

RENTAL HOUSING SUBSIDY POLICY: NRAS

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ABSTRACT

As house prices become increasingly unaffordable, many families turn to rental housing. However, the higher rent in some market places is placing a lot of families under stress, in particular the low-income families. Thus, many housing policies and strategies have been introduced by governments to support low-income families in improving their housing affordability. The national rental affordability scheme (NRAS) in Australia is such example. The scheme aims to increase supply of affordable rental housing for low-income families. The NRAS provides an annual tax-free incentive for investors to purchase new affordable dwellings and rent them at 20% below market rents to low-income families. This paper studies of the NRAS scheme and investigates the impacts of using the scheme for improving affordable rental housing. The paper will first study the NRAS structure and the performance since the policy introduced. Secondly, the impacts of the scheme will be investigated through case studies to establish whether the incentive provides a stronger influence on private investors in encouraging them to provide affordable rental housing for low-income families.

Keywords: Housing policies, affordable rental housing, NRAS Australia

INTRODUCTION

Rental affordability is deteriorating in Australia across both the capital cities and the rest of the states. This is because house prices have stayed relatively high. Many low- to moderate-income households are unable to access home ownership and are placed under stress in the private rental market. Rents continued to increase more than household incomes, and vacancy rates have fallen in all Australian cities to below the benchmark level of 3 per cent. For example in Sydney, the median rent for all dwelling was at \$450 per week (Housing NSW, 2012). The rents for two-bedroom units and three-bedroom houses across Sydney had increased by an average 70 and 67 per cent respectively from 2001 to June 2011. Nationally, there were 60 per cent of lower income private tenants paid rents in excess of 30 per cent of their income in 2009-10, and 25 per cent paid in excess of 50 per cent each week (National Housing Supply Council, 2012). Figure 1 depicts the gaps between average weekly rent, earnings and house price index from 1994 to 2011 in Australia (National Housing Supply Council, 2012).

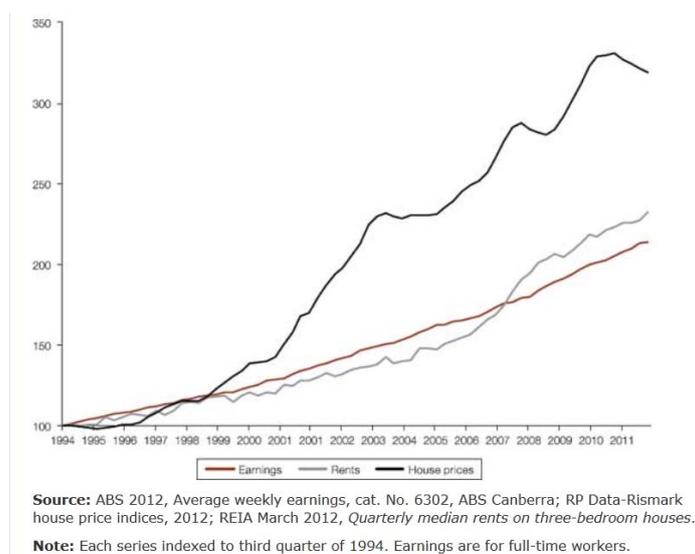


Figure 1 Average rents, earnings and house prices indexed to third quarter of 1994

Yates and Wulff (2000) estimated the shortage of low cost private rental stock in Australia using census data for 1986 and 1996. They found that there was a 34 per cent increase in the number of households in private rental, with a disproportionate growth in households with either low or high incomes during this period. However, the private rental stock affordable for these households declined significantly at the same time. This combination of increased need and decreased supply has resulted in an overall shortage of low cost stock. Again, Yates and Wulff (2005) provided evidence on the supply of private rental dwellings affordable for low income households in Australia in 1996 and 2001. They concluded that incentive to invest at the top end of the private rental market is ineffective in generating an adequate supply of low rent dwellings.

