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Submission to the National Housing Finance and Investment Corporation Consultation Paper

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Summary

We welcome the opportunity to comment on the National Housing Finance and Investment Corporation (NHFIC) Consultation Paper. Rapidly rising house costs have triggered renewed community concerns about housing affordability, especially for low-income earners. This submission summarises recent work by Grattan Institute that is relevant to the objectives of the NHFIC, and the provision of affordable housing more broadly.

Australian housing is increasingly expensive. Australian house prices have more than doubled in real terms since the mid 1990s, outstripping growth in household incomes. Home ownership rates have fallen sharply, especially among the young and the poor.

Rents have also risen, albeit less quickly than house prices. Rents now consume a bigger proportion of incomes, particularly for low-income households in capital cities. The stock of social housing has hardly grown in twenty years while the population has boomed, and so more low-income households now rely on private rentals. More low-income earners who rent privately in capital cities are under financial stress.

Because low-income households have been particularly affected by falling rates of home ownership and rising rental stress, there is a powerful case for additional social and public housing. But the public subsidies required to make a real difference would be very large. Facing up to the size of the affordable housing challenge is an important first step to solving it.

The Commonwealth Government's proposed social housing bond aggregator *could* significantly improve housing affordability by boosting the supply of social housing, but only if it were accompanied by very large subsidies at substantial additional cost to government budgets. Given the current economics of building social housing, the proposed bond aggregator is unlikely to make much difference. It will still be uneconomic to build social housing unless there are additional large public subsidies. No amount of innovative *financing* can paper over the lack of *funding* needed to boost the supply of affordable housing.

Inclusionary zoning is an alternative source of funding, but it entails risks. It may increase rents in the private rental market a little. Those who are allocated affordable housing will be much better off; other low income earners may be a little worse off.

The Commonwealth Government should also pursue reforms that will improve housing affordability more generally. Making housing cheaper overall will also help low-income earners. And it would also reduce the amount of public subsidy needed to bridge the gap between development costs and what low-income earners can afford to pay.

Given the allocation of federal responsibilities, the Commonwealth can primarily intervene to reduce demand, by abolishing negative gearing, reducing the capital gains tax discount, and including owner occupied housing in the Age Pension assets test. The states have more scope to boost supply, through land-use planning and zoning laws, and by releasing greenfield land. The Commonwealth should consider incentive payments to the states to boost housing supply and reform state property taxes. Both levels of government can also improve affordability by making better decisions about which transport infrastructure to build, and introducing congestion charges.

1 Housing is increasingly unaffordable, especially for low-income earners

1.1 House prices have risen much faster than incomes over 30 years

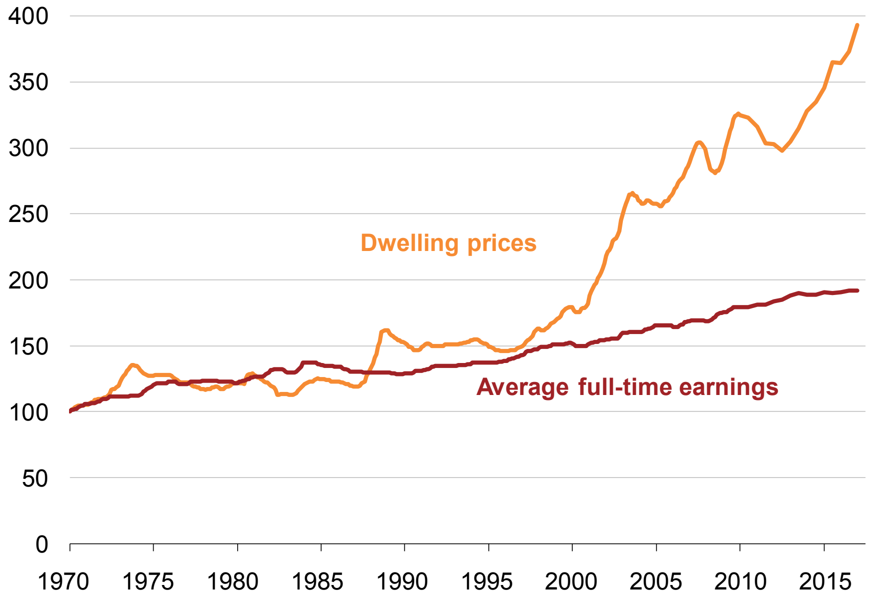
Australian housing is becoming increasingly expensive. Australian house prices have more than doubled in real terms since the mid 1990s, far outstripping growth in household incomes (Figure 1). *Average* prices have increased from around 2-to-3 times *average* disposable incomes in the 1980s and early 1990s, to around 5 times more recently.[1] And while house prices rose fastest in our major capital cities, regional house prices have also risen sharply in recent decades.

In the past 20 years, prices grew fastest in areas closer to the centres of all capital cities, especially in Sydney.[2] This is because capital city populations have grown rapidly, and most of the additional jobs are in city centres, but there is little extra land with good access to these jobs. As our cities have grown, traffic congestion has got worse and commuting times have increased, making inner-city houses even more desirable.

