



CENTRE FOR URBAN TRANSITIONS: Measuring What Matters

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Consultation: measuring what matters

Introduction

This submission is made by A/Prof Christian Nygaard, Director of the Centre for Urban Transitions (CUT) at Swinburne University of Technology. The CUT's research mission is to generate actionable knowledge and solutions for sustainable urban futures. The CUT also hosts the Swinburne-AHURI Research Centre, of which I am also the director. This submission is informed by many years of research into modelling of affordability, cost-benefit analysis, institutional innovation and political economy of housing regulation in the UK and Australia.

A wellbeing framework is divided into 'quality of life' and 'material living conditions' domains. Maintenance and improvement of wellbeing is achieved by preservation and investment in different types of capital. A key example is housing. Housing is an indicator of material circumstances, but also health, environmental quality, security and subjective wellbeing. The location of housing relative to work further conditions work-life balances and social connections. In market economies access to housing is determined by incomes and wealth. In a modern market economy it is thus the affordability of access to appropriate housing that determines key quality of life dimensions. For low-income households affordable housing predominantly equates to affordable rental housing. In the absence of affordability and appropriateness, the material living conditions and costs, for some households, means worsening quality of life.

A wellbeing framework for Australia should thus consider:

- Affordability and appropriateness of housing for low-income households as a key indicator of material living conditions;¹
- How benefits associated with affordability and appropriateness is measured, in order to preserve the capital required for maintaining affordable and appropriate housing.

The measurement of benefits is critical to inform investment decisions in different types of capital, and access to the material conditions that enable wellbeing. A standard tool for decision making is social-cost benefit analysis (SCBA). The remainder of this submission provides two solutions to the measurement of benefits associated with the affordability and appropriateness of housing that directly reflect wellbeing dimensions of affordability and appropriateness of housing.

These are:

1. **Welfare weights:** Currently not incorporated in Australian SCBA guidance. Welfare weights are based on empirical evidence on the marginal utility of income to different income groups (e.g. Layard et al 2008). Welfare weights are recognised in overseas jurisdictions (e.g. HM Treasury 2022).
Use in SCBA: Welfare weights are *not distributional judgements*, but empirically based measures of societal wellbeing impacts from income changes.
2. **Wellbeing Valuation:** values non-market goods (like social outcomes such as tenure security) by assessing the impact these outcomes have on individual's wellbeing, controlling for any associated income changes.

¹ The Centre for Urban Transitions also supports the Community Housing Industry Association's proposed indicators one way of operationalising this indicator.

Use in SCBA: wellbeing valuation is particularly valuable when evaluating discrete changes in circumstances or activities by monetising the associated impact on wellbeing or happiness.

Welfare Weights

Welfare Weights more accurately capture the societal wellbeing impacts of policy, program or social infrastructure developments. There is a large body of research (e.g. Layard et al 2008, Fujiwara 2010) and international practice (e.g. UK Green Book, HM Treasury 2022) that recognises that the impact – or value – of government programs, policies or social infrastructure varies substantially across different societal groups. Use of Welfare weights is currently not recommended in Australian practice (CoA 2006, NSW Treasury 2017, OBPR 2020).

The implication of this is that Australian SCBA practice does not capture/measure the full societal impact from decisions around resource allocation. This is a major omission when the aim of SCBA is to systematically assess what the overall societal gain from programs, policies or social infrastructure might be.

Differences in SCBA practices can be illustrated by considering how to account for the social value of investment in affordable and appropriate housing options for low-income households. Two models for delivering affordable and appropriate housing in Australia are social housing (public sector or community housing sector, CHO), where rent is set as a function of tenants' income; and affordable housing, where rents are set as a discount to comparable market rents. Consequently, tenants have more money than they otherwise would living in the private rental sector (PRS). However, landlords also have less money than they otherwise would if letting their property at the market rent. In Australian CBA practice these two income changes cancel out.