Low income and government regulations were identified as the two most likely potential causes behind the affordability problem (Feldman, 2002). Cox and Pavletich (2012) also pointed out that restrictive land-use regulations and governments' lack of consideration for economic fundamentals are the main driving factors of deteriorating affordability. A consistent under-supply of new properties compared to housing demand for housing in Australia is an example. Table 1 presents an estimation of the net dwelling supply in Australia from 2001 to 2011 (National Housing Supply Council, 2012). The supply of housing was shorted 228,000 dwellings to the underlining demand. It is estimated a shortage of 267,500 dwellings by 2020 in the NSW (Dale, et al., 2011). An interesting finding was presented by Yates and Wulff (2005) that more than half of the limited supply of affordable rental stock is occupied by households with higher incomes. The issues of affordability are not just a housing problem affecting individual families today and future generations, but also have an impact on economy as a whole and generate social consequences (NHPAU, 2009). Burke and Ralston (2003) suggested that high housing costs create financial hardship for low income households who are not be able to sustain their tenancy as they leave little budget for household necessities. Furthermore, Gabriel, et al. (2005) commented that the financial hardship can also affect children's education and place stress on already fragile families to accelerate relationship breakdown with all the associated personal and social costs.

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Both federal and state governments have initiated and played a crucial role to finance the low- and moderate-income families and improve their housing affordability through formulating housing policies. Examples of the policies include the First Home Owner Grant (FHOG) introduced on 01 July 2000 to provide a one-off grant of up to \$7,000 to first home owners that satisfy all the eligibility criteria. Supply side of policies, for example, the NSW state environmental planning policies include supporting secondary dwellings (granny flats), boarding houses, social housing, infill affordable rental housing and retaining affordable rental housing. Recently, the National Rental Affordability Scheme (NRAS) was established in 2008 by the Australian Federal Government, working in partnership with states and territories, underpinned by the *National Rental Affordability Scheme Act 2008*, the *National Rental Affordability Scheme (Consequential Amendments) Act 2008*, and the National Rental Affordability Scheme Regulations 2008 (FaHCSIA, 2011), aims to increase supply of affordable rental housing for low-income families.

Table 1: Estimates of the net dwelling supply gap, Australia, 2001-2011

Year ending June	Change in underlying demand ('000 households)	Supply growth, net of demolitions, with allowance for unoccupied dwellings excluding 'resident absent' ('000 dwellings)	Cumulative net dwelling supply gap 2001-2011 based on the difference between change in underlying demand and supply adjusted for demolitions and unoccupied dwellings ('000 dwellings)
2002	138	117	21
2003	140	135	26
2004	138	138	26
2005	137	142	21
2006	137	137	22
2007	162	130	54
2008	157	125	86
2009	211	128	169
2010	159	127	200
2011	163	135	228

Source: National Housing Supply Council estimates of underlying demand; National Housing Supply Council estimates of dwelling completions net of demolitions and adjusted for unoccupied dwellings.

Note: Figures may not sum exactly due to rounding. The net gap is assumed to be zero as at June 2001. All estimates and projections of the shortfall have been rounded to the nearest thousand.

The NRAS scheme has been claimed as ‘the future for developers’ because it helps to attract more private funding rather than rely on scarce government grants (Disney, 2011). However, the scheme has been criticized within the federal government for not meeting the initial growth targets which they set for it (Disney, 2011). The criticisms also include that the application process is in fact overly bureaucratic and burdensome, although NRAS was intended as a market-driven initiative (Thornley, et al., 2011). Both federal and state government act a role to manage and monitor the projects, the costs of compliance for the NRAS are expected higher. Moreover, Thornley et al. (2011) stated that the NRAS has *failed to attract the interest of institutional investors in need of more aggregation, liquidity, and clear risk profiling. Investors were not sufficiently engaged at the outset of the policy to address these needs.*

The debates on the effectiveness and efficiency of the policies are an interest area of study. This research investigates the impacts of the NRAS schemes for improving affordable rental housing. The paper will first study the NRAS structure and performances since the policy implemented. Secondly, the impacts of the scheme will be investigated through a hypothetical case study to establish factors that influence on private investors in encouraging them to provide affordable rental housing for low- to moderate-income households. Discussion and conclusion on the impacts of the police is last.

THE NRAS

By investing \$1 billion in tax credits, the NRAS aims to stimulate the supply of new affordable rental dwellings, targeting 50,000 new affordable rental properties by June 2012 (Milligan, et al., 2009). Investors who are interested in the scheme must construct new “approved” dwelling, which must be rented to eligible low- and moderate- income households at rental prices no greater than 80 per cent of the market rates. The scheme is also anticipated to encourage large-scale investment and innovative delivery of affordable housing (FaHCSIA, 2011).

