

Private Finance for Social Housing in Australia

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Abstract

A significant change in the finance of social housing in the 1980s was a movement to transfer responsibility for funding to the private sector. This article argues that governments must continue to be involved in social housing finance as this movement progresses. Financing initiatives undertaken in Australia are used to signal the risks associated with the provision of social housing finance, to illustrate the mechanisms employed to manage these risks, and to highlight the conflicts that arise when a mix of public and private funding is attempted.

The article proposes the introduction of "equity bonds" as an innovative way to raise funds for social housing and to overcome inefficiencies arising from the present complex and costly administrative structures. However, a commitment to ongoing subsidies to close the full rental gap is necessary for equity bonds to serve those most in need.

Introduction

One of the significant changes in the finance of social housing in the 1980s was an attempt to place increased responsibility for this funding on the private sector. Although the way this shift in responsibility has been brought about has varied considerably among countries, several common factors or constraints contributed to the desire for change. The changes are consistent both with a worldwide trend throughout the 1980s toward increased fiscal austerity and increased transparency in subsidy arrangements and with a new underlying managerialist approach to government. The trend toward leaner and meaner government focused attention on risk management strategies to eliminate open-ended budgetary commitments for government.

The changes that have taken place in social housing finance raise several fundamental questions. One such question is why the government should be involved in the provision of housing services. A second key question is what determines the appropriate form of involvement given an institutional reality that dictates some form of intervention.

This article begins by briefly examining arguments for government intervention in the provision of housing services, including housing finance. It then discusses the types of government intervention in the housing market and the risks that should be considered in determining the most appropriate form of government involvement. Financing initiatives undertaken in Australia are used to illustrate the mechanisms employed to manage these risks and to highlight the conflicts that arise when a mix of public and private funding is attempted.

Rationales for government intervention in housing markets

Efficiency

Two broad rationales have been used to justify government involvement in the provision of housing services: efficiency and equity. Intervention on efficiency grounds occurs in response to market failures. Markets for certain commodities may be inefficient because of special commodity characteristics. Housing has numerous characteristics that create the potential for market failure. Smith, Rosen, and Fallis (1988) point to the durability of housing; slow adjustment to equilibrium because of credit rationing, land use controls, and nonmarket clearing prices resulting from incomplete information; the dual nature of housing as both a consumer good and an investment; the symbiosis of housing and location choice; and high transaction costs exacerbated by the heterogeneous nature of housing as a commodity.

Flannery (1993) has identified information failures as the most pervasive source of market failure in the provision of housing finance. When information is costly, intervention may improve results. Asymmetric information can result in incomplete markets. The effect of adverse selection has been widely discussed in relation to insurance and credit markets. Market failures also arise in such markets when risks are unpredictable or systemic. An excellent discussion of efficiency arguments in justifying the role of the (welfare) state as a device for ameliorating “a series of principal-agent problems” can be found in Barr (1992).

Market failure alone, however, does not necessarily warrant government intervention. Much of the recent public choice literature focuses on the potential for government failure. Inman (1987) and Mueller (1989) provide comprehensive overviews of this literature. In the examples of Australian public-private

housing finance initiatives described below, many of the inefficiencies arise from the institutional framework within which finance is provided. Because there is a likely tradeoff between market and government failures, Stiglitz (1989, 1993) argues that intervention is justified on efficiency grounds only when market failures cost more than government failures. In practice, this criterion raises the question of how these costs are to be measured and monitored.

Equity

In the absence of market failures, government intervention in the provision of housing services may still be justified on equity grounds. Equity arguments for government intervention are based on providing access to affordable housing for all. This objective can be met by an unrestricted income supplement or by direct provision of housing.

As Schill (1990) points out, there are several arguments against use of unrestricted income supplements. As noted above, housing has numerous characteristics, such as slow speeds of adjustment and externalities, that create market imperfections and lead to a shortage of decent and affordable housing. Furthermore, housing is generally viewed as a merit good that will be underconsumed if households are given an unrestricted income supplement. This merit good argument forms the basis of Tobin's (1970) commodity egalitarianism, which suggests that everyone should have access to a minimum standard of particular goods or services (see also Rosen 1992).

Form of intervention

If it is assumed that there should be government intervention in the housing market, the question remains what type of assistance should be provided. A switch from supply-side subsidies to demand-side subsidies (or housing allowances) dominated housing policies in the 1970s and 1980s (see, for example, Hills et al. 1990; Kemp 1989; Oxley 1987). This switch usually has been defended on the grounds of consumer choice, removal of paternalistic control by the government, simplicity in administration, visibility, and hence accountability (Hays 1988).

Van Vliet (1990), in his overview of international housing practices, claims that unanswered questions remain about this

switch to housing allowances. Limited take-up rates raise questions of stigma, lack of awareness, complex regulations, and bureaucratic procedures. Hays (1988) has argued on both technical and political grounds for continuation of supply-side subsidies for housing. On technical grounds, Hays's counterarguments to the perceived advantages of housing allowances rely on merit good and social spillover arguments, on market rigidities that prevent consumers from exercising free choice (arising, for example, from discrimination on the grounds of race or culture), and on the potential divergence between the level of support provided and that needed.

This possibility that the support provided will be too low is of concern for those (such as large families, the physically handicapped, and deinstitutionalized mental patients) who need special types of housing that are expensive, scarce, or not forthcoming in the private market. This particular argument is consistent with concerns about a housing shortage in specific submarkets and with the lack of evidence on the supply response generated by housing allowances (Berthoud 1989; Bratt 1991; Kemp 1989; van Vliet 1990).

On political grounds, the arguments for supply-side subsidies to supplement housing allowances recognize the representative democratic nature of most of the political systems in which this assistance is provided. In such systems, fragmentation of the interest groups that support a policy will limit the support it receives. Political organizations among the poor have been relatively weak and have had to spread their efforts over a range of issues. Consequently, if consumer-based policies must rely on such groups for support, their chances for success are automatically reduced.

