



Financing rental housing through institutional investment

Volume 2: supplementary papers

authored by

Vivienne Milligan, Judith Yates, Ilan Wiesel and Hal Pawson

with Carrie Hamilton

for the

Australian Housing and Urban Research Institute

at University of New South Wales

March 2013

AHURI Final Report No. 202

ISSN: 1834-7223 ISBN: 978-1-922075-22-2



Authors	Milligan, Vivienne	University of New South Wales		
	Yates, Judith	University of Sydney		
	Wiesel, Ilan	University of New South Wales		
	Pawson, Hal	University of New South Wales		
Title	Financing rental housing through institutional investment— Volume 2: supplementary papers			
ISBN	978-1-922075-22-2			
Format	PDF			
Key words	financing, rental, housing, institutional investment, Investigative Panel			
Editor	Anne Badenhorst	AHURI National Office		
Publisher	Australian Housing and Urban Research Institute Melbourne, Australia			
Series	AHURI Final Report; no.202			
ISSN	1834-7223			
Preferred citation	Milligan, V., et al. (2013) Financing rental housing through institutional investment—Volume 2: supplementary papers, AHURI Final Report No.202. Melbourne: Australian Housing and Urban Research Institute.			

Note:

This Final Report consists of two volumes:

- 1. Financing rental housing through institutional investment—Volume 1: outcomes from an Investigative Panel.
- 2. Financing rental housing through institutional investment—Volume 2: supplementary papers.

Available at http://www.ahuri.edu.au/publications/projects/p71016.

ACKNOWLEDGEMENTS

This material was produced with funding from the Australian Government and the Australian states and territory governments. AHURI Limited gratefully acknowledges the financial and other support it has received from these governments, without which this work would not have been possible.

AHURI comprises a network of universities clustered into Research Centres across Australia. Research Centre contributions, both financial and in-kind, have made the completion of this report possible.

DISCLAIMER

AHURI Limited is an independent, non-political body which has supported this project as part of its programme of research into housing and urban development, which it hopes will be of value to policy-makers, researchers, industry and communities. The opinions in this publication reflect the views of the authors and do not necessarily reflect those of AHURI Limited, its Board or its funding organisations. No responsibility is accepted by AHURI Limited or its Board or its funders for the accuracy or omission of any statement, opinion, advice or information in this publication.

AHURI FINAL REPORT SERIES

AHURI Final Reports is a refereed series presenting the results of original research to a diverse readership of policy makers, researchers and practitioners.

PEER REVIEW STATEMENT

An objective assessment of all reports published in the AHURI Final Report Series by carefully selected experts in the field ensures that material of the highest quality is published. The AHURI Final Report Series employs a double-blind peer review of the full Final Report—where anonymity is strictly observed between authors and referees.

CONTENTS

ACR	ONYMS	. IV
INTR	ODUCTION TO THE SUPPLEMENTARY PAPERS	1
1	FINANCING OPTIONS FOR INSTITUTIONAL INVESTMENT IN RENTAL HOUSING	2
2	CREDIT ENHANCEMENT OPTIONS FOR STIMULATING INSTITUTIONAL INVESTMENT	. 16
3	FACILITATING INSTITUTIONAL INVESTMENT IN RENTAL HOUSING: UK DEVELOPMENTS	. 20
REFE	ERENCES	. 27

ACRONYMS

ADI Authorised Deposit Taking Institution

AHURI Australian Housing and Urban Research Institute

CEFC Clean Energy Finance Corporation
CHO Community Housing Organisation
CMOs Collateralised Mortgage Obligations

CPI Consumer price index

CRA Commonwealth Rent Assistance

GFC Global Financial Crisis

IPP Investment Property Database

LVR Loan-to-valuation ratio

LIHTC Low Income Housing Tax Credit (US)

NAHA National Affordable Housing Agreement

NBN National Broadband Network

NFP Not-for-profit

NRAS National Rental Affordability Scheme

PRS Private rental sector

RBA Reserve Bank Australia

REIT Real estate investment trust

RMBS Residential mortgage—backed securities

SMEs Small and medium sized enterprises

UK United Kingdom

INTRODUCTION TO THE SUPPLEMENTARY PAPERS

The three papers in this volume are provided as supplementary material to the Final Report on 'Financing rental housing through institutional investment: outcomes of an Investigative Panel'. Supplementary Paper 1 concerns specific ways by which affordable rental housing might be financed from institutional funds. Supplementary Paper 2 discusses examples and options for providing credit support in order to achieve such institutional investment. Supplementary Paper 3 describes developments in the UK related to that country's recent efforts to stimulate institutional investment in rental housing. The set of papers is intended to provide additional information and analysis to augment the considerations of the Investigative Panel on key issues and policy options.

1 FINANCING OPTIONS FOR INSTITUTIONAL INVESTMENT IN RENTAL HOUSING

A brief overview of the range of private financing options and of the public funding support that might be employed to encourage institutional investment in affordable (that is, below market) rental housing was provided in Chapter 2 in the Final Report for this study. The appropriate form of finance, and the institutions most likely to provide it, is likely to vary according to the risks that institutions are prepared to take and the way in which these might be managed.

This paper first provides a broader overview of private financing options relevant for institutional investors and focuses on some of the issues that arise with each. This is followed by more detail on public funding approaches that might be used to supplement private finance in order to facilitate institutional investment and achieve affordable housing outcomes. The final section presents illustrations of issues that arise when combining a mix of private financing and public funding to form new ways of financing rental housing.

1.1 Private financing options¹

1.1.1 Direct equity investment

As indicated in Chapter 2 of the Final Report, possibly the least sophisticated, but by no means the least risky, financing option is direct equity investment. This is a form that is prevalent where the dominant form of investment in private rental housing is that undertaken by small scale individual landlords. Institutions are wary of direct equity investment in affordable rental housing for a number of reasons. They are directly exposed to property market fluctuations although, as indicated in Chapter 2, property assets are often uncorrelated with other assets and so can reduce overall portfolio risk. However, other concerns relate to reputational risk associated with the need to evict tenants unable or unwilling to pay their rent on time, and a perception that this would remain even if tenancies were managed at arm's length. Other significant issues arise from the illiquidity associated with direct property investment and with problems of developing a portfolio of an appropriate scale. With investment in new dwellings, development and construction risks also can arise.

For these and other reasons, equity investment is more likely to occur indirectly through use of Real Estate Investment Trusts (REITs).

1.1.2 Indirect equity investment

Real estate investment trusts (or property trusts) provide a more sophisticated, indirect form of equity investment in rental housing, and one which addresses a number of the constraints arising from direct investment. In broad terms, REITs combine capital from a range of investors to form a fund to acquire or provide financing for all forms of real estate and allow investors to purchase an interest in a diversified and professionally managed portfolio of real estate in the same way as they would purchase shares in a company. They reduce the cost of entry into the property market, provide investors with access to professional property management skills and allow investors to diversify and spread their risk across a whole portfolio of

¹ The taxonomy in this section owes much to that outlined by LeBlanc et al. (2009) in their categorisation of rental housing finance systems undertaken for a World Bank report on housing finance in emerging markets.

² As indicated in Chapter 2, in advanced economies, and where tax breaks encourage it, this is usually supplemented with bank supplied debt finance.

properties. Global REITs provide added opportunities for diversification when global property markets are not synchronised (Nicholas 2011, p.32).

REITs can be listed (publicly owned) or unlisted (privately owned). Listed trusts provide liquidity; unlisted REITs, are less liquid but, because their unit price is based on periodic underlying asset valuations rather than daily ASX values, they are likely to offer lower volatility than listed REITs. Unit holders pay tax based on income distributed from the REIT at the rate applicable to their circumstances and are not required to pay stamp duty on shares bought in a REIT (Perpetual 2011). Listed REITs are traded on the Stock Exchange like shares and therefore make indirect investment in property more attractive in terms of liquidity. There is no indivisibility effect. Unlisted trusts have liquidity characteristics closer to direct investment, but still offer diversification benefits.

While direct investment in property provides less liquidity than indirect investment, research commissioned by the Property Fund Association of Australia, the peak body representing the unlisted property sector, suggests that direct property in Australia (through unlisted trusts) has had lower volatility of total returns than indirect property (through listed property trusts) and has produced higher cumulative total returns over 25 years to 2012 (Atchison Consultants 2012).³ A characteristic of this investment is that volatility in total return is driven by change in capital values. Income returns are relatively stable.

Both Listed (A-REITS) and Unlisted Property Trusts have been in existence in Australia since the 1970s, but in the main, have been commercial (office, retail and industrial) rather than residential REITs. Jones (2007, p.395) argues that both large landlords and a vibrant rental sector are preconditions for REITs to work. Difficulties are likely to arise in establishing a REIT from scratch because of the need to find supply sufficient to overcome local market risks and to create the economies of scale necessary to expand the sector. The ten largest residential REITs in the US, for example, held between 60 000 and 230 000 properties in the mid-2000s.

Mortgage REITs also exist, as do hybrid REITs which combine characteristics of the standard (equity) REIT and the less common mortgage REITs. Mortgage REITS typically borrow short and lend long. They make mortgage loans (secured by real estate) and, typically, buy mortgage—backed securities to generate the returns used to pay dividends to investors.

1.1.3 Bank supplied debt finance

Currently debt associated with equity investment is generally in the form of direct lending from an Authorised Deposit Taking Institution (ADI), the predominant form of housing finance in Australia (as in many Western countries and particularly in Anglo-Saxon countries). Residential mortgage lending, in fact, represented almost 40 per cent of total bank assets in mid-2012. Almost all of this, however, is to individuals for purchase of owner-occupied or rental investment dwellings. Loans to for-profit or not-for-profit providers of affordable rental housing are far less common. To date, ADIs have been very conservative in their limited lending to organisations providing affordable rental housing. Lawson et al. (2012, pp.18–20) provide an overview. In large part this arises because such loans are more likely to be assessed as business

³ These results apply to the broader property sector rather than specifically to residential property. A relatively low correlation was reported between returns of direct property and listed property across periods ranging from 1 to 25 years. Infrequent mark to market valuations of direct property explains the low volatility of returns and more stable returns (Atchison Consultants 2012, p.7).

⁴ See <www.investopedia.com/walkthrough/fund-guide/uit-hedge-fund-reit/real-estate-investment-trusts/default.aspx>.

or commercial loans with more emphasis on cash flow, debt cover ratios and breakeven ratios. Credit risk is defined by the characteristics of the project being funded rather than the characteristics of the borrower.