The incentives for private financing and ownership of new lower cost rental housing include two parts. One is through a Commonwealth contribution of a refundable tax offset valued at A\$6,000 per dwelling (in 2008/09) indexed in accordance with the rental component of the Consumer Price Index for ten years, subject to annual compliance with the rules of the scheme (Gilmour and Milligan, 2008). In the case of non-for-profit organisations participating in the scheme that are registered charities with the Australian Tax Office (ATO), the

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Commonwealth contribution will be provided as an annual cash payment (FaHCSIA, 2011). The ATO-endorsed charitable institutions may elect to receive a refundable tax offset rather than a cash payment. The second incentive comes from state or territory government contribution in the form of a payment per dwelling per year for up to 10 years. The State and Territory Governments may provide in-kind support to the approved participants rather than a payment such as a discount on stamp duty, land taxes or infrastructure charges and discounted price of land. In addition, state and territory governments may provide their contributions to the National Rental Incentive for future years in advance, and contributions may not be deferred (FaHCSIA, 2011). For example, in 2008, NRAS funding is \$6,000 from the Commonwealth and \$2,000 from the NSW state government each year over a 10 year period (Elton Consulting, 2010).

The scheme emphasizes that the owners of the NRAS dwelling are to receive benefits of the tax incentives and grants guaranteed by the governments for 10 years. The mandatory conditions must be met in order for an approved participant to receive the incentive in respect to an approved rental dwelling (FaHCSIA, 2011). The mandatory conditions include dwellings will be rented to 'eligible tenants' and at a rate that is at least 20 per cent below the prevailing market rate, and so on. There is no obligation for the owner of the NRAS to remaining in the scheme, i.e., the owners can cease being an NRAS unit at any time during the 10 year period without penalty and merely foregoes the future benefits for the remaining balance of the 10 year term. The government takes no hold on title and has no legal or equitable claim over the property (McAuliffe, 2011).

In late 2010, the timeframe for the rollout of the 50,000 targeted dwellings was extended from 2012 to 2014. By June 2012, a total of 40,550 incentives have been allocated, reserved or under offer and 8,678 affordable rental dwellings were tenanted or available for rent (Australian Government, 2012). Figure 2 and Figure 3 depicts the actual delivery and participant reported delivery of incentives by the end of NRAS year on 30 April 2012.

Figure 2: Actual delivery of incentives by the end of NRAS year (30 April) – Cumulative

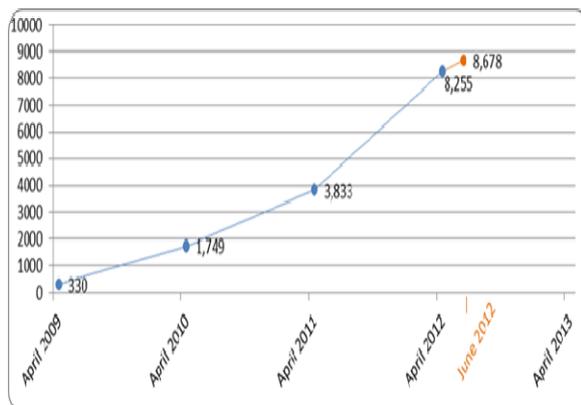
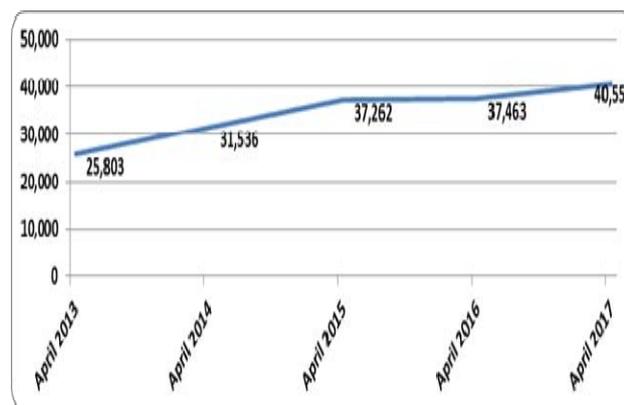


Figure 3: Participant reported delivery of incentives by the end of NRAS year (30 April) - Cumulative



(Source: Australia Government, 2012)

