International measures to channel investment towards affordable rental housing

authored by

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ACRONYMS

AHURI	Australian Housing and Urban Research Institute Limited
ALMO	Arms Length Management Organisation (England)
BBSH	Besluit Beheer Sociale Huursector (Netherlands)
BNG	Bank Nederlandse Gemeenten (Netherlands)
CDBG	Community Development Block Grant (US)
CDC	Caisse des Dépôts (France)
CFV	Centraal Fonds Volkshuisvesting (Netherlands)
EGW	Emissionzentrale für Gemeinnützige Wohnbauträger (Switzerland)
EU	European Union
EUROBOR	European Inter-bank Offered Rate (EU)
FOH	Federal Office of Housing (Switzerland)
LIBOR	London Inter-bank Offered Rate (UK)
GFC	Global financial crisis
HCCB	Housing Construction Convertible Bonds (Austria)
HCA	Homes and Communities Agency (HCA)
HUD	Federal Department of Housing and Urban Development (US)
HLM	Habitations à Loyer Modéré (France)
IIBW	Institute for Real Estate, Construction and Housing (Austria)
NWB	Nederlandse Waterschapsbank (Netherlands)
LIHTC	Low Income Housing Tax Credit (US)
LPHA	Limited Profit Housing Association (Austria)
MIILOS	Mission d'Inspection Interministérielle du Lodgement Social (France)
S&P	Standard and Poor's
SEM	Societes d'economie Mixtes (France)
SHG	Social Housing Grant (UK)
SPV	Special purpose vehicle
THFC	The Housing Finance Corporation (UK)
TSA	Tenant Services Authority (England)
WSW	Waarborgfonds Sociale Woningbouw (Netherlands)

EXECUTIVE SUMMARY

This research was commissioned by the Western Australian Government to describe and assess international models for financing affordable housing that use public subsidies and incentives to attract large-scale commercial finance to the supply of affordable housing.

There is a well-evidenced and growing need for additional affordable housing in Australia. This study aims to contribute in a timely way to a long-running dialogue between the research community, governments, the housing finance industry and private and non-profit housing providers about how to respond to this need by attracting more private investment.

Recent political, policy and financial market developments have given considerable impetus to that agenda. In particular, a new Australian government (elected in 2007) has embarked on wide-ranging reform of national housing policy and regulatory settings, and of most relevance to this study, has introduced a new large-scale incentive for private investment in affordable rental housing. In Western Australia where the study was initiated, a new state government (elected in 2008) appointed a Social Housing Task Force to address ways of achieving a large boost to the supply of social housing across that state. The task force advised that new methods to attract institutional investment from the private sector would be required to achieve an aspirational target in that state of an additional 20 000 social housing dwellings by 2020. Finally, an aspect of the project has been to consider (subject to available evidence) impacts that the global financial crisis (GFC) and the subsequent credit crunch have had on the performance of the housing financing models of different countries.

This report provides a qualitative analysis of six well-established financing mechanisms for affordable housing in well-developed affordable housing systems, contextualising each of these within their local market and institutional setting. The financing mechanisms that are examined in turn are the:

- \rightarrow dedicated and tax-privileged savings deposit system for affordable housing in France
- → housing tax credits in the US
- → loan and bond system with public guarantees in Switzerland
- → syndicated bonds issuer (the Housing Finance Corporation) in the UK
- → social housing mortgage guarantee scheme in the Netherlands
- → housing construction convertible bonds instrument in Austria.

Analysis of the case studies shows that having adequate and robust finance arrangements provides a crucial pillar to support the provision of affordable housing in the long term. This finance can take on a variety of forms, comprising grants, public loans and commercial loans, as well as other forms of equity. To meet the needs of institutional investors for security and liquidity, investment can be facilitated by various forms of collateral, government guarantees, mortgage insurance and tax privileges, often involving a specialist financial intermediary. Importantly, how this pillar is constructed influences the scale, pace and quality of housing outcomes generated.

The mix of public and private funding that is being used in each of the countries examined has helped to create and sustain a diversified housing delivery system. This is typically but not exclusively centred on non-profit housing providers. Such delivery agencies, operating under specialised government regulation and with well-defined social goals and business rules, are at the centre of efforts to stimulate and leverage additional private investment in affordable rental housing. Funding secured at competitive rates and at a suitable scale has underpinned the growth and urban renewal activities of these providers.

International examples cannot provide a ready-made solution to the specific issues faced by Australia in aiming to increase its overall supplies of affordable and social housing. However, the examples used in this study help to demonstrate that mixed funding models for affordable housing can generate substantial capacity for affordable housing investment, and also can play a strategic economic role in moderating housing market conditions or even redressing adverse housing finance circumstances, such as occurred during the GFC. Drawing on the analysis for this study and findings of earlier research that has examined the Australian policy and funding context in detail, we suggest that the following key considerations should guide and inform further development of an Australian model for financing affordable housing.

Public and private co-financing of affordable housing can work, but the relationship between private financing mechanisms and public subsidies must be carefully designed and well-coordinated. Regular monitoring and adjustments to the chosen funding model will be required to respond to dynamic housing and finance market conditions, and to changing needs.

- 1. A clear public vision, goals and targets for affordable housing should be developed from the outset so that private financing models do not dictate social policy.
- Specific mechanisms that are designed to raise and distribute large tranches of private finance can be strategic and cost effective but will require careful structuring in keeping with the local institutional context. This necessitates finance market cooperation in the design phase and appropriate competition in the implementation stage.
- 3. Appropriate industry norms and an effective regulatory framework must be established to ensure decent standards, drive costs down and, importantly, optimise benefits for tenants.
- 4. An appropriate balance of supply and demand side subsidies will be required on a long term basis, with the balance to be adjusted over time to reflect dynamic housing needs and market conditions. To support this, there is a clear role for state and local governments to develop locally responsive affordable housing strategies, targets and requirements, under a national framework.
- 5. It should be governments' (not the providers') responsibility to support incomes that are inadequate to afford decent housing.
- 6. It should be the responsibility of housing providers to provide housing and housing services that are cost effective. Competition for funding allocations and the regulation of costs can be used to drive costs down.
- 7. Income mix in housing projects should be used not only to promote their social acceptance but also to integrate weaker households and to contribute to a more secure revenue stream for providers and investors.

1 INTRODUCTION

Unlike many other similarly developed countries, Australia has not yet established a robust policy and institutional framework to attract and direct public and commercial funds towards the provision of additional affordable housing, despite having a wellevidenced need for this. Encouraging an adequate flow of investment into the supply of affordable housing in Australia is a major challenge for all governments and for the housing industry.

This research project aims to inform the development of policies, institutions and financing instruments that could promote reliable levels of investment at sufficient volume to address the need for affordable housing in Australia by examining a variety of models that have been used successfully by foreign governments for that purpose.

The project has two components:

- 1. Analysis of a variety of mechanisms that are being used successfully to attract private investment towards affordable rental housing in the Netherlands, France, UK, Switzerland, Austria and the US.
- 2. More in depth case studies of the design, operation and performance of the Austrian and UK models (chosen in consultation with the client).

This report of the research provides a qualitative analysis of the six different financing mechanisms for affordable housing that have been used by the selected countries and a description of the wider market and institutional context within which each mechanism operates. A standard set of assessment criteria is used to make an initial assessment of the relative strengths and limitations of each mechanism. To conclude, the report presents some general findings about the efficacy of the different mechanisms and poses questions for further consideration, with the aim of informing further research and development of a suitable model for Australia. Two further reports (Deutsch & Lawson 2010; Gilmour et al. 2010) that consider the financing mechanisms in Austria and England, respectively in more detail have been completed for the Western Australian government. Copies of these are available from the authors on request¹.

The financing mechanisms that are examined are: the dedicated and tax-privileged savings deposit system for affordable housing in France; housing tax credits in the US; the loan and bond system with public guarantees in Switzerland; the syndicated bonds issuer in the UK; the social housing mortgage guarantee scheme in the Netherlands and the housing construction convertible bonds instrument in Austria.

By undertaking a review of international models, the research aims to transfer knowledge of effective international practice, as well as to identify any cautionary lessons about channelling private finance towards affordable housing.

This introductory section explains the key terms and financing concepts that are used in the report, describes the Australian context for the study, gives a brief overview of the features of and differences in international financing strategies for affordable housing and outlines the methodology used for the case studies.

1.1 Definitions

It is important to clarify two key terms, affordable and social housing, which are used in the report. Affordable housing generally refers to privately provided housing that is priced to be affordable (by national standards) to households whose income and

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circumstances constrain their capacity to meet their housing needs adequately in the open housing market.

Affordable housing embraces different tenure forms ranging from rental to shared equity or home ownership. It typically concerns housing that is financed through a mix of public subsidies and/or planning benefits and private equity and/or debt finance. Although there may be various providers and forms of affordable housing, there are few examples of purely private affordable housing systems. The main providers in the countries reviewed in this report are government-regulated non-profit agencies.

Social housing is more specifically concerned with traditional forms of rental housing that have received high rates of direct public funding in the form of loans and grants. In many countries, social housing has been provided directly by public authorities, although this has changed in recent decades with the growth of specialised non-government housing providers. Access to social housing is determined administratively, according to public policy goals and there has been a growing trend to target housing to low and very low income households.

In practice, the usage of these terms varies across countries and is subject to change. There is an increasing tendency for non-government providers to use the term affordable housing to differentiate their products from traditional social housing, especially where the latter has become residualised and stigmatised. In Austria, for example, the limited profit housing sector prefers to be viewed as a provider of affordable rather than social housing, given its broad and economically active tenant base. In some countries, terms such as intermediate housing (UK) and workforce housing (US) have also been used, indicating the housing is not intended for the poorest or unemployed, but for a different target group of households. This shift in usage also reflects the widening need for affordable housing.

This report adopts local usage of these terms for the individual countries examined and the inclusive term affordable and social housing is used in general discussion.