One of the solutions used by ADIs to ameliorate the duration risk associated with borrowing short and lending long is to address the mismatch on the liabilities side. In the past few years, for example, there have been significant shifts in the composition of bank funding, with increased reliance on term rather than on-call deposits and a marked shift away from short-term wholesale funding towards long-term wholesale funding through the issue of longer term bonds with (secured) covered bonds having longer tenors of 5–10 years compared with the 3–5 years for (unsecured) bank bonds. As indicated in Chapter 2 of the Final Report, a second solution is to address it by securitising the income stream from their mortgage loans and issuing (residential) mortgage—backed securities (RMBS) into the capital market. Currently, however, this forms a small share of banks' total funding (Deans & Stewart 2012; Fabbro & Hack 2011). (See Box 1.) Each of these changes has the effect of increasing bank funding costs and adds to the cost of bank finance.

1.1.4 Capital market debt finance

The issue of bonds and RMBS by ADIs provides an indirect way for institutional investors to finance rental or affordable rental housing. An alternative is for such bonds or securities to be issued by a non-bank intermediary or by some level of government. Tax exempt revenue bonds as used in the US or Canada are examples of such instruments although these do embody public finance in the form of implicit tax subsidies.

Specific purpose securitised borrowings can be secured against the asset or the revenue stream arising from the asset. In Australia, their use had been phased out by the mid-1980s because of the inability of governments to avoid contingent liabilities (Chan et al. 2009, p.xxvi). They have re-emerged with the launch of 3– or 10–year fixed rate or indexed annuity Waratah bonds in New South Wales in late 2011 and with proposals for infrastructure bonds made by a number of submissions to the Infrastructure Finance Working Group (IFWG) (2012, p.31).⁵

Government issuance of general or specific purpose bonds to be used for provision of affordable rental housing is likely to be the cheapest way of encouraging institutional investors to finance for affordable rental housing. However, as argued by a Productivity Commission staff working paper on public financing of infrastructure, different forms of financing do have different strengths and weaknesses in terms of project risk management, transaction costs and the information and discipline that contribute to efficient investment decisions (Chan et al. 2009, p.xix). The role of public funding and an indication of the strengths and weaknesses of different approaches which might be used to supplement private finance are considered below.

⁵ The IFWG used two arguments for its failure to support the calls for infrastructure bonds in the submissions made to it: bonds issued by government would increase government debt and assistance for private issuance is not efficient (Infrastructure Finance Working Group 2012, p.31).

⁶ Indeed, ex-RBA Board member, Warwick McKibbin believes the government should take a 'once in a generation' chance to issue long-term bonds at very low interest rates to fund a large infrastructure program. 'If foreigners really want to hold Australian assets, we should be giving them long-term government bonds to hold. It would give us access to capital incredibly cheaply which we could then lock in as [infrastructure] investments that would probably give us 10 to 15 per cent return for 50 years' (quoted in Heath 2013).

Box 1: RMBS in Australia

At June 2012, securitisation vehicles held around \$125 billion of asset backed securities with almost 90 per cent of these being securities issued in Australia. This represents a decline from the pre–GFC peak of close to \$300 billion. Long term securities issued in Australia have stabilised at around \$85 billion, after reaching a peak of around \$125 billion in late 2007. At its peak, local lenders issued securities to the value of \$57 billion, primarily to investors who were highly geared banks and special purpose vehicles. Many of these were wound up in the aftermath of the global financial crisis. Residential mortgages account for about 80 per cent of total assets held. To date there has been minimal securitisation of loans for affordable rental property.

The attraction of residential mortgage backed bonds by investors in Australia and other parts of the world is expected to increase throughout 2013 as yields of more liquid securities (e.g. covered bonds) contracted throughout 2012. Demand for RMBS from mutual funds and asset managers is seen as strong, but changes in global banking regulations could reduce their attractiveness for Australia's major banks if the total amount of reserve assets banks are required to hold is reduced (since RMBS qualify indirectly as reserve assets). Banking regulation could have the opposite impact on overseas markets if regulators include mortgage backed bonds as eligible liquid assets.

Issues of covered bonds in early 2013 (an on-budget rather than off-budget activity) of around \$2 billion each by CBA and Westpac have highlighted falls in wholesale funding costs on international markets.

Source: RBA statistics (Table B19), Shapiro (2013) and Liondis (2013)

In the absence of a (central, state or local) government borrowing program, in broad terms, capital market finance (sourced from institutional investors) can be provided indirectly through a financial intermediary (e.g. a bank or a specialist intermediary focused specifically on the raising of wholesale funds for affordable rental housing) or it can be provided directly through the issue of bonds or securities by the affordable rental provider seeking funding. Examples of both approaches exist internationally.

Both bonds and securities are debt obligations of the issuing authority. The simplest form of bond, a fixed interest bond, repays a defined rate of interest (the coupon) at fixed intervals and repays the principal at a later date.

An asset backed security, such as a residential mortgage-backed security (RMBS), is backed by underlying cash flows from specified assets. Instead of paying investors fixed coupons and principal, it pays out the cash flows from the pool of assets or mortgages for an RMBS. The simplest form of security is a pass-through security in which all principal and interest payments (less a servicing fee) from a pool of mortgages are passed directly to investors. Thus, investors receive payments of principal over the life of the security as the underlying mortgages are paid off, rather than in a single lump sum at maturity. Because the principal is reduced over the life of the security, interest income also decreases. This exposes investors to pre-payment risk.⁷ A more complex structure of RMBS, such as Collateralised Mortgage Obligations (CMOs), orders the mortgages into tranches according to some

=

⁷ Based on The Bond Market Association's on-line publication, 'An investor's guide to pass-through and collateralised mortgage securities'. At <u><http://www.freddiemac.com/mbs/docs/about_MBS.pdf> accessed</u> 9 January 2013.

characteristic (e.g. repayment time) and issues several securities against the same pool of mortgages, giving investors a choice of exposure to risk and return.

To the extent that bonds or RMBS are issued against a diversified pool of assets, indirect debt investment in residential rental property through either bonds or mortgage backed securities reduces the risks associated with investment in rental property compared with direct equity investment. As is the case with indirect equity investment, however, liquidity depends on whether the securities are listed (so that they can be traded on the stock exchange) or unlisted (as is likely to be the case for private placement).⁸

Additional credit enhancement features can improve liquidity and reduce the yield gap by reducing the risk and/or improving the return of debt instruments. These are discussed in the section of public funding below.

1.1.5 General private financing issues

Some of the risks that were explicitly acknowledged by one potential institutional investor on the Investigative Panel were credit risk, mark to market volatility (which affects the risk of performance variance as assets are re-priced) and liquidity risk. Other issues raised relate to:⁹

- where the asset would be held on the institutions balance sheet
- → what is the exit strategy if institutional views relating to opportunity or asset manager change
- → simplicity (there is some suspicion of overly structured investments)
- → transparency (in relation to portfolio performance and risks undertaken)
- → administrative costs (low fees)
- → scalability (investments to be meaningful to justify the time and effort)
- track record (investments and managers with demonstrated track record are preferred)
- → socially responsible investment (important, but not at the expense of returns).

Managed funds investors are likely to have an appetite for a range of returns across different options; to assess the relative value between comparable investments; and, generally, to have higher return expectations than the banks.

The view of one potential institutional investor on the issues associated with a range of finance options likely to be available is presented in Table 1. An appropriate contribution in the form of some public sector contribution is likely to go a long way to addressing these issues.

⁸ As indicated above, however, volatility can be lower for unlisted than for listed securities because of less frequent market to market valuations of the underlying assets.

⁹ A more extensive overview of the issues raised by potential investors is provided in Lawson et al. (2012, Chapter 3).

Table 1: Issues associated with various private finance options

Finance option	Issues
Equity Investments	Scale and stamp duty
Equity Investments (NRAS)	Scale, returns low, finding suitable managers
Mortgages (Individual)	Invest via RMBS
Mortgages (NRAS)	New product, potentially attractive
REITs	Invest in some, high operating costs
Housing Supply Bonds	New product, potentially attractive
Public-Private Partnerships	Procurement process arduous, returns low, scale

Source: as made available to an Investigative Panel meeting

1.2 Public funding options

As indicated in Chapter 2 of the Final Report, the absence of institutional investment in rental housing in Australia, regardless of whether or not this is for general or affordable rental housing, suggests there is some form of market failure in Australia that needs to be addressed. In general, this will mean some form of government funding will be needed to stimulate this investment. For affordable housing in particular, on-going support will be needed because affordable rental housing, by definition, generates a below market return.

The housing market is not a single, homogeneous market, but one which varies by dwelling type and location. Thus, when government has specific affordability objectives, it is also critical that there is clarity about what type of dwellings are to be supplied, where they are to be located, and to whom they are to be targeted (as well as what other economic, social, environmental or other objectives might be intended) as a result of any assistance provided. Dwellings in high cost locations, for example, require more assistance than dwellings in lower cost locations to achieve specific affordability outcomes. Dwellings where rent can be set according to the market will be more profitable than dwellings where rent must be set at a below market rate. Dwellings where no eligibility criteria are imposed on tenants will be easier to let than dwellings where restricted criteria apply and so on.

Different types of subsidies can be used to address different issues and may have differential effects on the risks and returns associated with investing in a new asset class. Only subsidies provided directly or indirectly (including the taking of risks to support desired outcomes) are considered in this section. In other words, the options of 100 per cent capital or 100 per cent debt funding by government are not considered, although these could be used as a benchmark for determining the cost effectiveness of the various alternatives described below. Other forms of assistance that can be provided through modification of regulatory and legal policies (e.g. changes in zoning requirements, or changes to the use that can be made of housing organisation reserves) are also not considered.

1.2.1 Provision of equity support

Investment in rental housing, like investment in most infrastructure projects, requires significant outlays during the asset building or acquisition phase whereas the revenue generated from it is spread out over the economic life of the asset.

One obvious way of providing public funding is to reduce the amount of private finance needed during this stage by contributing equity up-front. Indeed, inability to

obtain an equity buffer is often a key barrier to attracting institutional investment to rental housing projects. Obvious methods for providing equity assistance are through up-front cash contributions or by providing land (at zero or below market cost or through a land rent scheme where rent is charged at a discounted rate).¹⁰

Any of these approaches reduce the up-front cost associated with provision of rental housing by reducing the up-front land cost associated with its development. It also reduces the risk for private investors because of the increased collateral or equity created by the public contribution. Where the public sector retains ownership (e.g. with a land rent scheme), it is still possible that the cost of providing rental housing can be reduced because the equity component opens up the possibility of the use of mezzanine finance with a risk profile between senior debt and equity rather than private equity finance. Silbernagel and Vaitkunas (2012, p.5), for example, suggest that, as a result of the mezzanine investors' risk reducing reputation, banks often look more favourably when there are institutional mezzanine investors and may extend more credit under more attractive terms. From the point of view of an institutional mezzanine investor, such an opportunity increases the range of risk/return profiles available to it.

