



How to make housing more affordable

Submission to the parliamentary inquiry into housing affordability and supply in
Australia

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Summary

We welcome the opportunity to make a submission to the House of Representatives Standing Committee on Tax and Revenue on the contribution of tax and regulation to housing affordability and supply.

Within living memory, Australia was a place where housing costs were manageable, and people of all ages and incomes had a reasonable chance to own a home with good access to jobs. But Australian housing has become increasingly expensive, and public anxiety about housing affordability is rising.

Home ownership rates are falling, especially among the young and the poor. Without change, many more young Australians will be locked out of the housing market. Owning a home increasingly depends on who your parents are, a big change from 35 years ago. People on low incomes – increasingly renters – are spending more of their income on housing.

House prices have risen as interest rates have hit record lows, while tax and welfare settings and rapid migration fed demand. But housing costs would have risen less if more housing had been built.

We have not built enough housing to meet the needs of Australia's growing population. Australian cities are not delivering the best mix of housing location and density, given what people would prefer. Australia has among the least housing stock per adult in the developed world, and is one of only a handful of developed countries in which housing stock per capita has been stagnant over the past 20 years. The mismatch between supply and demand has created a 'zoning premium' for well-located housing that benefits existing property owners, but imposes additional costs on new purchasers and renters.

Given the allocation of federal responsibilities, the most direct way the Federal Government can improve affordability is by reforming tax and welfare policies that distort demand for housing. The Federal Government can improve housing affordability by reducing demand. It should reduce the capital gains tax discount from 50 per cent to 25 per cent; abolish negative gearing; and include owner-occupied housing in the Age Pension assets test.

Housing will also become more affordable if more homes are built. Building an extra 50,000 homes a year for a decade could result in Australian house prices and rents being up to 20 per cent lower than they would have been otherwise. Increasing housing supply will only restore housing affordability slowly. But without a concerted effort to boost housing supply in Australia, housing affordability will likely get worse. This is primarily a problem for state governments: they set the overall framework for land and housing supply, they govern the local councils that assess most development applications, and they set building regulations that affect building costs. But the Federal Government can encourage the states to reform land-use planning and zoning laws in ways that will boost supply.

It took neglectful governments more than two decades to create Australia's current housing affordability mess. They preferred the easy choices that merely appear to address the problem. The politics of reform are fraught because most voters own a home (and many own investment properties), and mistrust any change that might dent the price of their assets. But if governments keep pretending there are easy answers, housing affordability will only get worse.

1 Australian housing has become less affordable for many Australians

Australian housing has become increasingly expensive in recent decades, and public anxiety about housing affordability is rising.¹ House prices have grown much faster than incomes.² Interest rates have fallen, and so repaying a typical first home loan is *not* particularly difficult at the moment. But it is harder to save a deposit for a first home, a first home loan now entails more risk, borrowers live with that risk for longer, and inflation is unlikely to erode the cost of repayments as quickly as in the past. Rents have also risen relative to incomes over the longer term, particularly for low-income households in capital cities, although rental affordability has improved in recent years as housing construction has accelerated.

1.1 Australians are spending more of their incomes on housing

Australian dwelling prices have grown much faster than incomes, particularly since the mid-1990s. Prices have risen rapidly in all cities, and most regions. *Median* prices have increased from about 4 times *median* incomes in the 1980s and early-1990s, to more than 8 times today (and around 10 times in Sydney).³

1. Daley et al (2018a, Figure 1.1).

2. Ibid (p. 25).

3. Updated from Daley et al (ibid, p. 16).

Box 1: What does housing affordability mean?

‘Housing affordability’ is a catch-all term for a grab-bag of public concerns linked to rising house prices. But confusion over core concepts around housing markets complicates discussion of problems, their causes and potential solutions.

Housing is both something we live in and an asset we can own.

Rents are the actual cost of consuming housing services in the housing market. Changes reflect shifts in the balance of demand and supply of the housing *stock*.^a Financial factors, such as interest rates, only affect rents indirectly by affecting the amount of housing that gets built.

House prices are the costs of acquiring a house, and reflect the discounted net present value of future rental income from owning a house, plus any expected capital gains in future.^b Since home purchases are typically financed by debt, interest rates and the availability of mortgage credit have an enormous impact on house prices, especially in the short term. The tax treatment of housing also affects house prices.

Many people also think of housing affordability as the **mortgage burden** – the share of household income required to pay the typical mortgage. This approach more closely reflects the cash-flow costs of housing.

a. Housing lasts a long time, but it depreciates, while new dwelling construction only adds 1-2 per cent to the housing stock in any given year.

b. In practice home buyers can either rent their house out – earning a rental income – or live in it, avoiding the need to pay rent. Economists refer to the amount a household would pay to rent the house they own as ‘imputed rent’.

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Of course, not all Australians own their own homes – nearly one in three Australian households rent privately.⁴ Rents have grown more slowly than house prices, and over the long term they have more or less tracked wages. But rents have fallen since the onset of the COVID-19 pandemic, as migration has come to a standstill.⁵

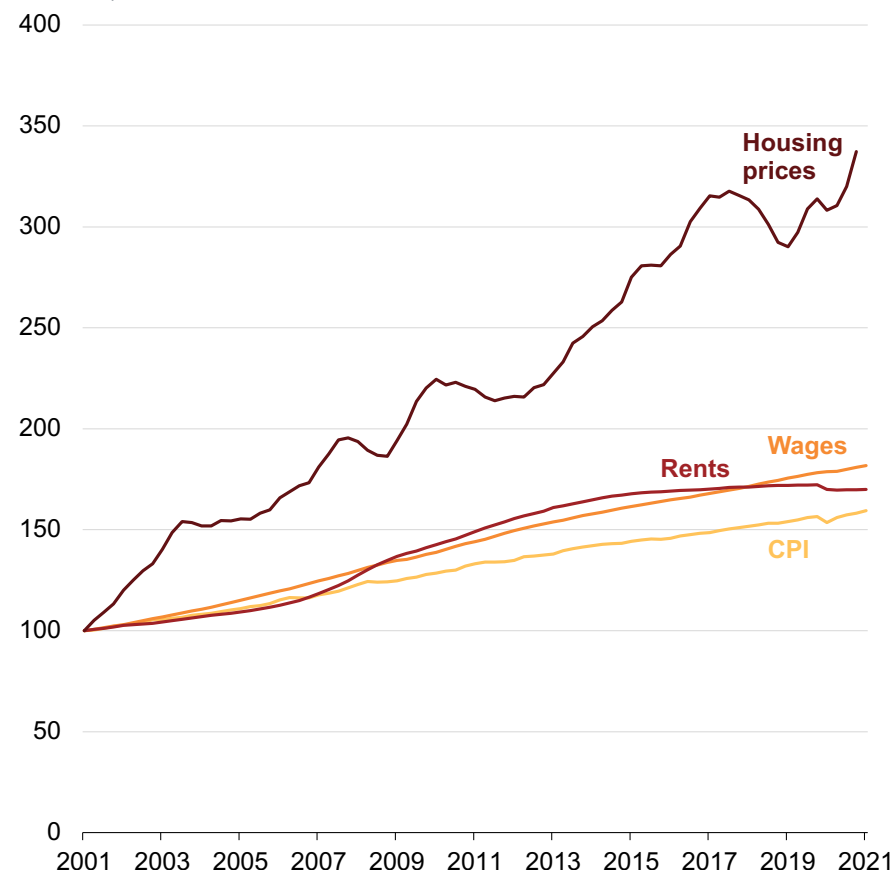
Rising housing costs in recent years mean Australians now pay 23.3 per cent of median incomes on housing costs, higher than all other comparator countries except the Netherlands (23.9 per cent).⁶ Among the OECD countries with comparable data, Australians have the 16th highest median spending on housing out of 43 countries.⁷

Lower-income Australian households in particular are spending more of their income on housing.⁸ More than half of low-income Australians in the private rental market suffer rental stress, especially those in the capital cities.⁹ One in five working-aged households who rent are in

4. Over recent years the proportion of households renting has steadily increased from about 27 per cent of households in 1991 to 32 per cent in 2016. Daley et al (2018a).
5. Quality-adjusted rents reported by the ABS have fallen by 1.3 per cent across Australia since the March quarter of 2020: ABS (2021a). However other indices which track recently rented properties point to a rapid turnaround in rents in recent months: Chau (2021).
6. Median housing costs are defined as mortgage burden (principal repayment and interest payments) or rent burden (private market and subsidised rent) as a share of disposable income. See: Daley et al (2019)
7. To some extent this may reflect an Australian preference to spend more resources on better housing. New Australian homes (houses and apartments) are the second largest by floorspace among 18 countries, second only to the US. In 2017-18, the average size of a new house built in Australia was 230.8 square metres, down from a record high of 247.7 square metres in 2008-09. James and Felsman (2018, p. 3).
8. Daley et al (2018a, p. 15).
9. Daley et al (Figure 2.14 2018a) and ABS (2019). Rental stress for low-income households is defined as the bottom 40 per cent of households with respect to equivalised disposable household income (excluding Commonwealth Rent Assistance), spending more than 30 per cent of gross income on rent.