In Australian SCBA practice affordability thus generates no additional social wellbeing as a result of changes in incomes. Based on the existing evidence on the marginal utility of income, the Australian SCBA practice underestimates the impact on societal wellbeing as a result of affordability for low-income households.

This is illustrated in the below Table 1a and 1b. These tables compare the measurement of the annual societal benefit for a single affordable tenancy using three methods, and based on the two affordable models in Australia:

- a) Current Australian SCBA guidance and practice (COA 2006, NSW Treasury 2017): a dollar has the same worth to lower and higher income households.
- b) An approximation of the marginal propensity to consume (MPC) (Nygaard 2019): lower income households spend more of each additional dollar than higher income households. A transfer of dollars from higher to lower income groups thus generate a net positive consumption impact.
- c) Welfare weights as per UK Green Book guidance (HM Treasury 2022): the marginal utility of a dollar is greater to a lower income household than higher income households, due to diminishing marginal utility of income.

The results in Table 1a+b illustrate how the social welfare effects that arise from more affordable housing options are recorded under different SCBA approaches. The results are illustrated assuming tenant did not receive Commonwealth Rent Assistance (CRA) while living in private rental housing, and assuming they did receive CRA and thus potentially experienced a decline in CRA payment as a result of change in rent expenditure. The results are highly contingent on the institutional arrangement associated with the affordable tenure.

Under Australian practice there is no social gain (including public sector gains, the net effect is zero). This is different for both the MPC and Welfare eight approach where the net effect (including public sector savings) is always greater than zero. The MPC and Welfare Weight based estimates are in principle biased downwards. That is, the calculations are based on the assumption that landlords in the private rental sector lose out on an equivalent amount of rent. In a situation where there is a shortage of supply, landlords would still be receiving rental income and thus not experience an equivalent decline in income.

Table 1a CBA annual input comparison: social rental housing (CHO) tenancies v private rental sector

Income pth	A: Australian practice		B: MPC approach		C: Welfare Weight	
	No CRA	With CRA	No CRA	With CRA	No CRA	With CRA
20 th percentile (CHO)	\$0	- \$305*	\$1,664	\$1,501*	\$9,480	\$8,478*
20 th percentile (public hse)	\$0	- \$4,628**	\$1,664	- \$812**	\$9,480	\$374**

Note: With CRA the public sector would make an annual CRA related saving of \$305* or \$4,628**.

Table 1b CBA annual input comparison: affordable rental housing tenancies v private rental sector

Income pth	A: Australian practice		B: MPC approach		C: Welfare Weight	
	No CRA	With CRA	No CRA	With CRA	No CRA	With CRA
20 th percentile	\$0	\$0	\$832	\$832	\$4,524	\$4,524
30 th percentile	\$0	\$0	\$832	\$832	\$2,392	\$2,392
40 th percentile	\$0	\$0	\$832	\$832	\$1,040	\$1,040

Note: Calculations in this section are based on one single parent with 1-2 dependent children transferring from paying market rent in private property, to either social or affordable tenancy assumptions, with and without being a recipient of Commonwealth Rent Assistance. Their main income is government benefits. Illustrations are based on a weekly market rental value of \$400. For social rental dwellings the discount to market is assumed to be 50 per cent. The average weekly housing cost for someone in public housing \$189 in 2019/20 (ABS 2022; Table 3.1) or 53% of the illustration market rent. For affordable rental dwellings the discount to market rent is assumed to be 25 per cent. In practice this means that social housing tenants are \$200 better off each week than under a private rental sector tenancy; affordable housing tenants are \$100 better off each week than under a private rental sector tenancy. An additional consideration is that low-income households' ability to pay rents in the private rental sector is severely constrained. Approximately 1.35 million Australians therefore receive Commonwealth Rent Assistance (PC 2022), the value of which is linked to private sector rental payments. A 2002 PC report found that 'About 850 000 households in the private rental market satisfy the income eligibility criteria for social housing'. Public housing rentals are on a social housing basis and state housing authority tenants are ineligible for CRA. This transferring from a private market rental and receiving CRA to public housing would mean a complete loss of CRA income. The primary function of the CRA is as an income supplement (PC 2022). Consequently if a tenant changes from paying rent in the private rental market to an affordable housing tenancy this may or may not entail a reduction in CRA payment; a change to social housing rental provided by a Community Housing Organisation similarly may or may not entail a reduction in CRA payment; finally, a change to state housing authority social housing rent will entail a loss of CRA payments.