The NRAS is a scheme similar to the low-income housing tax credit program (LIHTC) which has introduced in the USA. The LIHTC has been viewed a success program (McClure, 2000) in that it has generated many affordable rental housing units that are now occupied by low- and moderate-income households. Since 1986, the program has provided nearly 2.4 million affordable rental homes and creates approximately 95,000 jobs annually. Wallace (1995) concluded that the LIHTC program has become the nation's primary mechanism for encouraging the production of housing and is an extremely effective tool for developing millions of affordable rental housing and has helped meet a critical affordable housing shortage over the two decades. On the other hand, Case (1991) criticized the program for giving excessive subsidies to investors, beyond what is required to induce them to develop the properties. In addition, the program has been criticized for requiring additional layers of subsidy to leverage investment and for providing benefits to developers in excess of the amount necessary to induce them to invest (McClure, 2000). A criticism for the LIHTC administration is that there are major source of inconsistency and inefficiency as some fundamental flaws with regards to the LIHTC's administration, compliance and oversight (Leviner, 2004).

Blessing and Gilmour (2011) compared and contrasted the NRAS and the LIHTC of the two countries and highlighted the outcomes for investors, tenants and the wider housing system. They concluded that tax credit

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schemes still rely on additional government intervention especially during financial market turbulence. In Australia, the federal and state governments are both directly administering housing programs and having overlapping monitoring and regulatory processes. Milligan and Pinnegar (2010) indicated a concern that the State and Territory governments do not perform or if they disengage over time so that matching for all available incentives may be not secured. For example, the New South Wales state government announced that it will limit the number of incentives available to for-profit applicants to 1,250 dwellings, undermining the federal government's more ambitious targets (NSW government, 2012). There is a risk that the federal government abandons or withdraws from their administrative roles and leaves the states to manage it alone. Another criticism relates to the management of investment exit. There are no restrictions on the use of the dwellings produced after the expiration of the 10-year tax credit period (Lawson, et al, 2009). In addition, no regulations apply and dwellings may be sold after the tax incentive is offered for 10 years (Milligan and Pinnegar, 2010). This means that long-term supply of rental affordable housing cannot be guaranteed. Table 2 summarises the some of the differences of the both policies.

Table 2: The differences of the NRAS and the LIHTC schemes

	The NRAS	The LIHTC
Starting year	2008	1986
Act	National Rental Affordability Scheme Act 2008	Tax Reform Act 1986
	Incentives by subsidies	Tax Credits, a dollar-for-dollar
Scheme	Federal \$8000 + State \$2000 in advance	9% and 4% tax credits
	Federal FaHCSIA + Taxation office	State government
Administration	The Secretary	The Treasury
Incentive projects	Construct new buildings only	Construct new or to rehabilitate existing buildings
Developers' exit the policy	No penalty	Credit recapture + interest
Policy after the scheme	No	Yes

The Impacts of the NRAS Policy

The NRAS is a supply side policy which aims to encourage private investors taking the advantage of tax credit for providing rental dwellings. The private investors make their investment decision are based on the investment returns, i.e., when the benefits is greater than the costs of the projects. Thus, prior entering the NRAS scheme, investors have to gauge the benefits of the tax credits and the costs of capital, outgoings as well as below 20 per cent of market rent.

To demonstrate the impacts of the affordable rental policies, discounted cash flow (DCF) analysis are used. DCF analysis is a method of valuing a project using the concepts of the time value of money. The principle is that the value of a project is based on its ability to generate cash flows for the investors. This means that investors will assess benefits of investing the NRAS properties which is greater than the project costs. All future incoming and outgoing cash flows are estimated and discounted to give their present values. The sum of all future cash flows is the Net Present Value (NPV) which is used for measuring the benefits of the investments. When NPV is greater than zero, the project is considered feasible. If the NPV is less than zero, the project has to reject as it cannot bring any benefits to the investors. Table 3 shows the steps to calculate the cash flows.

Table 3: Steps of calculating the cash flows

Step 1	Estimate market rent
Step 2	Deduct NRAS discount
Step 3	Deduct all outgoings (rates, management, etc.)
Step 4	Deduct finance costs (if any)
Step 5	Deduct equity contribution (if any)
Step 6	Plus NRAS credit
Step 7	Plus Termination value
Step 8	Sum up total cash flow

The Hypothetical Case

The selected NRAS program is located 20 kilometres south-west of the Sydney central business district, Bankstown (postcode: 2200) in the state of New South Wales, Australia. Bankstown has a population of 30,572 according to the 2011 Census. The median income is \$377 for individuals and \$950 for households per week.