Figure 1.1: House prices have increased much faster than rents and income

Nominal, index 2001 = 100



Notes: Nominal house price growth from Bank for International Settlements; Wages from Wage Price Index (excluding bonuses; private and public). Rents in the CPI are stratified according to location, type, and size.

Source: BIS (2021, H1), ABS (2021a, Tables 1, 7) and ABS (2021b, Table 1).

financial stress, defined as skipping a meal, accessing charity, pawning something or not heating the home.

1.2 It is getting harder to save for a deposit

There are typically three hurdles to home ownership in Australia: savings for the deposit; affording mortgage repayments; and the level of risk that first home-buyers take on.

The challenge of saving an initial deposit is now typically a bigger barrier to home-ownership than the initial burden of mortgage repayments, and so younger households increasingly rely on contributions from the 'bank of mum and dad'.¹⁰

In the early 1990s it took about six years to save a 20 per cent deposit for a typical dwelling for an average household. It now takes more than 10 years.¹¹ Although banks no longer insist on a 20 per cent deposit, most people still try to save this much before purchasing a dwelling.¹² In addition, many young households are finding it harder to save for a deposit because they face larger higher education debts and are now forced to save more of their income into superannuation than their parents did 25 years ago.

In contrast, borrowers' ability to afford repayments on the mortgage has improved as house prices have fallen. This 'mortgage burden' is often defined as the proportion of household income spent on repaying a mortgage. Depending on the household income measure used, the mortgage burden on a newly purchased first home, assuming a person

borrowes 80 per cent of the value of the home, is currently lower than it was during much of the past 20 years.¹³

Yet a first home loan now entails more risk, since purchasers are borrowing a larger share of their lifetime incomes to purchase a home, and borrowers live with much of that risk for longer. Homebuyers repay their mortgages over periods as long as 30 years. The mortgage burden over the life of the loan depends on how fast nominal incomes (that is, taking account of inflation) grow, and what happens to interest rates. Most people who bought 20-to-30 years ago now use only a relatively small share of their income to pay the mortgage. Nominal interest rates fell while nominal wages rose rapidly for most of the 1990s. In contrast, a new homebuyer today is likely to continue to spend a large proportion of their income on the mortgage for many years, unless wages start to grow faster than in the past few years.

1.3 Home ownership is falling, especially among the young and the poor

Between 1981 and 2016, home-ownership rates among 25-34 year-olds fell from more than 60 per cent to 45 per cent. Home ownership has also fallen for middle-age households, suggesting that most of the fall is due to higher dwelling prices rather than changing preferences for home-ownership among the young. Consequently, without intervention, home-ownership rates are unlikely to bounce back over time. For 35-44 year-olds, home-ownership has fallen fast – from 74 per cent in 1991 to about 62 per cent today – and home-ownership is also declining for 45-54 year-olds.

Home-ownership rates are falling particularly fast among younger, poorer Australians. Thirty-five years ago, most low-income younger households owned their own home. Today, only about 1 in 5 do (Figure 1.2). Owning a home increasingly depends on who your

10. Daley et al (2018a, Chapter 2).

11. Based on households saving 15 per cent of their gross annual income.

12. The typical leverage of a first home buyer has remained remarkably constant, at about 83 per cent between 2001 and 2014, even though banks loosened lending requirements and became more prepared to provide high-leverage loans.

13. See: Daley et al (2018a, p. 21). Interest rates have since fallen further.

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parents are, a big change from 35 years ago when home-ownership rates were high for all levels of income. Younger people on low incomes no longer have a real choice between home-ownership and renting.

1.4 Housing costs has contributed to growing inequality in Australia

With low-income earners spending a larger proportion of their income on housing, inequality is rising. While income inequality is not getting much worse in Australia, incomes *after housing costs* have risen much faster for high-income than low-income households (Figure 1.3). Housing is also a leading reason that wealth has increased faster for those who were already wealthy.¹⁴

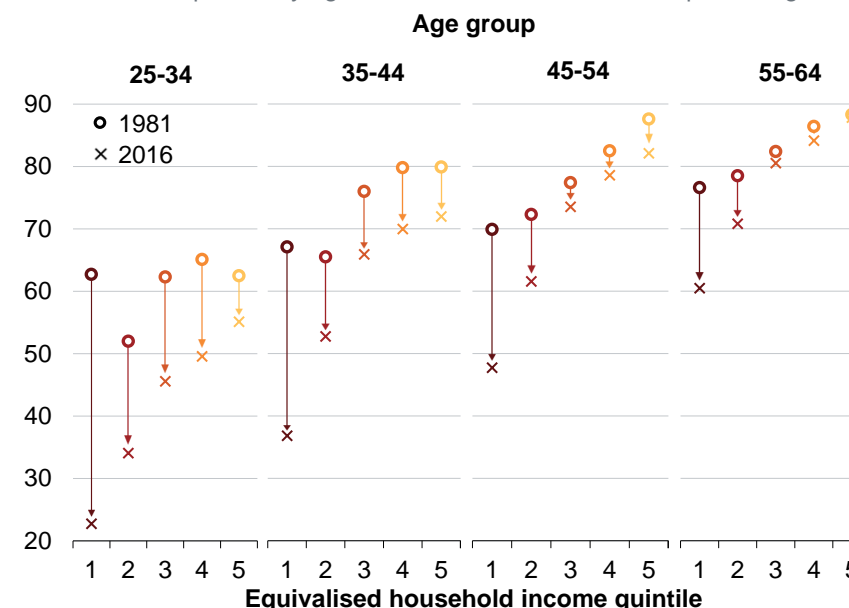
Rising housing costs also contribute to increased homelessness.¹⁵ Almost 50 of every 10,000 Australians were homeless in 2016.¹⁶ Australia's rate of homelessness has increased in the past five years.

More than 116,000 people were homeless in Australia on Census night in 2016 – up from 105,000 in the 2011 Census and 90,000 in the 2006 Census. Over the same period, the number of people sleeping rough— on the streets, in improvised dwellings, or tents – grew by about 950 people, to 8,200. The number of people who are not homeless but living in crowded dwellings rose 33 per cent from 61,000 in 2011 to 81,000 in 2016.¹⁷

Among countries with similar definitions of homelessness, Australia ranks better than New Zealand, which has almost 90 homeless per

Figure 1.2: Home-ownership is falling particularly fast for low-income earners

Home-ownership rates by age and income, 1981 and 2016, percentage



Notes: Household incomes based on Census data are approximate, and so small changes in ownership rates may not be significant. Excludes households with tenancy not stated (for 2016) and incomes not stated.

Source: Daley et al (2018a, Figure 4.3).

14. Daley et al (2018b, Figure 5.1).

15. Johnson et al (2018).

16. Daley et al (2018c, p. 51).

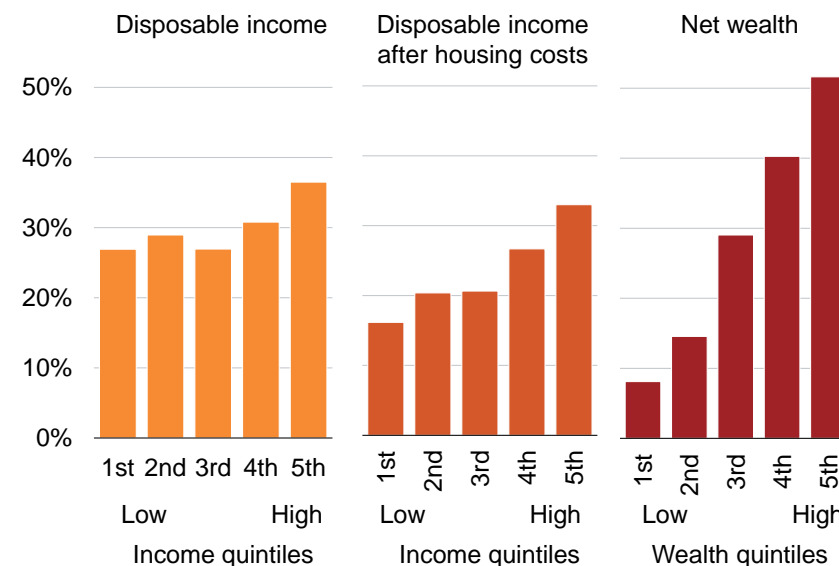
17. The ABS categorises people in houses that need three extra bedrooms not as homeless, but 'marginally housed'.