Different ways of providing equity support may have different implications in terms of their budgetary impact and on the availability of institutional investment. Their budgetary impact is likely to vary according to whether equity contributions are made in cash or kind, whether or not public ownership is retained and the accounting standards used to value assets such as surplus or under-utilised land. They are also likely to affect the cost of any institutional investment stimulated by the support provided. Where government absorbs some of the risk associated with any new housing development, institutional investment is more likely and available at a lower cost than when all of the risk is borne by the private sector participants. Box 2 gives an example of the ways in which different forms of subsidy affect government budget outcomes and provides one example of how an intermediary might be established to facilitate investment in affordable rental housing and minimise the impact of assistance provided on the government budget.

-

¹⁰ Such a scheme is employed in the ACT for affordable home purchase. The Land Rent Scheme gives a lessee the option of renting land through a land rent lease rather than purchasing the land to build a home. This reduces the up-front costs associated with building a dwelling since only the construction costs have to be met. Information on the ACT land rent scheme can be found at http://www.economicdevelopment.act.gov.au/affordable_housing/land_rent accessed 21 January 2013.

¹¹ Under legislation passed in 2009, use of Commonwealth land to increase the supply of housing provides one of the exceptions to the general principle that sale of surplus Commonwealth land be sold at full market value. See http://www.finance.gov.au/property/lands-acquisition/commonwealth-property-disposals-policy.html accessed 22 January 2013. How provision of such land affects budget statements is likely to depend on interpretation of AASB public sector accounting standards which require valuation at highest and best use, taking into account what is financially feasible and legally permissible AASB, 2011, p.13). Restrictions on the use to which any government land provided could reduce an assessment of fair value and reduce the budgetary implications of such transfer.

Box 2: NBN Co.

NBN Co. is funded with \$27.5 billion in 'equity' from government (raised through issue of Australian Infrastructure Bonds) and \$13.5 billion debt to be raised by NBN Co. (from 2015). The \$36 billion NBN Co. is structured so as to have minimal impact on government budget statements. The equity component does not affect government budget position or national debt levels as it is offset by equity in NBN Co. It is carried as an asset rather than as an expense (although holding costs over the construction period are taken into account).

Initial funding involves government equity injections (investment/contribution) which affect financial assets in the balance sheet. If made from equity (e.g. from BAF allocations) composition of financial asset changes; if from debt (e.g. from sale of bonds) both equity and debt increase but no change in net worth. An increase in debt or a decrease in cash, and an equivalent equity injection in NBN Co., increases net debt and net financial liabilities, but net worth and net financial worth are unchanged. Initial funding has a positive impact on the cash flow statement if the NBN Co. related equity injection amount is less than financing amounts ('borrowing') and vice versa.

The operating statement is not directly affected by equity injections. However, all interest paid on borrowings to fund these are accounted for as an interest expense in the operating statement. Where NBN Co. does not make payment(s) to the government to compensate for these expenses, they increase a budget deficit.

If NBN Co. fails to generate sufficient revenue and incurs recurring operating losses, it could require a government subsidy in order to remain a going concern. A subsidy is treated as an expense in the government's operating statement. NBN Co. would treat the subsidies as income in its financial accounts.

If payments to NBN Co. qualify as a subsidy expense, it would represent an increase in expenses in the operating statement. This would increase a budget deficit (as measured by the fiscal balance).

Source: McDuling (2012); Dalzell (2012)

1.2.2 Provision of subsidies for debt finance

An alternative to providing equity support is for governments to reduce the risk associated with institutional investment in rental housing or to provide subsidies for private debt finance such as those generated by exempting from tax the interest earned on loans made.

Risk profiles for affordable rental housing are often higher than for conventional mortgage finance because of the need for very long term loans, limited equity (resulting in high LVRs), and limited collateral value because of difficulties in evicting defaulting tenants or widespread use of covenants on the use to which the property can be put in case of foreclosure. Each of these factors can increase the risk premium on lending for such housing, whether this occurs directly from deposit–taking institutions or indirectly via the capital market. Subsidisation of the return on such lending, such as provided through interest rate subsidies or tax-exempt municipal bonds in the US and proposed for one of the tranches in the Housing Supply Bond proposal in Lawson et al. (2012), provide examples of this approach.

An alternative is to provide some protection for a securitised income stream. This can be achieved either by directly guaranteeing the rental stream (or loan

¹² Such protection, of course, is also relevant for institutional investment in the form of equity finance where this is reliant upon an income stream (in the form of rents) as well as capital growth.

repayments) or indirectly by the establishment of a reserve fund or liquidity facility (held in trust) to cover short-falls in payment of rent or loan repayments and/or establishment of a principal reserve fund to ensure that capital is repaid to bond holders on maturity (LeBlanc et al. 2009, pp.395ff). LeBlanc et al. make a distinction between:

- > insurance products devised to insure cash flows produced to buy the property
- → credit enhancement products applied to individual mortgages (and aimed at primary lenders) and
- → credit enhancement products applied to bonds issued to finance investment (aimed at achieving a AAA rating for the bonds).

Examples are rent insurance in the first category; guarantees of loans made to social housing institutions in the second category, and the complex structure of guarantees provided by the *Waarborgfonds Sociale Woningbouw* (a scheme that guarantees housing association lending) in the Netherlands in the third. Alternative or additional security can be provided by the availability of reserve funds that can be called upon in the event of late payment or default. In the main, the expectation is that reserve funds would not be called upon. Appropriate controls to ensure suitable projects are funded will assist with this. However, should this not be the case, additional funds will be needed to top up any funds.

As above, different forms of government funding will have different budgetary implications and will have different implications for the cost and availability of institutional finance. More detail on different forms of credit enhancement is provided in Supplementary Paper 3 (this volume).

1.2.3 Facilitating institutional investment

Where institutional investment is sought via the issues of asset backed securities, a third way in which government funding might be used to stimulate institutional investment is to create, or at least support the creation of, institutions designed to achieve this goal. One such institution could be a financial intermediary to issue these securities. Box 3 gives an example of an intermediary set up for specific infrastructure purposes. A case for a housing specialist financial intermediary is made in Lawson et al. (2012, pp.64–65). Support can be provided in a range of ways, such as the establishment of a reserve fund, or guarantees. Issues for government in providing such support are most likely to relate to questions of the extent to which the support results in a contingent liability that needs to be reported in its accounts, the extent to which such support will affect credit ratings, and the extent to which these can be mitigated by collaborative involvement across a number of jurisdictions.

¹³ Lawson et al. (2010, pp.44–46) provide detail on this last example.

Box 3: Clean Energy Finance Corporation

The CEFC is a \$10 billion fund (\$2 billion per annum from 2013) that was announced in 2011. It is dedicated to investing in clean energy, was set up to address market barriers that inhibit the financing of clean energy projects, and is able to offer long-term concessional finance to approved projects. It is intended to begin investment operations from 1 July 2013. This two-year pre-investment stage allows for the setting up of the Corporation (establishing the independent Board, agreeing on the investment mandate, engaging staff and setting up the critical infrastructure that will ensure transparent and accountable governance, strong risk management and best practice administration). The CEFC, as a general principle, seeks to co-finance investments. It can channel a proportion of its funds to the market through intermediaries and pooled funds but these must operate and manage funds under parameters consistent with the CEFC's investment mandate.

Source: Clean Energy Finance Corporation (2012)

A second such institution might be a unit with legislative responsibility for promoting institutional investment. This has been an essential step in attracting institutional investment for social purposes. In 2010, for example, the Productivity Commission highlighted that there was a lack of capital to promote the development of the NFP sector in Australia (Productivity Commission 2010). A subsequent enquiry by the Senate Economics References Committee (2011) examined in detail 'the barriers and options available to develop a mature capital market for the social economy sector in Australia', and called for greater government support to catalyse this market. The inquiry identified the need for a strategic approach to coordinating the opportunities for social economy organisations to access capital in Australia.

The central recommendation of the committee was to establish a Social Finance Taskforce similar to those which have operated successfully in the United Kingdom (UK Social Investment Task Force 2010) and Canada (Canadian Task Force on Social Finance 2010). The committee also recommended supporting financial intermediaries to connect social economy organisations with investors, build capacity in the social economy sector, educate investors, promote social investment products, strengthen social enterprise and develop a measurement framework. While it is not yet clear how government will act on these recommendations, linking action on this Social Finance Taskforce report to the aims for institutional investment in affordable rental housing is a logical next step. In Australia, a cross sectoral expert advisory group has recently advised on encouraging greater private sector investment in infrastructure, as outlined in Box 4.

Box 4: Infrastructure Finance Working Group (IFWG)

The IFWG was set up as an expert advisory body to Infrastructure Australia. Its 2012 report on infrastructure finance and funding reform recommends measures to encourage greater private sector investment in infrastructure projects. The working group's key recommendations are listed below. Many of these recommendations echo stakeholder views and industry sentiment about what will be required to develop a mature market for investment in affordable housing.

Reform funding

Increase capacity to invest through user charging; monetise existing assets; capture additional value from infrastructure investment; higher government priority on infrastructure funding; exploration of co-funding and other flexible funding models; incentivised Commonwealth payments to the states.

Better planning

Development of long-term strategic plans; development of 'transparent, robust and funded pipeline'; reduce costs of procurement by coordinating investment nationally.

Efficient markets

More flexible allocation of demand risk and refinancing risk; diversify sources of debt; facilitate greater superannuation investment.

Source: Infrastructure Finance Working Group (2012)

1.3 Combining private finance with public funding

The ultimate rationale that underpins a desire to stimulate the financing of rental housing through institutional investment is to increase the supply of rental housing in general, and affordable rental housing in particular. The need for supplementary public finance to stimulate the private finance required to build new affordable rental housing raises the question of how these are to be brought together. A formal or informal form of partnership between different levels of government and between government and the private sector is implied. Section 2.3.5 in the Final Report raises the question of whether use of public funds to underpin private finance represents a value for money solution and points to the need to assess the relative value of this compared with a public sector comparator.

Whether or not this use does represent value for money, there are many examples of successful use of public assistance to facilitate private finance and many lessons can be learned from this experience. For example, Austin (2008, p.2) reports that (formal) partnership models used successfully overseas to increase the supply of affordable rental housing have had a number of key components. These include:

- → Access to land at reduced cost (which could be a result of a discounted market price, use of leasehold or deferred payment arrangements, or generated from use of planning instruments).
- → Access to subsidised finance (e.g. grants, deferred loans or loans at below market interest rates).
- → Incorporation of debt finance based on a net income stream.
- → Management expertise (and, in particular, the capacity to manage development risk and on-going management risk).
- → Use of non-profit organisations to enable profits to be foregone, finance to be accessed on favourable terms and tax-exempt status to be maximised.