1.2 Australian context

1.2.1 The need for affordable and social housing in Australia

Recent research shows that of the 7.6 million households in Australia in 2003/04, just under 1.2 million (16% of all households) paid 30 per cent or more of gross household income to meet their housing costs. Of these, 862 000 were lower-income households, defined as being in housing stress². A further 164 000 were moderate-income households (Yates & Milligan 2007, p.19). In its first State of Supply report, the National Housing Supply Council showed that in 2006 there was a need for an additional 251,000 rental dwellings affordable and available to lower income households (Australian Government 2009, p.98).

1.2.2 Traditional financing

Traditionally, social housing in Australia was funded through public grants and public loans. However, investment through these means has been in long term decline, resulting in new supply levels falling below household formation rates. Since 1996 disinvestment in social housing has occurred (Australian Government 2009, p.135).

The private rental sector in Australia has been sizeable (around 20–25% or more of occupied dwellings) since the 1960s but it has operated in policy and market contexts

² Housing stress is defined by a household in the lowest 40 per cent of the income distribution having housing costs of at least 30 per cent of their household income. For detailed results and technical notes see Yates and Milligan (2007).

that have favoured individual rather than large-scale, long term investors. Typical investors in private rental housing are individuals or families owning their own home and renting out one or two further properties. Schemes orchestrated by various governments to attract institutional investment into rental housing have been 'piecemeal and fragmented' or have lacked essential policy support (e.g. supportive tax rulings) and, as a result, have been short-lived (Berry 2000).

Since 2000 there has been an intense period of development of policy proposals designed to attract private investment into affordable housing in Australia. Key contributions were made by individual academics and coalitions of industry, non-profit, consumer and financial stakeholders (Australian Housing Research Consortium 2001; Wood 2001; McNelis et al. 2002; Allen Consulting Group 2004; Housing Summit 2007). For a summary of key features and history of these proposals see Lawson et al. (2009).The potential to use secured bonds for this purpose has been a consistent feature of proposals by the research community and is understood to be of growing interest to social landlords and financial investors in Europe (CECODHAS 2009; Jenkins 2009). For this reason, bond financing options featured prominently in deciding the case studies.

1.2.3 Recent Australian Government initiatives

Since being elected in 2007, the Rudd Government has made positive moves to address the identified shortfall in affordable rental housing in Australia. The two most significant initiatives of relevance to this study have been:

- 1. A \$6 billion one-off allocation in an economic stimulus package in 2008 to increase the supply of social rental dwellings by 20 000 over 3 years³; and,
- 2. a Commonwealth contribution of \$623 million over 4 years from 2008/09 towards the National Rental Affordability Scheme (NRAS), which when combined with state government outlays and private equity investment, aims to add 50 000 dwellings to the affordable rental stock.

These initiatives represent a significant increase in public funding for additional rental housing supply in Australia in the short and medium terms. The National Rental Affordability Scheme offers a tax incentive or grant annually for 10 years to private or charitable affordable housing investors respectively in return for provision of below market rental housing to low and moderate income households. It has potential to be a key mechanism for financing affordable housing, if prospective investors gain confidence that the government will continue to offer a reliable residential investment opportunity at volume (Milligan & Pinnegar 2009). Nevertheless, these initiatives alone will not be sufficient to meet identified and projected need.

1.2.4 State government initiatives

Prior to recent engagement by the Australian Government, most state and territory (hereafter state) governments had been active to varying extents in developing policy initiatives to promote the supply of affordable housing, in recognition of the need for more resources and options. State-level strategies have given different emphasis to policy levers across the spectrum of: public financing incentives; regulation and capacity building in the non-profit sector; and the use of planning mechanisms to protect, promote or produce affordable housing (Milligan et al. 2009). These diverse approaches have generated a plethora of small-scale programs and projects and created a fragmented policy landscape. In the Australian federated system, state

³ In August 2009 this fund was reduced by \$750 million and the supply target dwelling number was cut to 19 300.

governments acting alone do not have the powers and resources to create a largescale financing model that is capable of meeting the requirements of investors. These factors help to explain why the conditions for establishing a sustainable affordable housing model at scale have not emerged in Australia.

1.2.5 Western Australia

This research has been commissioned by the Western Australian Government. Following an election in May 2008, a new Coalition Government in Western Australia established a Social Housing Task Force to consider (*inter alia*) how to expand the supply of social housing in that state, giving emphasis to the potential of new financing options. The Task Force was asked to consider a new policy model that could deliver an aspirational target of an additional 20 000 social housing dwellings across Western Australia by 2020. The final report of the Task Force (Social Housing Task Force 2009) considered that this was an achievable and desirable target. It recommended the development of a whole-of-government State Affordable Housing Strategy, to be informed and supported by local government housing strategies that identified the housing needs of their communities.

A wide range of specific actions was proposed by the Task Force, including: reforms to the planning system and to design and building codes to promote cost-effective housing forms; dedication of 15 per cent of government land for affordable housing; and policy reforms designed to improve housing options for lower-income households. An important organisational proposal was to establish a Housing Innovation Team to facilitate innovative housing solutions, help broker complex project deals for large projects and to develop the methodology and practical ways to attract institutional investment from the private sector. This research responds to that latter proposal by examining international approaches to that task.

The Task Force report highlighted that significant and sustainable growth in social and affordable housing would require a long term vision and progressive implementation of strategies that would achieve private sector involvement and leverage housing growth through the non-government sector. It cautioned that, as new policies were being implemented and the foundations of an effective affordable housing system were being put in place, commonwealth and state governments would need to provide the majority of capital and recurrent funding to ensure that social housing continues to be built.

Similarly, in their recent assessment of what will be required to develop a large-scale affordable housing response in Australia, Milligan et al. (2009) argued that growth in affordable housing necessarily requires a long term investment path involving a substantial commitment of dedicated public funds coupled to forms of cost-effective private financing.

1.3 Key concepts in financing affordable housing

To provide a conceptual framework to support a consistent analysis of how countries finance affordable housing, this section deals with some basic concepts concerning rent setting, financing options and subsidies. Our discussion of these concepts draws on social housing guidelines that were developed by the United Nations Economic Commission for Europe (UNECE 2006) and on previous research (Milligan et al. 2009).

Financing of social housing has to consider the financing of operations and the financing of additional supply. This report is primarily about financing new supply. However, the financing of both new investment and existing operations have to be considered together as they interact.

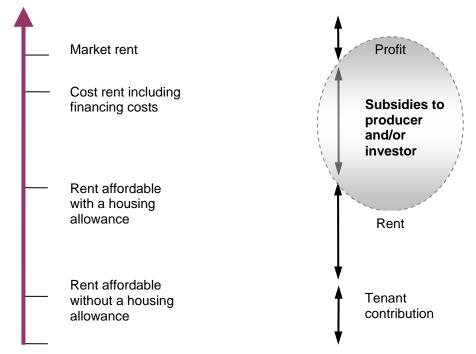
The first source of funds for the financing of operations is rent revenue. The level of rent is a major factor affecting operational viability (including the capacity of a provider to maintain housing over its life) and importantly, the level of surplus (over operations) that will be available to service the costs of private finance. However, the social purpose of social and affordable housing schemes is to ensure rents are affordable for the intended target groups for the housing. The lower the rents (to achieve affordability for the lowest incomes) the greater the gap will be between revenue and the potential for financing additional investment.

In a social financing system, this gap is bridged by providing a subsidy to a provider and/or to designated tenant groups. The former approach provides an additional recurrent revenue stream to the provider (or investor in the case where the provider is not the owner) and the latter approach (often called a housing allowance or rent assistance) enables the tenant to pay more rent. Rents will therefore be set differently depending on how subsidies for financing operations are provided.

As illustrated by the case studies that follow, countries choose different rent-setting regimes, such as market rents, cost rents or income-related rents. These have different economic and social benefits (see UNECE 2006 for further discussion). Policy settings in different countries also feature different mixes of subsidies to tenants (referred to as demand-side subsidies) and subsidies to providers or investors (referred to as supply-side subsidies). There is no one solution to how these rent and subsidy arrangements should be combined. What happens in individual countries reflects contemporary and historic characteristics of local housing markets and the housing financing system, as well as political and policy preference. Nevertheless, there are clear principles and many evaluative studies that can guide best practice (see UNECE 2006). Figure 1 shows schematically the relationship between different ways of setting rent and subsidies for providers and tenants.

Using Figure 1, the illustrative case studies are intended to highlight the different ways that governments can utilise demand- and supply-side subsidies to help attract investment into rental housing, and how this relates to rent setting. In general, it is the extent to which rents and subsidies together create a surplus to meet the financing costs of additional supply that determines the extent to which providers can raise private finance to invest in additional supply.

Figure 1: Rent setting and subsidy impacts on financing affordable housing



Source: Adapted from UNECE (2006), p.48

There is a range of other strategies that can be used to complement subsidy arrangements. These include:

- → Reducing the cost of finance, e.g. through using more cost-effective forms of finance and more efficient fund-raising.
- → Reducing the cost of procuring housing, e.g. through better procurement methods, utilising lower cost forms of housing that meet needs adequately, using non-profit developers to save developer margins, and discount pricing of land provided by government or a developer.
- → Planning policy support, such as mandated or negotiated developer contributions and planning concessions that are designed to support affordable housing goals.
- → Exemptions for providers / investors from development-, finance- and propertyrelated government taxes and charges.
- → Reutilising past investment, e.g. through capture and reinvestment of increased asset values or refinancing of amortised stock.
- → Regulatory regimes that help to control financial risks and thereby increase confidence of investors and lenders.
- → Efficiency of operations, e.g. through having a contestable system of provision.

Policy strategies that engage all of these components of an affordable housing business model in a packaged and well-integrated manner will promote optimum capacity for additional supply. The sections that follow give information about the extent to which and how a mix of financial and non-financial strategies are applied in a particular country, with a focus on the forms of financing and financial incentives and on the fund raising and allocation mechanisms (financial intermediaries) that are being used to promote more efficient and effective investment.