The mixed public-private funding proposal outlined below assumes that a case has been made for continuing with supply-side subsidies to ensure that appropriate housing is available. Private sector involvement in the provision of social housing finance is supported by various forms of indirect government intervention and supplemented by housing allowances presumed sufficient to close the gap between market rents and what is deemed to be affordable. This situation contrasts with the more traditional solution of direct funding. The question that remains to be addressed is how the supply-side aspects of this policy can best be funded. The answer requires consideration of both direct versus indirect assistance and recurrent versus capital funding.

Direct versus indirect assistance

The main argument for providing assistance through direct rather than indirect intervention is that such support is explicit; therefore, it is perceived as being subject to greater scrutiny and renders government more accountable for its actions. The argument for indirect assistance can be made on a number of grounds. The first is the converse of the above; because indirect assistance is implicit, it is less likely to be subject to the scrutiny of the annual budget process and hence less likely to be subject to the political risk associated with direct government assistance. A guarantee on a funding instrument to close the rent gap between the cost of funds and what is affordable, for example, will have the same budgetary cost as a housing allowance designed to achieve the same outcome, but it may have a lower political risk. Recipients of housing allowances have little political influence to ensure continuing support following a change of government or a change in government policy. The stronger symbiotic relationship between the financial sector and the government, however, means that guarantees on a financial instrument can ensure the life of a policy at least for the period of the guarantee.

Indirect support in the form of guarantees, tax expenditures, and the like can also decrease the immediate costs of specific policies and decrease the measured budgetary impact of these policies. This second argument for indirect support may become less important as the market becomes more informed about the impact and implications of government decisions and as developments in public sector accounting practices require contingent liabilities to be costed and brought to account as below-the-line items. At present, however, precisely because the expenditure is off budget, it does not immediately affect the budget deficit or public sector borrowing requirement. In an era of deficit fetishism, this has been an important and possibly overriding constraint.

Finally, in countries with several levels of government, indirect support from a higher level of government can encourage a lower level to increase its support while avoiding the paternalism of matching or tied grants.

Recurrent versus capital funding

Similar pragmatic arguments apply to whether assistance is provided through recurrent or capital expenditures.

Governments with short time horizons determined by electoral cycles prefer recurrent funding.

In the short term, a given housing budget can assist more households if assistance is provided on a recurrent basis rather than through upfront capital expenditure. Thus, the most obvious explanation for a preference for recurrent funding lies in the political realities associated with this larger target group. Such benefit, however, is available only once—to whichever government first makes the transition from capital to recurrent funding.

On economic grounds, a case can be made for funding long-life social housing from recurrent rather than capital expenditures on the grounds of intergenerational equity. This funding mechanism ensures that each generation contributes to the economic cost of investment expenditure. Whether such a funding approach imposes a disproportionate burden on present or future generations depends on the assumptions made about the length of life of the investment in relation to the financing period, on underlying growth rates in relation to real interest rates, and on inflation. In general, when the financing period is shorter than the life of the facility being financed (as will be the case with housing, with its long structure life and significant land component), the burden of loan-financed expenditure will fall unfairly on the existing population only when growth rates exceed real interest rates. These issues are fully discussed in Snyder and Stegman (1987) in the context of infrastructure funding.

Public sector budgetary practices that combine current and capital expenditures in budget statements and that do not provide a balance sheet statement alongside the income and expenditure statements do not encourage finance practices based on economic factors.

Risks associated with different forms of housing finance

Without the qualifications above, there is a *prima facie* case for social housing to be funded from public rather than private sector borrowing. Because government has the advantage of compulsion, the risk associated with such finance can be spread over all tax payers and reduced to a negligible amount. However, in light of the qualifications outlined above, which arise from government as distinct from market failure, whether this finance should be provided by the public sector will depend on an

assessment of the impact of this risk spreading on present and future government budgets. Some of the issues that arise can be seen by examining the risks involved in relying solely on direct support through recurrent expenditure on housing allowances rather than being directly or indirectly involved in the finance of housing.

Rental risk

If housing allowances are to address an affordability problem, they need to respond to both income level and the cost of adequate housing. The budget commitment arising from as-of-right subsidies can grow both because of increased eligibility (for example, from decreased incomes associated with a downturn in the economy) and increased rents (for example, from increased demand pressures due to increased income support or increased population). The need to close the gap between market and affordable rents imposes what can be described as a rental risk on government.

The possibility that the cost of such subsidies cannot be controlled leads to financial risk that affects future government budget allocations.¹ If government is committed to making housing affordable, there is no way it can avoid this rental risk. Without any intervention, market rents will reflect the assessment of the risk that households will be unable to meet their rent payments. With intervention to contain market rents, the cost of direct consumer subsidies may be reduced, but the cost of indirect producer subsidies will increase. By guaranteeing net rental returns in the private sector (subject to housing being provided at a specified gross rental return), however, the government can avoid the operating risks associated with managing housing.

In funding affordable housing, the government generally is exposed to the same risks faced by private sector investors in housing. As long as investors continue to require a market rate of return on their investments, any government committed to ensuring that housing is affordable will be exposed to market rates of return on housing, to house price inflation, and to a rental risk related to tenants' capacities to pay.

¹ Gyourko (1990) suggests that the amounts allocated to direct subsidy programs tend to vary with the degree of fiscal crisis and that housing budgets are among the first to be cut.

Capital risk

By subsidizing private sector investment rather than purchasing housing through a capital expenditure program, the government can protect itself from uncertain house price inflation and the uncertain nonrental returns associated with investment in housing. This approach provides one means of balancing the risks of investment in housing between the public and private sectors.

Mayshar (1977) provides an overview of the debate between Hirschleifer, on the one hand, and Arrow and Lind, on the other, on whether government should subsidize risky private projects rather than undertake public investment. He argues that government subsidization of risky private projects is justified given two conditions: that capital markets are incomplete and that income taxation exists. Under these circumstances, the government should subsidize risky projects if it is less risk averse than the private sector. Mayshar's heuristic argument for this claim is that the existence of taxation renders the government a partner in any private sector investment undertaking, and capital market deficiencies explain why the government's attitude toward risk differs from the private sector's. One deficiency Mayshar mentions is the limited scope of insurance markets for future wage income. Market failure occurs both because of information failures in relation to future income and because of the systemic risk associated with macroeconomic factors.