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10,000 people, but worse than the UK, which has about 25 homeless per 10,000.¹⁸

Figure 1.3: Housing costs and wealth are key causes of increasing inequality

Change in real equivalised household disposable income including and excluding housing costs growth, 2003-04 to 2015-16, per cent



Notes: Housing costs include rents for renters and repayments on loans for owners with mortgages. Growth in income excluding housing costs calculated by subtracting growth in housing costs from growth in disposable income. Income quintiles are calculated using household disposable income, equivalised by family size. Bottom two income percentiles are removed due to low reliability.

Source: Daley et al (2018a, Figure 4.1).

18. The definition of homelessness varies significantly across countries. The Australian definition includes: people living in improvised dwellings, tents, or sleeping out; people in supported accommodation for the homeless; people staying temporarily with other households; people living in boarding houses; people in other temporary lodgings; and people living in 'severely' crowded dwellings. See: Daley et al (2018c, p. 109).

2 Australia hasn't built enough housing to meet rising demand

Australian housing has become increasingly expensive – to rent or buy – for many reasons. Incomes rose, while tax and welfare settings and rapid migration fed demand. However record low interest rates have been the strongest driver of rising prices in recent years.¹⁹ But housing costs – especially rents – would have risen less if there had been more housing.²⁰

2.1 Australian cities have not built enough housing

Australian cities have not built enough housing to meet the needs of Australia's growing population. Australia has just over 400 dwellings per 1,000 people, which is among the least housing stock per adult in the developed world. Australia has experienced the second greatest decline in housing stock relative to the adult population over the past 20 years (Figure 2.1 on the following page). All states and territories except the ACT had less housing per adult in 2016 than in 2011.²¹ Some argue that there is no undersupply and possibly even an oversupply of homes in Australia. But these estimates typically ignore how rising prices and worsening affordability pushed people into larger households than they otherwise would have chosen.²²

Housing construction had accelerated in the years leading into the COVID pandemic.²³ Most of the additional approvals were for apartments in buildings with four or more storeys, with some pick-up in semi-detached townhouses.²⁴ But even record rates of housing construction in Sydney and Melbourne have only just been sufficient to accommodate the population increases seen prior to the pandemic.²⁵

The closure of Australia's international borders due to COVID-19 saw Australia's population growth slow to a near stand-still in the year to March 2021.²⁶ Over the same period, 189,000 dwellings commenced construction.²⁷ As a result, new housing supply is temporarily exceeding new demand.²⁸ This shorter-term period where new supply exceeds new demand can be seen as partial catch-up for much longer more protracted periods of undersupply. Yet COVID has also seen an increase in housing demand from existing residents, especially an increase in demand for more space per person, offsetting some of the decline in housing demand from the drop in migration. If Australia's population growth returns to pre-COVID trends, future rates of construction will need to be even higher than recent elevated levels.

19. For instance, RBA researchers recently concluded that a temporary 1 per cent decline in interest rates would be expected to lead to house prices rising by 8 per cent over the following two years. But if such a rate cut was seen as being permanent, house prices would instead rise by 28 per cent over the next two years. Tulip and Saunders (2019). House price rises since the onset of COVID are consistent with these estimates.

20. In the past, additional supply over the long run has successfully limited price growth, even when demand grew rapidly. See: Daley et al (2018a, p. 111).

21. Daley et al (2018c, Table 5.1).

22. The average number of people living in each dwelling fell from 3.5 to 2.6 between 1966 and 1996 due to couples having fewer children, the ageing of the population, shifting lifestyle preferences, more family breakdowns leading to smaller households, and older people living in their home for longer. However,

household size has remained roughly constant since the late-1990s. Therefore, these estimates underplay the number of dwellings needed to accommodate Australia's growing population. Daley et al (2018a).

23. Daley et al (ibid, p. 50).

24. The NSW, Victorian, and Queensland governments have all changed planning rules and processes over the past five years or so, which has helped new building to catch up with additional demand. Daley et al (2018c, p. 52).

25. Daley et al (2019).

26. Australia's population grew by just over 0.1 per cent (35,700 people) to 25.7 million. ABS (2021c).

27. ABS (2021d).

28. For example, Corporation (2020) expects new demand for housing fall by 286,000 dwellings between 2020 and 2025, compared with the pre-crisis outlook.

2.2 Restrictive planning rules have constrained supply

The historical shortage of housing in Australia is largely a failure of housing policy, rather than housing markets.

Australia's land-use planning rules are highly prescriptive and complex. Current rules and community opposition make it very difficult to create extra residences in the inner city and middle-ring suburbs of our capital cities.²⁹ And so new housing construction in Australian cities is relatively unresponsive to demand,³⁰ and the density of Australian cities has barely changed in the past 35 years.³¹

Reserve Bank researchers estimated that restrictive land-use planning rules added up to 40 per cent to the price of houses in Sydney and Melbourne, up sharply from 15 years ago.³² More recent research suggests that planning rules have added substantially to the cost of apartments, where building height limits in and around the urban cores of our major cities prevent more construction.³³ These findings are consistent with a growing international literature highlighting how land use planning rules – including zoning, other regulations, and lengthy development approval processes – have reduced the ability of many housing markets to respond to growing demand, adding to both rent and house price growth in a number of countries.³⁴

29. See Daley et al (pp. 56-58 2018a) on how regulations affect housing supply.

30. The best available estimates of the 'price elasticity of supply' in Australia is that a 10 per cent increase in dwelling prices leads to an increase in the stock of new housing of between 3 and 5 per cent. See: Daley et al (p. 46 *ibid*).

31. Daley et al (*ibid*).

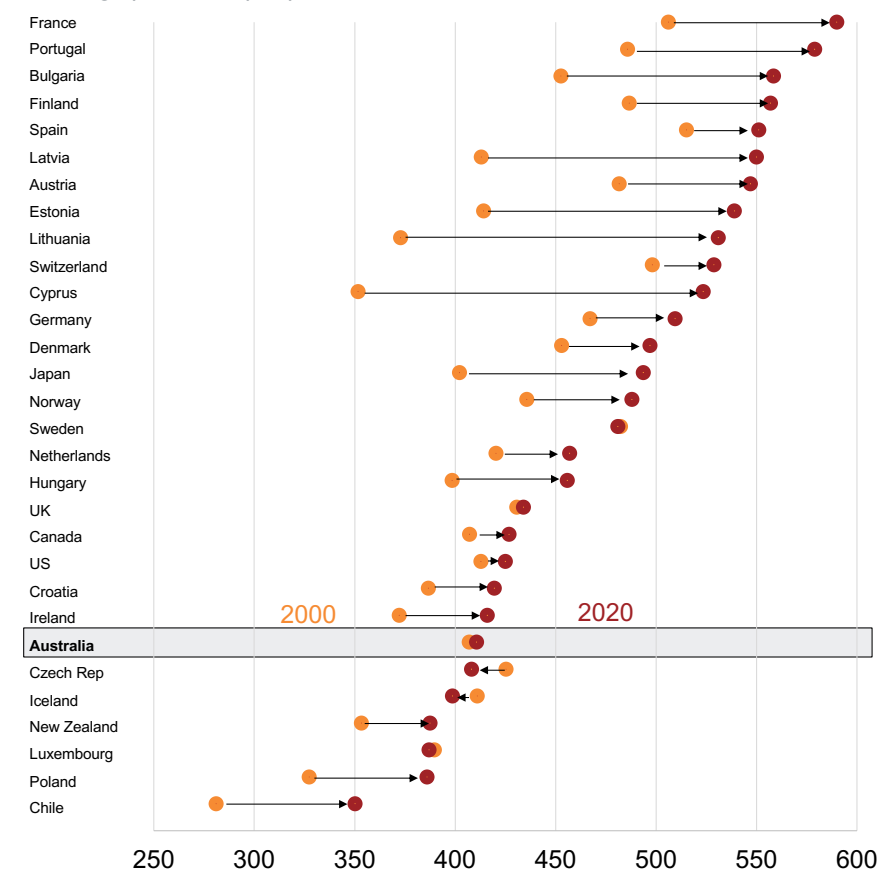
32. As demand for housing has increased, the zoning effect as a share of the price of housing has increased. Kendall and Tulip (2018).

33. Jenner and Tulip (2020) estimate that home buyers will pay an average of \$873,000 for a new apartment in Sydney though it only costs \$519,000 to supply, a gap of \$355,000 (68 per cent of costs). There are smaller gaps of \$97,000 (20 per cent of costs) in Melbourne and \$10,000 (2 per cent of costs) in Brisbane.

34. Daley et al (Box 4 2018a).

Figure 2.1: Australia's growth in housing stock in the past two decades has been among the lowest for developed countries

Dwellings per 1,000 people, 2000 and 2020 or latest



Notes: Figures are for total occupied and unoccupied private dwellings. Data for 2020 series refer to: 2020 for Austria, Denmark, Estonia, Finland, France, Ireland, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Sweden, UK, and US; and 2018 for all others. Data for 2000 series refer to: 1998 for Italy; 2001 for Australia, Austria, Bulgaria, Canada, Croatia, Czech Republic, Hungary, Luxembourg, New Zealand, Norway, Portugal, and Spain; 2002 for Chile and Latvia; 2005 for Malta.