Low-cost housing has also risen faster than median house prices over the past 15 years. In fact a detached house in the 2nd decile has increased in price by over 80 per cent, while a dwelling in the 8th or 9th decile has only increased in price by 60 per cent (Figure 2).[3] The differential is larger for dwellings such as apartments and townhouses. This is because new apartments tend to be more expensive than the existing stock.[4]

Figure 1: House prices have grown much faster than incomes since the mid-1990s

Real dwelling prices and full-time weekly earnings, index 1970 = 100



Notes: Data for 1970 to 2010 is from Yates (2011). Data from 2010 is six-monthly growth in the ABS residential property price index from ABS (2017a), deflated by CPI. Earnings data is full-time ordinary time earnings from ABS (2017b), deflated by CPI.
Sources: Yates (2011); ABS (2017a); ABS (2017b).

[1] Kent (2013); Ellis (2017); and Fox and Finlay (2012).
[2] Daley, *et al.* (2017b), p.5.
[3] Analysis of the HILDA survey shows similar results. Dwellings at the 10th percentile increased in price by 108 per cent between 2001 and 2014, compared to 47 per cent at the 90th percentile (in real terms). The median priced dwelling increased by 77 per cent (Wilkins (2016)).
[4] Ong, *et al.* (2017)

Figure 2: Prices for cheaper dwellings have increased more than expensive dwellings over the past decade

Per cent change in nominal dwelling prices between 2003-04 and 2013-14, by price decile

Notes: Only includes owners (with and without mortgage). Owner's estimated sale price if dwelling sold tomorrow. Average dwelling price in each decile. ' 'Apartment, townhouses etc.' includes semi-detached houses, row or terrace houses townhouses, flats, units and apartments.
Source: Grattan analysis of ABS (2015b).

As a result, average or median dwelling prices may underplay how much housing is becoming less affordable for low income earners.

1.2 Home ownership rates have fallen sharply among the young and the poor

Rising housing costs have contributed to falling home ownership rates, and this has far-reaching implications for our economy and society.[5] Falling home ownership is depriving more Australians of the benefits of owning a home, which include a sense of belonging, a sense of prosperity, the motivation for additional savings, and the basis for investing in a business.

Home ownership rates are falling quickly for those under 55. Between 1981 and 2016, home ownership rates among 25-34-year-olds have fallen from more than 60 per cent to 45 per cent (Figure 3). Falling home ownership among younger age groups might be explained away because people are forming long-term partnerships and having children later in life.

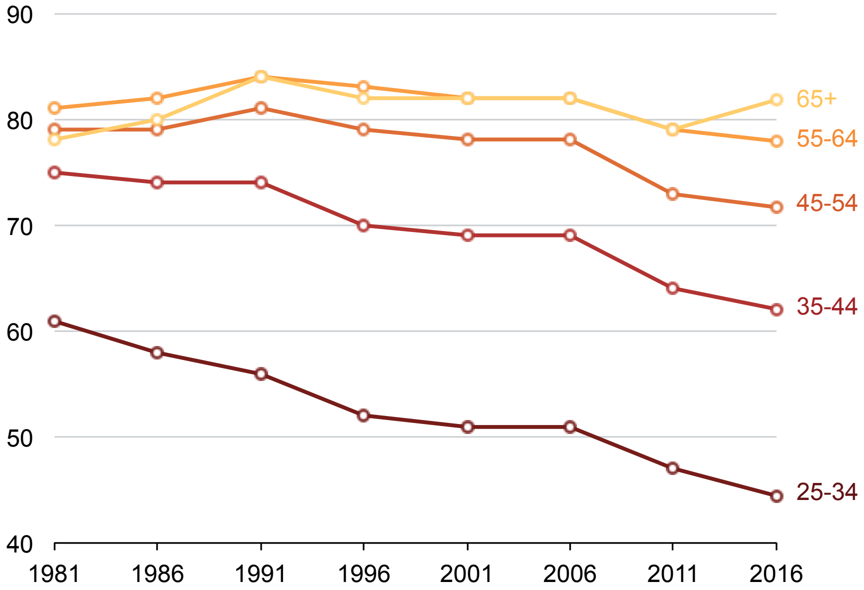
But this explanation doesn't wash for 35-44-year-olds. Home ownership among this group has fallen from about 75 per cent in 1991 to about 60 per cent today.

Home ownership is falling particularly fast for low-income households (Figure 4). For 25-34-year-olds in the lowest 20 per cent of incomes, home ownership rates have plummeted almost 40 percentage points between 1981 and 2016.

