.

Of course, the monocentric city model is an oversimplification of households' location decisions. Brueckner (2011) provides an overview of the assumptions and what happens when those are relaxed. The model assumes that for a household, the only important consideration is access to the city centre, whereas, in reality, location decisions are quite complex, capturing a multitude of both observable and unobservable factors. For example, Schirmer et al. (2014) suggest that individuals' and households' location choice is mainly influenced by four sets of attributes, including (1) the built environment – such as built density, structural density (compactness), the transport network, green space and land use (e.g. integration of residential, commercial and other uses); (2) points of interest – such as education, services and retail, recreation and sport, distance to city centre, etc.; (3) socio-economic environment – such as population density and household type, household income and school quality; and (4) access and accessibility – such as access to work and commuting time, and spatial distribution of facilities and services. All these factors came under scrutiny during the COVID-19 lockdown.

Coping with the new lifestyle and meeting utilitarian and recreational needs during the lockdown were more challenging for some individuals and households due to their housing locations. People living in compact areas of the city (e.g. city centres) have limited access to green spaces (Haaland and Van den Bosch, 2015). Moreover, lack of safe and walkable streets may discourage people from taking a walk in the streets near their homes. Therefore, such housing locations may offer limited opportunities to meet recreational needs. People living in suburbs (or on the urban periphery) may have ample green space around their homes (Haaland and Van den Bosch, 2015); however, they may have limited access to facilities (e.g. shops, takeaways, deliveries). Although people may find temporary solutions to meet their minimum utilitarian and recreational needs, the lockdown situation raises a key question: to what extent would the COVID-19 pandemic cause significant shifts in people's choice of housing location?

Changes in choice of physical attributes of housing

Housing is a multidimensional good with both consumption and investment demand motivations. For the consumption motivation, in addition to location characteristics, as explained above, each housing unit reflects a unique bundle of physical/structural

attributes, e.g. size, age, number of bedrooms, private outdoor space and so on (see Nanda, 2019, Chapters 2, 4). There is a long-standing literature with numerous theoretical and econometric studies exploring how these attributes matter in determining transacted house prices within the hedonic model framework (Kain and Quigley, 1970; Rosen, 1974). We discuss below how the preference for some of these hedonic physical attributes may change due to the COVID-19 pandemic.

Work-related considerations

Almost the entire country has been pushed into work-from-home (WFH) mode, and people for whom working from home is viable had to turn their bedrooms, living rooms or even kitchen areas into pop-up offices. Two factors have proved most important: space and connectivity. WFH requires specific space for work. Most residents had to make a few changes at home to accommodate WFH. In this sense, the availability of additional room, of usable workspace in a loft, basement or conservatory in a house, can be expected to feature prominently in home buyer's or renter's preference list. Unsurprisingly, with more work expected to be completed at home, extra storage space will also likely be in demand.

An important aspect of modern life is Internet connection. Digital platforms have become absolute necessities for all parts of daily life during the lockdown. From meetings over Skype, Zoom, Microsoft Teams, etc., to neighbourhood updates via WhatsApp group messaging, to online learning for school students and Netflix time for the whole family, technology platforms have become the windows onto the outside world and life's experience. It has been a dramatic shift in a few weeks and many of these new habits are likely to have a degree of permanence. This will crucially depend on a reliable and high-quality Internet connection and will perhaps be one of the most valuable factors on a home buyer's or renter's preference list. This is also a locational attribute as the availability of fibre-optic broadband services is not uniform across geographical areas.

Recreational aspects

With more time being spent at home, an overall larger space may be demanded and extension features such as a conservatory can meet such demand relatively easily for many households. In future, a private room for each householder may become a vital factor, while the private garden, outhouse, shed or even balcony (for flats) may be in higher demand. As we spend more time at home performing various energy-consuming activities (e.g. working/computing, heating/air conditioning, cooking, etc.), energy consumption will be much higher and the cost of energy may become an important consideration for housing choice, which implies that houses with superior

energy-efficient features (e.g. low energy fittings and appliances, double- or triple-glazed windows) and higher efficiency ratings may see higher demand (Fuerst et al., 2016). A related factor is noise-reducing features of the housing unit, which have become an issue during the lockdown with reports of higher-than-normal levels of complaints made due to increased noise from neighbours.

Health and safety features

It is likely that home buyers or renters will be willing to pay a premium to live in a property with security features (i.e. security alarm system, CCTV, concierge) for their own safety. As we spend much more time at home, health aspects will gain importance, from indoor air quality, to spaciousness, to the safety of building materials. Space is important as it allows options and flexibility to perform various activities, including work, leisure, schooling, exercise and relaxation. Recent research documents the housing–health nexus. For example, compared to homeowners, private renters tend to have a higher level of C-reactive protein (CRP), a biomarker associated with stress and infection, in their blood samples (Clair and Hughes, 2019). As many as 700,000 private rented households live in unsafe housing in England according to a 2016 estimate (Aldridge, 2016). The extended time spent in suboptimal homes under lockdown can potentially aggravate adverse health effects.