To achieve steady growth in supply, a social and affordable housing system requires a secure and predictable source of long term finance at lowest possible cost. Governments also need to ensure financial arrangements are viable and sustainable to avoid downstream risks, such as loss of housing or pressure on rents. This is done through both regulatory measures and by sharing risks. For example, governments may provide guarantees to lenders, establish mutual funds to cover any unfunded liabilities that arise, or provide additional loans that reduce exposure to private capital. Such loans are usually subordinated to commercial loans to reduce the cost of private capital. As repayment of commercial loans for affordable and social housing relies on some form of subsidy, stability of policy settings is also crucial.

1.4 Trends in financing strategies overview

National affordable and social housing systems are shaped by an enormous variety of financing, rent and asset management regimes, as well as by different rules and practices concerned with the use of funds and the provision of housing. This diversity has contributed to quite different housing outcomes in the countries discussed in this report and elsewhere. It also highlights the need for explicit and clear public policy goals to inform the business decisions that have to be made continuously by investors and providers.

Traditionally, public grants and loans were the main and cheapest mechanism to finance social and affordable housing. Due to borrowing constraints, and the greater availability of finance from capital markets, social and affordable housing has increasingly been financed by a variety of sources, as the share of government investment has declined. When public finance is not used as the main funding mechanism, governments need to mobilise private and institutional sources of finance in a way that meets the requirement for secure cost-effective financing (UNECE 2006). Table 1 outlines standard financing mechanisms and their typical application.

The trend to private financing has emerged for a range of reasons. Foremost among these have been the strong downward pressure placed on government borrowings by monetarist fiscal policy (promoting privatisation and a diminished role of governments in direct housing provision), and a strong ideological preference for targeted and controllable demand-side subsidies rather than supply-side subsidies. The trend seems to be strongest in countries with: large and mature housing provider systems; with ageing asset bases requiring modernisation and substantial upgrade; and/or where mortgage markets have grown in size and competitiveness, thus bringing interest rates to levels that are competitive with public loans. Cashing up housing associations, transferring assets at discounted rates from public to non-government providers and providing guarantees on commercial loans are examples of specific country strategies facilitating the use of capital market assets for affordable housing providers.

We know from international comparative reviews (CECODHAS 2009; Scanlon & Whitehead 2008; Lawson & Milligan 2007) that private finance has become an increasingly important element of social and affordable housing provision in many countries. Following the move away from traditional public grant/loan funded models, the proportion of direct government involvement in housing finance has tended to decline, but nevertheless varies significantly across countries. Direct government investment identified in this research varies from almost zero in the Netherlands (where organisations were cashed up by the government in the 1990s and privatised); to small (5% of total project costs) low interest loans from a revolving fund in Switzerland where providers are small and slow growing; to 30–40 per cent of capital public loans in the UK and Austria, where social landlords play a key role in housing markets.

Mechanism	Brief outline				
Grants	Directly able to influence housing supply, but limited to available funds and political commitment to housing. Often used to lever and secure other sources of funds.				
Discounted Iand price Traditionally a key vehicle to manage urban development outcome governments are major land holders. Can be applied specifical affordable housing goals. Subject to land availability and market					
Public loans	Traditionally the primary financing strategy for social / affordable housing. Cost-effective fund-raising. Revolving liquidity (through loan repayments) can offer longer-term reinvestment potential. Recently, curtailed by public sector borrowing limits and the attractiveness of low private mortgage rates So-called <i>soft</i> loans, may not require same security as for private finance.				
Protected circuits of savings for specified investments	Used to achieve a dedicated flow of affordable credit for affordable housing programs. Sustained in some countries, while others have dismantled them to improve competitiveness of local banks amid foreign competition.				
Bank loans	Increasingly play a role in financing affordable housing, either partially or entirely. Vulnerable to changing financial conditions and alternative investments. National approaches vary in cost-effectiveness and the appropriateness of the fund-raising and distribution mechanisms.				
Interest rate subsidies	Useful in the early phase of a mortgage to reduce higher relative costs. Containing the cost to government over time relies on steadily rising wage and house prices and stable interest rates.				
Tax privileged private investment	Used to channel investment towards affordable housing and to compensate investors for lower rates of return and profit restrictions.				
Government- secured private investment	Government-backed guarantees to reduce risks to financial institutions investing in affordable housing, passed on at a lower cost of finance.				
Tax privileges for providers of affordable housing	Many countries provide various tax privileges to registered organisations, for example income and investment deductions, depreciation allowances, reduced sales and property taxes, exemptions from capital gains tax. These allowances compensate the efforts of the preferred providers towards achieving the social policy objectives of governments, such as housing low income households or meeting high environmental standards.				
Use of own reserves and surpluses	Mature housing organisations can leverage their balance sheets, reserves and surpluses to invest in additional housing. Funds raised may be pooled to support weaker organisations or to promote innovation and competition.				
Use of tenants' Some funding models incorporate a small tenant equity contribution. Governments may assist low income tenants to make this contribution Larger contributions may lead ultimately to tenant purchase of dwelling.					

Table 1: Financing mechanisms for affordable housing

Source: Milligan et al. (2009) p.28

The brief overview of the characteristics of affordable and social housing systems below illustrates some key aspects of the diversity of approaches and outcomes to indicate the kind of policy choices that need to be considered. More details on the different options are included in the country reports.

Looking first at tenure, some countries direct housing finance to singular tenures, such as social rental housing or home ownership. Other countries allocate subsidies or incentives across different tenures, in an attempt to promote tenure neutrality and provide a genuine choice for all household types, income levels, ages and lifestyles, and also to reduce socio-tenurial polarisation.

In terms of providers, some financing strategies are restricted to approved providers, such as public landlords or registered housing associations, while others enable the participation of a wider variety, such as limited profit and for-profit companies, albeit with specific conditions for participation. In recent years there has been a shift away from direct public provision in social housing systems (especially those that require funding for substantial renewal) towards using non-government and private providers. This has occurred most notably in the UK, the US, Germany and the Netherlands. Other countries have a long tradition of mainly private provision of social and affordable housing, establishing large limited-profit companies for this purpose, as in France, Austria and Switzerland since the early 20th century.

Rules and regulations that are linked to the receipt of financial incentives may be applied to the quality, size and cost of housing to be produced and importantly, to the allocation of housing. Many countries have increased their requirements to channel assistance towards those households deemed unable to be housed affordably and appropriately in the private market. Typical priority groups include key workers in highcost housing markets, households whose incomes are too low to afford decent housing, households who are seeking political asylum and people with specific accommodation needs not being met by the market.

The set of rules operating in some countries has promoted a dual rental market because different regulatory and financial arrangements apply to market segments, as found in the UK, US and Australia. In such systems, providers of housing for lowerincome households are treated differently in terms of their access to public finance, taxation treatment and whether eligibility criteria and allocation mechanisms apply. One negative consequence of dual markets has been the process of residualisation, a phenomenon which also now afflicts formerly more diverse tenant communities in the UK, Sweden, France and the Netherlands. There estate-bound communities have narrowed in terms of their socio-economic profile, as households with a stronger socio-economic or labour market position have been either pushed or pulled out of the assisted sector, leaving behind an increasingly poor tenant base. Alternatively, a broader more inclusive approach to financing and eligibility is still found in so-called unitary (or integrated) housing markets, such as Austria.

Another important dimension of financial arrangements underpinning social and affordable housing systems concerns the relationship between the rent revenue regime and the size and maturity of the asset base. Asset-based financing strategies are very different from more revenue-driven models. In asset-based strategies, such as applied in the UK and the Netherlands, the portfolio of existing properties acts as a means of generating investment funds, sites for redevelopment and cash flow, and for securing debt. This strategy requires large-scale, asset-rich organisations that have the freedom to invest and disinvest in their stock in order to ensure their financial continuity. Such a model can also produce the opportunity to cross-subsidise less profitable activities, such as accommodating households with special needs (Pawson & Fancy 2003).

Alternatively, meeting the cost of private financing may depend more on rent revenue, as in Austria. In revenue-based financing systems, the rent-setting model and the flexibility that providers have over rent levels is crucial to financial security. In these systems, the role of governments in providing supply subsidies and rent assistance is very significant to the long term viability of providers (by reducing financing costs and securing revenue from low income households) and to affordability outcomes for tenants (through bridging the gap between tenant capacity to pay and costs).

Rents are set quite differently across the affordable and social rental systems featured in this report. They may be based on original production and ongoing operation and finance costs as in Austria and Switzerland; they may reflect neighbourhood income levels, as in the US; or they may be related to the quality and location of the dwelling, as in the Netherlands. Tenants may be expected to pay all or some of the rent. For those unable to pay there may be rent assistance, transferred directly to eligible tenants as in the Netherlands, or paid to the landlord who houses them, as in some cases in the UK. Mechanisms to review rent levels and rules about their increase (or decrease) also vary considerably. They may be determined annually by central government within a particular market segment, for example as applies to all dwellings under a certain price/quality limit in the Netherlands, or they may be indexed to CPI, as applies in Austria to rents that are based initially on individual project costs.

1.5 Methods for analysing financing strategies

Empirical work for this study extends and updates primary research on affordable housing that was undertaken previously in each of the case study countries by either Lawson or Gilmour (see Milligan et al. 2009; Gilmour 2009). This involved interviews conducted with policy makers, provider organisations, housing peak bodies, financial institutions and local researchers, as well as reviews of the academic and public policy literature and relevant sources of data. This repository of information and existing knowledge has now been updated through desktop research, a closer examination of information gathered previously, especially about financing mechanisms and, where required, additional discussions with national experts (as detailed in the Acknowledgements).

An additional focus of the latest research has been to make some assessment (subject to available evidence) of the impacts that the global financial crisis and the subsequent credit crunch have had on the housing financing model and its performance in each case study. As the country reports show in more detail, this has yielded important information on the latest strategies that are being adopted to protect and maintain investment in affordable housing, as well as offering a lens through which to view the robustness of different funding strategies.

