Home truths: the role of housing in economic recovery



Professor Rachel Ong ViforJ Professor Chris Leishman

October 2020



Abstract

This paper will investigate the role of housing in supporting recovery from the economic fallout of the COVID-19 pandemic. It will begin by offering a brief overview of the economic case for housing and changes to the housing market context since the first wave of the pandemic. Against this context, the effectiveness of the government's housing stimulus package will be critically assessed. While there are well-known macroeconomic arguments for a housing stimulus package, given the multiplier effect, there are inevitably unintended consequences to large-scale public policy interventions. This paper will address some of these. Finally, it will put forward a case for social housing construction and housing tax-transfer reform for supporting long-term recovery in a post-COVID Australia. Thus far, these policy options have featured dimly in both federal and state government roadmaps to recovery.

Key findings

- Public policy interventions in Australia's housing system during the pandemic have been more generous to homeowners, investors and households in higher income brackets.
- While the macroeconomic argument for a housing stimulus package is sound, the government's package will likely favour those who could have purchased property anyway, without assistance. It is thus likely to exacerbate wealth inequalities and potentially expose marginal home buyers to more risk in an uncertain economic environment.
- There is a strong case for building more social housing as part of a housing-led economic recovery strategy. Reviews of previous social housing construction initiatives show they effectively stimulate the building industry. Increasing social housing stock can also improve life outcomes for vulnerable Australians and bring significant medium and long-term economic benefits.
- Changes to the way housing is taxed could bring fiscal savings while also improving efficiency and equity. Replacing stamp duty with a uniform broad-based land tax; aligning the treatment of rental losses and capital gains; and limiting the family-home exemption from income-support means tests could all help stimulate economic recovery.

Introduction

Housing as a driver of economic outcomes

Housing plays many roles in our economy and society, including as a consumable good, investment asset and infrastructure. In recent years an important narrative has emerged in which the housing system generally, and housing outcomes more specifically, are seen as important determinants of economic outcomes and productivity.¹ This is significant because until now, policy intervention in housing systems was generally justified on the basis of equitable distribution of resources, or the notion that access to decent and affordable housing is an entitlement that all people have, flowing on from the human right to shelter. The new narrative emphasises a number of connections between housing circumstances and economic outcomes. Perhaps the most familiar and long running of these is the 'key worker' argument. This recognises that as metropolitan housing markets become larger and increasingly less affordable, the labour market earnings of a category of socially important but not particularly well paid workers become insufficient to access market-provided housing. Some examples of key workers include social workers, teachers, firemen and ambulance drivers. When such workers are excluded from the metropolitan housing market, the supply of essential, front-line services suffers.

Other research has recognised that the disruption caused by frequently moving home generates unintended negative consequences. In Australia, low-to-moderate income households generally rent from private landlords, and the private rental sector is dominated by 'Mum and Dad' landlords. According to estimates from the nationally representative Household, Income and Labour Dynamics in Australia (HILDA) Survey, in 2001, 36.5 per cent of households in the bottom two income quintiles lived in the private rental sector, but this increased to 49.1 per cent by 2018. During the same time period, the percentage of households in the top income quintile owning an investment property increased from 23 per cent to 38 per cent.²

Recent research has highlighted the rapid growth of the private rental sector in Australia, the growth of the informal private rented sector, and the weak regulation of rents and security by international standards.³ Tenancies generally run for six or 12 months, and there is a strong tradition in which renters move on at the end of their lease. Frequent relocation, which also often involves disruption to schooling, has an impact on the learning outcomes of children and sometimes adults. Lower educational attainment has a knock-on effect on lifetime earnings, which in turn has an impact on income tax receipts.

Unaffordable housing also increases commuting times, as households seek alternative housing opportunities in more affordable but less central locations. Time spent commuting is unproductive, in the sense that the activity is neither work, which generates income, nor utility-generating leisure activity. There are also indirect impacts on productivity, because as households move away from productivity and innovation centres, this reduces entrepreneurial activities such as new business start-ups. This observation is at the heart of recent studies that have examined the declining share

of metropolitan to national economic outputs.⁴ In short, there are policy concerns that Australian cities have now become so unaffordable that it is negatively impacting economic productivity and growth.