Harsh realities of demand–supply mismatch and housing inequality

Access to housing in the UK has been fraught with perennial inequalities, regardless of the disciplinary lenses we look through (McKee and Muir, 2013). The pandemic has taken everybody by surprise, with some ill-prepared yet otherwise ‘house-rich’, and some of us unprepared and ‘house-poor’ due to our socio-economic conditions. Taking an economic perspective, fast growth in housing costs coupled with slow income growth in recent decades has contributed heavily towards widening gaps amongst the full spectrum of ‘house-rich’ and ‘house-poor’ residents. We can identify four categories of housing-income profiles, namely house-rich–income-rich, house-rich–income-poor, house-poor–income-rich, house-poor–income-poor. And mismatch in demand–supply and resulting price fluctuations often hit the ‘house-poor’ much harder than they do the ‘house-rich’ due to lack of an ample financial cushion. Housing inequality has depended on socio-economic and demographic factors such as income, access to jobs, ethnicity, age, migration status, etc. During the pandemic, being ‘house-poor’ has also impacted livelihoods for some of us who had to accommodate the day job (possibly for multiple family members) in inadequate domestic spaces. There are also cross-generational impacts. It is not only the current

cohorts of ‘house-poor’ adult householders who are affected by the COVID-19 crisis, but children of those households may also suffer as their educational attainment has been somewhat inhibited and their well-being impaired due to confinement, lack of activity, increased parental anxiety and strains on familial relationships.

If the current state of affairs with regard to the quality of rental stock and a minimalist approach to newbuilds continues, ‘house-poor’ residents may suffer long-term health implications, continued vulnerability to the subsequent pandemics and path-dependent life outcomes. A recent Public Health England study (2020) suggests that being disabled or old, or belonging to an ethnic minority group, has made residents much more susceptible to COVID-19, and we often find these groups living in suboptimal housing conditions. Spatial inequalities have also played a key role, with deprived areas reporting much higher infection rates from COVID-19 compared to less deprived areas (*The Guardian*, 2020).

Conclusion

The socio-economic upheaval experienced so far is unlikely to end soon, and more complex and possibly much more severe socio-economic impacts might follow as the COVID-19 repercussions travel through our ramified world with layers of economic (national and local) and institutional structures. Much will depend on how local and national governments attempt to intervene at various territorial scales over time. Regardless, there seems to be little doubt that policy needs are significant; without them the impacts will be much deeper, affecting the well-being of millions of people with an inadequate financial cushion and housing endowment. The views of this Viewpoint can, therefore, be used to understand better the focus areas for policy-making purposes.

References

- ALDRIDGE, H. (2016), ‘The private rented sector is broken, the Housing Bill should do more to fix it’, *NPI*, <https://www.npi.org.uk/blog/housing-and-homelessness/private-rented-sector-broken-housing-bill-should-do-more-fix/> (accessed 10 June 2020).
- BBC (2020), ‘Coronavirus: closing parks and open spaces in lockdown should be “last resort”’, <https://www.bbc.co.uk/news/uk-52181808> (accessed 10 June 2020).
- BRUECKNER, J. K. (2011), *Lectures on Urban Economics*, Cambridge, MA, MIT Press.
- CLAIR, A. and HUGHES, A. (2019), ‘Housing and health: new evidence using biomarker data’, *Journal of Epidemiology and Community Health*, **73**, 256–62.
- FUERST, F., MCALLISTER, P., NANDA, A. and WYATT, P. (2015), ‘Does energy efficiency matter to home-buyers? An investigation of EPC ratings and transaction prices in England’, *Energy Economics*, **48**, 145–56.

- THE GUARDIAN (2020), 'Poorest areas of England and Wales hit hardest by Covid-19 – ONS', 12 June 2020, <https://www.theguardian.com/world/2020/jun/12/poorest-areas-of-england-and-wales-hit-hardest-by-covid-19-ons> (accessed 10 June 2020).
- HAALAND, C. and VAN DEN BOSCH, C. K. (2015), 'Challenges and strategies for urban green-space planning in cities undergoing densification: a review', *Urban Forestry and Urban Greening*, **14**, 760–71.
- KAIN, J. F. and QUIGLEY, J. M. (1970), 'Measuring the value of housing quality', *Journal of the American Statistical Association*, **65**, 532–48.
- McKEE, K. and MUIR, J. (2013), 'An introduction to the special issue – housing in hard times: marginality, inequality and class', *Housing, Theory and Society*, **30**, 1–9.
- NANDA, A. (2019), *Residential Real Estate: Urban and Regional Economic Analysis*, Abingdon, Oxon. and New York, Routledge.
- PUBLIC HEALTH ENGLAND (2020), 'Disparities in the risk and outcomes of COVID-19', https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/892085/disparities_review.pdf (accessed 10 June 2020).
- ROSEN, S. (1974), 'Hedonic prices and implicit markets: product differentiation in pure competition', *Journal of Political Economy*, **82**, 34–55.
- SCHIRMER, P. M., VAN EGGERMOND, M. A. and AXHAUSEN, K. W. (2014), 'The role of location in residential location choice models: a review of literature', *Journal of Transport and Land Use*, **7**, 3–21.
- THANOS, S. and WHITE, M. (2014), 'Expectation adjustment in the housing market: insights from the Scottish auction system', *Housing Studies*, **29**, 339–61.