A common framework has been used to collect and present the information on each case study using five key themes:

- → financial support and the role of private finance, which is the core focus of the research as discussed above
- → asset management, which concerns how the ownership, worth and physical characteristics of the existing portfolio of housing, and any rules about its use and sale, impact on financing strategies
- \rightarrow rent setting, which covers how rents are set and adjusted, and rent subsidy arrangements
- → regulation and profit making, which is concerned with who provides, how they are regulated and the business rules that apply

→ housing system outcomes, specifically supply levels, volumes of finance attracted, and access and affordability outcomes.

In the short timeframe of the study (September to November 2009), every effort was made to provide the information across these themes in a consistent form and depth to aid comparability. However, in a few instances further research would be necessary to obtain fully comparable information.

Following the structured description of each country's system, each case study concludes with a table that offers an initial qualitative assessment of the defining elements of the financing model using a common set of evaluative criteria. The next section discusses the choice and application of the criteria.

1.5.1 Approaches to assessing housing systems

A wide range of criteria have been used in previous studies that aim to assess the qualities of different housing strategies in Europe, North America and Australia. One important type of approach is to consider the achievements of social housing in addressing housing needs. For example, the European Commission has funded evaluations of the effectiveness of alternative approaches in meeting social welfare goals, such as poverty relief and social inclusion, and in providing tenure choice and tenure pathways (SOCOHO 2004).

International assessments have also been made of the performance of different models under different market conditions, such as: recent house price booms; during periods of labour market and socio-economic restructuring; and during the current global financial crises (see Lawson 2009). Another recent assessment has focused on the role of financing arrangements in steering the practices of housing organisations (see Lawson & Nieboer 2009). Over time, new criteria to assess social housing systems develop in response to shifting political priorities, for example, liveability, sustainability, energy efficiency and most recently, the role of the housing market in economic stability.

All of these evaluative studies offer important contributions to our understanding of the multifaceted impacts (intended and unintended) of the design and implementation of different affordable and social housing systems in their specific national, local and historical contexts.

1.5.2 Assessment criteria for this study

The assessment criteria for this study have been selected to highlight the performance of differing long term financing models across six countries. The Australian research on financing affordable housing (see above) includes some well-developed criteria for evaluating funding models which have been drawn on for this study (e.g. Allen Consulting Group 2004; McNelis et al. 2002; Australian Housing Research Consortium 2001).

The ten criteria that have been adopted are defined in Table 2.

In this preliminary stage of research, our preference has been to have a number of criteria to draw attention to the range of issues that may impact on the success of different financing approaches and their interaction with delivery systems. The criteria chosen could be developed further and honed in conjunction with more in-depth primary research on financing models.

The criteria have been applied across the cases to give a consistent assessment of each country's financing system for social and affordable housing in its local context. However, it should be stressed that while this approach offers some insights into the strengths and weaknesses of different approaches (as discussed in the concluding section of the report) we have not made a quantitative evaluation of the financing systems that are covered. Given the brief and timelines of this study, it has also only been possible to provide general findings about the potential applicability of these different approaches in Australia.

Criteria	Scope of assessment
Cost effectiveness	Level of output of social housing and leverage of private resources for given amounts of public subsidy
Cost reducing	Financing mechanisms provide housing at least possible cost
Rent reducing	Financing mechanisms do not place excessive pressure on rents or increase financial risks for low income tenants.
Equitable	Directs greatest public subsidies towards lowest income households
Appropriate risk allocation	Acceptable allocation of risk across key players: government, providers, investors and tenants. Rate of return commensurate with investor risk.
<i>Impact on public finances</i>	Subsidy costs are predictable, stable and reasonable for government
Robustness	Mechanism is robust under different market conditions and promotes market stability and moderates volatility
Feasibility	Mechanism attracts political and stakeholder support that can be sustained.
Effective delivery	Supports delivery arrangements that improve the access of low income households to quality, secure and appropriate housing that is affordable to them.
Enhances capacity	Supports preferred housing providers to operate independently, to increase the supply of social and affordable housing.

Table 2: Assessment criteria

1.6 Case study overview

Before describing and assessing each of the selected financing mechanisms in more detail, Table 3 provides an overview of each mechanism and important characteristics of the housing system within which each type of approach operates.

Social housing as % total stock		Housing allocation	Rent regime	Social housing organisations	Main private financing instrument	
France	18%	Broad, targeting according to subsidy program	Central government sets maximum rents, which vary by region and subsidy program	Public bodies, non- profit organisations, mixed companies and cooperatives	Protected circuit of savings provides low interest mortgage loans for a variety of social housing renovation and development programs	
US	4%	Narrow, targeting based on income and housing need	Rent related to area medium income, not actual tenants' income	Public housing authorities (nationally coordinated). Tax credit schemes run by for-profit and local non- profit organisations	Equity investment via tax credits available to for- profit and non-profit organisations. This is blended with traditional bank debt and with layered grants from state and city authorities. Philanthropy can be important on some projects and to support non-profit providers	
Switzerland	8%	Broad access in the past with occupation now more diverse	Cost-based	Regulated limited-profit associations and municipal companies	Bank finance, low interest loans from a joint state/sector revolving fund, loans from bonds issued with state guarantee (administered by non-profit sector through regional umbrella agencies) plus sale or lease of land at below market price	
England	21%	Broad access in the past but now more targeted as supply constrained and waiting lists long	Tenant income supported through <i>housing benefit</i> based on proportion of income spent on rent	Municipal providers, non-profit housing associations and small number of private sector organisations	Bank finance in a highly developed and competitive market. Limited use of bonds either raised directly by a housing association or syndicated by a non-profit intermediary. Some public grants	
The Netherlands	32%	Broad access, narrowing income	Rent-based on utility value of dwelling and target household income level	Non-profit housing associations	Bank finance in an uncompetitive but public bank-dominated market backed by triple guarantee (central/local govt. and associations). Self-financing by financially robust associations	
Austria	21%	Broad access with targeting depending on particular subsidy program	Cost-based	Regulated limited-profit associations and municipal companies	Public grants and loans combined with low interest commercial loans, raised via tax- privileged Housing Construction Bonds	

2 FRANCE

In France affordable and social housing is provided by a variety of landlords: public and private in the social and market sector and together they provide 43 per cent of the total rental stock and 18 per cent of total housing stock (Table 4). It has been estimated that currently, more than one person in six is housed in the social housing sector, which is made up of 4.5 million dwellings, often spatially concentrated and mostly (86%) flats (CDC 2009; Tutin 2008).

The largest providers of rental housing are the public HLM (*Habitations à Loyer Modéré*) now known as *Offices Publics de l'habitat*. They are managed and financially controlled by district and regional governments and provide 18 per cent of all rental housing. There are also well-established, limited dividend private HLMs, known as *Enterprises socials pour l'habitat*, with origins in the company housing sector. They are managed by both public and private shareholders and provide 15 per cent of rental dwelling stock. Finally, there are other social landlords known as *Societes d' Economie Mixtes* (SEM) which are public private partnerships, operating under the same conditions as social landlords, which provide 10 per cent of the rental stock. They are governed by a mix of public and private shareholders, which for governance purposes includes at least 30 per cent local authorities and tenant votes.

Type of landlord	Dwellings (000)	Total (000)	% rental stock	Total housing stock% ¹
Public HLM	2026		18	
Private HLM	1756		15	
Other social landlords, inc. SEM	1138		10	
Total social rental sector		4920	43	18
Individual private rental landlords	6329			
Institutional private rental landlords	219			
Total market sector		6548	47	23
Total rental sector		11 468		

Source: Amzallag in Haffner et al. (2009)

1 Because of the complex nature of private and social tenure in France, comparable tenure statistics are unavailable. Those referred to here have been interpreted from Housing Statistics (2005-6), Tables 3.5 and 3.6.

Private HLMs are now the main producers of French social housing, for both rental and ownership in the affordable and social housing sector. There are 317 such companies, many in groups managing from 10 000 to 130 000 dwellings each.

2.1 Financial support and the role of private finance

French social housing is largely funded by off-market loans, supplemented by various employer grants, subsidies, guarantees and tax incentives, as well as a small contribution of landlords' own equity. The mix is shown in Figure 2.

Over the past two decades there has been a significant shift from supply- to demandside subsidies and from direct to indirect subsidies in France. In 1985, bricks and mortar subsidies consumed 50 per cent of the housing budget, falling to 20 per cent in 2008. Conversely, rent assistance has risen from 35 to 50 per cent over the same period. Furthermore, fiscal rebates or indirect assistance has grown from 15 to 30 per cent of total expenditure.

State and local governments provide grants for building and buying land and also provide indirect assistance by reducing the rate of value-added tax (5.5%) on social housing construction and providing a land tax rebate for 25 years. The total budget for supply-side assistance was €5.1 billion (\$8.1b) in 2008. Low cost off-market loans are guaranteed by local authorities or by a special financial body (CGLLS Mutual Fund for Guarantees of Rental Social Housing). Local housing targets and planning processes, such as inclusionary zoning, help provide land for social housing development. The employers' *1 per cent* of pay-role (now actually 0.45%) contribution is also used as loans and for grants to promote rental accommodation or home ownership.

On the demand side, the government provides housing benefits to eligible tenants at an average monthly cost of \in 165 (\$264) for tenants and \in 150 (\$240) for owneroccupiers in 2003. The total budget for housing allowances was \in 14.5 billion (\$23.2b) in 2008, and was primarily financed by social security, but also by the state budget (12%) and the employers' *1 per cent* fund (Schaefer 2008; 2003).

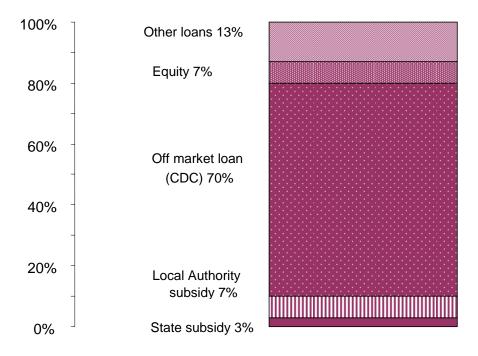


Figure 2: Components of financing social housing projects in France

Source: Adapted from Schaefer (2008)

To provide lowest-cost finance for social housing construction, the French government has sustained for over 200-years a protected circuit, involving a conversion of short term deposits into long term loans at cost price for services in the public interest, such as transport, universities and housing. Deposits made into the *Livret A* government-backed savings scheme, while providing security and adequate return for investors, are the main sources of loan funds to build social housing. Part of these funds is managed by the French government-owned and guaranteed *Caisse des Dépôts* for developments by registered social landlords.