43.1% of the homes are rented (QPZM, 2012) and the median rent in Bankstown for units is \$380 per week (indicated yield 6.2%) and median sale price is \$390,000 (Property Observer, 2012). There were 104 NRAS Units allocated in the suburb of Bankstown. It is assumed that the 104 units were built and rented to the low- and moderate-income families for 10 year then the units will be sold at the end of 10 year term. The hypothesis is what benefits are there for the private investors for investing the 104 units under the NRAS scheme?

Assumptions for the NRAS

The assumptions include

- Both the Federal and State government will contribute \$9,981 tax free to the investor in 2012.
- The tax free contribution is indexed for the 10 year term of the agreement at CPI.
- Brand new properties are rented at 20 per cent lower than the market rent. No vacancy rate is assumed since there is a long waiting list of eligible tenants.

Other general assumptions are listed in the Table 4. The fee charged is assumed to be charged per year per unit. Interest rate is assumed average 7% over the next 10 years and interest only loan is used. The investment properties are managed by a professional team who will ensure the eligibility of the NRAS tenants, process the tax credits and compliances. All outgoings are adjusted by the CPI. Market growth rate of 4 per cent each year is applied for the final sale. Discount rate is assumed 10% because a) investors tend to maximise their debt finance to take tax advantages; and b) the cost of debt is assumed to remain relatively low for the next few years since the local economic fundamental are weak and fragile global economic conditions.

Table 4: Variables used for DCF analysis

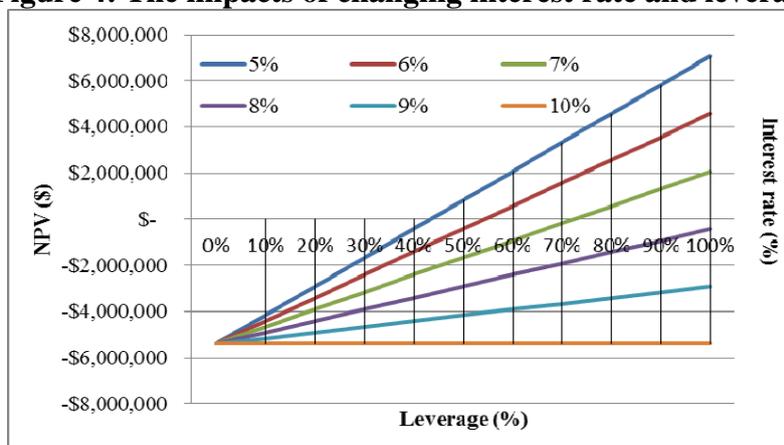
Cost of unit	\$390,000	Rent	\$380
No of Unit	104	Year owned	10
Stamp duty	\$10,075	Leverage	95%
Legal	\$1,100	Market growth rate	4%
Council rate & Strata	\$4,000	Inflation rate	3%
Insurance & Maintenance	\$1,000	Interest rate	7%
Depreciation	\$10,000	Sale fees	2%
NRAS management	\$1,750	Discounted rate	10%
NRAS credit	\$9,981	NRAS rent discount	20%

The Results

Based on the assumptions, the Bankstown project can be considered by investors since the NPV is greater than zero (positive \$2.88 millions) and the IRR is greater than the discount rate (16 per cent). The results indicate that investors benefit from the NRAS schemes.

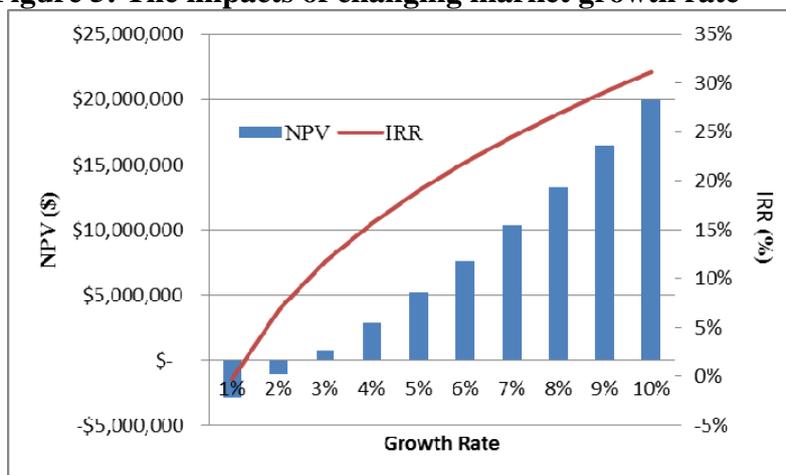
Many factors affect investors' decision. For example, lending policy is an important element to affect the project returns. The project will occur loss if less than 70 per cent of lending is allowed (Refer to Figure 4). Similarly, increase in the interest rate will increase the cost of finance. The risks of the project can be shown where interest rate to above 8 per cent.