Source: OECD (2017).

Of course, land-use planning rules benefit other land users by, for example, preserving the views of existing residents or preventing increased congestion. But studies generally conclude that the benefits of restricting development are much less than the costs imposed.³⁵

Planning rules that constrain development in Australian cities have also led to a shortage of medium- and high-density housing compared to what Australians actually want. After accounting for trade-offs in price, location, and size, many people would prefer a townhouse, semi-detached dwelling, or apartment in a middle- or outer-suburb, rather than a house on the city fringe. For example, semi-detached dwellings, townhouses, units, and apartments made up 44 per cent of Sydney's and 33 per cent of Melbourne's dwelling stock in 2016, up from about 38 per cent and 28 per cent respectively in 2006. But this is still well short of the 59 per cent and 52 per cent respectively that residents say they want (table 2.1).³⁶

In recent years, planning controls have been significantly relaxed for high-rise in Brisbane and for medium-high density dwellings in Sydney.³⁷ But Australian cities still have relatively little medium density development in their extensive middle rings. Many local governments restrict medium- and high-density developments to appease local residents' concerns about road congestion, parking problems, and damage to neighbourhood character.

Since the onset of the pandemic, population growth into Australia has slowed. International borders are expected to be reopened in the coming months, but rates of inbound migration may take some time to fully return to pre-COVID levels. Wherever people decide

35. Ibid, p. 57. For example, in a review of the literature, Gyourko and Molloy (2015) conclude that while the benefits of land-use planning rules are difficult to quantify, 'recent studies suggest that the overall efficiency losses from binding constraints on residential development could be quite large'.

36. Daley et al (Table 3.2 2018a).

37. Daley et al (pp. 58-59 *ibid*).

to live after the pandemic subsides, the planning system should be flexible enough to ensure that they can. Changing land-use on urban fringes has already created some conflicts as housing developments encroach onto land previously used for farming.³⁸ Allowing Australians to choose where they want to live by relaxing planning rules to allow more housing to be built in a variety of places is the best approach.

2.3 Strict land-use planning rules reflect the politics of planning

Planning regulations have not changed much, despite the pressure of increasing population, because of the politics of planning. Most people in the established middle suburbs already own their house. Most of them don't like new developments in their neighbourhoods.

The structure of government doesn't make the politics of increasing density any easier. The voting bases of councils, the basis on which they collect rates, and the blurring of responsibilities between the Commonwealth and the states all reduce the political incentives for any level of government to do better.

The benefits of population growth accrue to society as a whole, whereas decisions about development approvals largely sit with local councils. Existing residents usually prefer their suburb to stay the same. Restricting development effectively increases the scarcity value of their property. And they worry that increased population will reduce the value to each of them of the current publicly provided infrastructure in their area such as roads and other amenities: existing residents are typically concerned that there will be more traffic congestion, more crowding on public transport, more noise, and less 'street appeal'.³⁹

Meanwhile, prospective residents who don't already live in middle-ring suburbs cannot vote in council elections, and their interests are largely unrepresented.

38. Select Committee on Agricultural and Related Industries (Chapter 2 2010).

39. Daley et al (2018a)

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Table 2.1: The housing stock in Sydney and Melbourne is still some way from what people would prefer

Sydney					Melbourne				
	Detached	Semi-detached or townhouse	Apartment building up to 3 storeys	Apartment buildings 4+ storeys		Detached	Semi-detached or townhouse	Apartment building up to 3 storeys	Apartment buildings 4+ storeys
% housing stock in 2016									
Inner	5	4	6	7	Inner	10	6	6	6
Middle	13	3	5	4	Middle	18	6	2	1
Outer	18	4	4	2	Outer	25	4	1	0
Fringe	21	3	1	0	Fringe	14	1	0	0
Total	55	14	16	14	Total	67	17	10	7
Preferred housing stock, % of respondents									
Inner	9	4	2	5	Inner	8	6	3	5
Middle	9	7	4	5	Middle	14	9	4	4
Outer	12	7	4	6	Outer	14	6	3	3
Fringe	10	6	5	4	Fringe	12	6	2	2
Total	41	25	15	20	Total	48	26	12	14
Housing stock mismatch (housing stock in 2016 minus preferred housing stock), percentage points									
Inner	−4	0	4	2	Inner	2	0	3	1
Middle	4	−4	1	−1	Middle	4	−3	−2	−3
Outer	6	−3	0	−4	Outer	11	−2	−2	−3
Fringe	11	−3	−4	−4	Fringe	2	−5	−2	−2
Total	15	−11	1	−6	Total	19	−9	−2	−7

Notes: Preferred stock is from the trade-off survey in Kelly et al (2011). Excludes dwellings listed as 'Not stated' and 'Other dwellings'. Semi-detached/townhouses includes townhouses, terrace houses, row houses, courtyard houses, and villa units. Regions are at statistical local area level, sorted according to land price in 2011, and approximately match distance to the CBD. Data may not sum due to rounding.

Source: Daley et al (Table 3.2 2018a).

3 What the Federal Government can do

The remainder of the submission identifies federal government policies that might improve housing affordability. Grattan Institute's 2018 report, *Housing affordability: re-imagining the Australian dream*, showed what would work. The report evaluated a wide range of housing policy options on whether they would make a material difference to affordability without substantially dragging on the economy or the budget. It concluded that many of them would boost the supply of housing, while a number of tax reforms to remove distortions in housing investment would have large budgetary and economic benefits, but more modest impacts on housing demand. These options are summarised in Figure 3.1.

Given the allocation of federal responsibilities, the most direct way the Federal Government can improve affordability is by reforming tax and welfare policies that distort demand for housing. The Federal Government can improve housing affordability somewhat – and immediately – by reducing demand. It should reduce the capital gains tax discount from 50 per cent to 25 per cent; abolish negative gearing; and include owner-occupied housing in the Age Pension assets test.

But affordability – both to buy and to rent – would also improve if governments permit more homes to be built. Building an extra 50,000 homes a year for a decade could reduce Australian house prices by up to 20 per cent compared to where they would have been otherwise.⁴⁰ This is primarily a problem for state governments: they set the overall framework for land and housing supply, they govern the local councils that assess most development applications, and they set building regulations that affect building costs. But the Federal Government can

encourage the states to reform land-use planning and zoning laws and release greenfield land, which would boost supply.

The Federal Government should also provide extra support for the worst-off. But not all such policies would be equally effective. Any boost to social housing will be expensive, and therefore should be reserved for people at greatest risk of long-term homelessness. And any further support for those on low incomes should be focused on direct financial assistance for low-income renters rather than building more social housing.

3.1 Reform tax and welfare rules to reduce demand for housing

Housing demand would be reduced a little if the Federal Government reduced the capital gains tax discount and abolished negative gearing – and there would be substantial economic and budgetary benefits.⁴¹ The effect on property prices would be modest – they would be roughly 2 per cent lower than otherwise – and would-be homeowners would win at the expense of investors. House prices at the bottom would probably fall by more, since these tax breaks have channelled investors into low-value homes that are lightly taxed under states' progressive land taxes and tax-free thresholds.⁴²

The dominant rationale for these reforms is their economic and budgetary benefits. The current tax arrangements distort investment decisions and make housing markets more volatile. Our proposed reforms would boost the budget bottom line by about \$5 billion a