Livret A savings accounts are popular because they offer a stable interest rate, interest is tax-free and deposits are guaranteed by the state (through the Caisse des Dépôts (CDC)). There are around 50 million such accounts, with a deposit cap of €15 000 (\$24 000). For many households the average account holds only €3000

(Schaefer 2009). The level of funds centralised with CDC is set above a minimum of 125 per cent of the amounts outstanding on loans for social housing and urban policy (CDC 2009). Together, these deposits formed a pool of €220 billion (\$352b) in 2008.

This substantial pool of funds is partly used to provide long term (15–50-years) below market rate loans (PLUS – *prêt locatif à usage social*) to finance approved initiatives by registered public and private social landlords, including housing for people with very low incomes, housing and urban renewal, homes for the elderly or handicapped, apprentices or student hostels, equipped campsites for gypsies or travellers, and so on. Importantly, loans are only provided when proposals have received public approval, which gives providers access to other state subsidies and local authority guarantees. Social landlords are also involved in partnerships with private developers (such as retail housing developments) and CDC can provide loans to support these. Loans are guaranteed by local authorities (95% of cases). When this free guarantee is not available (5% of cases), they are guaranteed by a mutual fund (CGLLS) for a 2 per cent fee (Shaefer 2003; Taffin 2004).

The CDC has a credit rating of AAA, the same as the French state. To ensure the equilibrium, liquidity and security of the fund, CDC retains a large part of the funds in the form of liquid assets and investments in the financial markets, so it is able to reward deposit holders and to honour requests for withdrawals at all times.

In 2008, CDC provided \in 8.5 billion (\$13.6b) in finance for construction and upgrading of social housing and urban renewal at cost price – interest paid to savers plus a margin for banking and management costs (CDC 2009). Importantly, from 2009 the number of banks able to hold *Livret A* accounts has broadened from public postal and savings banks to include any bank. During negotiations, the government achieved a reduction in the fees paid by the CDC for collecting *Livret A* savings from 1.1 per cent to 0.6 per cent. Consequently the interest on loans for social housing was reduced from 4.6 per cent in 2008 to 4.1 per cent in 2009 (Schaefer 2009).

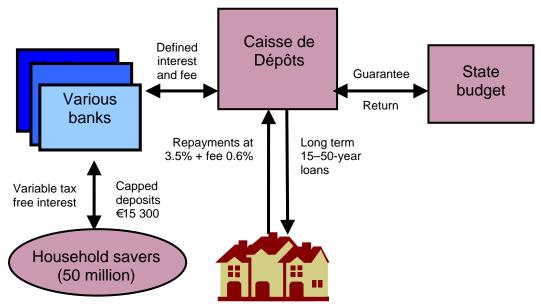


Figure 3: CDC financing mechanism in France

Source: Adapted from Schaeffer (2008)

The role of the CDC in housing finance has proven robust over time, with the potential to perform a countercyclical role when required. It currently plays a key role during the financial crises in moderating volatility in the real estate market.

2.2 Asset management

The financial position of French social landlords varies in terms of their mortgage maturity, solvency and reserves. Those with higher proportions of stock constructed in the 1960 and 1970s now generate surpluses that can be used as equity for new projects and renewal.

HLMs must be able to fund their operations themselves yet do receive significant supply-side subsidies along with favourable loans and tax incentives for building new dwellings as well as buying and refurbishing existing ones. Project costs, including building and land, cannot exceed reference values and must meet quality standards approved by the Ministry of Housing. Further, plans must provide a financial return which takes into account expected rent revenues and expenses for each housing project according to projected increases in rents, property taxes, maintenance and management expenses and vacancy and turnover rates (Schaefer 2003).

Private social housing providers have the right to sell dwellings to tenants and other households and have been strongly encouraged to do so under the current French presidency. However, unlike the UK, sales have not been significant. The low level is possibly due to the high market price of the dwellings, limited financial capacity of tenants, reluctance of landlords to sell dwellings that have been paid off and thus provide a valuable asset and the complexities that mixed ownership presents for building management (Bougrain 2004).

2.3 Rent setting

The purpose of French social housing is to provide broadly accessible but also highly targeted affordable housing for low income households. Dwellings are allocated according to need and waiting lists and rents are regulated by state decree. This directly affects rent setting and allocation by social landlords and rent levels closely relate to financing arrangements and the role of subsidies, rather than dynamic market conditions. For this reason social rents are substantially lower than market rents in urban areas, especially Paris, and around 25 per cent lower in rural areas.

Typically, the calculation of social rents varies according to the subsidy program and the conditions set out in related contracts between the governments and social landlords. However, at certain times, the government has reduced the interest rates on public loans in exchange for rent freezing by social landlords. Allocation of social tenancies is broader than purely welfare-orientated systems, such as Australian public housing, but most subsidy programs are limited to tenants with incomes below a maximum ceiling. Again this varies by program, household type and region.

The term of tenant contracts varies across the rental sector, from indefinite in social housing, to 3-years in the regulated market and normal market sector, to 6-years for institutional market rental sector. Once allocated a social rental dwelling, household income may rise above these limits, but a household in that situation must also pay a supplement to compensate for the privilege of remaining. For some tenants, this may promote their move to the free sector. However, the incomes of social tenants are increasingly well below the maximum ceiling. Further, the difference between social rents and market rents in high-demand areas is so great, that moving to the private sector is less attractive and often not feasible. There is currently a political discussion about the level of the levy in markets such as Paris and the tenancy conditions of those above the income limits in such markets.

Allocations are also influenced by the role of companies as shareholders and dwellings can be reserved for their workers. Companies (of more than 10 workers) who contribute 0.45 per cent of their company wage account towards a housing

construction fund, may reserve dwellings for workers whose incomes are below the ceilings set by subsidies also used to finance the project.

Subsidies are also available for the intermediate sector (reserved dwellings in the private sector) and such projects are also subject to rent control. Purely private rented (non-social sector) dwellings may be subject to rent regulation based on old contracts or to reflect market rents in local area in the case of renewed contracts for sitting tenants. Adjustments to rents are based on an index of costs.

2.4 Regulation and profit making

All French social landlords are governed by regulations over rents and allocations. Their investments are also regulated and they are subject to a housing construction code, which concerns the construction and management of housing for low income households. MIILOS, (*Mission d'Inspection Interministérielle du Lodgement Social*) inspects around 200 social landlords per year, auditing their accounting, financial, social, technical and administrative activities. Sanctions issued by MIILOS vary from recommendations to improve management practices, to dismissal of the board. In recent years, emphasis has been placed on conditionality in financial support, strategic asset management and preventing the misallocation of grants. When facing serious financial problems, landlords can be forced to merge with stronger ones.

Private HLM companies are also bound by private company rules, with profits limited to 4 per cent of their capital. However, such companies tend to have very low capital (Schaefer 2003) and profits are often zero. They are not subject to company taxes.

2.5 Housing system outcomes

Unlike the UK and the Netherlands, there has not been a decline of social stock in France, either absolute or relative. Conversely, there has been slow and steady growth. Social rental landlords contribute approximately 40 000 to 65 000 dwellings of total dwellings starts of 300 000 to 430 000 per year. The level of residential construction by tenure in France from 2001 to 2007 is presented in Figure 4.

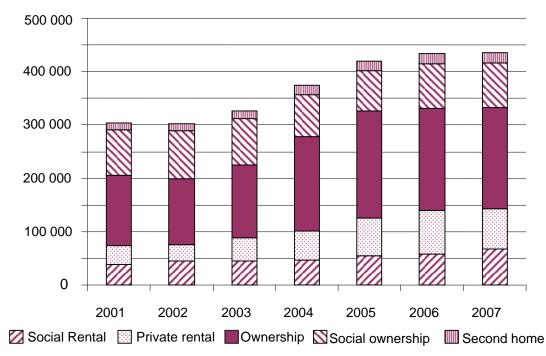


Figure 4: Number of dwellings constructed across different tenures in France

Source: Schaefer (2008)

CDC manage €220 billion (\$352b) regulated savings and invests in €90 billion (\$144b) loans to social housing developers. Approximately €7–9 billion (\$11–14b) in loans are granted where properties conform to certain space and amenity standards and rent levels are set at approved levels. As a result of this crucial source of low cost finance, the purpose and volume of social housing construction is tightly managed in partnership with central government. Local governments influence production through their planning procedures and enjoy nomination rights, and influence the operational management of the HLMs they sponsor (Tutin 2008).

Crucial to the level and type of production has been the level of subsidies provided by the government complemented by the off-budget financing mechanism provided by CDC (Tutin 2008). Recently these subsidies have grown, with an additional purpose of supporting employment in the residential construction sector and moderating volatility in property markets. In 2008, social housing production was given an additional boost by the central government, with €1.4 billion (\$2.2b) funds for housing construction, primarily in the social and intermediate rental sector to lift production. The CDC has also played a moderating role in the housing market during economic downturn, by purchasing 10 000 units from developers to support the property market in 2009. An evaluation of the protected savings circuit mechanism is provided in Table 5.