[5] Daley, *et al.* (2017c)

Figure 3: Home ownership is falling particularly fast for low-income households

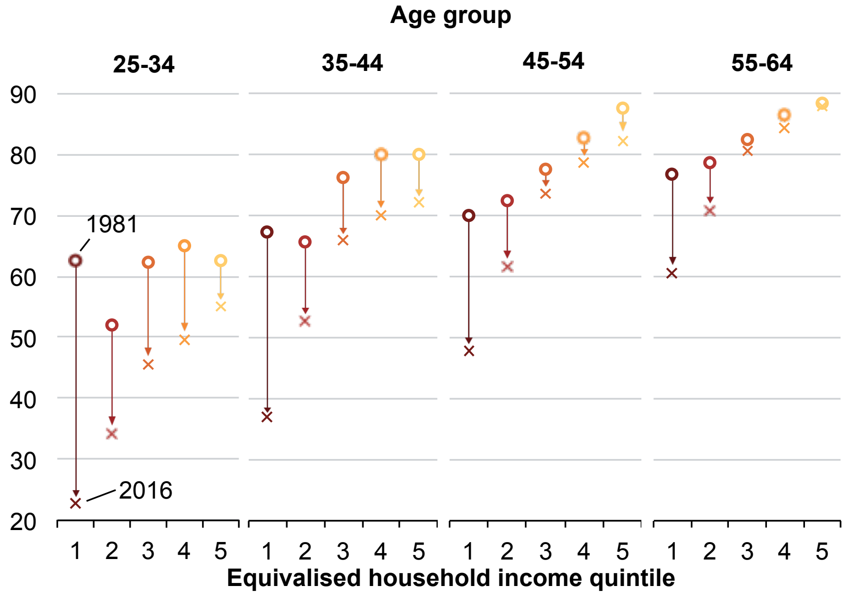
Home ownership rate by age, per cent



Notes: Per cent of occupied private dwellings. Household age group according to age of household reference person. Excludes households with tenure type not stated.
Source: Yates (2015); ABS (2016); Grattan analysis.

Figure 4: Home ownership is falling particularly fast for low-income households

Home ownership rates by age and income, 1981 and 2016



Notes: Updates Burke, Stone and Ralston (2014) using ABS Census special request data. 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.
Sources: Burke, Stone and Ralston (2014); ABS (2016); Grattan Institute.

1.3 Rents have grown slowly than prices, but rental stress has increased among low-income households

Of course, not all Australians own their own homes. More than 2.6 million Australian households – nearly one in three – rented privately in 2016.

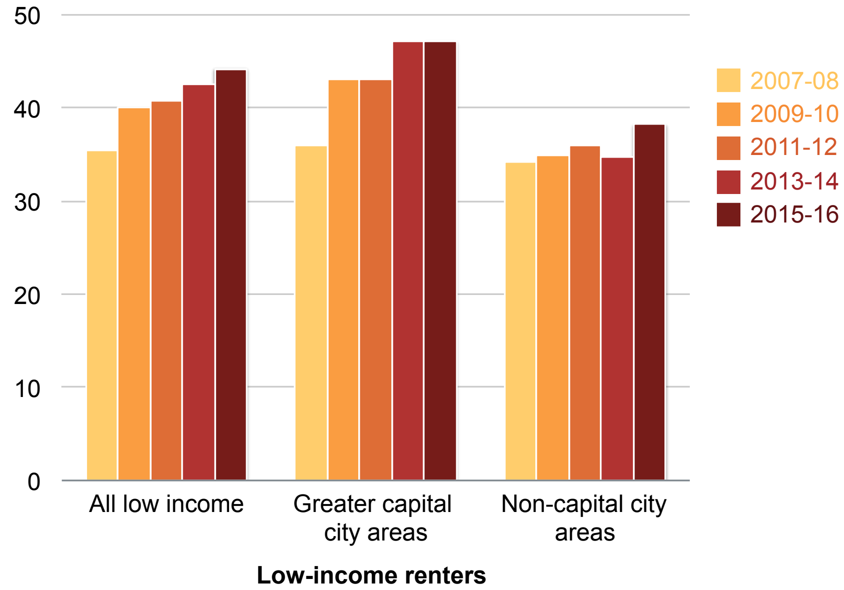
Over recent years the proportion of households renting has steadily increased from around 27 per cent of households in 1991 to 32 per cent of households in 2016.[6] So rents matter to housing affordability.

Rents have also risen, albeit less quickly than house prices. Nonetheless rents are higher relative to incomes, particularly for low income households in capital cities. As a result, a growing proportion of low-income earners who rent in capital cities are under financial stress (Figure 5).

Rental stress has increased in part because rents for cheaper dwellings in capital cities have grown faster than rents for more expensive dwellings (Figure 6).[7] Rents for cheaper (privately leased) units and apartments, often the cheapest option, increased in price by more than more expensive options (although not the cheapest 10 per cent) (Figure 6).

Figure 5: Rental stress among low-income households is increasing in capital cities

Per cent of low-income renters with housing costs more than 30 per cent of gross household income



Source: ABS (2013).