Prior to the COVID-19 pandemic, the Australian housing system was viewed as one that heavily favoured homeowners and 'Mum and Dad' investors. Both groups are well served by a range of interventions including grants designed to facilitate entry, and tax concessions designed to raise the attractiveness of housing as an investment class. Australia's housing system has a very small component of social housing compared with other developed economies, and a small not-for-profit (NFP) or 'affordable housing' sector, as it has sometimes confusingly been dubbed.⁵

Enter COVID-19

Housing researchers immediately recognised the pandemic as a game changer. The importance of the 'home' aspects of housing increased immediately, as governments in many nations put their populations into lockdown. Dwellings became workplaces and learning environments overnight. Homelessness, long recognised as being cheaper to prevent than to correct, became a public health issue rather than a housing or social policy issue. This prompted governments to put up many rough sleepers temporarily in hotel accommodation. At the same time, the pandemic revealed the fragility of Australia's housing system through its weak and confusing arrangements covering the private rental sector. Each state and territory advanced a different approach. Nationally, the main message was that while the Federal Government supported jobs and incomes, landlords and tenants were expected to negotiate sensible arrangements between themselves.

As we enter the 'post-COVID period', a number of housing market scenarios seem possible. Early in the pandemic, there were widespread predictions of falling – even crashing – housing prices.⁶ Much more recently, there is an emerging consensus that prices will fall in early 2021 before recovering later in the year. Some observers and analysts are predicting a very strong recovery.⁷ It seems likely that Australia has escaped the worst of the devastating economic impacts already being witnessed in some countries, including the UK.⁸ It is also the case, however, that Australia does not have a national housing market. Housing prices in Melbourne and Sydney have experienced a greater shock than smaller capital cities such as Perth, Adelaide and Brisbane, where COVID-19 outbreaks were brought under control relatively quickly. Assuming this trend continues, one possible scenario therefore involves a significant divergence of price trends and levels within Australia.

Distributional impacts are also likely. As we discuss earlier in the paper, and in the next section, public policy interventions in Australia's housing system during the pandemic have been more generous to homeowners, investors and households in higher income brackets. This may be a coincidence, or may reflect a perceived need for political balance given the strong focus of income support interventions on those in lower income brackets. Whatever the reason, the effect within the housing system is likely to increase polarisation between homeowners and renters, between renters and investors, and between low/moderate and higher-income households.

Housing stimulus programs

HomeBuilder

The HomeBuilder program is a Federal Government fiscal stimulus program that provides a grant of \$25,000 to all eligible owner-occupiers, including first homebuyers, to build a new home or substantially renovate an existing one. It forms a major plank of the government's economic response to COVID-19. As such, contracts must be signed between 4 June and 31 December 2020, and construction must commence within three months of the contract's signed date. HomeBuilder is expected to boost the construction industry via the commencement of new home builds and renovations. While it is a federal program, it is implemented via a National Partnership Agreement with state and territory governments and therefore uses existing state and territory mechanisms to distribute the payments.

Eligible homeowners are Australian citizens aged 18 years or older who meet specified income and property value caps:

- Applicants must have 2018-19 taxable income that falls below \$125,000 per year for an individual (\$200,000 for a couple);
- Applicants must be building a new principal place of residence valued at or below \$750,000 or entering into renovation contracts between \$150,000 and \$750,000 where the pre-renovation value of their existing property does not exceed \$1.5 million.

State-based building grants

In some instances, the Federal Government's HomeBuilder program was supplemented with a state or territory-based building grant. Many states also already had first-home owner grants in place that could be used in addition to HomeBuilder.

Newly introduced building grants include:

- Queensland: Regional home building boost provides \$5,000 on the construction of a new house, unit or townhouse valued at less than \$750,000 in regional Queensland.
- Western Australia: a \$20,000 Building Bonus grant is available to those building a new home or entering into an off-the-plan contract as part of a single-tier development.
- Tasmania: a \$20,000 Tasmanian HomeBuilder grant is available to owner occupiers for eligible new-build homes.

First Home Loan Deposit Scheme (FHLDS)

While the HomeBuilder program is not likely to be extended beyond December 2020, the Federal Government has renewed the FHLDS, with an additional 10,000 places available for the 2020-21 financial year. The FHLDS is an Australian government scheme that aims to support eligible applicants into home ownership. Under this scheme, eligible buyers can purchase their first home with as little as

a five per cent deposit without having to pay lenders mortgage insurance. This is made possible by the National Housing Finance and Investment Corporation (NHFIC) acting as guarantor for up to 15 per cent of the value of the property purchased.