Figure 4: The impacts of changing interest rate and leverage



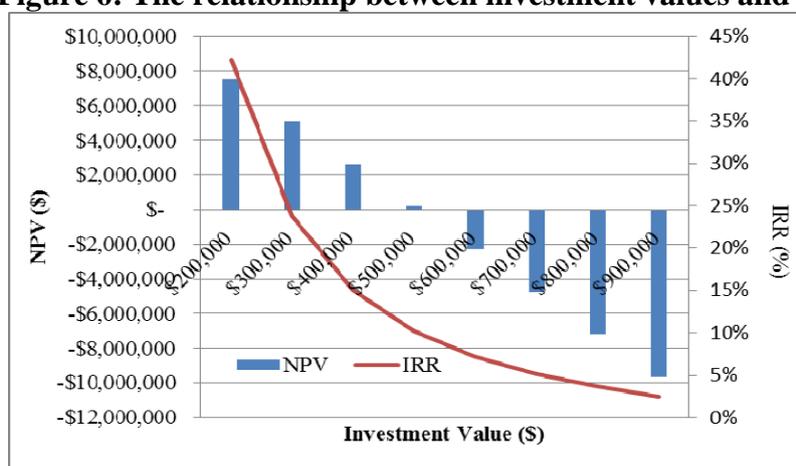
Investors have to also face a negative return if the value of investing properties appreciation below 3 per cent for the next ten years (Refer to Figure 5).

Figure 5: The impacts of changing market growth rate



On the other hand, keeping all assumptions constant, the findings suggest that investors are not encouraged to invest in higher value properties. Figure 6 describes the effects of investing different value of properties under the NRAS credit schemes. The vertical left axis is measured by NPV and the IRR is at the right axis. The horizontal axis shows the value of investments. Both NPV and IRR results are negatively correlated to the investment values. The more expensive the properties the less the investment returns will be, keeping other variable constant. Under the NRAS scheme, it is not profitable when investment value is greater than \$500,000. This result suggests that the new supplies of housing for the low- and moderate-income households are encouraged to develop largely located at suburbs and far away from CBD, which the land values are relatively low comparing to those suburbs closed to the CBD.

Figure 6: The relationship between investment values and returns



Discussion

The accuracy of the valuation determined using the DCF analysis is highly dependent on the quality of the assumptions. However, in this analysis, the assumptions are merely used for a based case. The analysis conducted through sensitivity study, i.e., how changes of one factor influences the investment return, given other factors constant. In this way, the benefits and risks of investing the NRAS projects can be evaluated.

As indicated by the DCF analysis, the investors do not benefit from investing the high value properties under the NRAS schedule. The NRAS has been implemented through funding rounds and has effectively increased the standard residential net income return in Australia from about 2 per cent for not-for-profit housing providers to 5 per cent (James, 2010). Table 5 shows the incentives allocated and reserved by round by states with total

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incentives of 40,550 in June 2012. There were 16.7 (6,772 incentives) per cent allocated to the NSW and 27.8 (11,284 incentives) per cent to the QLD indicates the disproportions of geographic distribution of the NRAS grants. This evidence suggests that the NRAS creates disincentives for investing in Australia's most unaffordable markets where the cost of land and development is relatively expensive. In addition, Gilmour (2010) argued that most NRAS incentives have been awarded to community housing organisations, with only a minority going to private investors. Around 20 large housing groups have grown in capacity and regularly win NRAS incentives.