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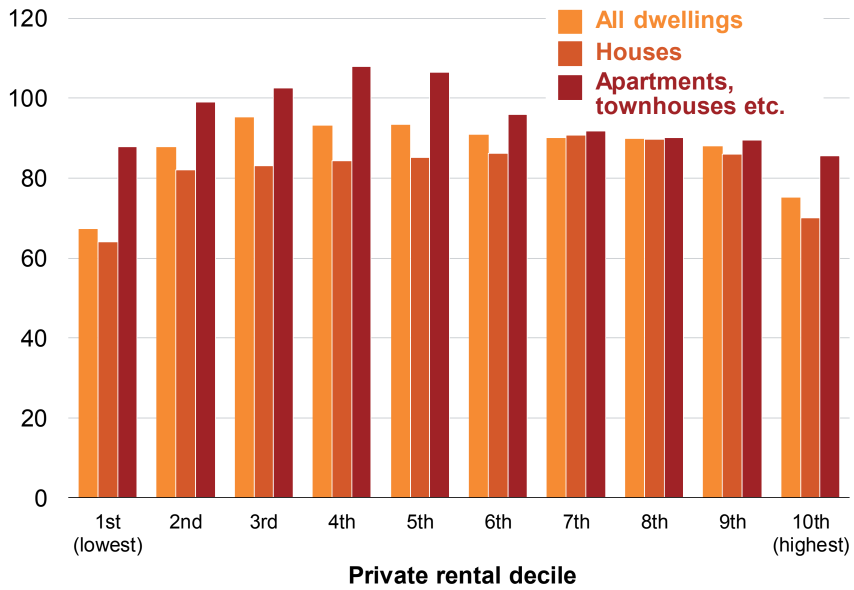
[6] Census data, excluding dwellings with 'tenure type not stated'.
[7] Yates in Committee for Economic Development of Australia (2017) p20 estimates a shortfall of up to 300,000 rental dwellings in 2011 for households in the lowest income quintile and over 100,000 for those in the second income quintile.

Figure 6: Rents for cheaper housing increased by more than rents for more expensive housing

Per cent change in nominal rents between 2003-04 and 2013-14, by private rental decile



Notes: average rent in each decile. 'Apartment, townhouses etc.' includes semi-detached houses, row or terrace houses townhouses, flats, units and apartments. Excludes public and social housing tenants and those paying less than $20 per week and $31 per week in rent in 2003-04 and 2013-14 respectively. Source: ABS (2015b).

1.4 Public housing has not kept pace with our growing population

Financial stress for low-income renters has also increased because growth in the stock of public housing has not kept pace with population.

The stock of social housing – currently around 400,000 dwellings – has hardly grown in twenty years.[8] As a result the proportion of affordable rental dwellings has declined by from 6 per cent of Australia's total housing stock in the mid-1990s to just 4 per cent today (Figure 7).

As a result, an increasing proportion of low-income Australians are renting privately, with many facing high housing costs.[9] Only 17 per cent of low-income rental households living in public housing experience rental stress, compared to more than 60 per cent of low income renters in the private rental market.[10]

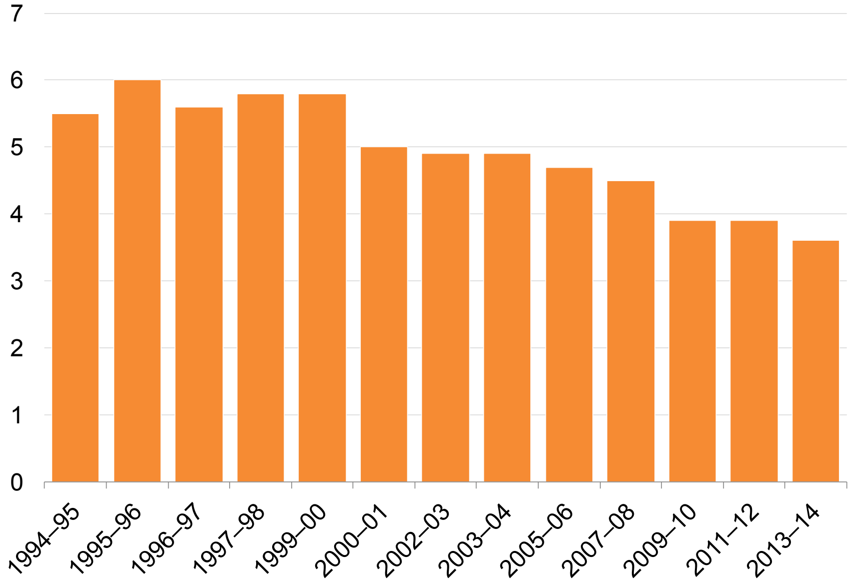
[8] There are roughly 320,000 public housing dwellings in Australia and a further 80,000 homes managed by Community Housing Providers (Productivity Commission (2017), Table G.1; AIHW (2017)).

[9] Yates (2015), page 2. In 1994/95, 5.5 per cent of household rented from state/territory housing authorities, compared to 3.6 per cent in 2013/14 (ABS (2013)). Yates in

[10] Council on Federal Financial Relations (2017a), p.10.