- → Targeting of moderate as well as lower income households and opportunities for cross-subsidisation within and between developments.
- → Local council support through planning process and contributions to partnership through resources and/or implicit subsidies.
- → Good quality design.
- → Support of local community.
- → Mechanisms that retain housing as affordable into the future. 14

She goes on to suggest that three interrelated steps are needed to develop successful formal partnerships: establishment of objectives and targets; identification of potential partners and resources; and selection of the appropriate model for each scheme. These steps are not sequential. Finding suitable partners may require revision of objectives, resources may not be available to meet target households, and the preferred model may require additional partners (Austin 2008, p.38).

The end result of this interrelated process—how much public assistance is available and how this is provided—is likely to affect the optimal approach to facilitating institutional investment. As raised above, different solutions to the financing task are likely to have different strengths and weaknesses in relation to a number of key factors affecting the choice between them. One assessment of these in terms of project risk management, transaction costs and the information and discipline that contribute to efficient investment decisions, is presented in Table 2 from a study of public infrastructure financing undertaken by Productivity Commission staff.

In this study Chan et al. (2009, p.9) make a number of points that are likely to be equally relevant for funding (affordable) rental housing.

- → The financing vehicle may promote capital market and governance disciplines that affect project selection and hence improve allocative efficiency. Information asymmetry is a major hurdle to allocative efficiency, and the financing vehicle may help address this problem.
- → Efficient financing depends on selecting a financing vehicle that minimises the total cost of finance over the lifetime of the infrastructure asset.
- → The total cost of finance is made up of: the return paid to the investors who provide the capital for the investment; any contingent liabilities arising from financial claims associated with the investment; transactions costs of negotiating and managing the financial vehicle, including any costs associated with delay in commencement of a project.
- → Transaction costs aside, in general the total cost of finance is minimised where the financing vehicle assigns project risks to those parties to the transaction that are best able to manage those risks.
- During the past two decades, significant innovation in project financing, credit enhancement and securitisation have contributed to the potential for increased financing efficiency, enabling a combination of debt and equity financing from both private- and public-sector sources.

¹⁴ In a study based on interviews with experts and stakeholders, Black (2012) proposes a similar range of actions for stimulating private sector participation in the development and financing of affordable rental housing in Canada.

Table 2: Comparing the characteristics of financing vehicles

Financing vehicle	Exposure to market or other discipline	Incentives for project risk management	Transactions costs
Government appropriation: PAYG	Low to medium: exposure to parliamentary scrutiny and subject to binding budget constraints	Low: depends entirely on quality of public management of procurement and operation	Low: but cash flow constraints could delay project and little flexibility as only assets sales allow restructuring of ownership
Government appropriation: government bonds	Low: exposure to parliamentary scrutiny	Low: depends entirely on the quality of public management of procurement and operation	Low: marginal cost of higher debt issue but little flexibility as only assets sales allow restructuring of ownership
Government appropriation: Intergovernment transfers	Low: exposure to parliamentary scrutiny could distort preferences	Low: depends entirely on quality of public management of procurement and operation and level of project monitoring by grantor	Low: as above but may have additional costs associated with project monitoring
Specific purpose bonds (not tax exempt)	Medium: intermediaries provide risk assessments and price in risk but weaker if governments offer some backing	Medium: requirement for user charges to service debt imposes disciplines, but depends on government assumption of contingent liabilities	Medium: requires intermediary assessment and underwriting costs
Specific purpose bonds (tax exempt)	Medium: as above, but maybe lower if tax exemption acts as an investment incentive (tax gain not fully passed into lower yields)	Medium: requirement for user charges to service debt imposes disciplines, but depends on government assumption of contingent liabilities	Medium: requires intermediary assessment and underwriting costs
Public private partnerships	Medium to high: depends on reliance on user charges or well designed service payments	High: as long as contracts allocate risk appropriately	High: contract negotiations are complex and can be lengthy

Source: Chan et al. (2009, p.xxiv)

In her World Bank overview of subsidies for rental housing, Hoek-Smit (2009, pp.447–48) concludes:

[D]elivering affordable rental housing can entail deep subsidies (depending on the country, total subsidies in social-rental housing projects can easily reach 40 or 50 per cent of project value). Usually, these subsidies cannot be provided by only one level of government. Indeed, a sound conclusion that has

emerged through the years is that the public sector alone cannot solve the housing problems of low-income households.

In most, if not all, countries, subsidies to affordable rental housing and, more generally, rental housing finance involve partnerships between different government levels, as well as between the government and the private sector. Attractive tax and subsidy packages are combined with contributions (e.g. in the form of land or equity, or guarantees) from various levels of government.

[E]fficient partnerships in the delivery of affordable housing are often difficult to put in place. ... Because of the specificities of the relations between the three levels of government, coordination between them has been a challenge both in terms of financial resources and in terms of leadership.

2 CREDIT ENHANCEMENT OPTIONS FOR STIMULATING INSTITUTIONAL INVESTMENT¹⁵

As indicated in Chapter 4 of the Final Report, one of the key messages that emerged from the consultation with Investigative Panel members was the need for some form of credit enhancement to meet the yield expectations of institutional investors while at the same time achieving housing affordability objectives. This paper expands on that chapter in two ways. First, it presents examples of where government guarantees have been used successfully and second, it identifies specific design options for further consideration that could be appropriate in the Australian context to ensure the viability of affordable housing projects involving institutional funding.

2.1 Credit enhancement precedents

There are a number of international precedents of government guarantees in the affordable housing sector that have unlocked construction activity and underpinned private institutional investment in affordable rental housing. There are also relevant examples from other socio—economic sectors.

- → In December 2012, the Coalition Government in the UK announced it would guarantee bonds issued by NFP housing associations in order to reduce their interest costs and stimulate more affordable housing starts. Already established as the UK's first guarantee-based housing supply model, the Scottish Government's National Housing Trust scheme was launched in 2010. Initially aimed at stimulating development of 2500 homes at submarket rents for 10 years, the scheme involves a debt warranty for participating social landlords (Pawson & Wilcox 2013).
- → The Netherlands, Switzerland and France each feature various specific housing guarantee structures (Lawson et al. 2010 provides a broad outline).
- → In the operation of its tax exempt bond and LIHTC program (briefly described in Chapter 2 of the Final Report), the US demonstrated the use of commercial credit enhancement, purchased from private guarantors prior to the GFC. These were structured as 'Letters of Credit,' available to service bond payments in the case of interruptions to cash flow, though not necessarily guaranteeing full return of capital. Often these 'first-call' Letters of Credit would still sit behind project-specific reserve funds in order of priority, which reduced their risk profile (and therefore their cost).
- → New Zealand Health provides a government letter of comfort, accompanied by extensive covenants, which ratings agencies see as less constraining that a broader guarantee.

Post-GFC, there is little evidence of commercially available credit enhancement as former providers are of variable creditworthiness while markets and trust recover. It is likely that the cost of any privately-sourced credit enhancement would cancel out the interest rate savings sought by this bond mechanism. This tenuous period in the recovery of the financial markets is another reason for temporary government participation in credit enhancing new rental housing activity, as in the Australian RMBS market where government also provided backing through the GFC.¹⁶

¹⁶ There are, however, many examples of where there is a market failure associated with information asymmetry between the small and medium size enterprises (SMEs) and potential lenders and where a credit guarantee scheme is a commonly used response to address the financing gap. SMEs typically are

¹⁵ This paper was researched and written by Carrie Hamilton, a member of the Investigative Panel with specialist expertise in financing affordable housing.

Domestically, student housing and state homeowner mortgage rate reduction programs both provide precedent and support for the effectiveness of this credit enhancement mechanism. While Western Australia does not have a guarantee per se for the Keystart homeownership program, the government did enter into a cash shortfall underwriting arrangement with the company¹⁷ (that has never been called on). All of Keystart's borrowings are already backed by financial assets—that is the underlying mortgages, just as rental housing securities are backed by the asset value of the underlying homes. It is counter to affordable housing goals for a lender to foreclose on this security and sell the rental properties; hence credit enhancement can provide a structured alternative in that instance.

The Keystart example demonstrates a further, almost intangible government role that satisfies the aim of all good credit enhancement—to provide investor comfort while not explicitly putting government at risk. Though it had issued its own securities, Keystart bonds are now issued by the state's Treasury Corporation in order to provide volume. While they do not carry a guarantee, these issues carry the imprimatur of government, which may provide some comfort to investors. This 'perceptual' enhancement is not free: connotations of moral hazard—of government pressured to bail out troubled securities or housing projects even while not contractually bound to do so—is the dominant reason why explicit guarantees are dismissed by government.

Once the state of Western Australia became the primary shareholder of Keystart, replacing an array of peak bodies and industry associations that initially 'owned' the company, the *Crown Suits Act* 1947 (WA), which provides that investors may sue government to recover a loss after the fact, came into play. Again, while not a formally provided indemnity, this provides some comfort for investors (though no losses have ever been experienced in this scrupulously-managed program).

2.2 Design options for credit enhancement

A guarantee component is never intended to bridge commercial feasibility. An underlying assumption of cost-effective government credit enhancement is the fundamental commercial viability of an affordable rental housing development, vetted through competitive tender with strict financial thresholds. The guarantee is assumed to be one layer of assistance alongside CRA, NRAS, and other government land/equity components necessary for reasonable return—without an unrealistic risk-premium. The guarantee is designed to bridge the investor's perception gap between perceived and actual risks. Guarantees or guarantee funds are never intended to be called upon. Since the overall goal of bond finance is to bring interest costs down, this reduction of the 'risk premium' is the central role of the credit enhancement.

Some options for design of an effective guarantee include:

- → A first-call reserve fund, either industry-based or project-based, would make the likelihood of a government guarantee being called more remote. (This is one form of overcapitalisation.) The fund would be intended to make bond payments while restructuring, allowing more time to cure prior to event of default.
- → Credit enhancement may be limited to guarantee solely:

limited in their access to credit by under-collateralisation, limited or no credit history and lack of expertise needed to produce sophisticated financial statements. See the Final Report of the OECD Centre for Entrepreneurship, *SMEs and Local Development*, issued in January 2013. At http://search.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=CFE/SME(2012)1/FINAL&doclanguage=En accessed 15 February 2013. The report shows that the use of public guarantee schemes is widespread across OECD and non-OECD economies and that these have expanded significantly in the aftermath of the 2008–09 financial crisis.