Cost effective	The main cost to government is indirect, through tax exemptions for interest on savings in <i>Livret A</i> accounts. There is also an implicit but unfunded guarantee on CDC loans. However, the CDC actually provides a return to the government not only in the form of cost-price off-market loans, but also a return on its investments. However, the scale of this return needs to be established.
Cost reducing	CDC contributes the largest proportion of finance for social housing projects (70%+). Interest on CDC loans is lower than commercial rates and terms are very long (35–50-years). Loans are guaranteed by local authorities, further reducing their cost. Recent negotiations between the CDC and deposit-taking banks have reduced management fees and thus interest rates.
Rent reducing	Rents are based on net construction costs which are reduced by low interest loans from subsidy programs. At times interest has been lowered in return for rent freezes. Loans are derived from Livret A deposits via the CDC. It provides the lower-cost loans to those programs targeting the lowest-income households. Their off-market cost-price loans are claimed to be considerably lower than market alternatives.
Equitable	Only public entities and non-profit companies can benefit from CDC loans. It has a very equitable interest rate policy. The CDC supports a variety of housing subsidy programs: the lowest-cost loans are for projects that target the lowest-income households.
Appropriate risk allocation	There are loan appraisers within the CDC with expertise in social and affordable housing. The guarantees from local authorities and the mutual fund (CGLLS) have never been drawn on. The setting of the interest rate is a political decision, subject to competing tensions between various parties. In the past the state has reduced public loan interest rates in order to keep rents low.
Impact on public finances	The CDC is a government-owned financial institution. The deposits it manages require implicit taxation subsidies and savings guarantees to be attractive to households, as well as a government guarantee for its loans (which has never been drawn on). Further research could determine how expensive these implicit costs are and the return on investments from the CDC, as mentioned above.
Robustness	Unlike private financing mechanisms in some other countries, the French model has been a buffer for social landlords during the GFC. During this

Table 5: Evaluation of the protected savings circuit in France

	period, the guarantee on savings has attracted many small deposits. The CDC is being used to strengthen weak housing markets during the crisis.
Feasibility	The CDC has been established for almost 200 years and plays a significant role investing in public infrastructure through cost-price off-market loans. Recently, it has responded to criticisms from the EU concerning competition among deposit-taking institutions by broadening the number of banks able to host <i>Livret A</i> accounts. As a result, management fees were actually reduced.
Effective delivery	Loans are only issued on the basis that they meet the standards and affordability conditions of the subsidy programs from which they benefit. Only program-approved projects are able to receive a CDC loan.
Enhances capacity	The loans are only accessible to public and non-profit enterprises. Loans are lower than commercial loans, reducing the financing costs of social housing projects. France has produced a higher rate of social housing than any other European country in recent years.

3 UNITED STATES

The US has a small social and affordable housing sector by international standards. From the 2000 census, the total stock of occupied dwellings was 105.5 million, of which 66 per cent were owner-occupied. Determining the share of non-market housing is difficult as data is based on a subsidy program, and households may receive more than one type of subsidy. The US has 1.25 million public housing units, there are 1.6 million private sector-owned affordable units where landlords are subsidised (see Section 3.1) and 1.5 million properties part-financed by tax credits (Schwartz 2006). Hence total US social and affordable housing is around 4.4 million units, or 4.2 per cent of total dwellings.

US public housing is nationally funded and coordinated, operating independent of state and local authority control. The 3200 Public Housing Authorities (PHAs) are diverse in size, with the top 13 each managing over 9000 units, although most run under 500. Public housing reached a peak of 1.4 million units in 1994, but has since been in gradual decline as estates are redeveloped under the HOPE VI program. This program, launched in 1993, uses public–private–non-profit partnerships to renew public housing. Schemes mix federal subsidies with private capital, with ownership and/or tenancy management often transferring to non-profit or for-profit organisations.

Demand-side housing support is rationed, rather than provided to all eligible applicants based on housing need. With demand far exceeding supply, successful applicants are chosen by lottery (Hulse 2003). From the 1970s, *section 8* housing vouchers have been provided to selected low income tenants to pay the difference between 30 per cent of household income and the fair market rent which is set to be equivalent to rent at the 40th percentile of the rent distribution in a defined local area. Occasionally tenants with vouchers will occupy properties financed through tax credit schemes, although generally supply and demand support is kept separate.

Non-profit housing organisations complement the delivery of social and affordable housing by the public and private sector. Although non-profits have played a role in US housing delivery for a century, their role expanded through grant programs during the 1970s and with the launch of tax credits in 1986. The most prominent non-profits are the 3300 Community Development Corporations, ranging widely in size and capacity. Most are small and serve local communities, with few operating across state boundaries. Some 100 non-profit organisations have grown larger and more professional, one of the largest being BRIDGE Housing with 13 000 units in California.

3.1 Financial support and role of private finance

Unlike most European countries and Australia, the US rarely provides direct capital grants to support building new social and affordable housing other than through the PHAs. The federal grants that are provided, such as Community Development Block Grants (CDBG) and the HOME Partnership Program, are devolved to states and local authorities, and are carefully targeted. For example, 70 per cent of CDBG grants must benefit households earning below 80 per cent of the area median income. Public grants supply only a small portion of funding for new affordable housing, with reliance placed on market mechanisms such as tax incentives to encourage private investment. The following types of private finance are used in the US.

- → Tax credits. The Low Income Housing Tax Credit (LIHTC) scheme, providing tax and depreciation benefits for institutional investment in affordable housing, is described below.
- → Bank debt. Traditional amortising loans by both local and national banks are usually part of the financing package in addition to LIHTC support. Banks choose to lend based on normal banking criteria and at commercial rates to both for-profit

and non-profit affordable housing developers. With non-profit borrowers, loans assist their compliance with the Community Reinvestment Act (see subsection on LIHTC).

- → Bonds. States, local authorities and state Housing Finance Agencies, can seek voter approval to raise finance through bond issues. These are subject to state caps of US\$90 (\$99) for each resident of that state. Most but not all bonds are exempt from federal and state taxes for the investor, and are therefore priced below market rates, which make them attractive for the issuer. The two main types of bonds used towards funding affordable housing to rent or purchase are:
 - Multi-family Housing Revenue Bonds. These are used to finance construction of projects where at least 40 per cent of units are for families with income below 50 per cent area median income. Bonds of this type have been used to construct just under one million new properties, although three-quarters of all schemes supported by bonds also receive LIHTC (Schwartz 2006, p.188).
 - Mortgage Revenue Bonds. These are a type of municipal bond where the proceeds are used to subsidise the provision of low cost mortgages. Recipients must be low or moderate income first-time home buyers, earning below 115 per cent of area median income. Figures from the National Council of State Housing Agencies confirm approximately 2.6 million households have been assisted, with some 100 000 new loans supported each year.
- → Private landlord subsidies. From the early 1960s until the introduction of LIHTC in 1986, the federal government subsidised private landlords' borrowing costs provided units were rented to tenants earning below 80 per cent area median income. For example, with 'Section 236' properties built between 1968 and 1973, subsidies reduced the effective interest rate to 1 per cent for the 20–40-year life of the mortgage. Just over 1.6 million properties under various legacy programs remained subsidised in 2003. Although new properties have not been built using this type of subsidy during the last two decades, the sector forms an important component of the US's affordable housing stock (Schwartz 2006, p.142).
- → Philanthropy. Although not strictly a form of private finance, donations of land and cash by individuals and corporate foundations underpin many US affordable housing projects. These donations may provide an element of support for LIHTC projects, or support building the capacity of non-profit providers (e.g. the non-profit Local Initiatives Support Corporation was funded by the Ford Corporation to help build the capacity of non-profit housing organisations). Several charities, particularly faith groups, continue to provide affordable housing without using LIHTC or private finance.

The Low Income Housing Tax Credit (LIHTC)

US tax credits for affordable housing were introduced by the Tax Reform Act of 1986. Between 1986 and 2005 LIHTC helped fund 1.5 million units of affordable housing in 27 410 schemes. The current annual cost is US\$5 billion (\$5.5b), making it the main subsidy for low income rental housing ahead of public housing. In the last two decades, tax credit funded homes have overtaken the 1.2 million public housing units, despite the latter scheme operating since 1937 (HUD 2009b). Introducing LIHTC shifted the type of investors supporting the provision of affordable housing from individuals to institutions, and made the process more competitive.

The LIHTC scheme was declared *permanent* by Congress in 1993, enjoys bi-partisan support, is backed by a broad coalition of for-profit and non-profit developers, banks, investors and consultants (Dreier 2006). Figure 5 summarises how LIHTC works. Once a developer has identified a site and been allocated tax credits, capital is raised by *selling* the credits to investors. Normally the sale is to a syndicator who acts on behalf of institutional investors. Ernst and Young (2003) estimated the investor mix in

2002 was banks (43%), Government Sponsored Enterprises such as Fannie Mae (30%), insurance and other finance companies (19%) and non-financial companies (8%). Banks invest to comply with the Community Reinvestment Act 1977, which obliges them to support community development in the locations where they operate. Tax benefits only flow to investors if the scheme remains compliant for 15-years with the rules set when the tax credits were allocated.

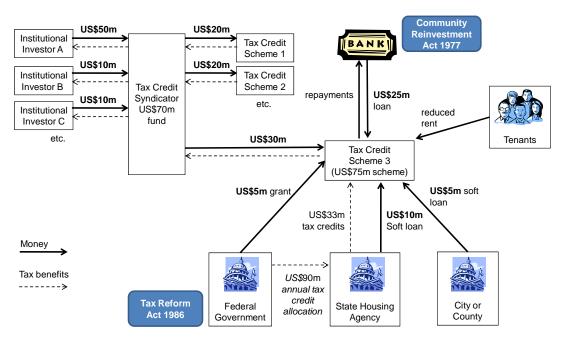


Figure 5: LIHTC for US housing finance

In this hypothetical example, a tax credit syndicator creates a US\$100m fund from a number of institutional investors. The fund invests in several tax credit transactions: this diagram relates in detail to Tax Credit Scheme 3. The scheme builds multi-family housing costing US\$75m. The State allocates to the developer US\$33m of its US\$90m annual tax credit allocation from the Federal Government. These tax credits encourage investment of US\$30m equity by the tax credit syndicator. Other funding comes from bank loans (US\$25m), state/city soft loans (US\$15m) and grants (US\$5m).