The combination of this future income risk and political risk provides a rationale for government intervention both through income support and through guarantee of this income support to ensure that housing is both forthcoming and affordable. The attempts that have been implemented in Australia to balance the roles of the private and public sector in providing finance for social housing are outlined below.

Use of private finance for social housing in Australia

In 1990, the Commonwealth government in Australia established a National Housing Strategy (NHS) to develop a program of housing policy reform to enhance the affordable and appropriate housing options available to all Australians. This has been heralded as the first major review of housing needs and policy since 1944 (NHS 1991a).

Since its inception, NHS has released a number of issues papers. The first outlined the demographic, economic, and social changes that have influenced Australian housing over the past decade or so and identified the key policy challenges over the next two decades. The second focused specifically on affordability issues and, in conjunction with the third issues paper, recommended ways to alleviate affordability problems. The third focused on potential mechanisms for financing an increased supply of affordable housing. Subsequent papers have focused on supply issues, on factors affecting housing choices, and on barriers constraining access to housing.

Taken together, Issues Papers 2 and 3 (NHS 1991b, 1991c) proposed an integrated policy package designed both to address the financial stress faced by an increasing proportion of households in the private rental market and to expand the supply of nonprofit or social rental housing. The issue of affordability was addressed through income support to those in rental housing of the form assumed above—that is, a rental gap payment to make up the difference between market and affordable rents. Availability was addressed through the introduction of tax-advantaged “equity bonds” as described below.

Background

Work undertaken for Issues Paper 2 showed that in 1988 more than 750,000 income units² were in housing stress, facing a ratio of housing cost to income that was at least double the average ratio (which was 12.6 percent). These income units all had incomes in the lowest two income quintiles and represented one-third of income units in this income range and well over 10 percent of all 6.2 million income units in Australia. Almost 60 percent of these 750,000 income units were housed in the private rental market. More than 20 percent of all private renters in the lowest two income quintiles were spending more than half their income on rent.

At the current level of funding, the state housing authorities (SHAs) are unable to meet the demand for low-cost housing.

² Income units can be distinguished from individuals or households as the underlying units that have the potential to form separate households and generate housing demand (subject to economic factors). For analytical purposes, four main types are generally distinguished: single persons, single persons with dependents, couples, and couples with dependents. Any combination of these can form a household.

Waiting lists have increased and are likely to continue to do so in response to economic and sociodemographic changes that have contributed to the observed high levels of housing stress.

In response to the fiscal constraints imposed by current levels of funding for public housing and to the restrictions imposed on public sector borrowing by Loan Council constraints,³ SHAs began to look to creative financing approaches based on the use of equity finance as a means of introducing private sector funds into the financing of social rental housing. Various fund-raising vehicles, such as property trusts and joint ventures or partnerships, have been considered. The equity bond proposal can be seen as a logical step in the continuing development of innovative approaches to finance.

Past initiatives

New South Wales Rental Property Trust. One of the first experiments with the use of an equity structure to finance rental housing was the New South Wales Rental Property Trust, which was launched in 1988. Similar schemes were developed concurrently in other states. The New South Wales scheme used a depreciation allowance on new rental dwellings in conjunction with the tax-free status of indexed capital gains to provide investors with a guaranteed tax-free real rate of return and, on redemption of their units, a capital gain equal to the inflation rate over the investment period. A state bank guarantee, in turn supported by an indemnity given by the Rental Bond Board,⁴ provided credit enhancement for this venture. From the point of view of public finance measures, this financing mechanism was treated as an off-balance-sheet arrangement.⁵ From the point

³ Australia operates under a federal financial system in which total public sector borrowing is controlled through the Loan Council, which imposes a global borrowing limit on each state and the Commonwealth. Under the conditions that applied at the time of the proposals outlined here, any borrowing was outside Loan Council restraints if the balance of risks lay with the investor rather than the government.

⁴ The Rental Bond Board is a statutory authority that reports to, but operates independently of, the state government.

⁵ This treatment was possible because of the credit enhancement procedures employed, which were presumed to remove the balance of risks from the state government.

of view of the investor, the financing was equivalent to state-guaranteed, tax-exempt indexed debt.⁶

However, there was considerable difficulty in ensuring that the securities issued were treated as equity, not debt instruments, under the taxation system, and the Tax Office issued a preliminary ruling so that a pilot scheme could go ahead. This pilot scheme successfully raised its target A\$20 million; the establishment costs of the trust (said to be on the order of A\$500,000) were borne by the housing authority.

With this initiative, the housing authority was responsible for acquiring and constructing the stock and so absorbed the financial and construction risks associated with the project. Once constructed, the stock was managed by the private sector, with tenant selection and security of tenure based on normal private sector practices. Rents charged for these dwellings were sufficient to cover operating expenses and financing costs; no rent rebates were available. Thus, the private sector absorbed operating risks. Tenants had no guarantee of tenure because the trust had to be able to sell properties to return capital to the investors.

Subsequent rulings by the commissioner of taxation eliminated the tax advantages derived from depreciation and capital indexation and led to the scheme's being abandoned. In response to the reversal of the tax rulings associated with this first initiative, several states have sought off-budget funds for public and private rental housing on an indexed equity basis. These later initiatives have attempted to protect the important tax-effective status accorded to equity finance and have many of the characteristics embodied in the rental property trust model.

New South Wales Public Equity Partnership scheme. In 1990, New South Wales entered into a public equity partnership scheme with a large superannuation fund⁷ to provide housing for public tenants. The New South Wales Public Equity Partnership scheme is a A\$145 million agreement with the Australian Mutual Provident Society (AMP) to provide 1,000 dwellings for public tenants for up to 20 years. These dwellings are to be

⁶ Under the Australian tax system, interest income on debt finance is taxed on a nominal income basis, and indexed debt is taxed on an accrual rather than a realization basis. Returns on equity, however, are taxed on a realized, real income basis (with inflation adjustment applying to capital gains).