40. Daley et al (2018a). Saunders and Tulip (2018) estimate this would reduce the cost of housing by 11 per cent.

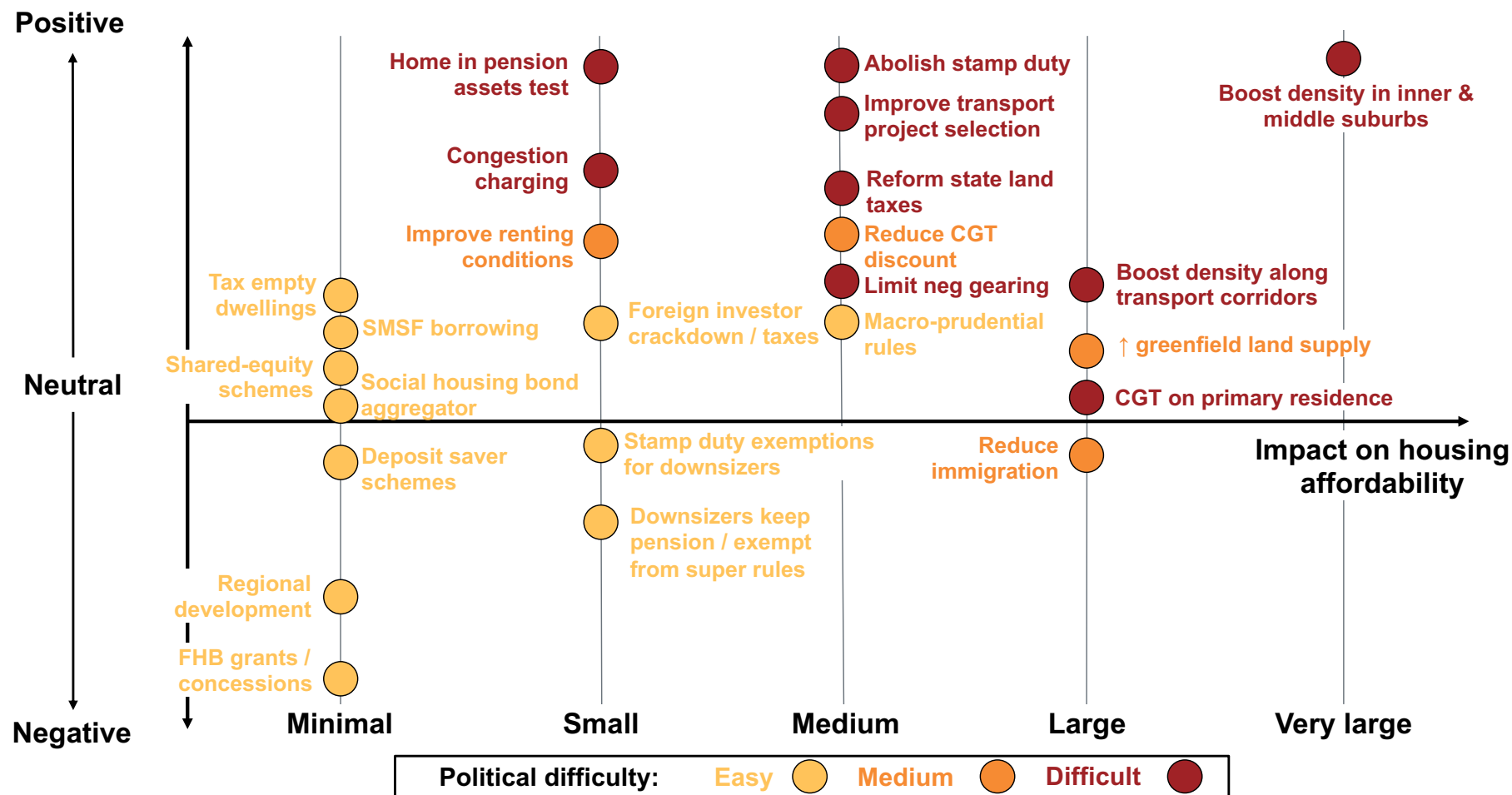
41. Daley et al (2016).

42. Daley et al (2018a, pp. 97–98).

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Figure 3.1: Only some policies will actually improve housing affordability, and these are politically difficult

Summary of economic, budgetary, and social impacts



Notes: Prospective policies are evaluated on whether they would improve access to more-affordable housing for the community overall, assuming no other policy changes. Assessment of measures that boost households' purchasing power includes impact on overall house prices. Our estimates of the economic, budgetary, or social impacts should not be treated with spurious precision. For many of these effects there is no common metric, and their relative importance depends on the weighting of different political values. Consequently our assessments are generally directional and aim to foster a more informed discussion. SMSF = self-managed superannuation fund. FHB = first home buyer. CGT = capital gains tax.

Source: Daley et al (2018a, Figure 5.2).

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year.⁴³ Contrary to urban myth, rents wouldn't change much, nor would housing markets collapse.⁴⁴

Including more of the value of the family home in the pension assets test would also marginally reduce housing demand. Under current rules only the first \$216,500 of home equity is counted in the pension assets test; the remainder is ignored. Inverting this so that all of the value of a home is counted above some threshold – such as \$500,000 – would be fairer, and contribute to the budget. Again the dominant rationale for this reform is the budgetary benefit, rather than housing affordability. Many Age Pension payments are made to households that have substantial property assets. Half of the government's spending on the Age Pension goes to people with more than \$500,000 in assets.⁴⁵

This reform would also encourage a few more senior Australians to downsize to more appropriate housing, although the effect would be limited given that research shows downsizing is primarily motivated by lifestyle preferences and relationship changes.⁴⁶

Other tax and transfer settings that affect housing include the (non) taxation of imputed rent, the corresponding (non) deductibility of mortgage costs, and the (non) taxation of capital gains and imputed

rents on owner-occupied housing. While the policy merits of taxing owner-occupied housing are sound, the politics is likely to be particularly intractable.⁴⁷

3.2 The Federal Government should sharpen states' incentives to boost housing supply

The Federal Government should provide incentives to state and local governments to increase the supply of housing in good locations.⁴⁸ Coordinating action by the states is worthwhile because improved housing supply in one state spills over into lower prices in other states.⁴⁹ The Federal Government can help solve this coordination problem. And the Commonwealth tax base is more likely than the state tax base to capture the increased revenues that flow from higher economic growth as a result of better housing supply.

43. Daley et al (2016).

44. Analysis of daily house price data compiled by Corelogic after the 2019 federal election showed that APRA's post-election decision to loosen the lending restrictions it imposes on the banks, rather than the election result, spurred the recovery of Australian house prices. See: Coates and Cowgill (2019)

45. Daley et al (2018b, p. 98). Excludes impact of changes to the Age Pension assets test that took effect from 1 January 2017, reducing the pension entitlements of 326,000 pensioners. But these changes would have reduced overall pension payments to part-rate pensioners by only about \$1 billion in 2017-18, which is unlikely to substantially change the distribution of pension payments by net wealth, given total pensions spending of \$45 billion in 2017-18 (Morrison (2015) and Treasury (2017)).

46. Daley et al (2018b, p. 38); Productivity Commission (2015); and Valenzuela (2017).

47. Investment would be less biased towards housing, where any capital gains and imputed rents – the value of owning the home that you live in – are untaxed, compared to investing in other more productive assets. But it would be difficult to resist calls to allow deduction of interest payments and the cost of any capital improvements made to the home such as renovations, which could wipe out most or all of the benefit to the budget. Taxing imputed rents in particular presents a number of practical policy design and implementation challenges, which is why only five OECD countries – the Netherlands, Iceland, Slovenia, Luxembourg, and Switzerland – tax imputed rents, and they often substantially under-estimate the rental value (Daley et al (2018a, pp. 101–102)).

48. Daley et al (ibid, pp. 128–130). See also Deloitte Access Economics (2016).

49. Australia's housing markets are interconnected. If, for example, only the Victorian Government substantially boosts housing supply, any improvement in affordability will be dispersed across Australia as residents of other Australian cities move to Melbourne, attracted by lower house prices relative to other major Australian cities. But because Australia's migration intake is largely determined by the Federal Government, independently of state planning policies, affordability would improve in other states, even though they would have avoided the political costs of increasing housing supply. See: Daley et al (2018a, p. 129), Abelson (2016) and Aura and S. Davidoff (2008).

The principle of federal financial support for state-level reform is well-established. From 1997-98 to 2005-06 the National Competition Policy involved payments averaging about \$600 million a year to the states and territories for regulatory and competition reform.⁵⁰ The Productivity Commission's 2005 review of the National Competition Policy found that it had delivered substantial benefits to the Australian community which, overall, greatly outweighed the costs of these payments to the Commonwealth.⁵¹

The Federal Government had sought to use the most recent intergovernmental housing agreement to encourage state and local governments to boost housing supply.⁵² But the Commonwealth did not put enough money on the table to get states to make the politically difficult decisions on planning reform.⁵³

The Federal Government should also increase the pressure on states to make good planning decisions. The Commonwealth should shift housing research functions from the National Housing Finance and Investment Corporation to an independent statutory body, Housing Australia, with a mandate to collect nationally consistent data on issues related to housing supply and demand, including on the operation of state and local government land-use planning systems, infrastructure charges, and migration. This more independent body could be used to

hold the states to account on any government promise to boost housing supply and reform land-use planning rules.⁵⁴

Of course, boosting housing supply will improve affordability only slowly. Even at current record rates, new housing construction increases the stock of dwellings by only about 2 per cent each year. According to available estimates, adding an extra 50,000 dwellings to Australia's housing stock – an increase of about 25 per cent on current levels of construction nationally, or roughly 0.5 per cent of the national housing stock – would lead to national house prices being only 1-to-2 per cent lower than otherwise.⁵⁵

But these estimates also imply that a sustained increase in housing supply would have a big impact on house prices. For example, if an extra 50,000 homes were built each year for the next decade, national house prices and rents could be between 10 and 20 per cent lower than they would be otherwise. While these effects are insufficient to offset the impact of record low interest rates on house prices, they could make housing substantially cheaper in Australia than would otherwise be the case.

3.3 Boosting housing supply would especially help low-income earners

A 10 per cent fall in private market rents would reduce the number of low-income households in housing stress by 8 per cent, and a 20 per cent fall in private market rents would reduce that number by 18 per cent.⁵⁶

50. Productivity Commission (2005).

51. Ibid.

52. The National Affordable Housing Agreement specifies national performance indicators including the total number of dwellings relative to the population, and increases in the number of dwellings permitted by zoning in major cities. But no funding is attached to achieving these milestones: (Treasury (2018) and Milligan (2018)).