Figure 7: Australia's public housing stock has not kept pace with population growth

Social housing share of total housing stock, per cent



Source: ABS (2015a).

Table 1 – Percentage of population living in public housing

Area	1988-89	2003-04	2013-14
Capital cities	6.0	4.9%	3.1%
Other	6.9	4.4%	4.3%

Notes: capital city boundaries are as defined in each survey.
Source: ABS (2015b); Grattan analysis.

The problem is more severe in capital cities, where the proportion of the population living in public housing fell from 4.9 per cent in 2004 to 3.1 per cent in 2014 (Table 1). In addition, much of the existing social housing stock is in a poor state of repair, or is approaching the end of its useful life.[11] In 2016, about 27 per cent of public housing tenants were not satisfied with their accommodation, and almost 20 per cent of dwellings do not meet a (fairly undemanding) adequacy standard.[12]

[11] AIHW (2014), p.27
[12] The adequacy standard is "at least four working facilities and not more than two major structural problems". Productivity Commission (2017), Table 18A.36.

2 The social housing stock is unlikely to increase without large public subsidies

Because low-income households are now much less likely to own their own home, and their rents are increasing faster relative to incomes, there is a powerful case for additional social and public housing. But the public subsidies required to make a real difference would need to be very large to cover the costs of providing a large amount of new housing at below-market rents. And these subsidies are likely to grow over time -- the *COAG Affordable Housing Working Group* estimates that a further 230,000 affordable housing dwellings will be required by 2055 just to sustain the existing social housing share of the total housing stock.[13]

2.1 The bond aggregator will only modestly increase the supply of social housing

The Commonwealth Government's proposed social housing bond aggregator will make it a little cheaper to build more social housing. The corporation will borrow on behalf of community housing providers, and on-lend to the providers – giving them access to cheaper and longer-term finance.[14] For example, EY (2017) estimate that the bond aggregator *could* reduce the interest rates paid by community housing organisations by up to 1.4 per cent for 10-year debt, depending on whether the Commonwealth guarantees the debt.[15]

But the aggregator alone is unlikely to have much impact on the supply of affordable housing, because it will still be uneconomic to build social housing unless there are additional large public subsidies. In fact EY (2017) estimate that the aggregator could allow total borrowings to increase by $360 million – sufficient to support an additional 1500 affordable housing dwellings nationwide – or just a 0.35 per cent increase in the existing social housing stock.[16] At the scale currently envisaged, and given the current economics of building social housing, the aggregator is unlikely to make much difference.

2.2 Large public subsidies will be needed to boost the affordable housing stock

No amount of innovative *financing* can paper over the lack of *funding* needed to boost the supply of affordable housing.[17] While the bond aggregator will reduce the borrowing costs of community housing organisations, the funds borrowed must ultimately be repaid. And since affordable housing providers charge rents that are below market rates in order to assist tenants with their housing costs, government *funding* will be required to make up the shortfall.[18] For example, the *COAG Affordable Housing Working Group* estimated that the rental stream from *social* housing only covers 40 per cent of the costs of land, building and

[13] Council on Federal Financial Relations (2017b), p.8

[14] In Australia the community housing sector typically relies on shorter term bank debt (typically 3-5 years) (EY (2017), p.8).

[15] Ibid., p.8.

[16] Assuming each dwelling costs $250,000 to produce (excluding land costs). The impact would be even less if community-housing organizations must also acquire the land to build on.

[17] Terrill, *et al.* (2016), p.11.

[18] There are a number of types of affordable housing, ranging from sub-market private rental housing provided at 75 to 80 per cent of the market rate, through to public and community housing where rents are more heavily subsidized and set at a proportion of tenants' incomes– usually 25 to 30 per cent (Council on Federal Financial Relations (2017b)).

maintaining social housing, while the rental stream from *affordable* housing only covers 65 per cent of the costs.[19]

The Commonwealth Government's proposed social housing bond aggregator *could* significantly improve housing affordability by boosting the supply of social housing, but only if it were accompanied by very large additional subsidies, at substantial cost to government budgets. For example, the *COAG Affordable Housing Working Group* estimates the funding gap for an affordable housing rental (75 per cent of market rent) is around $3,100 a year. For a social housing dwelling – where tenants' rent is set at 25 per cent of income -- the funding gap is $8,850 a year. Boosting the stock of each by 100,000 dwellings – broadly sufficient to return the total affordable housing stock to its historical share of the total housing stock -- would require additional ongoing public funding of around $12 billion a year.[20]

Plans to sign a new National Affordable Housing Agreement with the states could lead to extra funding, but any increase is likely to be small and the extra funding would hit Commonwealth and state government budgets. Alternatively states could better utilise their existing public housing stock, and especially the underlying land, in order to generate returns that could be reinvested in the expansion of the affordable housing stock.[21] But again the additional stock is likely to be small relative to the gap between historic and current levels of affordable housing stock.