17

¹⁷ Keystart is a wholly owned subsidiary of DoHWA.

- → expected yield
- → rental income
- → income support program continuation
- → project sponsor performance
- → return of capital after expiry of a program
- → public purchase of dwellings if unsold.
- → Guarantees may be time-limited, capped or conditioned, being callable only under certain conditions or 'burning off' upon certain milestones where risk is concurrently reduced. This is appropriate after a development has been operating for a period of time and operating/construction default risks have lessened, or to bridge the temporary period until the new asset class of rental housing has established track record. The Australian National Accounting Office also suggests that 'termination clauses, subrogation clauses, and financial limits on liability' could also be incorporated into guarantees where possible.
- → Guarantees may be contained to various metrics that may provide comfort to investors and which may be hedged. For example, guarantee that CPI (with the view that rents increase at least in line) increases minimum 'x%' per year may help underpin investors' underwriting, or occupancy guarantees where the government is confident in housing need but the investor remains unconvinced.
- → Guaranteeing the continuance of income support mechanisms, such as CRA or NRAS (i.e. the Commonwealth making the future availability of these payments more explicit), may diffuse some policy risk while being no additional obligation than may already exist in Budget Estimates assumptions.
- → A Treasury guideline states that: 'As a matter of principle, risks should be borne by those best placed to manage them and the Australian Government should generally not accept risks which another party is better placed to manage.' Notional allocation may look like:
 - → New markets risk, policy risk—Commonwealth Government.
 - → Investment fundamentals risk—institutional investor.
 - → Tenancy risk—community housing tenancy manager, via capitalised reserve fund if inadequate balance sheet.
 - → Reputational risk—community housing Provider, as a private tenancy manager, must contain this risk from the private investor and the government.
- → Guaranteed buy-outs of unsold housing may also fit into a credit enhancement structure.
- → Tranching of the bond instrument and tailoring any credit support to those tranches can achieve efficiency. For example:
 - → A highly-rated debt tranche with government backing marketed to the superannuation fund sector.
 - → Next piece with modest risk to capital markets sector.
 - → Higher-risk mezzanine tranche to be purchased by states.
 - → Equity component from Commonwealth NAHA growth fund.
- → Reduce the 'moral hazard' concern by operating the rental housing developed under this initiative as meaningfully private, not an extension of social housing by another name. Robust management by CHOs under residential tenancies

legislation, no suggestion of indefinite tenure, high-quality development of quality housing that is indistinguishable from non rent-restricted housing should all be thresholds.

→ Some guarantees have mechanisms for being recovered after the fact. For example, a financial claims scheme guarantees deposits whereby if one bank falls over, government may charge all others to recoup its loss. However, this industry-wide spread of risk is perhaps inappropriate in an emergent industry where the goal is to develop activity.

Ultimately, all players structuring a model or deal have considerable room for subjective appraisal of housing investment return and credit support impact. In the end, someone must take a reasoned view, using as much information as possible. There is considerable scope for forceful leadership and coherent case-making in finding a meeting point between private sector return/credit support expectations and public sector ability to bridge. In general, the housing sector needs to 'sell' itself more consistently to those whose role is to form a view as to its creditworthiness.

3 FACILITATING INSTITUTIONAL INVESTMENT IN RENTAL HOUSING: UK DEVELOPMENTS

This paper reviews the recent debate on stimulating institutional investment in rental housing in the UK, seen as relevant because of the great similarity between the UK and Australia in terms of the 'liberal market' legal/regulatory frameworks for private rental housing in the two countries. The striking parallels between this research and the recently unfolding policy debate in the UK are highlighted in the similarity of the terms of reference set for this Australian study to those set by the UK Government for the recent independent review of the potential for institutional investment in the private rental sector (Montague 2012). However, the Montague agenda differed from the AHURI brief in that it included little explicit emphasis on the generation of affordable rental housing and was more influenced by a Ministerial priority to boost the house-building industry through the promotion of a 'build to rent' ethic. Many of the present report's conclusions and recommendations closely mirror those generated by Montague, despite being developed entirely independently.

This review of developments in the UK looks at the motivations behind recent policy-maker attention to this topic and at the perceived barriers to greater institutional investor activity. It then discusses the kinds of financial institutions considered as being the most likely players in this arena, the mechanisms through which local analysts consider this might be brought about, and the policy interventions that they consider could potentially stimulate such engagement.

3.1 Background

Official efforts to channel private finance into the provision of rental housing have been longstanding in the UK (Kemp 2004; Crook & Kemp 2011). An important early milestone in the UK was the *Housing Act* 1988 which established a mixed funding regime for housing associations, thereby enabling associations to secure bank loans alongside government grant funding for new development. Critical here was Treasury agreement that, reconfigured as 'independent' organisations outside direct state control, association borrowing would not be accounted for as public debt (Malpass 2000).

Since the 1980s there has been a strong cross-party political consensus in favour of an expanded private rented sector (PRS). In the UK, as in other countries, this is connected to an argument that a plentiful supply of private rental housing is an important contributor to a flexible labour market (Scanlon & Kochan 2012). A secondary aspiration, again shared to some extent with governments internationally, has been for private rented housing to play a larger role in accommodating low income households (Hulse & Pawson 2010).

3.2 The case being made for facilitating institutional investment in rented housing in the UK

While the UK PRS more than doubled in the two decades to 2011 (Pawson & Wilcox 2013) this was facilitated almost entirely through small investor activity, largely financed through 'Buy to Let' mortgage finance (Rugg & Rhodes 2008). Partly due to the failure of government initiatives aimed at attracting institutional investment (e.g. Housing Investment Trusts), large scale investors have played virtually no part in this process.

However, the policy goal of attracting institutional investment into rental housing has once again come to the fore since the 2010 change of government (Crook & Kemp

2011). This partly reflects a 'housing policy' recognition that there is a need for continued growth of private renting to accommodate the growing sections of the population excluded from both home ownership and social renting and the related increase in the numbers of households renting for longer periods.

Hence, it has been recently argued that only through harnessing extensive institutional investment will it be feasible for private rented sector (PRS) expansion to continue along its recent growth trajectory. According to Savills, the number of private renters in the UK is predicted to grow from 3.4 million to 5.9 million in the decade to 2016, calling for £200 billion in investment, of which only about £50 billion can be expected from Buy to Let mortgage finance made available to small landlords (Savills 2012).

Within this context, as seen by Alakeson (2011, p.14): 'Institutions could [not only] support the necessary expansion of the sector ... [but also] shift the nature of the product the sector is able to provide because long-term security for tenants translates into predictable returns for investors.' Similarly, Stephens and Williams (2012, p.12) have argued that any form of effective subsidy to such investors should be conditional on 'the housing remaining in the rental sector for a minimum period ... and on improvements in the security offered to tenants compared to the normal insecure tenancies that are offered by small scale landlords'.

More broadly, there is policy-maker recognition that the UK's historic undersupply of new housing has been greatly exacerbated by the post-2008 credit crunch; residential construction has subsequently continued to run at only around two-thirds of previous rates (Pawson & Wilcox 2013). Allied to this is the observation that 'growth in the rented sector [as cited above] has generally not contributed to the supply of new housing' (Montague 2012, para 4). This refers to an estimate that only 10 per cent of recent sector growth has involved the commissioning or purchase of newly built homes (National Housing and Planning Advice Unit 2008).

Post-2010, therefore, the policy priority accorded to institutional investment in private rental reflects a desire to stimulate a new 'build to let' dynamic. And, as the Montague report makes clear (2012, para 5), equal in importance to expanding housing supply, is the aspiration for boosting housing construction to stimulate the moribund UK economy.

However, it is important to recognise that the policy priority currently accorded to growing the PRS through institutional investment is not without its critics. While endorsing the objective of continued sector expansion, some contend that policy-makers should 'go with the flow' by focusing mainly on fostering ongoing growth of small scale investor activity. Similarly, commentators such as Rugg and Rhodes (2008) and Ball (2010) have argued that advocates for institutional investment and professionalised management need to recognise that:

- → The semi-informal quality of much small landlordism can have advantages, for example in the fact that such landlords often commit considerable 'sweat equity' to the business.
- → The success of large institutional landlords in the commercial property sector does not necessarily translate directly across to residential property because there are certain fundamental differences in the legal and administrative frameworks.
- → The scope for scale economies in the residential sector is likely to be highly dependent on portfolio profile—for example the extent to which this involves large, wholly owned blocks.

→ Far from being internationally unusual, the UK's small landlord dominated private rented sector is similar to the norm among most high income countries.

3.3 UK barriers to institutional investment in rental housing

If institutional investment is to be attracted into rental housing there is a logical need to identify and understand the barriers that have, until now, prevented this. As in Australia, for most UK analysts addressing this issue, the overriding obstacle has been the reported inadequacy of rates of return, relative to those that investors may derive elsewhere. For example, citing Investment Property Databank (IPD) figures, HM Treasury estimated recent net *rental returns* as averaging only 3.3–3.6 per cent as compared with 6–7 per cent believed to be required by institutional investors (HM Treasury 2010).

However, evidence put to the Montague inquiry 'challenged the perception that yields in the sector would always be insufficient to attract investment, particularly when compared to commercial property' (Montague 2012, para 24). Similarly, the Future Homes Commission (2012, p.25) estimated that, at over 10 per cent, yields realisable in current housing market conditions could be '... attractive to any institutional investor ...'. Nevertheless, in Montague's view, 'to bring pure income returns into investors' target horizons it will be necessary to bear down on land, construction and management costs' (2012, para 25). By implication, therefore, acceptable rates of return could be generated through effective subsidy of development costs (e.g. the provision of discounted public land) and/or management efficiencies potentially achievable through large scale block procurement.

Clearly, this debate is often confused by ambiguous references to rates of return on a net or gross basis and by the selective or otherwise inclusion of capital growth as well as rental income. Relevant here, however, is the observation that if rental housing is to provide an effective magnet for institutional investment on a stable and long-term basis, it will need to generate returns which are attractive purely on a rental income basis—such that their realisation does not rely on property sale (although scope for return of capital will still be an issue).

In addition to the rates of return issue, three other barriers to institutional investment have been emphasised in the recent debate. Firstly, there is the issue of scale. According to the Future Homes Commission (2012, p.21), while they might otherwise view rental housing investment as attractive (see below), 'local authority pension funds lack the scale and expertise to be able to invest with confidence in local property developments'. Hence, realising the potential of such funds may call for the pooling of funds in a new entity established for this purpose.