Eligible home buyers are Australian citizens aged 18 years or older who are first home buyers and meet specified income and property value caps:

- Applicants must have a taxable income for the previous financial year that falls below \$125,000 for an individual (\$200,000 for a couple);
- Applicants must be purchasing or constructing residential property with values that fall below the relevant price cap for the area in which it is located. In general, the price caps are higher for capital cities than regional areas. For instance, the price cap is \$750,000 in Sydney and \$450,000 in the rest of NSW.

How effective is the government's housing stimulus package?

The macroeconmic argument

At a macroeconomic level, the impacts of housing's role on economic performance are commonly assessed through multiplier effects – the short-run flow-through effects that housing investment has on national income and employment.

The mechanics of the multiplier effects are well known. The government injects a certain amount of expenditure into the construction industry – in this case, \$25,000 per successful application for Home-Builder. In the case of the FHLDS, demand for housing construction is boosted by the government's guarantor role, which increases the number of active first-home buyers in the property market. This in turn increases national output, income and employment to meet the additional housing demand created by these government stimulus programs. Output, income and employment will be further boosted along the supply chain as construction firms increase their own demand for goods and services from their suppliers, and consumers increase their spending.

It is unsurprising that the government has targeted the construction industry for this spending injection during this economic crisis. According to the National Housing Finance and Investment Corporation, the residential construction industry currently contributes five per cent to annual gross domestic product (GDP), accounting for approximately 134,000 jobs. Recent NHFIC estimates suggest that the multiplier for residential construction is around 2.9, the second largest multiplier of 114 industries in the Australian economy.⁹

Given the dominance of housing on households' balance sheets, homebuilding has been the traditional 'go to' solution for stimulating the economy in times of economic crisis. For instance, during the 2008 Global Financial Crisis, the government tripled first homeowners grants to \$21,000 for new homes, and doubled grants to \$14,000 for established homes. Of course, economists often argue that multiplier effects are short-lived, with ongoing benefits only possible if sustained through recurrent government expenditure.¹⁰ There are also other concerns that hamper the effectiveness of HomeBuilder and the FHLDS in driving economic recovery.

Behavioural perspectives

Large-scale public policy interventions that involve significant grants, subsidies or tax concessions inevitably create some unintended consequences. Some of these consequences arise as a result of individuals' behaviour – particularly in the form of rent-seeking, or changing decisions in order to increase personal benefit from the interventions.

There has already been some debate about how much these housing interventions will displace existing demand, as opposed to creating new housing development activity. Some have argued that the eligibility criteria meant that those taking up the grant were likely to have been willing and able to develop in the near future without the intervention, and that the grant would simply bring forward their decision.¹¹ This criticism was also levied on the First Home Owner Boost grant introduced during the GFC.¹² A related concern is that if activity planned for 2021 is brought forward to 2020, any downturn in the housing market and construction industry in 2021 would be exacerbated rather than alleviated.

Distributional consequences

HomeBuilder favours individuals and households well-placed to move ahead quickly with their plans to buy or develop new housing. Almost by definition, the recipients will tend to have higher than average incomes, and will have access to equity and finance. The intervention is therefore likely to exacerbate inequalities in income and wealth — a recognised and growing problem in Australia even prior to the pandemic. In summary, HomeBuilder is likely to be an unnecessary subsidy for better-off households who had plans to build and buy additional housing in any event.

Having considered higher income households, we now turn to consider those on moderate incomes. In Australia, most households aspire to own a home. If households save 15 per cent of their gross annual income, on average, it takes 9.1 years to save the 20 per cent deposit required to buy a home, while avoiding the need to pay lenders mortgage insurance (LMI).¹³ Clearly, a considerable number of households currently living in private rentals at any given time will be relatively close to their savings goal, and will be considering buying a home in future. Of course, we must also recognise that a considerable number of private renters will never reach their savings goal and will not buy a home at any point. Some of those households with savings and the intention to buy a home in the future could be enticed into doing so earlier through targeted interventions such as FHLDS, which reduce the barriers. However, given that there are now predictions of declining housing prices in some major cities in 2021¹⁴, one must seriously question whether the timing is right for additional interventions aimed at aspiring but marginal homeowners.