The above results illustrate three important points for Australian SCBA practice. First, Compared to international practice and academic research Australian SCBA practice *underestimates* societal gains and benefits. Second, Welfare Weights capture the marginal value of income to different social groups. Welfare Weights based estimates of benefits to society are thus independent of value judgements on distributional issues. Instead they reflect empirical regularities in the calculation of the value of money. Third, where target groups are precisely identified (such as under priority list allocations to social housing, or income requirements in affordable housing) Welfare Weights allows for more accurate measurement and systematic summation of societal value/impacts from public policy, programs or social infrastructure projects.

In measuring what matters the use of Welfare Weights is consistent with the philosophy and purpose of social cost-benefit analysis, and wellbeing frameworks. Updating Australian guidance would bring practice in Australia in line with the empirical evidence and international practice, and more accurate capture societal wellbeing, impact of public policy and social infrastructure.

Wellbeing valuation

The Welfare weights and MPC approaches capture societal benefits associated with changes in income. Access to affordable and appropriate housing (or employment, or social networks etc) does, however, also generate wellbeing impacts related to change of circumstance, rather than the income effect. Wellbeing valuation techniques, based on subjective wellbeing surveys, are now used internationally to measure the value of non-market goods (happiness improvement from tenure security) and included in social cost benefit analysis (e.g. HM Treasury 2021, HM Treasury 2022).

Wellbeing valuation applies econometric analysis to the impact of discrete changes in circumstance or non-market goods on subjective wellbeing or life satisfaction. Changes in wellbeing assessment is then converted into monetary values based on the relationship between income and wellbeing. Wellbeing valuation techniques explicitly control for changes in income to avoid double counting to isolate the additional wellbeing impact of change in circumstance (HM Treasury 2021).

Key to the appropriate application of wellbeing valuation techniques is the robust identification of causal impacts. Menus of wellbeing valuation measures now exist that are based on various econometric and research design techniques (such as randomised control trials) to identify wellbeing impacts from housing outcomes, employment and educational outcomes, place-making outcomes (e.g. UK Social Value Bank, Australian Social Value Bank).²

In measuring what matters the use of wellbeing valuation techniques is consistent with the philosophy and purpose of social cost-benefit analysis, and wellbeing frameworks. Updating Australian guidance would bring practice in Australia in line with the empirical evidence and international practice, and more accurately capture societal wellbeing, impact of public policy and social infrastructure.

Conclusion

In the absence of affordability and appropriateness, the material living conditions, for some households, means worsening quality of life. A wellbeing framework for Australia should thus consider affordability and appropriateness of housing for low-income households as a key indicator of material living conditions in a wellbeing framework.

The sustainability of societal wellbeing over time, or the improvement in societal wellbeing, requires investment in the types of capital that underpin material living conditions and quality of life. The tools that guide investment decision making in Australia, such as social cost benefit analysis, currently underestimate the societal wellbeing gains, for some types of investment. This is inconsistent with the aim of implementing a wellbeing framework for Australia, the empirical evidence (with respect to the marginal utility of income) and international SCBA practice.

Welfare weights and wellbeing valuation techniques also directly relate to recommendation 8.3 (Support economic development by recognising the value of investment in social infrastructure) in the 2021 Australian Infrastructure Plan, reform priority list.

The author is happy to provide additional information on any of the information contained in this submission.

² For transparency: I have collaborated with key stakeholders associated with both of these value banks.

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