Secondly, it is important to distinguish between the financing of initial housing development and ongoing housing provision (Alakeson 2012). Concurring with the view that underwriting the construction phase is a particular barrier, the Future Homes Commission (2012, p.16) reported that institutional investors '... are looking to put their money into the equivalent of a fully let retail park'. As acknowledged by Alakeson, a commitment to development finance would be '... a relatively risky proposition for investors and one for which it is particularly hard to make a case when investors do not have any track record in the sector' (Alakeson 2012, p.3). Moreover, obtaining development finance has been made more difficult in the post-GFC lending climate, and raising such funds without a certain buyer further raises the cost of borrowing.

Thirdly (although less directly relevant to the Australian case, given different tax structures), there has been debate on whether the residential Real Estate Investment Trust (REIT) framework has been excessively constrained. As originally established in

2007, the residential REIT framework aimed to facilitate vehicles through which investors can take an interest in residential property without their income being subject to 'double taxation' (first, as company income, second as individual-investor income). However, the first few years of the new retime saw no such bodies in fact created, amid claims that the rules governing REIT establishment and administration were unnecessarily stringent.

3.4 Potential sources of institutional investment

In the housing policy literature, the term 'institutional investment' has often been cited in a fairly unspecific way. However, the debate in the UK has recently become more nuanced and precise. Hull et al. (2011, p.16) were among the first to argue that, 'if there is to be substantial institutional investment [in rental housing] most of the money will have to come from the domestic insurance and defined benefits pension funds'. In particular, local authority pension funds were identified as the most promising area. Prospects were considered less encouraging as regards other types of institutions such as hedge funds, private equity, sovereign wealth funds and commercial property funds.

More recently, the Future Homes Commission (2012, p.17) argued that housing expansion could be kick-started through 'concerted action by local authority pension funds'. While managing assets valued at £182 billion, these institutions were reportedly 'desperate for better returns' (Future Homes Commission 2012, p.19), following more than a decade of falling funding ratios—the extent to which projected future liabilities are covered by current assets. Thus, the Commission believed that promising prospects arose from fund managers' 'need[ing] to achieve higher returns than they are getting in the equity or bond markets' (2012, p.17), but also [potentially] influenced by municipal awareness of affordable housing shortages in the local area.

Hence, according to the Commission, municipal pension funds had been recently 'looking to diversify their investment portfolios by reducing their allocation to equities and increasing their allocations to real estate, private equity and infrastructure investments' (2012, p.20). Similarly, it has been observed that, because of the tendency for market rents to rise closely in line with earnings, rental housing may be attractive to pension funds seeking to 'match their liabilities' in terms of obligations on index-linked payments to beneficiaries (Montague 2012). Williams et al. (2011) also saw evidence that the time might be ripe for institutional investment in rental housing in the observation that pension funds had recently displayed increased willingness to invest in 'less traditional' asset classes—notably hotels and student housing.

Taking all of the above into account and factoring in 'conservative assumptions', the Future Homes Commission (2012, p.25) estimated that 'the total pool of UK pension fund and financial institutions assets available to invest in ... rental housing would exceed £60 billion'.

During 2012, the housing professional press and elsewhere instanced a growing number of cases where local authority pension-funded housing projects were being reportedly progressed, often incorporating contributions of municipal land. Press reports in the latter part of 2012 referred to such schemes going forward in a number of areas across the UK including Edinburgh, Islington and Manchester. Nevertheless, until such projects progress to the development phase it is probably appropriate to retain a degree of scepticism about their prospects.

23

¹⁸ Dividend imputation in Australia has eliminated 'double taxation'. Any tax paid by the trust is passed through in the form of franked dividends to the investor.

3.5 Possible institutional investment models, mechanisms and incentives

Picking up on the distinction between financing rental housing *development* versus underwriting *housing provision*, Montague (2012, para 32) noted the importance of 'Linking institutions with the development pipeline ... perhaps through guaranteed take-outs—that is, developments which are fully built out and let—allowing developers to accept a lower rate of return for de-risking their output'.

Also addressing the specific need to catalyse the development phase, and drawing on work undertaken elsewhere (BSHF 2012), Alakeson (2012) outlined a model in which housing associations would play the central role. In his view, utilising associations in this way would capitalise on specific features common to many larger housing associations; especially their ability to raise development finance at relatively competitive rates and their tolerance for rates of return lower than those required by private developers.

Under this 'revolving fund' model, schemes newly completed by associations 'would be sold on to an investment fund which would buy and hold the units for the long term' (Alakeson 2012, p.4). The associations would then re-cycle their receipts into subsequent development tranches. Alternatively, if a buyer could not immediately be found, associations could retain scheme ownership and draw on the associated rental income stream and/or exit involvement through disposal into a REIT (see below), in which the association might retain an equity stake. Irrespective of possible ownership handover, associations could potentially retain the management of the homes developed to 'insulate investors from day-to-day issues with tenants and mitigate any reputational issues for investors' (Alakeson 2012, p.5).

Instances apparently resembling the above model have, indeed, already begun to occur. Early in 2013 it was reported that M&G Investments (a branch of Prudential) had purchased a 401 home development from Genesis Housing, whereby the association would make inflation-linked payments to the investor over 35 years, while retaining management of the homes (Hollander 2013). This followed on from reports that London & Quadrant planned to develop and acquire 1,000 private rented homes over two years, with the possibility of selling these on to an institutional investor 'in the medium term' (Social Housing 2012).

In the longer term, Alakeson (2012, p.5) argued that the proposed 'intermediary' developer role of housing associations might become unnecessary as, with greater confidence and familiarity, 'investment could be drawn into the sector at the development stage or guaranteed at the point at which the units were built and let'.

In some respects similar was the arrangement outlined by the Future Homes Commission (2012), in which local authority pension funds would act as a 'revolving fund' in underwriting initial development costs of rental housing schemes, with the possibility of the schemes then being sold on to other institutions (e.g. non-municipal pension funds), with the originally committed development finance then becoming available for recycling into new projects.

3.6 Making institutional investment happen

In supporting calls for increased institutional investment in rental housing, a number of policy and regulatory reforms have recently been advocated in the UK. Firstly, there have been proposals aimed mainly at enhancing potential rates of return through reducing scheme development costs. For instance, the Montague Report argued that the UK Government should carry through an existing commitment to release public

sector land for house-building, as well as freeing up rules which normally outlaw discounted asset disposals by local authorities and other public bodies.

Echoing Alakeson (2012) and also relevant to minimising development costs, Montague also called for local authorities to be encouraged to use planning conditions to require that new homes developed for rent remain as such for a specified period—at least 10 years, but possibly as long as 30 years. The result would be that 'land values used in calculating developers' and investors' business plans would reflect the land values based on rental tenure rather than theoretical valuations based on sale' (Montague 2012, para 49). As emphasised by Alakeson, current planning rules would allow the above—they would not require the creation of a separate planning class for private rented housing.

Secondly, there have been proposals for regulatory relaxation which would facilitate the development of 'build to let' schemes and/or institutional investment in rental housing. On the former, the Montague Report (para 49) advocated that 'in many cases it will be appropriate for authorities to waive [land use planning] affordable housing requirements in relation to schemes for private rental'. On the latter, Ministers launched a consultation in 2012 seeking views on raising the limit for municipal pension fund investment in infrastructure projects from 15 per cent to 30 per cent (DCLG 2012c). Also in 2012, the UK Government announced 'fine tuning' reforms to the REITs' regime in an attempt to stimulate interest. Press reports that major housing associations are looking to launch REITs as vehicles for market rent projects (Hollander 2012) suggest that, suitably modified, the model may finally bear fruit.

Responding to the Montague recommendations, the UK Government has committed to a range of actions including:

- → Establishment of a £200 million 'Build to Rent' (BTR) fund to 'test the viability of and institutional appetite for a range of propositions' (DCLG 2012b, p.3) and where it is assumed that, once completed, a scheme will be sold on to an investment fund (or refinanced), enabling the initially committed capital to be recycled.
- → A £10 billion debt guarantee scheme, which will enable access to lower cost borrowing for developers constructing BTR schemes.
- → A 7-strong expert task force headed by a well-paid executive is being recruited to 'offer ... expertise to the promoters of private rented sector propositions (DCLG 2012b).

Since all of the above have been only recently announced at the time of writing, many details on how they will operate have yet to emerge. However, initial response to the guarantee scheme was muted partly because housing associations nonetheless remain constrained by existing lender covenants and cover ratios that limit additional borrowing.

3.7 UK overview

Energised by the urgent aspiration to kick-start economic activity through build-to-let, the past two years have seen the strong re-emergence of policy-maker attention to institutional investment in rental housing in the UK. Some experts have discerned growing signs of a decisive shift in market fundamentals such that, enabled by only modest government intervention, a critical threshold for large-scale activity has come within sight. While recently announced plans and projects suggest that a step change in this area might indeed materialise, prospects remain as yet uncertain.

Little remarked upon in the recent debate has been the shifting focus of ambition in favour of rental housing development unqualified by any requirement on 'affordability'. Indeed, in its recommendations around land-use planning, the Montague Report positioned rental housing procured through institutional investment directly in opposition to affordable housing. Policy innovations arising from the Montague proposals will, if successful, yield additional accommodation made available at market prices. Unless supplemented by additional government support (e.g. through targeted subsidies or tax breaks) they will not substitute for the reduced supply of social or 'affordable' housing resulting from post-2010 public expenditure cuts (Pawson & Wilcox 2013).

REFERENCES

- AHNRC 2001, Policy options for stimulating private sector investment in affordable housing across Australia. Affordable Housing National Research Consortium (AHNRC) and Australian Housing and Urban Research Institute (AHURI), Melbourne.
- Alakeson, V 2012, Making institutional investment in the private rented sector work; Resolution Foundation, London. http://www.resolutionfoundation.org/media/media/downloads/Making_Institutitional_Investment_in_the_Private_Rented_Sector_Work.pdf, accessed 21 January 2013.
- _____ 2011, Making a rented house a home: Housing solutions for 'Generation Rent', Resolution Foundation, London.
- Allen Consulting Group 2004, *Better housing futures: Stimulating private investment in affordable housing*, Brotherhood of St Laurence, Sydney.
- Atchison Consultants 2012, *PFA Investment Report: Property performance research*, http://denisonfm.com.au/library/pdf/PFA_Investment_Report_September_2012.
- Austin, T 2008, Public private partnerships for funding affordable housing developments in New Zealand, http://www.housinginstitute.org/events/Public_Private_Partnerships_Trish_Austin.pdf> accessed 5 December 2012.
- Australian Accounting Standards Board (AASB) 2011, Fair value measurement, AASB 13, September 2011, http://www.aasb.gov.au/admin/file/content105/c9/AASB13_09-11.pdf accessed 22 January 2013.
- Australian Government 2012, *National Rental Affordability Scheme monthly performance report 31 October 2012*, January 2012, <a href="http://www.fahcsia.gov.au/our-responsibilities/housing-support/programs-services/national-rental-affordability-scheme-performance-reporting-accessed 11 January 2013.
- _____2008, Nation-building Funds Act, http://www.comlaw.gov.au/Details/ C2008A00154/Download> accessed 30 July 2012.
- Australian Prudential Regulation Authority (APRA) 2013, Annual Superannuation Bulletin, June 2012 http://www.apra.gov.au/Super/Publications/Documents/June%202012%20Annual%20Superannuation%20Bulletin.pdf accessed 18 January 2013.
- _____2012, Annual Superannuation Bulletin, http://www.apra.gov.au/super/publications/documents/june%202011%20annual%20superannuation%20bulletin.pdf> accessed 2 September 2012.
- Abt Associates Inc. 2012, What happens to low income housing tax credits at 15 years and beyond, Report for the Department of Housing and Urban Development, http://www.huduser.org/portal/publications/hsgfin/lihtcreport2012.html accessed 13 September 2012.
- Ball, M 2010, *The UK private rented sector as a source of affordable accommodation*, Joseph Rowntree Foundation, York.
- Berry, M, Whitehead, C, Williams, P & Yates, J 2004, Financing affordable housing: A critical comparative review of the United Kingdom and Australia, Final Report 72, AHURI, Melbourne.