2.3 Inclusionary zoning is an alternative source of funding for affordable housing, but entails risks

State governments could also adopt "inclusionary zoning" policies that compel new developments to include a proportion of new affordable housing.

Under inclusionary zoning governments require new developments to contain a certain proportion of 'affordable housing' that can be rented out at below-market rates. Developers can be required to make a certain proportion of any new development "affordable housing" as a condition of development approval, or developers can receive planning concessions, such as higher height limits, or other bonuses if affordable housing is included as part of the development.[22] Alternatively states can require developers to pay a levy that funds the provision of affordable housing when development rights are granted.

Inclusionary zoning has become increasingly popular in Australia, in part because it holds out the prospect of an increased supply of affordable housing at no direct cost to government budgets. Inclusionary zoning is also seen as a way to encourage social mixing within neighbourhoods.[23]

Most state and some local governments have adopted some form of inclusionary zoning policies.[24] For example, the Greater Sydney Commission's District requires all new urban renewal or greenfield developments to dedicate 5 to 10 per cent of new floor space to affordable housing. South Australia has a 15 per cent affordable

[19] Council on Federal Financial Relations (2017a), p.14.
[20] Council on Federal Financial Relations (2017b), p.13.
[21] Ibid., p.14

[22] AHURI (2017)
[23] Spiller and Anderson-Oliver (2015).
[24] Davison*, et al.* (2012); Gurran*, et al.* (2016).

housing target for all significant developments, while Queensland and Western Australia mandate inclusionary zoning for government developments and the Victorian Government recently announced a similar pilot program.[25]

Yet there are three key questions with inclusionary zoning.

First, who bears the costs of inclusionary zoning? Since inclusionary zoning acts like a tax on new housing supply, economic theory suggests house prices would be higher and supply lower than otherwise. Yet since the supply of new housing in Australian cities is relatively unresponsive to demand because of land use planning rules,[26] the main impact of inclusionary zoning should be to reduce land values as developers are not willing to pay so much for developable land.[27] Therefore in large part inclusionary zoning acts as a de facto value capture tax by reducing the windfall gain landowners receive from land being re-zoned.[28] But since housing supply responds at least a little to prices (i.e. it is not perfectly inelastic) some portion of the costs will be reflected in higher rents in the private rental market.

Second, does inclusionary zoning actually result in an increase in the housing stock, or does it simply displace homes that would have been built anyway and supplied to the private rental market? The provision of affordable housing may reduce community opposition to denser development in established suburbs, or conversely, it could increase opposition. By definition, an incentive based scheme that provides density bonuses is likely to boost overall housing supply by more than a mandatory inclusionary zoning for which existing land use planning rules apply. On the other hand, the uncertainties and negotiation inherent in incentive-based schemes may slow development and increase its costs.

Third, how is the supply of affordable housing allocated? Demand for homes provided below market rent will exceed supply, so homes will be rationed, resulting in long waiting lists. As such, inclusionary zoning has distributional consequences – those that can obtain an affordable dwelling win, whereas those that can't, may lose a little.

On balance it appears that modest inclusionary zoning requirements should be considered as part of the broad policy mix required to tackle housing affordability. Yet expanding inclusionary zoning would be a large-scale change to Australia's development market, which could have big unintended consequences. Consequently new policies to promote social housing need to be designed very carefully. A detailed examination of what is required is beyond the scope of this submission.

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[25] Victorian State Government (2017)
[26] Schuetz*, et al.* (2008), pp.7-8.
[27] For example, Terrill and Emslie (2017); Spiller and Anderson-Oliver (2015) note that developer charges are most likely to be borne by the landowner at the time the charge is determined by reducing the price a developer will be willing to pay for the land. Yet developer charges are often poorly targeted at capturing value uplift since they are charged per property or per square metre of floor space, and tax some windfall gains but not others.
[28] Troy*, et al.* (2016); Martin (2017).

3 Improving affordability generally will also help low-income earners

The Commonwealth Government should also pursue reforms that will improve housing affordability more generally.

Making *existing* private housing cheaper overall will help low-income earners struggling with rising housing costs. New housing doesn't need to be specifically targeted at lower price points to improve overall housing affordability. More housing supply – albeit at the top end – will ultimately free up less expensive housing stock. The people who move into the newly constructed housing are either existing residents who move out of less expensive housing, or new residents who would otherwise have added to the demand for less expensive housing. Irrespective of its cost, each additional dwelling adds to total supply, which ultimately affects affordability for all home buyers.[29]

This is not merely theory: international evidence suggests that "filtering" occurs in practice. Initially expensive homes gradually become cheaper as they age, and are sold or rented to people with more modest incomes, and this is a strong source of more affordable housing, especially in the private rental market.[30]

And by reducing the costs of housing overall, such steps would also reduce the size of the public subsidies needed to bridge the gap between the market cost of housing and what low-income earners can afford to pay.