⁷ A superannuation fund is a scheme that provides benefits on retirement, death, or disability to an employee or self-employed person.

managed by the SHA and are let to public housing tenants at first; they are to be sold or let to private tenants when vacated. The SHA subsidizes the difference between investor yield required and net rental income. A capital gain equal to the increase in the Consumer Price Index (CPI) over the term has been guaranteed; both partners benefit from any real capital gains.⁸ In this scheme, the private investor owns the stock, which is managed by the SHA. In contrast to the first model, operating risks have been absorbed by the public sector.

The rental yield risk that rents will fall short of the required yield (of 6.5 to 7 percent real when implemented) embodies two components: a vacancy risk arising from less than 100 percent occupancy rates and a rental risk that gross rental income will fall short of that predicted.⁹ On advice from the major bank that undertook the initial financial modeling for this structure, the vacancy risk was regarded as uninsurable in the market.¹⁰ Self-insurance was adopted both for this risk and to cover unsatisfactory rental returns. Risks associated with management and maintenance costs, which affect net returns, can be (but have not been) covered by contracting out.

A second risk identified with this structure is the capital risk associated with guaranteeing indexed returns. In the New South Wales Public Equity Partnership deal, in which capital returns are indexed to the CPI, the experience with obtaining correlation insurance to cover the mismatch risk between sales revenue and inflation indexation suggests that such insurance is both extremely difficult to obtain in the private market and extremely costly. No Australian insurer would provide this coverage, and it took nearly 2 years to find an offshore insurer who, despite historical data that indicated a real growth in house prices of more than 3 percent per year over the past 20 years, required a significant upfront premium to partially cover losses arising from a real decline in house prices. If house prices do not increase in line with inflation, the required premiums will add

⁸ This subsidy has an estimated cost of A\$26 million and is financed from the funds made available in 1989 for noncapital purposes. The agreement with AMP places a collar on the indexation guarantee, limiting this indexation to rates of inflation between 4 percent and 14 percent.

⁹ This risk arises when tenant incomes do not keep pace with inflation; the estimated difference between rent to be paid by tenants (defined as a percentage of income) and return required is covered by the rental subsidy.

¹⁰ Presumably, the vacancy risk was not insurable because of the moral hazard associated with such insurance. However, past vacancy rates from outside the public sector could realistically be used to determine the self-insurance premium that would need to be set aside to cover this risk.

approximately 100 to 150 basis points to the cost of funds obtained.¹¹ AMP has accepted the residual risk associated with losses in excess of those covered by the insurance.

This particular structure was initiated in response to the taxation difficulties raised with the property trust scheme; it is a direct investment scheme in which AMP is unable to receive any repayment of principal for at least 10 years to conform to existing tax legislation regarding cost base indexation. Returns on any sales up to year 11 are retained by the SHA in an operating account; returns on sales thereafter are passed through immediately. Thus, the SHA faces a reinvestment risk on any sales for the first 10 years of the scheme. This risk was accepted because the SHA is able to choose the time of sale and hence to manage this risk. After year 10, sales are on a pass-through basis, which eliminates reinvestment risk.

There are other associated risks. The credit risk associated with the correlation insurer has been secured by reinsurance at a minimal cost. The taxation risk, which is associated with changes in tax legislation that affect the after-tax returns from such an arrangement, is borne by AMP.

New South Wales Shared Equity Rent/Buy scheme. A third creative financing initiative has raised A\$150 million from two large superannuation funds (AMP and Mutual Life Company [MLC])¹² to finance the New South Wales government's Shared Equity scheme. This initiative, which was introduced in 1991, has been targeted at existing public housing tenants and, as with the Public Equity Partnership scheme, provides a guaranteed CPI-indexed return on funds. It has been underwritten by the state government.

The rental yield risk in this case is treated as in the previous case, and higher repayment-to-income ratios faced by prospective

¹¹ To obtain this insurance coverage for the 20-year term of the agreement, the SHA has paid an upfront fee of several million dollars to the insurer and is to pay an additional annual fee of A\$250,000. It has also been necessary to deposit a repayable amount into a special account to cover potential premium costs should house prices fall. In this event, additional premiums based on actual outcomes over the period will also be required. Because of the commercial nature of this arrangement, published information is not available on all aspects of the associated costs. This lack of information highlights one potential source of inefficiency associated with private financial arrangements.

¹² The funds used were from the Develop Australia Fund, an ethical investment trust established by a coalition of the Australian Council of Trade Unions, the Australian Chamber of Manufacturers, and AMP.

buyers suggest that this risk may well be greater in this scheme because of increased pressure on both mortgage and rent repayments.¹³ The correlation risk, however, is borne by the purchaser, who is required to purchase at the current market value or the CPI-indexed capital value, whichever is higher. Reinvestment risk is reduced by prohibiting purchase of additional shares within the first three years. Purchase is compulsory within 25 years.

New South Wales Private Equity Partnership scheme. A Private Equity Partnership arrangement similar to the Public Equity Partnership scheme outlined above has also been considered in New South Wales. This was intended to increase the supply of low- to moderate-priced private rental housing. Dwellings were to be let at market rents, and the net rental yield was to be supported by an upfront subsidy provided by the Commonwealth. This initiative differed from the Public Equity Partnership in that no guarantee of rental income was to be provided in an attempt to remove any unfunded risk from the state budget.

However, even though the origins of the Private Equity Partnership scheme dated back at least to early 1989, when the Commonwealth government established a private rental subsidy scheme to encourage rental investment, no funds had been committed by mid-1992, when the underlying rental subsidy scheme was abandoned. Approval for the New South Wales Private Equity Partnership scheme and similar schemes was withheld because all proposals involved some form of state government guarantee and were therefore outside the guidelines set by the Commonwealth for use of the subsidy provided. Such guarantees, however, were required by potential private investors.