It is worth noting that pandemic interventions directed at lower income and more precariously housed individuals and their households are weaker and less generous. As we noted in the introduction, the Commonwealth Government has largely left the private rental sector to its own devices. Landlords and renters have been encouraged to negotiate, but there has been no direct government intervention regarding rent levels or backlogs of unpaid rent arising from job losses during the pandemic. Instead, states and territories have rolled out a variety of measures including moratoria on evictions and, in some cases, rent relief programs. These interventions provide temporary and time-limited relief to the more precariously housed, and it seems likely that tenuous housing circumstances, evictions and homelessness will rise in 2021 after these temporary interventions have ended.

Missed opportunities

The case for social housing construction

During the GFC, the then government invested significant amounts in expanding social housing stock. The Social Housing Initiative (SHI) was a key plan of the Nation Building – Economic Stimulus Plan (NBESP) designed to stimulate economic activity through the GFC. Under the SHI, the Federal Government provided funding of \$5.6 billion over 3.5 years for new social housing dwellings, as well as extensive repairs and maintenance of existing social housing stock.¹⁵ As with the GFC, there continues to be a case for expanding the social housing stock as part of a housing-led economic recovery strategy. A review of the SHI found that the program provided tangible economic benefits by stimulating the building and construction industry.¹⁶ It is likely that a new social housing construction program would create similar multiplier benefits.

The immediate benefits of building more social housing (instead of simply building more housing in general) are clear. The evidence on general housing supply levels across Australia is mixed. Some researchers have noted that Australia's housing supply levels have been relatively healthy compared with other OECD countries,¹⁷ while others have raised concerns around housing supply shortage in Australia.¹⁸ There is, however, widespread agreement that the demand for social housing far outstrips its supply. There are nearly 150,000 eligible applicants on the public housing wait list nationally.¹⁹ Given the size of this wait list – and these numbers show no indication of dwindling over time – it is difficult to see how one can tackle rising levels of homelessness in Australia without some expansion of social housing stock.

The benefits that social housing offers to vulnerable Australians can lead to significant medium and long-term economic benefits. First, it reduces exposure to unhealthy conditions and transmission of diseases associated with homelessness.²⁰ The experience of COVID-19 has highlighted the intricate and significant links between public health and economic outcomes. Second, the subsidised rents received by public housing tenants free up their limited resources for other purposes, thus reducing the risk of food insecurity and vulnerability to illness for children, which can in turn influence educational outcomes. Third, the security of tenure offered by public housing has also been found to have positive impacts on children's educational outcomes.²¹

The case for housing tax-transfer reform

Currently, Australian homeowners and investors benefit from a plethora of housing-related tax concessions and subsidies that create inefficiencies and worsen inequity. These concessions tend to be poorly targeted, mainly benefiting better-off segments of the population. Overall, the preferential treatment of property assets detracts from the efficient allocation of resources by biasing decisions towards over-investing in the property sector at the expense of investment in more productive sectors.²² Such non-neutral tax arrangements can result in efficiency losses, and lower productivity and growth.²³

1. Aligning the treatment of rental losses and capital gains

The partial exemption of property investments from capital gains tax encourages speculative demand for housing; when accompanied by negative gearing provisions, this demand is satisfied through debt-financed property purchase. Hence, these housing-related tax provisions can amplify market cycles and exacerbate financial instability. There are strong equity reasons for tightening generous negative gearing provisions. The fiscal savings generated by the reform would be drawn from those who benefit the most from negative gearing i.e. investors in high-income tax brackets. However, there are other good reasons for reform in this area. Negatively geared landlords are personally more exposed to financial vulnerability during economic downturns given their indebtedness. Reducing incentives to debt-finance property investment reduces this vulnerability for individual investors while promoting overall economic stability.

2. Replacing stamp duty with a uniform broad-based land tax:

This has been consistently highlighted as a candidate for reform for obvious reasons. There is no obvious efficiency rationale for imposing stamp duty on property purchase. It can deter the transfer of property from lower value uses to higher value uses, as well as hinder labour market mobility, resulting in an inefficient allocation of resources. Land tax is more efficient due to its effective incidence on land owners. The supply of land is fixed and a broad-based tax cannot be avoided by changing land use or tax jurisdiction.