The first step to making housing more affordable is to face up to the size of the problem.[31] Demand for housing has risen as interest rates fell, incomes rose, migration increased and government policies artificially inflated demand. But the supply of well-located homes has not kept up, resulting in higher land prices. Even though land prices have risen, supply has not increased enough because of legislative restrictions on the effective supply of residential land – both limits on rezoning for urban infill and limits on developing land at the urban fringe.

For a forthcoming report, we have analysed dozens of housing affordability measures. Unfortunately many of them will have little impact – including the reforms currently being pursued by the Commonwealth Government – such as the new *Super Saver Scheme* and downsizing incentives for superannuants (Figure 8).[32]

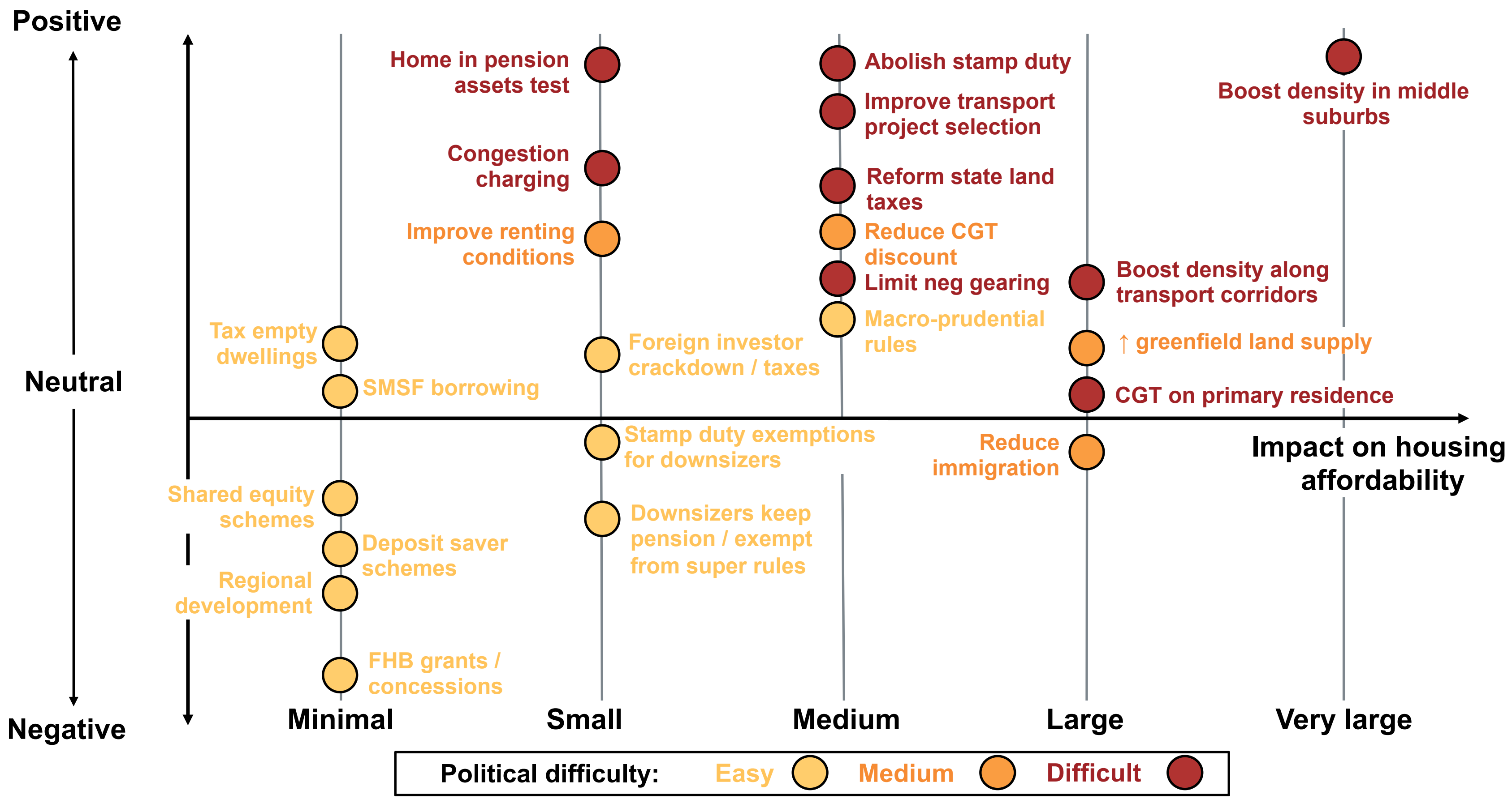
Some policies would address housing affordability. None of them are politically easy. But housing won't become more affordable unless Commonwealth and state governments take on the tough choices that would actually make a difference.[33]

[29] While gentrification can push up prices in a particular area, constructing more housing in total should lead to overall prices being lower than otherwise.
[30] Rosenthal (2014) finds that the U.S. housing stock "filters" by roughly 1.9 per cent a year—meaning that a 50-year-old home is typically occupied by someone whose income is about 60 per cent lower than that home's first occupant. Most of the filtering of once high-end housing to lower income groups occurs within the first twenty years of a dwelling's life. See also Taylor (2016).