Overview of Australian initiatives

These pioneering initiatives have been developed over a five-year period and have involved considerable effort by a number of key individuals. The funds raised by these initiatives have been encouraging, but considerable difficulty has arisen in obtaining finance, and the amounts raised have not yet begun to reach the targets. To date, little more than A\$300 million has been raised from these deals, and the investors involved in the

¹³ Public rental tenants pay no more than 25 percent of their income for housing costs; purchasers under the rent/buy scheme pay 27 percent of income for rent and mortgage payments and, on top of this, bear all ongoing costs of repairs, maintenance, insurance, and rates.

current structures have indicated that they have little interest in undertaking further investment along such lines. Chong (1990) reports that more than 60 superannuation funds were approached in an attempt to raise finance for the Public Equity Partnerships deal.

All the structures implemented to date have been based on real-rate funding mechanisms, which are seen as the preferred method of funding from the SHAs' point of view because they best match the cash flows generated by rental operations and reduce the upfront demands made on public budgets. The current programs, however, have been forced to raise funds through complex partnership structures that have relied on direct investment mechanisms to access taxation benefits and costly credit enhancement procedures to ensure that the funds raised are off budget. The outcome has been an illiquid form of investment.

Much of the difficulty in raising funds arises because rental yields are not adequate to attract investment at the lower end of the rental market. The creative financing approaches employed have been made financially viable through credit enhancement (through state guarantee, insurance, or indemnity), through subsidies in the form of Commonwealth tax expenditures or direct outlays, or through implicit state absorption of establishment costs and construction and operating risks.¹⁴ Current tax rules and public sector borrowing regulations, however, constrain the extent to which these approaches can be used simultaneously. Changing interpretations of the Tax Act and the constraints imposed by public sector borrowing requirements lead to new artificial funding structures, and the uncertainties and increasing complexities that arise highlight the associated administrative inefficiencies and compliance costs.

It is not immediately apparent that the subsidies involved have been used efficiently, because the commercial and confidential nature of the deals means that precise information on funding costs is not available. Market wisdom suggests that neither the benefit of the tax expenditures explicitly acknowledged (primarily capital gains indexation, but also depreciation) nor the benefit of the asymmetric treatment of capital returns (in which the downside risk is reduced by a guarantee of capital growth at least equal to inflation but the potential upside benefit of gains over inflation remains) has been fully passed on in terms of a lower required investor yield.

¹⁴ That the approaches rely on federal tax expenditures to raise funds suggests that claims of cost-effectiveness are dominated by a state rather than a federal government perspective.

The uncertainties associated with the tax treatment of these structures have arisen because each attempt has required an individual tax ruling from the Australian Tax Office on all aspects of each transaction. There have often been considerable delays in obtaining these rulings, and the resultant uncertainty has limited the potential for raising further funds.

The then-current Loan Council constraint was avoided by ensuring that the balance of risks lies with the investor through structures providing indirect credit support.¹⁵ Insurance to cover the guarantees required by the market, however, has been both expensive and difficult to obtain.

The initiatives undertaken have had long lead times. They have been possible only when structures have been devised that implicitly provide a form of credit enhancement that the market interprets as being at least as good as a state government guarantee. This restriction has limited their development to programs that can be incorporated under the umbrella of SHA responsibility.

These experiences with creative financing techniques are not unique to Australia. Chen and Kensinger (1991) document similar examples of short-lived schemes in the United States. These fell prey to what they, following Kane, called the “regulatory dialectic” of action and reaction of the public and private sectors to new initiatives and changing ground rules. Stegman (1991) argues that the U.S. experience with creative financing techniques suggests that public-private partnerships, while they are important vehicles for leveraging limited federal funds, cannot be relied on to provide a viable long-term national strategy for funding low-income housing because of their high transaction costs, insufficient monitoring, and complicated use of federal tax credits.

Policy proposal in response to past experiences

In response to the perceived inefficiencies arising from the complex and costly administrative structures being set up to raise this off-budget finance in Australia, NHS proposed institutionalizing finance arrangements by establishing an independent corporation or trust at arm’s length from the Commonwealth and

¹⁵ Because of changes in 1993, only nonrecourse lending is now outside these constraints.

state governments (NHS 1991c). This corporation would issue a new, standardized instrument, described as an “equity bond.”¹⁶

Equity bonds proposal

Equity bonds are to have risk and return characteristics similar to those of the direct investment initiatives described above and already implemented in Australia in response to the need for more funds for social rental housing.¹⁷ They are to be real-rate instruments with a guaranteed income stream provided from rental income and with the underlying asset value providing an asset backing to protect the capital value of the bonds. Changes in this underlying capital value are to be treated by the tax system in the same way as capital gains on any equity investment. Such an instrument can be seen as a form of “dequity” finance, in which the distinction between equity and debt is blurred and the benefits of each are maximized (Chen and Kensinger 1991).

As real-rate instruments, equity bonds can partially cover the mismatch between rental income and bond interest by indexing interest repayments to the CPI or average weekly earnings (AWE). Equity bonds can also protect repayment of principal at maturity by passing this risk through to investors by indexing capital to a house price index.

In the Australian context, statutory incomes (provided as social security pensions and benefits) are automatically indexed to movements in the CPI. If all households in social rental housing were on these minimum incomes, the risk that incomes would not increase in line with the chosen index could be removed by choosing the CPI as the index. In practice, however, households on statutory incomes are not the only target group for such instruments. SHAs, for example, have looked to alternative funding arrangements to expand their shared ownership programs, which are targeted primarily to moderate- to low-income earners who have incomes below AWE and who, because their income

¹⁶ These proposals were developed for NHS by the author. The genesis of their intent and a housing policy rationale for their introduction can be found in Yates (1989).

¹⁷ Note 6 outlines the tax treatment of debt and equity instruments in Australia. The term “equity bond” was chosen to indicate that such instruments would ensure that investment in social rental housing was being provided on the same tax-advantaged basis as equity investment in private rental property.

depends on their workforce status, are more vulnerable to changes in the economic climate. In both cases any gap between market and affordable rents must be closed.