3. Limiting family home exemption from income-support means tests

Not all low-income elderly Australians are housing asset-rich. However, it remains the case that a significant minority of elderly social security recipients own high levels of housing wealth. Estimates from the nationally representative 2017 HILDA Survey show 232,000 social security recipients aged 65 years or over own primary home equity in excess of \$1 million, that is, they are in the top 10 per cent of the housing equity distribution in the Australian population.²⁴ Making part of the value of housing equity assessable would encourage downsizing and therefore more efficient use of housing stock. In turn, this would promote equity, generate some (small) fiscal savings and discourage over-investment in property.

Conclusion

This paper has critically assessed the role of housing in supporting recovery from the economic fallout of the COVID-19 pandemic. We examine the effectiveness of the government's housing stimulus package, in particular the HomeBuilder and FHDLS programs. While the macroeconomic argument for a housing stimulus package is sound due to a multiplier effect, a more nuanced analysis reveals some noteworthy concerns. In particular, the package will likely favour those who would have been able to purchase property anyway without assistance. Thus, the effectiveness of the policy is questionable. The package is thus likely to exacerbate wealth inequalities and potentially expose marginal home buyers to more risk in an uncertain economic environment.

There are more focused interventions that would generate economic benefits as well as promote equity. Increasing social housing stock would reap multiplier benefits while also improving the life outcomes of vulnerable Australians. It has also been demonstrated in a number of recent studies cited earlier that providing more affordable housing in Australian capital cities can yield economic productivity dividends. There also remains a case for targeted housing tax-transfer reforms that would allocate resources towards more productive uses while achieving greater equity across the wealth distribution.

This paper concerns the role of housing in economic recovery, yet the role of politics cannot be ignored. The targeting of recent housing stimulus measures to higher income households, including homeowners and investors, may reflect the earlier targeting of income-support interventions to lower income and more precariously employed workers. Thus, while these measures are explainable politically, there is an alarmingly real prospect that they will increase polarisation and inequalities while reducing housing and wealth opportunities for many Australian households.

Rachel Ong ViforJ is a member of the CEDA Council on Economic Policy. She is an ARC Future Fellow and Professor at the Curtin University School of Economics, Finance and Property. She is also Chair of the School's Research Committee. Rachel is currently a member of the National Economic Panel, which comprises leading economists in Australia who comment on topical economic issues. She was the recipient of the 2018 Young Economist Award, the 2019 Professor Mike Berry Award for Excellence in Housing Research and the 2018-19 Helen Cam Visiting Fellow at Girton College, University of Cambridge.

Chris Leishman is Professor of Housing Economics and Director of the Hugo Centre for Population and Housing at the University of Adelaide. He is currently leading an AHURI Inquiry focused on the linkages between population, migration and agglomeration economies. He also leads the 'Understanding Housing Markets' theme of the UK's ESRC Housing Evidence Centre. He is an editor of the Urban Studies Journal and lead editor for housing economics submissions.

Endnotes

1 Maclennan, D, Wood, G. and Ong, R. (2015), *Making Connections: Housing, Productivity and Economic Development,* Final Report No. 251, Australian Housing and Urban Research Institute, Melbourne.

2 Melbourne Institute of Applied Economic and Social Research (2018), *The Household, Income and Labour Dynamics in Australia Survey*. This paper uses unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. HILDA was initiated and is funded by the Australian Government Department of Social Services (DSS) and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute). The views expressed herein are those of the authors and should not be attributed to the DSS or Melbourne Institute.

3 Hulse, K., Parkinson, S. and Martin, C. (2018) *Inquiry into the Future of the Private Rental Sector*, Final Report No. 303, Australian Housing and Urban Research Institute Limited, Melbourne.

4 Deloitte (2017), *Understanding the Productivity Paradox: Behind the Numbers*, 27th October, Available: https://www2. deloitte.com/us/en/insights/economy/behind-the-numbers/decoding-declining-stagnant-productivity-growth.html (accessed 05/10/2020).

5 Leishman, C. and Rowley, S. (2012) "Affordable housing", in Clapham, D., Clark, W., Gibb, K. (eds), *The SAGE Handbook of Housing Studies*, doi: 10.4135/9781446247570.n20.

6 Lenaghan, N. (2020), *Sydney House Prices could Drop 15pc in 2021*: HSBC, Available: https://www.afr.com/property/ residential/sydney-house-prices-could-drop-15pc-in-2021-hsbc-20200521-p54v4v (accessed 05/10/2020).