- Black, J 2012, The financing and economics of affordable housing development: Incentives and disincentives to private-sector participation, Research Paper 224, Cities Centre, University of Toronto, http://www.citiescentre.utoronto.ca/Assets/Cities+Centre+Digital+Assets/pdfs/publications/Research+Papers/224+Black+Affd+Housing+Finance+2012.pdf accessed 15 January 2013.
- Black, S, Rogers, L & Soultanaeva, A 2012, 'Household's appetite for financial risk', *Reserve Bank of Australia Bulletin*, June, pp.37–42.
- Building and Social Housing Foundation (BSHF) 2012. *Building new homes for rent: Creating a tipping point*, The Foundation, Coalville.
- Canadian Task Force on Social Finance 2010, *Mobilizing private capital for public good*; TFSF http://socialfinance.ca/uploads/documents/FinalReport_MobilizingPrivateCapitalforPublicGood_30Nov10.pdf accessed 21 Jan 2012.
- Chan, C, Forwood, D, Roper, H & Sayers, C 2009, *Public infrastructure financing—an international perspective*, Productivity Commission Staff Working Paper, March.
- Chiquier, L & Lea, M (eds) 2009, Housing finance policy in emerging markets, World Bank. http://siteresources.worldbank.org/FINANCIALSECTOR/Resources/HousingFinanceforEMs_Ebook.pdf accessed 10 December 2012.
- Clean Energy Finance Corporation 2012, Report of the expert review panel, http://www.cefcexpertreview.gov.au/content/report/downloads/CEFC_report.p df> accessed 18 April 2012.
- Connolly, E & McGregor, D 2011, 'Household borrowing behaviour: Evidence from HILDA', Reserve Bank of Australia Bulletin, March, pp 9–14, http://www.rba.gov.au/publications/bulletin/2011/mar/index.html accessed 22 August 2011.
- Connolly, N 2012, Australians and infrastructure investment, Russell Research, http://www.russell.com/AU/_pdfs/capital-markets-reserach/research/2012-March-AusAndInfra.pdf accessed 13 December 2012.
- Croce, R, Stewart, F & Yermo, J 2011, 'Promoting longer-term investment by institutional investors: Selected issues and policies', *OECD Journal: Financial Market Trends*, no. 1, pp.1–20, http://www.oecd.org/insurance/48616812.pdf accessed 20 January 2013.
- Cox, J & Jones, M 2011, 'Sale and leaseback offers new funding route, but involves index-linked pricing risk', *Social Housing*, vol. 23, no. 11.
- Crook ADH & Kemp, PA 2011, *Transforming private landlords*, Wiley Blackwell, Oxford.
- Dalzell, B 2012, 'The national broadband network and the federal government budget statements', *Parliamentary Library Background Note*, http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BN/2011-2012/NBNBudgetStatements accessed 21 November 2012.
- Department for Communities and Local Government (DCLG) 2012a, Housing and growth—Parliamentary statement by the Right Hon Eric Pickles, Secretary of State for Communities and Local Government, http://www.communities.gov.uk/statements/corporate/housingandgrowth>accessed 21 January 2013.

- _____ 2012b, Build to Rent Fund, Prospectus, December 2012, http://www.homesandcommunities.co.uk/sites/default/files/our-work/build_to_rent_fund_prospectus.pdf> accessed 7 January 2013.
- Department for Communities and Local Government 2012c, *Local Government Pension Scheme: Investment in partnerships*, Consultation, DCLG, London.
- Deans, C & Stewart, C 2012, 'Banks' funding costs and lending rates', *Reserve Bank of Australia Bulletin*, March 2012, pp.37–43.
- Deloitte Access Economics 2011, Increasing affordable housing provision through the Victorian community housing sector, Report for CHFV, CHFV, Melbourne, http://chfv.org.au//uploads/File/CHFV%20Cover%20letter%20and%20Deloitte%20Access%20Economics%20Report.pdf.
- Donovan, B & Gorajek, A 2011, 'Developments in the structure of the Australian financial system', *Reserve Bank Bulletin*, June, pp.29–40.
- Dreier, P 2006, 'Federal housing subsidies: Who benefits and why?' in RG Bratt, ME Stone & C Hartman (eds), *A right to housing*, Temple University Press, Philadelphia, pp.105–138.
- Ernst & Young 2012, Strong foundations for sustainable local infrastructure: Connecting communities, projects, finance and funds, <www.regional.gov.au/local/lgifr/files/Strong_foundations_20120615.pdf> accessed 18 June 2012.
- _____ 2011, Financing Australia's infrastructure needs: Superannuation investment in infrastructure, http://www.ey.com/Publication/vwLUAssets/ Financing_Australia_infrastructure_needs/\$FILE/Superannuation_Investment_ In_Infrastructure.pdf> accessed 6 August 2012.
- Fabbro, D & Hack, M 2011, 'The effects of funding costs and risk on banks' lending rates', *Reserve Bank of Australia Bulletin*, March 2011, pp.35–41.
- Firzli, M & Bazi, V 2011, 'Infrastructure investments in an age of austerity: The pension and sovereign funds perspective', *Revue Analyse Financière*, no. 41, pp.34–37, http://worldpensions.org/uploads/Infra_Investments...Pension_SWF_Perspective__4Q_2011.pdf accessed 20 January 2013.
- Future Homes Commission 2012, *Building the homes and communities Britain needs*, Royal Institute of British Architects, London, http://www.architecture.com/Files/RIBATrust/FutureHomesCommissionLowRes.pdf> accessed 21 January 2013.
- Gerrard, M 2001, 'Public-Private Partnerships', *Finance and Development*, vol. 38, no. 3, http://www.imf.org/external/pubs/ft/fandd/2001/09/gerrard.htm. accessed 5 December 2012.
- Gilmour, T & Milligan, V 2012, 'Let a hundred flowers bloom: Innovation and diversity in Australian not-for-profit housing organisations', *Housing Studies*, vol. 27, no. 4, pp.476–494.
- 2009, 'Stimulating institutional investment in affordable housing in Australia: Insights from the US' in T Dalton, V Colic-Peisker, E Taylor & R Muir (eds), Refereed papers presented at the 3rd Australasian Housing Researchers Conference, 18th-20th June 2008, CD-ROM, RMIT University, Melbourne.
- Hamilton, C 2012, 'Housing supply bonds: Thoughts from the vision down to the details', *Housing Action Network*, 27 July 2012.

- Heath, J 2013, 'Outspoken McKibbin far from retiring', *Australian Financial Review*, 8 January 2013, http://afr.com/p/national/outspoken_mckibbin_far_from_retiring_sBNWqnyc8CALb8Z5bDHNgL accessed 8 January 2013.
- Heywood, A 2010, *Investing in social housing*, The Housing Finance Corporation, http://www.thfcorp.com/investing/THFC%20-%20Investing%20in%20Social%20Housing%20230510.pdf accessed 9 January 2013.
- Hoek-Smit, M 2009, 'Housing subsidies', chapter 16 in L Chiquier & M Lea (eds), op. cit
- HM Treasury 2010, *Investment in the UK private rented sector*. Housing Supply Bonds: Thoughts from the vision down to the details, http://www.hm-treasury.gov.uk/d/consult_investment_ukprivaterentedsector.pdf> accessed 21 January 2013.
- Hollander, G 2012, 'Landlords jump on REIT bandwagon', *Inside Housing*, 1 November, http://www.insidehousing.co.uk//6524443.article accessed 21 January 2013.
- Hollander, G 2013, 'Investor ploughs £125m into groundbreaking PRS deal', *Inside Housing*, 13 January, accessed 21 January 2013.">http://www.insidehousing.co.uk/finance/investor-ploughs-%C2%A3125m-into-groundbreaking-prs-deal/6525252.article>accessed 21 January 2013.
- House of Commons 2012, *Financing of new housing supply*, Parliament of the UK, London, http://www.parliament.uk/business/committees/committees-a-z/commons-select/communities-and-local-government-committee/inquiries/financing-of-new-housing-supply/> accessed 21 January 2013.
- Housing Ministers Advisory Council (HMAC) 2012, *Public consultation on the national regulatory system for community housing: Final report*, http://www.nrsch.gov.au/NR/rdonlyres/83C8660E-6EE3-4F86-80C1-92D2D8095E98/0/NRSCHPublicConsultationsFinalReport.pdf
- Hull, A, Cooke, G & Dolphin, T 2011, *Build now or pay later: Funding new housing supply*, Institute for Public Policy Research (IPPR), London, http://www.ippr.org/images/media/files/publication/2011/10/build-now-pay-later_Oct2011_8116.pdf> accessed 21 January 2013.
- Hulse, K, Burke, T, Ralston, L & Stone, W 2012, *The Australian private rental sector:* Changes and challenges, Positioning Paper 149, AHURI, Melbourne.
- Hulse, K, Milligan, V & Easthope, H 2011, Secure occupancy: Conceptual foundations and comparative perspectives, Final Report 170, AHURI, Melbourne.
- Hulse, K & Pawson, H 2010, 'Worlds apart? Low income households in the private rental sector in the UK and Australia', *International Journal of Housing Policy*, vol 10, no. 4, pp.399–419.
- Hurley, B & Wilmot, B 2012, 'Super funds could back cheap homes', *Australian Financial Review*, 31 May, p.43.
- Infrastructure Finance Working Group 2012, Infrastructure finance and funding reform, Infrastructure Finance Working Group's final report, April, http://www.infrastructureaustralia.gov.au/publications/files/IFWG_Report_FINAL.pdf accessed 30 July 2012.