Source: Gilmour and Milligan (2009)

LIHTC introduced competition between non-profit and for-profit developers for funding. Each state is allotted annual national tax credit funding based on headcount, originally US\$1.25 (\$1.38) per resident, rising to US\$1.75 (\$1.93) in 2002 then indexed by inflation. States develop an annual Qualified Allocation Plan outlining how they will distribute credits and which type of schemes will get priority. Organisations compete for credits in one or two 'allocation rounds' each year and the top-rated bids meeting the application criteria receive funding. The Tax Reform Act requires a minimum 10 per cent of credits to be set aside for non-profit organisations, although they always receive more than this. In 2005 non-profits received 26 per cent of LIHTC tax credits (ABT Associates 2007). Over time the transparent bidding procedure has raised the quality of affordable housing schemes, and non-profit bidders have built their capacity.

LIHTC does not fund, and was never intended to fund, the total cost of affordable housing. Credits are calculated at only 70 per cent of the present value of eligible expenses (which exclude land purchase) and investors will pay less than the face value for tax benefits due to compliance risks. Ernst and Young (2003) estimated that tax credits in 2002 contributed on average 42 per cent of project costs, followed by bank debt at 36 per cent, as shown in Figure 6. Beyond tax credits and bank debt, the additional funding is known as *gap finance* of which two-thirds is likely to be 'soft loans' at reduced or zero rates of interest from state and local governments. Normally

these loans are accompanied by extra conditions on the developer, but are eventually written-off if all terms have been met. The final slice of funding comes from land donations, retained earnings, Multi-family Housing Revenue Bonds and various grants. There are often up to 10 finance sources per transaction and critics argue that the process is complex and expensive (Cummings and DiPasquale 1999).

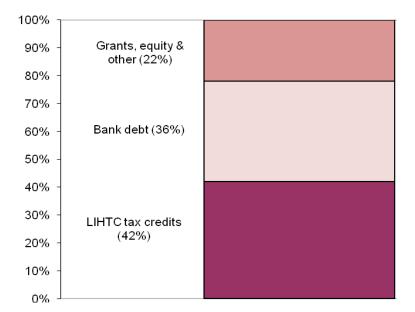


Figure 6: Typical components of LIHTC scheme in US

Source: Ernst and Young (2003)

3.2 Asset management

The original LIHTC legislation required affordable tenancies to be maintained for only 15-years, after which developers could sell the property or charge market rents. This period was increased to 30-years in 1989. Some states insist on longer retention periods if they are contributing grants. The City of Boston requires affordable rentals over the *useful life* of the property (Davis 2006). When the affordability period ends, protracted negotiations normally take place with further public funding (and sometimes additional LIHTC support) required to maintain the stock as affordable.

Although LIHTC is a national scheme, individual states can influence the types and locations of projects assisted. For example, California allocates tax credits across 10 regions based on wealth and housing need—a more equitable system than national distribution between states based on headcount alone. California awards extra points to LIHTC bids incorporating energy-efficient design and proximity to public transport. Californian projects receiving state grants must remain affordable for 55-years and have on-site social service provision. Within a metropolitan region such as the Bay Area, there are differences between San Francisco, which operates a 'queuing system' for city grants to mainly non-profit providers, and Oakland where operation of market forces often favours for-profit developers (Gilmour 2009). Hence there is considerable variability across LIHTC schemes in different parts of the US.

3.3 Rent setting

Eligibility requirements for LIHTC-subsidised rental properties are set nationally. Schemes must set aside at least 20 per cent of units for tenants earning below 50 per cent of the area median income, or alternatively, a minimum 40 per cent of units for tenants earning less than 60 per cent of the area median income. Rents are fixed at 30 per cent of either 50 or 60 per cent of area median income, depending on whether

the project is aimed at very low or low income groups. Projects normally cater for a range of income groups, and many will house some tenants with special needs.

In contrast to public housing and housing vouchers, LIHTC projects do not set rents based on tenant income. Therefore, poorer families can spend significantly more than 30 per cent of their income on rent, and are at risk if their income falls or they become unemployed. Most LIHTC tenants work in low paid jobs, with only a small number receiving income support through housing vouchers. Tenants can remain in LIHTC properties until their income reaches 140 per cent of the area median.

3.4 Regulation and profit making

LIHTC is allocated to both for-profit and non-profit organisations for specific affordable housing projects, typically multi-storey medium-density developments. Recipients of LIHTC tax credits must manage their businesses at project level, with each project governed by a separate contract and ring-fenced finances. Institutional investors in LIHTC only receive tax and depreciation benefits if projects comply with contract terms over the full 15-year period, evidenced by the tax credit syndicators submitting financial information to the tax authorities, backed by periodic inspections by state officials. In effect regulation is out-sourced to the private sector.

Non-profit housing providers are not regulated and do not need to register in respect of their housing activities. However, to maintain tax-exempt status, they must comply with section 501(c)(3) of the US Internal Revenue Code and annually submit Form 990, a publicly available document. These procedures apply to all tax-exempt nonprofits, not just those providing affordable housing. There are no regulations (other than contract compliance) or limits on profit-making for private firms awarded LIHTC. However, the complexity of bidding and the competitiveness of the allocation rounds make it unlikely that large profits will be made by commercial companies.

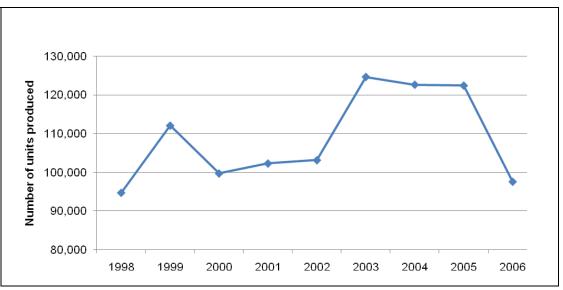


Figure 7: LIHTC units produced in US

Source: HUD (2009)

3.5 Housing system outcomes

LIHTC funding helped contribute to the construction of an average of 103 000 new homes each year in the US between 1995 and 2006, the latest year when data is available (Figure 7). The 1400 projects provided an average of 74 units per development, with 95 per cent rented to tenants earning below 60 per cent of area median income (HUD 2009b). Table 6 provides an assessment of the LIHTC.

Table 6: Evaluation of the LIHTC in the US

Cost effective	Funds available to build affordable housing were only 50–60 cents in the dollar of LIHTC public subsidy until 1995. Since then investor returns have moderated. By 2005 affordable house builders received 90 cents for each tax dollar (Schwartz 2006). LIHTC is less efficient than public sector grants, with leakage to professional fees and investor profit.		
Cost reducing	LIHTC is an equity-type product, with no payment due to investors in the form of interest or dividend. Therefore, it is low cost finance for the affordable house builder, although compliance costs are expensive.		
Rent reducing	Rents charged to tenants are strictly controlled on each project. Some non- profit providers target very low income groups, although many private companies aim as high on the income spectrum as permitted by LIHTC.		
Equitable	LIHTC credits are allocated to states based on headcount, not housing need Within a state, allocation may not target locations most in need.		
Appropriate risk allocation	Investor risk is well balanced due to market pricing of the LIHTC credits. For non-profit housing providers, the system is risky as each project is financially ring-fenced leaving little surplus for central overheads.		
Impact on public finances	LIHTC is popular with politicians from left and right as it does not appear as government expenditure. However, tax credits impact upon public finances they represent a major item of potential tax income forsaken.		
Robustness	LIHTC has proven problematic during the GFC due to problems with the market for investors buying tax credits. Most investors are banks who have faced liquidity problems. Federal intervention to support this market appears to have only had limited success to date.		
Feasibility	After more than two decades, LIHTC financing has become institutionalised, with procedures understood by a wide variety of organisations. However, schemes developed by for-profit companies face problems at the end of the initial contract period and stock may revert to the market sector.		
Effective delivery	The need for multiple layers of finance, in addition to LIHTC, increases project complexity and risk. Transaction costs are high.		
Enhances capacity	Non-profit providers have built capacity since the LIHTC was introduced in 1986, deepening their financial and property development skills.		

4 SWITZERLAND

Renting is the dominant tenure in Switzerland (65%), largely provided by individual private landlords and institutional landlords. There is a small and diverse social housing sector that comprises around 1700 non-profit organisations, being primarily small cooperatives and social housing foundations, associations and municipal housing companies (Hauri 2004). Together these social landlords provide 14 per cent of total rental housing stock, mostly as flats and row housing often in urban areas (Table 7). Most social landlords are cooperatives, which are very small enterprises. Seventy per cent own fewer than 100 dwellings. Only 25 cooperatives have more than 1000 units and the largest, in Zurich, has 4600 (ICA 2009). The Federal government regards these social enterprises as important providers of affordable housing for families, the elderly, and socially and economically disadvantaged households, as well as a laboratory for experimentation with environmentally sustainable design.

Inquiries of appropriate agencies have confirmed Kemeny et al.'s (2005, p.862) finding that statistics on tenure are insufficient to determine the precise scale of social landlords in Switzerland. In this report, reliance has been placed on information published by umbrella organisations representing these landlords.

Type of landlord	Total (000)	% rental stock	Total housing stock %
Limited-profit housing associations	49	2.5	
Non-profit cooperatives	154	7.9	
Municipal companies	66	3.4	
Total social rental sector	269	13.8	8.8
Individual private rental landlords		57.4	
Institutional private rental landlords		28.5	
Total market sector	1681	86.2	56.6
Total rental sector	1950	100.0	
Total ownership sector			34.6
	<i></i>	: (000 1)	

Source: derived from Kemeny et al. (2005), Hauri (2004)

4.1 Financial support and the role of private finance

From time to time the government has provided subsidies and low cost loans to promote the provision of rental housing, boost construction and ensure a supply of housing at below market rents. Today there are few public subsidies available and no significant public loan programs. Further, demand assistance is patchy and only available in some cantons and communes.

To expand, new social housing requires debt finance (80%) often comprising various loans, alongside tenant equity or small grants promoting environmentally sustainable and energy-efficient design. To reduce finance costs, small low interest loans are competitively allocated from an accumulated revolving fund, financed by the federal government and managed by the sector. These loans contribute 5 per cent of total project costs. In addition the sector has established its own members fund based on a levy per dwelling, which can issue small loans. Most recently they have established another revolving fund specifically to assist new cooperatives (Solinvest).