7 Robinson, J. (2020), Westpac Soften House Price Forecast, Now Predict Five Per Cent Peak to Trough Declines, 17th September, Available: https://www.propertyobserver.com.au/forward-planning/investment-strategy/property-news-and-insights/117231-westpac-soften-house-price-forecast-now-predicting-a-total-five-per-cent-fall.html (accessed 05/10/2020).

8 Jones, R. (2020), *House Prices to Fall 14% in 2021*: CEBR, 14th September, 2020, Available: https://www.financialreporter.co.uk/finance-news/ouse-prices-to-fall-14-in-2021-cebr.html (accessed 05/10/2020); Nabarro, B. (2020), UK economic outlook: the long road to recovery, in Institute for Fiscal Studies (2020), The IFS Green Budget: October 2020 London: Institute for Fiscal Studies.

9 National Housing Finance and Investment Corporation (NHFIC) (2020a), *Building Jobs: How Residential Construction Drives the Economy*, Available: https://www.nhfic.gov.au/media/1298/building-jobs-how-residential-construction-drives-the-economy-final4.pdf (accessed 14/09/2020)

10 Maclennan, D. and O'Sullivan, A. (2012), *Raising the game: The economic case for housing*, Chartered Institute of Housing Scotland, Edinburgh.

11 Owen, E. (2020), The 'Vacuum' Effect and its Implications for the Homebuilder Scheme

12 Randolph, B., Pinnegar, S. and Tice, A. (2013), The First Home Owner Boost in Australia: A case study of outcomes in the Sydney housing market, *Urban Policy and Research*, 31(1), 55-73.

13 CoreLogic (2018), *Housing Affordability Report, June quarter*, Available: https://www.corelogic.com.au/sites/default/files/2018-09/CoreLogic%20Housing%20Affordability%20Report_Sep%202018.pdf?utm_source=Newsletter&utm_medium=Email&utm_campaign=PPulseReport_20180910 (accessed 09/10/2020).

14 Robinson, J. (2020), Westpac Soften House Price Forecast, Now Predict Five Per Cent Peak to Trough Declines, 17th September, Available: https://www.propertyobserver.com.au/forward-planning/investment-strategy/property-news-and-insights/117231-westpac-soften-house-price-forecast-now-predicting-a-total-five-per-cent-fall.html (accessed 05/10/2020).

Home truths: the role of housing in economic recovery

15 KPMG (2012), *Housing Ministers' Advisory Committee Social Housing Initiative Review*, September, Available: http://www.nwhn.net.au/admin/file/content101/c6/social_housing_initiative_review.pdf (accessed 08/10/2020).

16 KPMG (2012), *Housing Ministers' Advisory Committee Social Housing Initiative Review*, September, Available: http://www.nwhn.net.au/admin/file/content101/c6/social_housing_initiative_review.pdf (accessed 08/10/2020).

17 Ong, R., Phelps, C., Rowley, S. and Wood, G. (2018) Spatial and temporal patterns in housing supply: a descriptive analysis, *Urban Policy and Research*, 36(3), 287-303.

18 Daley, J., Coates, B. and Wiltshire, T. (2018), *Housing Affordability: Re-imagining the Australian Dream*. Grattan Institute.

19 Productivity Commission (2020), *Report on Government Services*, Available: https://www.pc.gov.au/research/ongo-ing/report-on-government-services/2020 (accessed 08/10/2020).

20 Australian Institute of Health and Welfare (2020), *Health of People Experiencing Homelessness*, Available: https://www.aihw.gov.au/reports/australias-health/health-of-people-experiencing-homelessness (accessed 08/10/2020).

21 Dockery, A.M., Ong, R., Colquhoun, S., Li, J and Kendall, G (2013), *Housing and Children's Development and Wellbeing: Evidence from Australian Data*, Final Report No.201, Australian Housing and Urban Research Institute, Melbourne.

22 Wood, G., Ong, R. and Cigdem, M (2016), Housing tax reform: Is there a way forward?, *Economic Papers*, 35(4), 332-346.

23 Stiglitz, J. E. (2000), Economics of the Public Sector, 3rd Edition, W. W. Norton, New York.

24 Melbourne Institute of Applied Economic and Social Research (2017), *The Household, Income and Labour Dynamics in Australia Survey.*