Table 5: Incentives overview by round

State	Round 1		Round 2		Round 3		Round 4		Total Incentives
	Incentives Allocated	Incentives Reserved							
ACT	56	0	64	12	947	75	209	1,332	2,695
NSW	601	134	613	316	23	279	61	4,745	6,772
NT	0	0	0	0	21	1,179	0	496	1,696
QLD	535	123	722	873	776	2,542	364	5,349	11,284
SA	327	47	769	113	26	74	25	2,410	3,791
TAS	339	29	64	25	0	0	18	988	1,463
VIC	439	85	927	783	128	3,552	20	888	6,822
WA	293	80	113	81	27	1,835	171	3,427	6,027
Total	2,590	498	3,272	2,203	1,948	9,536	868	19,635	40,550

(Source: Australian Government, 2012)

One of the NRAS's objectives is to attract and encourage large-scale investment (Australian Government, 2008). Desai, et al. (2008) suggested that a success program should not only make the program efficient and encourages competition, but attract a variety of market participants. Berry (2000) stated that institutional investors, such as insurance and superannuation funds, have avoided investing in rental housing and residential property in general. In the discussion of whether the NRAS stimulates institutional investment in affordable housing, Gilmour and Milligan (2008) found that the NRAS relies on either private or non-for-profit investment partners who have limited access to supplementary funding. The main reasons of lack of institutional investors are not only low yield (Berry, 2000) and high risks, but also illiquidity. The subsidy of \$10,000 though indexed for each of the affordable rental units each year is not attractive enough for the institutional investors. The risk factors consist of a) the costs of keeping the properties at the rentable conditions; b) the potential subsidy and tax policies changes by future government and c) and the risk of capital gain after ten years due to unpredictable market changes are some of the risk concerns for institutional investors. Currently insufficient details are released publicly on how the NRAS works is also an additional issue.

CONCLUSION

The NRAS program plays important roles in the supply of affordable rental housing for the low- and moderate-income households. The NRAS scheme has also offered a strong incentive for small scale investors to increase affordable rental stocks. Although the set 50,000 affordable housing target has not been met, more than 8,500 low- to moderate-income households have been benefits since the scheme introduced. Stable economic conditions and long-term policies can ensure the NRAS scheme run successfully. Some limitations do exist for both programs. In particular, it is notable that investors tend to go for less expensive projects which are normally located long distances away from the central business district. Furthermore, institutional investors are not attracted into the scheme. Two recommendations are suggested: a) the schedule should remove the flat rate of subsidy to the investors. The incentive could provide by formulating credit according to the land value of the areas and targeted developing areas for affordable dwellings. To encourage institutional investors, the incentive could provide based on the investment value, i.e., number of affordable dwellings provided. Further studies are required to develop the ratio of incentives that can improve the effectiveness and efficiency of the NRAS scheme and its implementations. Crowd out effects (Eriksen and Rosenthal, 2010) of the NRAS subsidized rental housing is also an area for future research.