- JCHS 2010 Long-term low income housing tax credit policy questions, Joint Center for Housing Studies, Harvard University, http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/long-term_low_income_housing_tax_credit_policy_questions.pdf accessed 24 January 2013.
- Jones, C 2007, 'Private investment in rented housing and the role of REITS', *European Journal of Housing Policy*, vol. 7, no. 4, pp.383–400.
- Kemp, P 2004, *Private renting in transition*, Chartered Institute of Housing, Coventry.
- KPMG 2012a, Social housing. A discussion paper on the options to improve the supply of quality housing, Report for the Victorian Department of Human Services, April, http://www.dhs.vic.gov.au/__data/assets/pdf_file/0004/709402/housingframework_socialhousingoptions_30042012.pdf accessed 1 May,2012.
- _____ 2012b, Social Housing Initiative Review, September, http://www.fahcsia.gov.au/our-responsibilities/housing-support/publications-articles/social-housing-initiative-review accessed 12 January 2013.
- 2010, Barriers to the creation of a long-term affordable housing investment class, Response to FaHCSIA Discussion Paper, Australian Government, http://www.kpmg.com/AU/en/IssuesAndInsights/ArticlesPublications/Docume nts/Barriers-to-the-creation-of-a-long-term-affordable-housing-investment-class-June-2010.pdf> accessed 12 January 2013.
- Lawson, J Gilmour, T & Milligan, V 2010, International measures to channel investment towards affordable rental housing, Research Paper, AHURI, Melbourne.
- Lawson, J, Milligan, V & Yates, J 2012, Housing supply bonds—a suitable instrument to channel investment towards affordable housing in Australia?, Final Report 188, AHURI, Melbourne.
- LeBlanc, D, Green, R & Tiffin, C 2009, 'Residential rental housing finance', chapter 14 in L Chiquier & M Lea (eds), op.cit.
- Liondis, G 2013, 'Cheaper funds may ease rates', *Australian Financial Review*, 11 January 2013.
- Malpass, P 2000, Housing associations and housing policy, Macmillan, Basingstoke.
- McDuling, J 2012, 'Govt hiding up to \$10bn of NBN price tag', *Australian Financial Review*, 6 August.
- McNelis, S, Hayward, D & Bisset, H 2002, A private retail investment vehicle for the community housing sector, Final Report 21, AHURI, Melbourne.
- Milligan, V Hulse, K & Davison, G 2013 (forthcoming), *Understanding leadership, strategy and organisational dynamics in the not-for-profit housing sector*, Final Report, AHURI, Melbourne.
- Milligan, V, Gurran, N, Lawson, J, Phibbs, P & Phillips, R 2009, *Innovation in affordable housing in Australia: Bringing policy and practice for not-for-profit housing organisations together*, Final Report 134, AHURI, Melbourne.
- Milligan, V, Phibbs, P, Fagan, K & Gurran, N 2004, A practical framework for expanding affordable housing services in Australia: Learning from experience, Final Report 65, AHURI, Melbourne.

- Montague, A 2012, Review of the barriers to institutional investment in private rented homes, Department for Communities and Local Government, London, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/15547/montague_review.pdf accessed 21 January 2013.
- Murja Ltd. 2012, Report on long-term funding options, Scottish Federation of Housing Associations,
 At http://www.scottish.parliament.uk/S4_InfrastructureandCapitalInvestmentCommittee/SFHA_Report.pdf accessed 21 January 2013.
- National Housing and Planning Advice Unit 2008. Buy-to-let mortgage lending and the impact on UK house prices, DCLG, London.
- National Housing Supply Council (NHSC) 2012, Housing supply and affordability key indicators 2012, Australian Government, Canberra.
- _____ 2011, 3rd state of supply report, Australian Government, Canberra.
- Nicholas, A 2011, 'Property: finding the right key to unlocking liquidity', Financial *Times Investment Adviser*, 25 April 2011, http://www.firststate.co.uk/uploadedFiles/CFSGAM/News/NewsEnGB/Investment%20Adviser%20A%20Nicholas%20Property%20250411%281%29.pdf accessed 18 January 2013.
- NSW Registrar of Community Housing 2010a, *The regulatory framework*, http://www.rch.nsw.gov.au/NR/rdonlyres/313919C0-D510-43BB-A829-9DC6F2061F3D/0/ltem2RegulatioryframeworkAvivaForWeb.pdf accessed 21 January 2013.
- Pawson, H 2013, 'Commentary Chapter 4: Housing expenditure plans' in H Pawson & S Wilcox (eds), *UK housing review 2013*, Chartered Institute of Housing, Coventry.
- _____ 2012, 'The changing scale and role of private renting in the UK housing market' in H Pawson & S Wilcox (eds), *UK housing review 2011/12*, Chartered Institute of Housing, Coventry.
- Pawson, H. & Wilcox, S 2013, *UK housing review 2013*, Chartered Institute of Housing, Coventry.
- _____ 2012, *UK housing review 2011/12*—commentary chapter 4, Chartered Institute of Housing, Coventry, http://www.ukhousingreview.org.uk/>
- Perpetual 2011, Residential investment property or real estate investment trusts? http://www.perpetual.com.au/pdf/29007_GuideTo_RIProperty-WL.pdf accessed 8 May 2012.
- Preqin 2012, *The 2012 Preqin sovereign wealth fund review. Executive Summary*, http://www.preqin.com/docs/samples/2012_Preqin_Sovereign_Wealth_Fund_Review_Sample_Pages.pdf?rnd=1 accessed 20 January 2013.
- Productivity Commission 2010, *Contribution of the not-for-profit sector*, Research Report, http://www.pc.gov.au/projects/study/not-for-profit/report accessed 14 December 2011.
- Questus 2012, *Australian residential housing trust discussion paper*, prepared as an Information Memorandum provided on a personal application basis, mimeo.
- Reserve Bank of Australia (RBA) 2012a, Financial stability review, March 2012, http://www.rba.gov.au accessed 31 August 2012.

- _____ 2012b *Financial stability review*, September, 2012, http://www.rba.gov.au accessed 9 January 2013.
- Rowley, S & Phibbs, P 2012, *Delivering diverse and affordable housing on infill development sites*, Final Report 193, AHURI, Melbourne.
- Rugg, J & Rhodes, D 2008, *The private rented sector: Its contribution and potential*, University of York, York.
- Savills 2012, Rental Britain as an asset class, http://www.savills.co.uk/research_articles/141285/142076-0> accessed 21 January 2013.
- Scanlon, K & Kochan, B 2012, Towards a sustainable private rented sector: The lessons from other countries, LSE, London.
- Schwartz, A 2011, 'The credit crunch and subsidized low-income housing: The UK and US experience compared', *Journal of Housing and the Built Environment*, no. 26, pp.353–374.
- Scottish Government 2012, Evidence review of the private rented sector in Scotland, http://www.scotland.gov.uk/Topics/Built-Environment/Housing/privaterent/evidencereview accessed 21 January 2013.
- Senate Economics References Committee 2011, Investing for good: The development of a capital market for the not-for-profit sector in Australia, The Senate, Canberra.
- Shapiro, J 2013, 'Mortgage-backed bonds post revival', *Australian Financial Review*, 9 January 2013.
- Silbernagel, C & Vaitkunas, D 2012, *Mezzanine finance*, http://bondcapital.ca/wp-content/themes/trymee/images/Mezzanine%20Finance%2012.pdf accessed 21 January 2013.
- Social Housing 2012, 'London & Quadrant to acquire £250 million private rent portfolio', Social Housing, August, p.2, http://www.socialhousing.co.uk/News/LQ_to_acquire_250m_private_rent_portfolio accessed 21 January 2013.
- Sovereign Wealth Fund Institute (SWFI) 2013, 'What is a Sovereign Wealth Fund?'.http://www.swfinstitute.org/sovereign-wealth-fund/ accessed 20 January 2013.
- Stephens, M & Williams, P 2012, *Tackling housing market volatility in the UK: A progress report*, Joseph Rowntree Foundation, York, http://www.jrf.org.uk/publications/housing-market-volatility-progress accessed 21 January 2013.
- TCA 2011, 'LIHTC market gets its mojo back', *Tax Credit Advisor*, http://www.bfim.com/news/TCAFEb2011.pdf> accessed 24 January 2013.
- The Treasury 2010, Australia's future tax system, Report to the Treasurer (Henry Review, http://taxreview.treasury.gov.au/content/ Content.aspx?doc=html/pubs_reports.htm> accessed 3 November 2010.
- Towers Watson 2012, *Global pension assets study 2012*, http://www.towerswatson.com/assets/pdf/6267/Global-Pensions-Asset-Study-2012.pdf> accessed 20 January 2013.
- UK Social Investment Task Force 2010, *Social investment ten years on*, http://www.socialinvestmenttaskforce.org/downloads/SITF_10_year_review.p df> accessed 14 December 2011.

- Vamos, P 2012, 'Refocus debate on superannuation asset allocation: ASFA' in *Super Review*, 5 April 2012, http://www.superreview.com.au/news/superannuation/refocus-debate-on-superannuation-asset-allocation accessed 2 September 2012.
- Williams, P, Salisbury, N & Caven, R 2011. *Opportunities for institutional investment in affordable housing,* Cambridge Centre for Housing Planning and Research, Cambridge, <www.cchpr.landecon.cam.ac.uk/Downloads/110311 Institutional Funding.pdf> accessed 21 January 2013.
- Wulff, M, Reynolds, M, Dharmalingam, A, Hulse, K & Yates, J 2011, *Australia's private rental market: The supply of, and demand for, affordable dwellings*, Final Report 168, AHURI, Melbourne.
- Yates, J & Milligan, V 2007, Housing affordability: A 21st century problem, Final Report 109, AHURI, Melbourne.

AHURI Research Centres

AHURI Research Centre—Curtin University
AHURI Research Centre—Monash University
AHURI Research Centre—RMIT University

AHURI Research Centre—Swinburne University of Technology

AHURI Research Centre—University of New South Wales

AHURI Research Centre—University of Queensland

AHURI Research Centre—University of Tasmania

AHURI Research Centre—University of Western Australia

AHURI Research Centre—University of Western Sydney

Australian Housing and Urban Research Institute
Level 1, 114 Flinders Street, Melbourne Victoria 3000
Phone +61 3 9660 2300 Fax +61 3 9663 5488

Email information@ahuri.edu.au Web www.ahuri.edu.au