As with the direct investment approaches, these instruments leave some residual risk besides this rental gap. If the values of the dwellings in the relevant portfolio do not change in step with the index chosen, there will be a mismatch between the value of the government's assets and liabilities. This correlation risk between actual house price movements and repayment of principal at maturity will depend on how the index to determine liabilities is chosen. The risk will be minimized if the capital value of bonds is indexed to movements in house prices rather than to inflation or wages. The more closely the spread of dwellings being financed matches those in the index, the greater the number of dwellings involved in both the particular project being financed and the index, and the more flexibility the borrower has over the timing of asset sales, the lower the risk will be.

Reinvestment risk arising from early sale of dwellings can be minimized by use of pass-through securities. Any attempt to reduce exposure to the equivalent of prepayment risk in this way, however, is likely to result in a premium's being placed on such securities over the equivalent bullet securities. The development of tranches of pass-through securities, as has occurred with securitized mortgage funds, offers a way of managing this pass-through risk more cost-effectively but as in that market, there are likely to be information failures associated with the pricing of this risk, and there may be an efficiency argument for its being borne by the government, at least at first.

Funds raised by equity bonds would be available to any non-profit organization that provided dwellings for low-income renters who, with the form of rent assistance outlined above and recommended in Issues Paper 2 (NHS 1991b), would thereby be provided with affordable housing.

Rationale

Establishing a single, independent corporation to issue equity bonds would avoid the past uncertainties created by tax rulings and would overcome the repeated and inefficient administrative costs of establishing new trusts or companies for every financing deal. Standardizing the instrument would enhance its market attractiveness by improving its tradability.

Equity bonds would achieve the same outcomes as past initiatives but would do so in an administratively more efficient way. Under current arrangements, attempts to capture for low-income renters the tax benefits of capital gains indexation generally available to investors in private rental property have created two types of administrative inefficiency. The first has arisen from the uncertainty about tax rulings on past financing initiatives; successful structures based on one tax ruling have had to be revised when the ruling changes. Such changes in tax rulings reduce any benefits of economies of scale that might come from being able to repeat successful schemes. They also reduce the market value of the information provided by past experiences with fund-raising mechanisms and therefore add to the cost of raising funds. Uncertainty arises because tax rulings can be obtained only after financing structures are in place. The delays that arise while awaiting a tax ruling and the possibility that the proposed structure will be denied the tax exemption sought also add to costs. These inefficiencies reflect market failures arising from information failures.

The second type of administrative inefficiency arises from the financial and resource costs associated with financing deals through trust or partnership arrangements—that is, from market failure associated with high transaction costs. The establishment costs of such deals are high, the deals are complex, and often there is inadequate financial and legal expertise available among those willing to accept responsibility for encouraging the provision of social rental housing. These factors detract from the effort required to produce dwellings and render such schemes less viable for the smaller states and nonviable for would-be social housing providers from within the community or nonprofit sector who cannot provide acceptable forms of credit enhancement. A related problem is that under current regulations the only institutional investors likely to be interested in long-term illiquid investment require that this investment be operated on a scale of A\$100 million and up. This barrier to entry reduces the efficiency of raising such funds.

This inefficiency is reflected in a perception that, under existing arrangements, private sector participants have been able to retain some of the tax benefits built into existing financing arrangements. This possibility has been attributed to the restricted competition arising from the constraints imposed by the need to set up one financing deal at a time and the barriers to entry arising from the scale of operation. A second explanation is that this possibility arises from the inefficiencies caused by lack of information about the risk and return characteristics of

syndicated investment in rental housing at the lower end of the market. This lack results from the private market's failure to provide such investment opportunities.

As a standardized instrument issued by a single fund raiser with established credit enhancement procedures in place, equity bonds can reduce the barriers to entry created by scale requirements and so provide a more efficient vehicle for ensuring that tax benefits are passed on in financing costs. By providing investors with liquidity not provided by existing initiatives, equity bonds can help produce the volume of funds needed for information efficiency. Although funds are unlikely to be any more cost-effective than on-budget financing, such constructs provide the opportunity for project financing to be taken off budget. By encouraging use of project-based funding, equity bonds increase accountability over that achieved with past forms of public finance. Risk is shared: The public sector guarantees a net rental return on investment, and the private sector bears the operating risks associated with managing rental housing and the risk associated with the return of capital.

Responses to proposal

Following the release of Issues Papers 2 and 3, a national consultation process was undertaken. Views were obtained from SHAs (which are currently the major social housing providers), community groups (which could expand their involvement in social housing provision), and potential investors. SHAs were unanimously in favor of the proposal and saw it as the only way forward. Community groups were less sanguine and less united in their views, which will be examined below. Potential investors required more specific information about the instruments being proposed but generally indicated that a tradable real-rate instrument would be attractive to institutional investors.

This consultation process revealed considerable interest in equity bonds and sufficient potential to justify further work. As a result of this consultation process, the Commonwealth government allocated A\$1.8 million in its 1991–92 budget for the development of efficient and effective financing structures to raise private sector finance for social rental housing. The housing ministers of the Commonwealth and various state governments formed a Working Group on Private Sector Financing of Social Housing, made up of Commonwealth and state officials, to facilitate this process. This group engaged financial market consultants to develop structures and to report on their viability from a taxation and market perspective.

Market assessment of viable financing instruments. The consultants' report indicated that institutional investors have little or no interest in investing large sums in social rental housing unless an SHA guarantees minimum rates of return (Caversham Partners 1991). They concluded that under current market conditions and taxation rules, funds were insufficient to meet the anticipated requirements for social rental housing (taken to be of the order of A\$1 billion to A\$1.25 billion per year within three years) without increasing subsidies above current levels.

To generate funds of this order, a number of steps need to be taken. The focus of fund raising must shift from direct investment (as employed in the Public Equity Partnership deal) to securities; there should be a single issuer of these securities of the highest credit quality available and the Tax Act should be clarified or amended to provide capital gains indexation to investors in social rental housing.