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REFERENCES

- Australian Government (2012) National Rental Affordability Scheme Monthly Performance Report 30 June 2012.
- Berry, M. (2000) Investment in rental housing in Australia: small landlords and institutional investors, *Housing Studies*, 15(5): 661-681.
- Blessing, A. and Gilmour, T. (2011) The invisible hand? Using tax credits to encourage institutional investment in social housing, *International Journal of Housing Policy*, 11(4): 453-468.
- Burke, T. and Ralston, L. (2003) *Analysis of Expenditure Patterns and Levels of Household Indebtedness of Public and Private Rental Households, 1975 to 1999*, Final Report, AHURI, Melbourne.
- Case, K.E. (1991) Investors, Developers, and Supply-Side Subsidies: How Much Is Enough? *Housing Policy Debate*, 2(2):341-56.
- Cox, W. and Pavletich, H. (2012), *International Housing Affordability Survey*, Demographia, Accessed at <http://www.homeloanfinder.com.au/australian-home-loan-market/housing-affordability-in-australia-vs-the-rest-of-the-world> on 11 Sep. 2012.
- Dale, H., Harvey, A., Murray, G., King M. and Lewis, K. (2011), *Housing to 2020: the state of Australian housing to the year 2020*, The HIA Economics Group, Jeldwen Australia.
- Desai, M., Dharmapala, D. and Singhal, M. (2008) Investable tax credits: the case of the low income housing tax credit, Faculty Research Working Papers Series: RWP08-035, Harvard Kennedy School.
- Eriksen, M. and Rosenthal, S. (2010) Crowd out effects of place-based subsidized rental housing: New evidence from the LIHTC program. *Journal of Public Economics*, 94(11): 953-966.
- Elton Consulting (2010), *Affordable housing strategy, draft*, Bega Valley Shire Council, accessed on 17 Sep. 2012 at www.begavelley.nsw.gov.au.
- FaHCSIA (2011) National rental affordability scheme policy guidelines, Department of Families, Housing, Community Services and Indigenous Affairs.
- Feldman, R. (2002), The affordable housing shortage: considering the problem, causes and solutions, *The Region*, Autumn issues Accessed at http://www.minneapolisfed.org/publications_papers/issue.cfm?id=169 on 13 Sep. 2012.
- Gabriel, M., Jacobs, K., Arthurson, K., Burke, T. and Yates, J. (2005) *Conceptualising and measuring the housing affordability problem*, National Research Venture 3: Housing Affordability for Lower Income Australians, Research Paper 1, (Report) AHURI. ISBN: 1 902941 76 2.
- Gilmour, T. and Milligan, V. (2008) Stimulating institutional investment in affordable housing in Australia: Insights from the US, 3rd Australasian Housing Researchers' Conference Melbourne, June 18th – 20th 2008.
- Housing New South Wales State (2012) Rent and Sales Report, Housing Analysis and Research, No. 101 ISSN-1440-0049.
- James, D. (2010) Low Cost, Not Low Returns: Affordable Housing, *The Australian*, May 26 Accessed at www.theaustralian.com.au/business/wealth/low-cost-not-low-returns-affordable-housing/story-e6frgac6-1225870686052 on 01 Oct. 2012.
- Lawson, J. Berry, M. Milligan, V. Yate, J. (2009) Facilitating investment in affordable housing – towards an Australian model, *Housing Finance International*, 24(1): 18-26.
- Leviner, S. (2004) Affordable housing and the role of the low income housing tax credit program: a contemporary assessment, *Tax Lawyer*, 57(4): 869-904.
- McAuliffe, B. (2011) Implications of the national rental affordability scheme on the valuation of residential property, 17th Pacific Rim Real Estate Society Conference, 16 to 19 January 2011, gold Coast, Australia.
- McClure, K. (2000) The Low-Income Housing Tax Credit as an Aid to Housing Finance: How Well Has It Worked? *Housing Policy Debate* · Vol. 11, No. 1, pp. 91 – 113.
- Milligan, V. and Pinnegar, S. (2010) The comeback of national housing policy in Australia: first reflections, *International Journal of Housing Policy*, 10(3): 325-344.
- Milligan, V., Gurrán, N., Lawson, J. Phibbs, P. and Phillips, R. (2009) *Innovation in affordable housing in Australia: bringing policy and practice for not-for-profit housing organisations together*, Sydney: AHURI.
- National Housing Supply Council (2012) *Housing supply and affordability – Key indicators, 2012*, State of Supply Report 2012, NHSC: Canberra, Commonwealth of Australia.
- NHPAU (2009), *Affordability – more than just a housing problem*, National Housing and Planning Advice Unit CB04 Ground Floor of Clerical Block Segensworth Road, Titchfield. Fareham PO15 5RR. Accessed on 11 Sep. 12 at <http://www.communities.gov.uk/documents/507390/pdf/1221507.pdf>.
- Property Observer (2012), *Bankstown NSW*, Accessed on 08 Oct. 2012 at <http://www.propertyobserver.com.au/data/suburb/bankstown-nsw>.

NINETEENTH ANNUAL PACIFIC-RIM REAL ESTATE SOCIETY CONFERENCE

MELBOURNE, AUSTRALIA, 13-16 JANUARY 2013

- QPZM (2012), Bankstown Demographics (NSW) Local Stats, Accessed on 08 Oct. 2012 at <http://localstats.qpzm.com.au/stats/nsw/sydney/canterbury-bankstown/bankstown>.
- Thornley, B., Wood, D. Grace, K. and Sullivant, S. (2011) Impact Investing: A framework for Policy Design and Analysis, Case Study 16: National Rental Affordability Scheme, InSight at Pacific Community Ventures & The Initiative for Responsible Investment at Harvard University Supported by The Rockefeller Foundation.
- Wallace, J.E. (1995) Financing affordable housing in the United States, *Housing Policy Debate*, 6(4):785–814.
- Yates, J. and Wulff, M. (2000) W(h)ither low cost private rental housing? *Urban Policy and Research*, 18(1): 45-64.
- Yates, J. and Wulff, M. (2005) Market provision of affordable rental housing: lessons from recent trends in Australia, *Urban Policy and Research*, 23(1): 5-19.

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