53. The Commonwealth's City Deals could be used for this purpose, but so far they have focused not on housing affordability but on the broader objectives of increasing economic growth and stimulating urban renewal: see Department of Infrastructure, Regional Development and Cities (2019).

54. Daley et al (2018a, p. 129).

55. Daley et al (ibid, p. 111). A more recent estimate from Tulip and Saunders (2019) suggests that each 1 per cent increase in the stock of dwellings lowers the cost of housing by 2.5 per cent.

56. Grattan analysis of Wong et al (2016).

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Private housing helps people on low incomes by lowering the rents they pay. Rents have increased more slowly over the past decade in Victorian suburbs in which more housing has been constructed.⁵⁷ Increasing the supply of housing as we recommend would, over a decade, be sufficient to reduce the number of low-income households suffering housing stress by up to one-third, or about 170,000 households.⁵⁸ And all low-income households would be paying less for their housing.

Claims that direct investment in affordable housing is the only way to boost the stock of homes available to low-income earners are based on misleading research.⁵⁹ More housing supply will ultimately free-up less expensive housing stock, making rents cheaper for low-income earners.⁶⁰ International evidence suggests that this 'filtering' does occur in practice. For example, US estimates suggest that 45 per cent of homes that were affordable to very low-income earners in the US in 2013 had filtered down from owner-occupier or higher-rent categories

57. Each 1-percentage-point increase in the amount of new housing constructed in a local government area resulted in rents growing 3.7 per cent slower over the decade (Grattan analysis of ABS (2017a) and Victorian Department of Health and Human Services (2019)).

58. Grattan analysis of ABS (2017b). Based on a 20 per cent fall in rents.

59. For example, Ong et al (2017) claim that most of the additional dwellings built over the past decade were substantially more expensive than the existing housing stock. But this study is flawed because it groups price deciles by the number of local government areas, rather than by the number of dwellings. Grattan Institute's new analysis of the data, updated to 2016-17, shows that two-thirds of new houses have been built in the cheapest half of all suburbs, and most new units and apartments have been built in Sydney and Melbourne, where median prices are higher (Coates and Wiltshire (2018)).

60. See: Daley et al (2018a, p. 64). The people who move into newly constructed, more expensive housing are either existing residents who move out of less expensive housing, or new residents who would otherwise have added to the demand and pushed up the price of existing housing. Irrespective of its cost, each additional dwelling adds to total supply, which ultimately improves affordability for all homebuyers.

in 1985.⁶¹ And higher rents increase the risk of homelessness for those who are already vulnerable.⁶²

Decreasing rents provides the kind of support to households which subsidies on their own will never be able to feasibly achieve. Decreasing rents by 20 per cent would boost the post-housing incomes of low-income private renters by more than \$3 billion a year, equivalent to more than an increase of more than 80 per cent in the maximum rate of Commonwealth Rent Assistance.

Making housing cheaper would also make existing government subsidies more effective, since Rent Assistance would go further towards reducing financial stress among low-income private renters.

3.4 Reducing immigration would improve housing affordability but probably leave Australians worse off

Australia's migration policy is its de-facto population policy. The population is growing by about 350,000 a year. More than half of this is due to immigration. Some have called for fewer migrants to be allowed into Australia, to improve housing affordability and reduce congestion in our biggest cities.⁶³

Lower migration would make housing somewhat more affordable, but only in the long term.⁶⁴ We estimate that curbing net overseas

61. Weicher et al (2016).

62. For example, Johnson et al (2018) find that a \$100 increase in 20th percentile weekly rents raised an individual's risk of becoming homeless by almost 3 per cent among a sample of welfare recipients who had been flagged by Centrelink as being at risk of housing insecurity. In fact, increasing rents actually had a greater impact on the risk of homelessness than frequent illicit drug use, experiencing physical or sexual violence in the past six months, or a history of being in state care.

63. For example, NSW Premier Gladys Berejiklian has previously called for the state's migrant intake to be halved (McGowan and Evershed (2018)).

64. Daley et al (2018a).

migration by 30,000 a year would result in house prices and rents about 3-to-4 per cent lower after a decade.⁶⁵ Researchers at the Reserve Bank recently estimated that the post-2005 increase in migration led to rents (and house prices) being around 9 per cent higher than they otherwise would have been.⁶⁶

But lower migration would probably leave Australians worse off. Slowing migration, especially skilled migration, would probably reduce Australians' per-capita incomes.⁶⁷ Cutting migration would also hit the Commonwealth Budget in the short term.⁶⁸ Most migrants are of working age and are liable to pay personal income tax. And many temporary migrants, such as 457 visa holders, can't draw on a range of government services and benefits, including welfare and Medicare.

More importantly, cutting back on younger, skilled migrants is likely to hurt the budget and the economy in the long term. New migrants are younger than many previous waves of migrants when they arrived. And they are much younger than the incumbent Australia population.⁶⁹

Consequently, they provide a 'demographic dividend' over the medium run by increasing the proportion of Australians in the workforce, thus smoothing the negative economic and budgetary impacts of an ageing population over a longer period.⁷⁰ While immigration does not eliminate the costs of population ageing, since migrants themselves also age, it has smoothed out the baby-boom 'bump' that created a cohort much larger than the age group born in the years before or after.⁷¹

65. Coates (2016) estimated that a 50,000-a-year cut to the migrant intake would reduce house prices by 6-to-7 per cent after a decade.

66. Tulip and Saunders (2019).

67. Daley et al (2018a, pp. 105–106).

68. Belot (2018). Then Treasurer Scott Morrison warned that reducing Australia's permanent migration cap by 80,000 people a year would cost the budget between \$4 billion and \$5 billion over four years.

69. Productivity Commission (2016, p. 125); and Daley et al (2018a, p. 34).

70. Daley et al (2018a, p. 105).

71. Daley et al (Figure 3.4 2018a); and Norton and Tanner (2017).

Consequently any decision to reduce net overseas migration would need much more careful thought, and would require changes to the rules around temporary visas, which typically involve difficult trade-offs.

3.5 Boost Commonwealth Rent Assistance

Rent Assistance materially reduces housing stress among low-income Australians.⁷² But the value of Rent Assistance has not kept pace with rent increases. The maximum Rent Assistance payment is indexed in line with CPI, but rents have been growing faster than CPI for a long time.⁷³

Boosting the rate of Commonwealth Rent Assistance would help low-income earners with their housing costs, and reduce poverty more generally. A 40 per cent increase in the maximum rate of Rent Assistance – worth about \$1,400 a year for singles – would cost \$1.3 billion a year.⁷⁴ Commonwealth Rent Assistance would then provide the same real level of assistance to low-income earners as it did 15 years ago, taking into account the rising cost of their rent. In future, Rent Assistance should be indexed to changes in rents typically paid by people receiving income support, so that its value is maintained, as recommended by the Henry Tax Review.⁷⁵

A common concern is that boosting Rent Assistance would lead to higher rents, eroding much of the gains in living standards for low-income earners.⁷⁶ But an increase in Rent Assistance is unlikely

72. In June 2016, 68 per cent of Rent Assistance recipients would have paid more than 30 per cent of their income on rent if Rent Assistance were not provided. With Rent Assistance provided, this proportion was reduced to 41 per cent (Daley et al (2018b, p. 76)).

73. Ibid (p. 76).

74. Coates and Nolan (2020, p. 66).

75. Treasury (2009, p. 595). While the rental component of the CPI is a readily available and transparent measure, an index of rents paid by Rent Assistance recipients would provide a more accurate assessment of their rental costs.

76. Senate Economics References Committee (2015, Chapter 22).

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to substantially increase rents.⁷⁷ Households are unlikely to spend all of the extra income on housing.⁷⁸ Households receiving Rent Assistance are only a small proportion of low-income renting households. And only half of low-income renters actually receive Rent Assistance, since eligibility is linked to receiving an income support payment.

But boosting Rent Assistance would not solve all the issues around housing affordability. Boosting Rent Assistance by 40 per cent would only modestly reduce the proportion of low-income earners in housing poverty. Many low-income Australians are spending up to 50 per cent of their incomes on housing.⁷⁹ And private rental is likely to be inappropriate for people at severe risk of long-term homelessness.

3.6 The Federal Government should help boost the supply of social housing to reduce homelessness

The Federal Government should increase funding through the National Affordable Housing Agreement⁸⁰ for social housing, provided that the money is tightly targeted to help Australians at serious risk of homelessness.