[31] For further analysis of the drivers of rising house prices, see Daley, *et al.* (2017c).
[32] For a more detailed assessment of the Commonwealth Government's housing package announced as part of the 2017-18 Budget, see Daley and Coates (2017)
[33] See Daley et al (2017a)

Figure 8: Only some policies will actually have any impact in improving housing affordability, and these are politically difficult

Summary of social, economic and budgetary 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 produce an informed discussion.

Source: Grattan analysis.

3.1 The Commonwealth should reform policies that artificially inflate housing demand

Given the allocation of federal responsibilities, the Commonwealth can primarily intervene to reform policies that inflate housing demand.

As recommended in our 2016 report, *Hot Property,* the capital gains tax discount should be reduced from 50 to 25 per cent, and negatively geared investors should no longer be allowed to deduct losses on their investments from labour income. The effect on property prices would be modest – they would be roughly 2 per cent lower than otherwise – and the change would primarily advantage would-be home owners at the expense of investors. Instead the dominant rationale for these reforms is their economic and budgetary benefits: reform would boost the budget bottom line by around $5 billion a year.[34]

Including more of the value of owner occupied housing in the age pension assets test would improve the allocation of housing assets a little, make pension arrangements fairer, and contribute up to $7 billion a year to the budget.[35] Under the current rules only the first $200,000 of home equity is counted in the Age Pension assets test, and the remainder is ignored.[36] 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 budget repair.

[34] Daley, *et al.* (2016)
[35] Daley, *et al.* (2013), p.37
[36] A single homeowner can own $250,000 in assessable assets before their pension is reduced, compared to $450,000 in assets as a single non-homeowner. Home owning couples are allowed $375,000 in wealth before their full pension is reduced, while a couple without a home can have $575,000. DHS (2017)

Again, the dominant rationale for the change would be budgetary. Many Age Pension payments are made to households that have substantial property assets. Half of the government's spending on age pensions goes to people with more than $500,000 in assets.[37]

3.2 The Commonwealth can support the states to boost housing supply and reform state land taxes

The states have more ability to boost supply, through land-use planning and zoning laws, and by releasing more greenfield land. They can also make renting more attractive by reforming state land taxes and residential tenancy laws.

But even here the Commonwealth still has an important role. Because Australia's housing markets are interconnected, no state government can solve the housing affordability problem alone. 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, and overseas migrants, move to Melbourne, attracted by lower house prices relative to other major Australian cities.[38]

[37] Grattan analysis of ABS (2015b). Excludes impact of changes to the Age Pension assets test that took effect from 1 January 2017 that reduced the pension entitlements of 326,000 pensioners. However these changes will reduce overall pension payments to part-rate pensioners by around $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 (2016); Treasury (2017), p.6-27).
[38] Abelson (2016), p.51. Similarly, Aura and Davidoff (2008) find that loosening regulatory constraints on supply in an individual city would have little effect on house prices, whereas a coordinated boost to housing supply across major cities could result in large price falls.

The Commonwealth can solve this coordination problem. And it has an interest in doing so: it will ultimately reap much of the benefit of increased economic growth encouraged by higher tax revenues that flow from better housing policies. Consequently the Commonwealth should provide incentive payments to the states to boost housing supply and reform state property taxes. A recent COAG agreement to encourage states to enact economic reforms is a step in the right direction, but more needs to be done.[39]

3.3 Use existing transport infrastructure better, and make better decisions on what new infrastructure to build

Both Commonwealth and state governments need to improve transport networks by using existing transport infrastructure more efficiently and building more effective transport projects. This will make fringe suburbs a more attractive alternative to established suburbs closer to CBDs.

The Commonwealth Government should work with the states on the possibility of congestion charging to ensure roads are used more efficiently.[40] Charging drivers a fee to drive on congested roads would reduce congestion: a congestion charge needs to discourage only a small proportion of drivers to enable a big increase in traffic speed.[41] The government should also consider changing public transport pricing to encourage patrons to shift their travel to off-peak periods.

Finally, the government needs to improve how it decides on transport infrastructure investments. Commonwealth and state governments have spent unprecedented sums on transport infrastructure in the past decade. But often they have not spent wisely. They have tended to favour projects in swing states and marginal seats, rather than projects with the highest benefit-cost ratios.[42] Governments should commit money to a transport infrastructure project only if Infrastructure Australia or Infrastructure Australia has assessed it as high priority, and the business case has been tabled in parliament.[43]

[39] COAG (2016)
[40] Daley, *et al.* (2016); Terrill, *et al.* (2017)
[41] Kelly and Donegan (2015), p.172
[42] Terrill, *et al.* (2016)
[43] Governments should be wary of the likelihood of cost overruns when assessing or announcing an infrastructure project, see Terrill and Danks (2016).

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