The consultants' market analysis of the cost of the various enhancements—such as whether capital gains indexation is provided and whether securities are issued by a single issuer—suggested that capital gains indexation is likely to leave untouched the cost and volume of funds available from current forms of direct investment but is likely both to increase the availability of funds raised from indexed bonds and to reduce their cost by 100 to 150 basis points. Similarly, issuing such bonds from a single issuer rather than having each state raise funds separately is expected to reduce the cost of indexed funds by 30 to 50 basis points, depending on the number of states involved and the consequent size of the issue. Providing credit enhancement in the form of a Commonwealth guarantee would reduce costs by a further 50 basis points. Issuing a capital indexed bond in which principal is indexed to a house price index rather than the CPI is estimated to reduce the cost of funds by a further 50 basis points.¹⁸

The volume of funds available is likely to be at least as important as the cost of these funds. Having a single issuer for securities was estimated to produce a volume of funds 30 to 40 percent higher than having individual states raise funds. A significantly greater volume of funds (about 300 percent higher)

¹⁸ This assessment, however, was made on the basis of information on house price index for Sydney only, and such an assessment may be applicable only for the Sydney and Melbourne markets. One argument presented for the lower cost of funds is that such an instrument has different risk characteristics and hence presents different hedging possibilities from those currently available on the market.

is likely to be available for securities issued with capital gains indexation than if the same securities are offered without such indexation. One option that has been floated by the Commonwealth treasury is that an upfront subsidy be provided in lieu of granting tax exemptions. This proposal is thus similar to the unsuccessful private rental subsidy scheme described above. Such schemes were seen as not providing the market with an indication that they will be sustained in the long term. Consequently, they will generate low volumes of funds, particularly from institutional investors, because they are seen as likely to be unique fund-raising exercises that are not worth the effort required to become familiar with them.

To summarize, the instruments proposed under the name “equity bonds” provide scope for an increase in the efficiency of fund raising for social housing. Standardized instruments can reduce the uncertainties that exist with the current unique structured financing deals. A single issuer can generate greater liquidity than is possible with fragmented fund raising. A single issuer for housing securities will likely achieve a credit rating between those of the Commonwealth and the highest rated states.¹⁹

State and community response. The SHAs, in outlining their vision to the end of the century (State Housing Agencies 1991), indicated that proposals for off-budget funding arrangements such as those outlined above were critically important to the operation and viability of SHAs. A strong, viable social housing sector, which they saw as a necessary response to private rental market failures, could develop only if current financing arrangements were changed so that private and public funds could be mixed.

Support from the community sector, however, was more qualified. Concern focused on one critical aspect of the schemes that has not been commented on in any detail as yet. While recognizing the general intent of the equity bonds proposal, Hollows and Flood (1991) attacked the proposal on its own pragmatic grounds. They argue that “the Commonwealth’s call for fiscal restraint is justifying policies which ultimately seek a shift

¹⁹ An important advantage of a single-issuer system is its capacity to provide quality credit enhancement. One way of achieving this arises from the ability to overcollateralize using the returns from the existing stock of public housing to back up those from additions to the stock. Information on the financial operations of such a corporation and on the level of government support needed to ensure its viability opens up the possibility of ultimately making all government involvement explicit and removing the factors that constrain private sector involvement without guarantees.

from public provision to the market place and voluntary sector. [With] real cuts in [Commonwealth] funds, equity bonds and other forms of off-budget debt financing are being seen as the only politically acceptable means of obtaining more low-cost housing in the short run. The willingness of commentators...to accept privatization alternatives that may damage the long-term financial viability of public housing is a matter of concern.”

Hollows and Flood express concern about the use of real-rate funds. When the bonds used to finance the increased provision of housing reach maturity, they will have to be redeemed at their current value. Depending on the form of bond used, the bonds will have inflated in line with a general price index or with the capital appreciation in the pool of properties underpinning the bonds. This refinancing could be undertaken by a new issue of bonds. The basis of Hollows and Flood’s concern is that new funds will not be available. Thus, properties will have to be disposed of, and low-income tenants will be evicted. This possibility raises equity issues about the tradeoff between providing ongoing and long-term security of tenure for those tenants fortunate enough to gain access to a dwindling supply of public housing and providing immediate security of tenure for a defined period (which would depend on the funding structure employed) and possibly (but with no guarantees) beyond that period.

Compromises, of course, can be reached. The implicit assumption behind this expressed concern is that real-rate finance with bullet bonds is to be employed. Such finance, because it embodies no repayment of principal, maximizes the extent of gearing possible with given grant funds and a given target income group. A shift to annuities would represent a compromise that would ensure sufficient funds were generated to repay principal over the life of the instrument. The downside of such a proposal, however, is that either additional recurrent subsidies are required to meet the higher cash flow requirement arising from principal repayment or only higher income groups can be targeted if such instruments are employed.

Conclusions

If standards that limit rent burdens to 20 to 25 percent of income are to be maintained, innovative forms of finance based on real-rate instruments can fund affordable housing only if there is a guaranteed commitment to provide sufficient income to bridge the gap between predicted rental income and required rental yield. New approaches to risk management can bridge the gap

between actual and predicted income, but not that between predicted income and required rental yield. Without an assurance that the rental gap will be bridged, private funds for social housing finance will not be forthcoming.

Thus, the missing piece of the social housing finance puzzle is a commitment to ongoing subsidy support to bridge the full rental gap. The need for this commitment was recognized in the proposals arising from NHS. However, the Commonwealth was prepared to address neither the specifics nor the intent of these proposals in its annual budgets since the release of Issues Papers 2 and 3. Instead it continues to provide a predetermined level of subsidy support for rental housing and to supplement tenant income with ad hoc rental assistance unrelated to the cost of providing rental housing. The states, with a lower revenue base from which to raise funds, are also not prepared to take on such responsibilities. Until either level of government commits itself to provide the recurrent funding needed to maintain the viability of innovative financing schemes, little further progress will be made. Attempts to innovate while cutting back on recurrent commitments will result in those least in need of assistance being served and those most in need being excluded.