The best Australian evidence shows that social housing substantially reduces tenants' risk of homelessness.⁸¹ Social housing can make a big difference to the lives of the worst off. While lots of landlords rent to low-income households, many are prepared to leave their property

vacant if the only person seeking tenancy faces the many issues typical for those who are at severe risk of, or already suffering, homelessness. These issues include living with a disability, domestic violence, poor mental health, drug and alcohol misuse, a history of state care, or long-term disadvantage.⁸²

The stock of social housing – currently about 400,000 dwellings – has barely grown in 20 years, while the population has increased by 33 per cent.⁸³ As a consequence, there is little 'flow' of social housing available for people whose lives take a big turn for the worse,⁸⁴ and many people who are in greatest need are not assisted. Tenants generally take a long time to leave social housing; most have stayed for more than five years.⁸⁵

But boosting social housing would be expensive: increasing the stock by 100,000 dwellings – broadly sufficient to return the total social housing stock to its historical share of the total housing stock – would cost the Federal Government about \$30 billion.⁸⁶ People in social housing receive a much greater average level of assistance – at much greater cost to government – than private renters receive from Rent Assistance.⁸⁷

Given its costs, social housing should be reserved for those most in need, and at significant risk of becoming homeless for the long term.⁸⁸ While even an unprecedented boost to the social housing stock – such

77. Daley et al (2018b, pp. 77–79).

78. Each dollar of additional Rent Assistance should lead to an increase in spending on housing of only between 9 cents and 15 cents (Daley et al (ibid, p. 78)).

79. Ibid (p. 77).

80. Treasury (2018).

81. Prentice and Scutella (2018) studied the benefits of social housing, comparing the outcomes of people who entered social housing to similar individuals in the private rental market. They found that social housing tends to be effective at reducing homelessness rates. Only 7 per cent of residents placed in social housing subsequently become homeless, compared to 20 per cent of similar renters in the private market.

82. Daley et al (2018a, p. 134).

83. Daley et al (ibid, p. 62). This is despite some significant investments in public housing, including under the controversial and now discontinued National Rental Affordability Scheme.

84. Daley et al (ibid, p. 132).

85. AIHW (2017).

86. Coates (2020).

87. Productivity Commission (2018, p. 174).

88. New allocations of social housing are better targeted to those most in need. Of all social housing allocations in 2017, almost three-quarters went to 'greatest needs' applicants (Productivity Commission (ibid, Chapter 18)).

as an extra 200,000 dwellings – would make a big difference to people who are homeless if it were tightly targeted towards them,⁸⁹ more than two-thirds of low-income Australians would still remain in the private rental market.

Therefore, beyond ensuring a flow of additional social housing for people most at risk of long-term homelessness, further support for low-income housing should be focused on direct financial assistance for low-income renters, and improving housing affordability more broadly by increasing the number of homes constructed.

3.6.1 Don't subsidise first home-buyers and downsizers

Over recent decades, federal, state, and territory governments have spent billions of dollars giving cash incentives and stamp duty concessions to first-home buyers.⁹⁰ These policies have typically resulted in spikes of first home-buyer activity as they bring forward purchases, then there is a lull in activity, and in the end housing affordability is actually worse because additional demand drives up prices.⁹¹

Some argue that governments should give senior Australians more incentives to downsize their homes through stamp duty concessions, exemptions from the Age Pension means test, or additional superannuation tax concessions.⁹² It sounds good: new incentives would encourage seniors to move to housing that better

suits their needs, while freeing up equity for their retirement and larger homes for younger families.

But the reality is different. Most seniors are emotionally attached to their home and neighbourhood and don't want to downsize.⁹³ So most of any financial incentives will go to people who were going to downsize anyway.⁹⁴ And, as the Productivity Commission found, these incentives have a material budget cost, and distort the housing market by adding even more tax and welfare incentives to own a home.⁹⁵

If governments really want to encourage seniors to downsize, they should do so by including the family home in the Age Pension assets test – which would at least have the virtue of improving the budget bottom line, even if it would have little impact on housing affordability.

3.7 Making housing more affordable requires making tough choices

Australian governments have historically avoided the hard choices on housing affordability, preferring policies that merely appear to help. The politics of reform are fraught because most voters own a home (and many own investment properties), and mistrust any change that might dent the price of their assets. But if governments keep pretending there are easy answers, housing affordability will only get worse.

If governments really want to make a difference, they need to stop offering false hope through policies, such as first home-owners' grants, that are well-known to be ineffective. Governments have no chance of bringing the community with them when they keep telling voters that the easy policies will do the job. Instead they need to explain the

89. For example, there were 116,000 homeless Australians on Census night in 2016 (ABS (2017a)).

90. Eslake (2013). Daley et al (2013, p. 49) estimated that abolishing all subsidies for first home-buyers could save federal, state, and territory budgets a combined \$1.3 billion a year. Stamp duty concessions act in a similar way to cash grants for first home-buyers (I. Davidoff and Leigh (2013)).

91. Daley et al (2018a, pp. 135–137).

92. For example, see Ong et al (2016).

93. For two-thirds of older Australians, the desire to 'age in place' is the most important reason for not selling the family home. Often they stay put because they can't find suitable housing in the same local area (Daley and Coates (2017)).

94. Daley et al (2018a, pp. 140–141).

95. Productivity Commission (2015).

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hard choices, to prepare the ground for the tough decisions that need to be made. Either people accept greater density in *their* suburb, or their children will not be able to buy a home, and seniors will not be able to downsize in the suburb where they live. Economic growth will be constrained. And Australia will become a less equal society – both economically and socially.

Policy can make a difference. But only if we make the right choices.

Bibliography

- Abelson, P. (2016). *Housing Costs and Policies: With Special Reference to Sydney*. Sydney: Applied Economics / Applied Economics. <http://www.applieconomics.com.au/publications/papers/housing/2016-housing-prices-and-policies-with-special-reference-to-sydney.htm>.
- ABS (2017a). *Census of population and housing, 2016, TableBuilder Pro, Cat. 2073.0*.
- (2017b). *Microdata: Household Expenditure, Income and Housing, 2015-16, Cat. 6540.0*.
- (2019). *Survey of Income and Hosing, 2017-18*. Australian Bureau of Statistics. <https://www.abs.gov.au/statistics/people/housing/housing-occupancy-and-costs/2017-18#data-download>.
- (2021a). *Consumer Price Index, Australia*. Australian Bureau of Statistics. <https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/consumer-price-index-australia/latest-release#data-download>.
- (2021b). *Wage Price Index, Australia*. Australian Bureau of Statistics. <https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/wage-price-index-australia/latest-release#data-download>.
- (2021c). *Australia's population growth close to zero*. Australian Bureau of Statistics. <https://www.abs.gov.au/media-centre/media-releases/australias-population-growth-close-zero>.
- (2021d). *Building Activity, Australia, March 2021*. Australian Bureau of Statistics. <https://www.abs.gov.au/statistics/industry/building-and-construction/building-activity-australia/latest-release#number-of-dwellings-commenced>.
- AIHW (2017). *Housing Assistance in Australia 2017*. Australian Institute of Health and Welfare. <https://www.aihw.gov.au/reports/housing-assistance/housing-assistance-in-australia-2017/contents/social-housing-dwellings>.
- Aura, S. and Davidoff, S. (2008). "Supply constraints and housing prices". *Economic Letters* 99.2, pp. 275–277.
- Belot, H. (2018). "Peter Dutton, Scott Morrison dismiss Tony Abbott's call to cut migration to Australia". *ABC News*. <https://www.abc.net.au/news/2018-02-21/two-senior-ministers-slap-down-abbott-on-migration/9470610>.
- BIS (2021). *Residential property prices: selected series, nominal and real*. Bank of International Settlements. https://www.bis.org/statistics/pp_selected.htm.
- Chau, D. (2021). "Australian renters facing biggest rent hikes in 12 years, amid surging house prices". *ABC*. <https://www.abc.net.au/news/2021-07-19/rent-corelogic-property-housing-record-surge-regional/100304400>.
- Coates, B. (2016). *Supply sceptics beware: without more housing it won't be affordable*. Grattan Institute. <https://grattan.edu.au/news/supply-sceptics-beware-without-more-housing-it-wont-be-affordable/>.
- (2020). "Money for social housing, not home buyers grants, is the key to construction stimulus". *The Conversation*. <https://theconversation.com/money-for-social-housing-not-home-buyers-grants-is-the-key-to-construction-stimulus-139743>.
- Coates, B. and Wiltshire, T. (2018). *The Conventional Wisdom Is Wrong: Building More Housing Does Help Low-Income Earners*. Inside Story. <http://insidestory.org.au/the-conventional-wisdom-is-wrong-building-more-housing-does-help-low-income-earners/>.
- Coates, B. and Cowgill, M. (2019). "What's driving the rebound in house prices since the election?" *Grattan Blog*. <https://grattan.edu.au/news/whats-driving-the-rebound-in-house-prices-since-the-election/>.
- Coates, B. and Nolan, J. (2020). *Balancing Act: Managing the Trade-Offs in Retirement Incomes Policy (Submission to the Retirement Income Review)*. Grattan Institute. <https://grattan.edu.au/wp-content/uploads/2020/03/Grattan-Institute-sub-balancing-act-retirement-income-review.pdf>.
- Corporation, N. H. F. a. I. (2020). *State of the Nation's Housing 2020*. NHFIC. <https://www.nhfc.gov.au/research/thematics/state-of-the-nations-housing/>.
- Daley et al (2013). Daley, J., McGannon, C., Savage, J. and Hunter, A. *Balancing budgets: tough choices we need*.
- Daley et al (2016). Daley, J., Wood, D. and Parsonage, H. *Hot property: negative gearing and capital gains tax*. <https://grattan.edu.au/report/hot-property/>.

How to make housing more affordable

- Daley, J. and Coates, B. (2017). *Why older Australians don't downsize and the limits to what the government can do about it*. <https://theconversation.com/why-older-australians-dont-downsize-and-the-limits-to-what-the-government-can-do-about-it-76931>.
- Daley et al (2018a). Daley, J., Coates, B. and Wiltshire, T. *Housing affordability: re-imagining the Australian dream*. <https://grattan.edu.au/report/housing-affordability-re-imagining-the-australian-dream/>.
- Daley et al (2018b). Daley, J., Coates, B., Wiltshire, T., Emslie, O., Nolan, J. and Chen, T. *Money in retirement: More than enough*. <https://grattan.edu.au/wp-content/uploads/2018/11/912-Money-in-retirement.pdf>.
- Daley et al (2018c). Daley, J., Duckett, S., Goss, P., Terrill, M., Wood, D., Wood, T. and Coates, B. *State Orange Book 2018: Policy priorities for states and territories*. Grattan Institute. <https://grattan.edu.au/report/state-orange-book-2018/>.
- Daley et al (2019). Daley, J., Duckett, S., Goss, P., Norton, A., Terrill, M., Wood, D., Wood, T. and Coates, B. *Commonwealth Orange Book 2019*. Grattan Institute / Grattan Institute. <https://grattan.edu.au/wp-content/uploads/2019/04/916-Commonwealth-Orange-Book-2019.pdf>.
- Davidoff, I. and Leigh, A. (2013). "How do stamp duties affect the housing market?" *Economic Record* 89.286, pp. 396–410. <http://www.andrewleigh.org/pdf/StampDuty.pdf>.
- Deloitte Access Economics (2016). *Federal incentives model for housing supply*. https://www.propertycouncil.com.au/Web/Content/Media_Release/National/2016/New_report_finds_competition_payments_could_unlock_new_housing_supply.aspx.
- Department of Infrastructure, Regional Development and Cities (2019). *City Deals*. <https://infrastructure.gov.au/cities/city-deals/index.aspx>.
- Eslake, S. (2013). *Australian Housing Policy: 50 years of failure. Address to the 122nd Annual Henry George Commemorative Dinner, The Royal Society of Victoria, Melbourne*. via author.
- Gyourko, J. and Molloy, R. (2015). "Regulation and Housing Supply". *Handbook of Regional and Urban Economics* 5. Ed. by N. Holland, pp. 1289–1337. DOI: 10.1016/B978-0-444-59531-7.00019-3.
- James, C. and Felsman, R. (2018). *Australian home size hits 22-year low*. https://www.commsec.com.au/content/dam/EN/ResearchNews/2018Reports/November/ECO_Insights_191118_CommSec-Home-Size.pdf.
- Jenner, K. and Tulip, P. (2020). *The Apartment Shortage*. <https://www.rba.gov.au/publications/rdp/2020/2020-04.html>.
- Johnson et al (2018). Johnson, G., Scutella, R., Tseng, Y.-P. and Wood, G. "How do housing and labour markets affect individual homelessness?" *Housing Studies*.
- Kelly et al (2011). Kelly, J.-F., Weidmann, B. and Walsh, M. *The housing we'd choose*. Grattan Institute. <https://grattan.edu.au/report/the-housing-we-d-choose/>.
- Kendall, R. and Tulip, P. (2018). *The Effect of Zoning on Housing Prices*. Reserve Bank of Australia. <https://www.rba.gov.au/publications/rdp/2018/pdf/rdp2018-03.pdf>.
- McGowan, M. and Evershed, N. (2018). "Gladys Berejikilian calls for immigration cut – but it could cost NSW". *The Guardian*. <https://www.theguardian.com/australia-news/2018/oct/10/gladys-berejikilian-calls-for-immigration-cut-but-it-could-cost-nsw>.
- Milligan, V. (2018). "The new national housing agreement won't achieve its goals without enough funding". *The Conversation*. <https://theconversation.com/the-new-national-housing-agreement-wont-achieve-its-goals-without-enough-funding-99936>.
- Morrison, S. (2015). *Fairer access to a more sustainable pension*. <https://formerministers.dss.gov.au/15866/fairer-access-to-a-more-sustainable-pension/>.
- Norton, R. and Tanner, D. (2017). "Generation Y bigger than boomers and Xers". *The Australian*. <http://www.theaustralian.com.au/national-affairs/generation-y-takes-over-from-baby-boomers-and-xers/news-story/32d9aa8f7ca661bdfa472194937e1fc9>.
- OECD (2017). *OECD Affordable Housing Database*. <http://www.oecd.org/social/affordable-housing-database.htm>.
- Ong et al (2016). Ong, R., Duncan, A. and Rowley, S. "Lack of housing choice frustrates would-be downsizers". *The Conversation*. <https://theconversation.com/lack-of-housing-choice-frustrates-would-be-downsizers-60512>.

How to make housing more affordable

- Ong et al (2017). Ong, R., Dalton, T., Gurran, N., Phelps, C., Rowley, S. and Wood, G. A. "Housing supply responsiveness in Australia: distribution, drivers and institutional settings".
- Prentice, D. and Scutella, R. (2018). *What Are the Impacts of Living in Social Housing?* Infrastructure Victoria / Infrastructure Victoria. <http://www.infrastructurevictoria.com.au/sites/default/files/images/Infrastructure%20Victoria%20Technical%20Paper%20%E2%80%93%20What%20are%20the%20impacts%20of%20living%20in%20social%20housing%20May%202018.PDF>.
- Productivity Commission (2005). *Review of National Competition Policy Arrangements*. Productivity Commission. <https://www.pc.gov.au/inquiries/completed/national-competition-policy/report>.
- (2015). *Housing Decisions of Older Australians*. <http://www.pc.gov.au/research/completed/housing-decisions-older-australians/housing-decisions-older-australians.pdf>.
- (2016). *Migrant intake into Australia*. <http://www.pc.gov.au/inquiries/completed/migrant-intake/report>.
- (2018). *Report on Government Services*. <https://www.pc.gov.au/research/ongoing/report-on-government-services>.
- Saunders, T. and Tulip, P. (2018). *A Model of the Australian Housing Market*. <https://www.rba.gov.au/publications/rdp/2019/2019-01.html>.
- Select Committee on Agricultural and Related Industries (2010). *Food Production in Australia - Final Report*. Parliament of Australia. https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Former_Committees/agric/completed_inquiries/2008-10/food_production/report/index.
- Senate Economics References Committee (2015). *Out of reach? The Australian housing affordability challenge*. http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Affordable_housing_2013/Report.
- Treasury (2009). *Australia's future tax system, Report to the Treasurer, Part Two Detailed analysis*. https://taxreview.treasury.gov.au/content/downloads/final_report_part_2/AFTS_Final_Report_Part_2_Vol_1_Consolidated.pdf.
- (2017). *Budget 2017-18: Budget Paper 1*. http://www.budget.gov.au/2017-18/content/bp1/download/bp1_bs6.pdf.
- (2018). *National Housing and Homelessness Agreement*. <https://static.treasury.gov.au/uploads/sites/1/2018/03/National-Housing-and-Homelessness-Agreement.pdf>.
- Tulip, P. and Saunders, T. (2019). *A Model of the Australian Housing Market*. Reserve Bank of Australia. <https://www.rba.gov.au/publications/rdp/2019/2019-01.html>.
- Valenzuela, R. (2017). *It's about time, not money: the real reason retirees keep their big homes*. <http://www.theage.com.au/money/its-about-time-not-money-the-real-reason-retirees-keep-their-big-homes-20170825-gy4kbp.html>.
- Victorian Department of Health and Human Services (2019). *Past Rental Reports*. <https://dhhs.vic.gov.au/past-rental-reports>.
- Weicher et al (2016). Weicher, J., Eggers, F. and Moumen, F. *The Long-Term Dynamics of Affordable Rental Housing*. <https://www.hudson.org/research/13339-the-long-term-dynamics-of-affordable-rental-housing>.
- Wong et al (2016). Wong, L., Selvanathan, E. A. and Selvanathan, S. "Empirical Analysis of Australian Consumption Patterns". *Empirical Economics* 52, pp. 799–823. <https://link.springer.com/article/10.1007/s00181-016-1095-3>.