The community responses to existing and proposed initiatives highlight some of the tensions that come from introducing private finance into the provision of social housing. Some see such developments as the thin end of the wedge of privatization, which will ultimately result in the decline of public housing as it currently exists. Others, however, see these developments as a pragmatic solution to the reality of fiscal restraint and the only way of ensuring that the current social housing sector can be expanded in a way that ensures its ongoing viability and removes it from the obvious current threat of being limited to “welfare” housing.

The proposals outlined above derive from the creative financing initiatives that have been tried in Australia and elsewhere. With a government commitment to ensure that recurrent support will be provided for those for whom housing is unaffordable, such proposals can form the basis of viable and efficient funding structures.²⁰

²⁰ Postscript: In 1993, Tascorp, the financing arm of the Tasmanian government, announced the issue of a new financial instrument that it called an equity bond. This was a tax-advantaged, real-rate, medium-term instrument indexed to share market performance and guaranteed by the Tasmanian government.

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References

- Barr, Nicholas. 1992. Economic Theory and the Welfare State: A Survey and Interpretation. *Journal of Economic Literature* 30(2):741–803.
- Berthoud, Richard. 1989. Issues for Housing Support. In *The Future of Housing Allowances*, ed. John Hills, Richard Berthoud, and Peter Kemp, 33–54. London: Policy Studies Institute.
- Bratt, Rachel G. 1991. Public Housing Authorities: Determining an Appropriate Role in a National Preservation Strategy. *Housing Policy Debate* 2(2):535–56.
- Caversham Partners. 1991. *Alternative Ways of Raising Private Sector Finance for Social Rental Housing*. A report commissioned from Caversham Partners, Mallesons Stephen Jaques, and TPF&C by the Commonwealth Department of Health, Housing, and Community Services.
- Chen, Andrew, and John Kensinger. 1991. *Innovations in Dequity Financing*. Westport, CT: Quorum Books.
- Chong, Francis. 1990. AMP Plunges into Residential Property. *Business Review Weekly*, September 21, 36.
- Flannery, Mark. 1993. Government Risk-Bearing in the Financing Sector of a Capitalist Economy. In *Government Risk-Bearing*, ed. Mark Sniderman, 71–100. Boston: Kluwer.
- Gyourko, Joseph. 1990. Controlling and Assisting Private Rented Housing. In *Housing Subsidies and the Market: An International Perspective*, ed. Duncan Maclellan and Ruth Williams, 4–16. York, England: Joseph Rowntree Foundation.
- Hays, R. Allen. 1988. Housing and the Future of the American Welfare State. *Built Environment* 14(3/4):177–89.
- Hills, John, Franz Hubert, Horst Tomann, and Christine Whitehead. 1990. Shifting Subsidy from Bricks and Mortar to People: Experiences in Britain and West Germany. *Housing Studies* 5(3):147–67.
- Hollows, Andrew, and Joe Flood. 1991. Equity Bonds: The Vision Splendid. *Shelter—National Housing Action* 8(1):29–32.
- Inman, Robert. 1987. Markets, Governments and the “New” Political Economy. In *Handbook of Public Economics*, Vol. 2, ed. Alan Auerbach and Martin Feldstein, 647–777. Amsterdam: North Holland.

Kemp, Peter. 1989. Alternatives to Housing Benefit. In *The Future of Housing Allowances*, ed. John Hills, Richard Berthoud, and Peter Kemp, 56–71. London: Policy Studies Institute.

Mayshar, Joram. 1977. Should Government Subsidize Risky Private Projects? *American Economic Review* 67(2):20–28.

Mueller, Dennis. 1989. *Public Choice II*. Cambridge: Cambridge University Press.

National Housing Strategy. 1991a. *Framework for Reform*. Background Paper No. 1. Canberra: Australian Government Publishing Service.

National Housing Strategy. 1991b. *The Affordability of Australian Housing*. Issues Paper No. 2. Canberra: Australian Government Publishing Service.

National Housing Strategy. 1991c. *Financing Australian Housing*. Issues Paper No. 3. Canberra: Australian Government Publishing Service.

Oxley, Michael. 1987. The Aims and Effects of Housing Allowances in Western Europe. In *Housing Markets and Policies under Fiscal Austerity*, ed. Willem van Vliet, 165–78. Westport, CT: Greenwood Press.

Rosen, Harvey. 1992. *Public Finance*. Boston: Irwin.

Schill, Michael H. 1990. Privatizing Federal Low-Income Housing Assistance: The Case of Public Housing. *Cornell Law Review* 75:878–948.

Smith, Lawrence, Kenneth Rosen, and George Fallis. 1988. Recent Developments in Economic Models of Housing Markets. *Journal of Economic Literature* 26:29–64.

Snyder, Thomas, and Michael Stegman. 1987. *Paying for Growth: Using Development Fees to Finance Infrastructure*. Washington, DC: Urban Land Institute.

State Housing Agencies. 1991. *State Housing Agencies towards the Year 2000: Directions and Opportunities*. Contribution to the National Housing Strategy, Canberra. Mimeographed.

Stegman, Michael A. 1991. The Excessive Costs of Creative Finance: Growing Inefficiencies in the Production of Low-Income Housing. *Housing Policy Debate* 2(2):357–73.

Stiglitz, Joseph. 1989. *The Economic Role of the State*. Oxford: Blackwell.

Stiglitz, Joseph. 1993. Perspectives on the Role of Government Risk-Bearing within the Financial Sector. In *Government Risk-Bearing*, ed. Mark Sniderman, 109–30. Boston: Kluwer.

Tobin, James. 1970. On Limiting the Domain of Inequality. *Journal of Law and Economics* 13:263–77.

Van Vliet, Willem, ed. 1990. *International Handbook of Housing Policies and Practices*. New York: Greenwood.

Yates, Judith. 1989. Housing Policy Reform: A Constructive Critique. *Urban Studies* 26:419–33.