To promote access to private loans, the non-profit sector and federal government established a bond-issuing cooperative in 1991. This secures lower-cost capital from the market by issuing 7–10-year bonds guaranteed by federal government. The non-profit status of social landlords also places them in a more favourable taxation position, but this varies by canton. Figure 8 illustrates the financing of a recent cooperative housing development in Geneva, which provides rental housing for families, students and the elderly, using environmentally sustainable approaches.

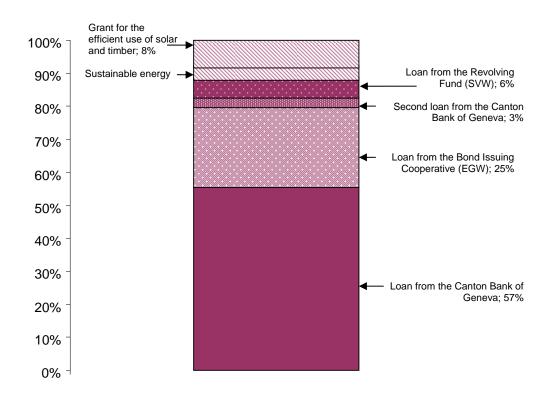


Figure 8: Financing Swiss social housing provision

Source: authors, drawing from case study research for Lawson (2009)

There are several variations of the mixed financing regime in Figure 8, with varying proportions of cooperative equity, low interest loans provided by the sector's revolving funds together with funds from the bond-issuing cooperative and commercial loans. These finance types are described below, based on Lawson (2009).

→ Revolving funds: Federal Revolving Fund, SVW Solidarity Fund and Solinvest. A revolving fund for the promotion of non-profit housing was established in the 1970s. Federal payments gradually accumulated and today the fund comprises CHF 300 million (\$318m), sufficient to issue small low interest loans, with rates currently at 2 per cent and always at least 1.5 per cent below market rates. In 2009, the revolving fund was expanded significantly by additional federal contributions that will bring the fund to CHF 510 million (\$550m) in 2015.

Loans are available for new construction, renovation, acquisition and/or take-back of existing buildings according to applicable rules and ratios (ICA 2009). The fund offers CHF 30 000 (\$32 000) per standard dwelling, rising to CHF 45 000 (\$48 000) for proposals that meet higher environmental standards. Loans amortise over 20 years and are administered by the non-profit sector umbrella organisation.

Loans requests are evaluated by a committee of housing policy, design and project finance experts from both the government and social housing sector on the

basis of the proposed quality of dwellings (size, yield, price and comfort), the quality of the immediate environment (inside accessibility, common spaces, noise levels, etc.) as well as the attributes of the location (transport connectivity, recreation areas, schools, etc.). Due to its revolving nature, funds are continually recycled to support new approved projects and will soon play a key role encouraging environmentally sustainable and energy-efficient developments.

There are two smaller sector-financed revolving funds: the solidarity fund promoting innovation and the new Solinvest fund promoting new cooperatives. Minimum contributions from non-profit organisations are based on the number of dwellings managed. The funds have grown to CHF 30 million (\$32m) since 1966. Solidarity funds are pooled, managed by the umbrella organisations and since 1999 have been recycled as small low interest loans at 2 per cent. In 2008, 96 loans were issued, to promote innovation in housing form, cooperative services and sustainability (Schwitter 2008; SVW 2009).

- → Specialised mortgage guarantee co-operative for non-profit housing. Since 1956, the social housing sector and banks have operated a Mortgage Guarantee Fund (CHF 32.6 million (\$35m) in 2006). This fund guarantees banks for 90 per cent of loans for new buildings and renovations. It is funded by the sector (238, typically larger members) and backed by a state guarantee fund (CHF 12.9 million (\$13.7m) in 2006), through which eligible non-profit builders can access lower interest rates for their first or second mortgages. The state guarantee continues to exist to this day, but in reality it is rarely used.
- → Bond Issuing Co-operative (EGW) for non-profit housing. The Swiss Bond Issuing Cooperative (Emissionzentrale für Gemeinnützige Wohnbauträger, EGW) was established in 1990 to raise funds for non-profit housing entities that have formed a cooperative. It was established when mortgage rates were relatively high in Switzerland, at 7 per cent. The federal government introduced a mechanism in 1991 allowing investors to subscribe to a special-purpose bond, covered by a government guarantee. Investors were attracted by the low risk of the bond, and low returns enabled an interest rate on loans issued from the bond to be lower and constant for the entire term of the bond, in contrast to the situation involving adjustable rate mortgages on the open market (Hauri 2004).

Since 1991, EGW has issued CHF 3.05 billion (\$3.23b) in a series of 46 bonds (public issues or private placements). The EGW issue 7–10 and 6–15 year-bonds, which are covered by a state guarantee. It is able to provide loans to members with a very low interest rate (2–3%) over a fixed term. While some larger non-profit entities are financially strong, the EGW pool allows smaller non-profit builders to join together, improving their access to lower-cost finance. In this way it plays a leading role in financing small non-profit housing projects.

The EGW is organised as a cooperative and its members are cooperatives and non-profit housing associations. It has 361 members and has helped to finance more than 900 projects to supply 30 000 non-profit dwellings. Institutional investors such as pension funds and insurance companies are attracted to EGW bonds by the state guarantee and AAA credit rating. In the decade since 2000 there has been a high level of demand for EGW bonds.

Figure 9 details the working of EGW, which involves the following steps.

→ Requests can be submitted for a new project or to refinance a mortgage. Applicants must have a non-profit status, EGW membership, and undertake appropriate activities according the Charter and Federal Office of Housing (FOH) standards. They must also be financially sustainable entities with a viable and suitable project and able to offer assurances with respect to lending limits and available mortgage deeds.

- → All requests are pooled by the EGW. When the pool is of sufficient size and market conditions advantageous, the EGW will issue a new bond. It then negotiates with a lead bank the conditions of issuance and applies for the State Guarantee to cover the entire extent of the bond.
- → The issuance can be as a public bond or a private placement. A private placement will be done for smaller pools (CHF 20–50m, \$21–53m). In these cases, one investor, such as a pension fund or an insurance company, subscribes to the entire bond. Where the pool is more than CHF 50 million (\$53m), the bond is divided into denominations of 5000 and placed by a consortium of banks. A bond pool of CHF 100 million (\$106m) could serve around 40–60 non-profit organisations. All the bonds are listed on the stock exchange for trading.
- → After subscription, funds raised from the sales of bonds are allocated to non-profit housing entities according to their requests to be paid back in full at a fixed rate and defined term. On maturity, EGW organises conversion of the bond and seeks ongoing participation by investors (Hauri 2004; FOH 2006).

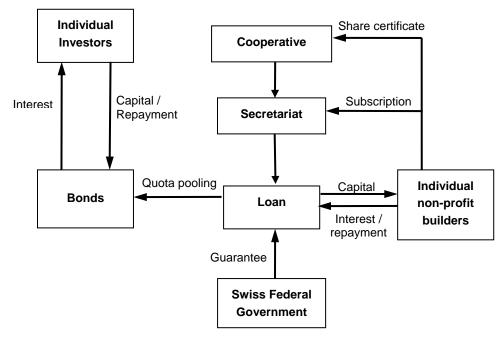


Figure 9: Swiss bond-issuing co-operative

Source: FOH (2006)

Interestingly, during the GFC, Swiss banks began luring a growing number of cooperatives away with interest rates similar to EGW (Gurtner 2009). This led to a decline in the volume of business conducted by EGW. However, the long term low rates of the EGW remain an important financial resource for the non-profit sector

4.2 Asset management

Cooperatives own the properties they manage. Members own a share but have no equity in their units. These shares are reimbursed to members upon leaving, at the original amount. Tenants do not have the right to buy their dwellings and there are no strong policies to further privatise social housing or strongly promote individual ownership of rental units. Cooperatives tend to concentrate their assets in metropolitan areas. Unlike institutional investors, they are less sensitive to business cycles and shifts in international markets, thus they keep on building in periods when private capital is scarce. During the 1990s, globally exposed investors withdrew from

the for-profit rental sector, enabling cooperatives to acquire dwelling stock amid favourable purchasing conditions (Van Wezemael 2009).

Large well-established cooperatives, with a mature financial base, are able to access good terms on the mortgage market. They have professional management practices; a strategic asset management focus and sound business administration practices. Dwellings built during the 1930s often dominate their stock, many requiring substantial upgrading. Consequently, there has been an outflow of families and higher-income households in search of more and better-quality living space, leaving behind a population with fewer resources (Hugentobler 2006).

The city of Zurich has actively pursued a policy promoting the construction of more spacious and better-appointed apartments via the cooperative housing sector. It has facilitated the development of more innovative projects to attract a wider range of household types. Re-zoning land to permit higher-density residential developments has favoured older, established cooperatives, enabling them to renew older estates with greater yield, quality and variety of dwellings.

Unlike the established non-profit housing cooperatives mentioned above, smaller and more recently established providers lack the accumulated equity and creditworthiness required to raise sufficient capital to purchase or lease building sites and to finance the construction of new buildings. Projects often have a long gestation period and require sustained commitment from active members. The availability of small loans for innovative housing (such as through Solinvest), favourable loans from EGW and tenants' abilities to provide equity, have been crucial to the financing of such projects.

4.3 Rent setting

In a cost rent regime, such as Switzerland, rents can only be adjusted with changes in operating, maintenance and financing cost. Given the importance of debt financing, lowering interest on mortgages is an important means to promote affordability. For new dwellings, the rising cost of building and scarcity of developable sites increases the amount of project finance required and thus rents. Large cooperatives are able to pool rents between older and newer dwellings, while smaller cooperatives without upfront subsidies are unable to do so.

In the past, federal legislation provided for investors to be granted a public loan so that rents could be set below market rates during the initial 15 years of operation. The law also made it possible for landlords to receive subsidies to lower rents even further when units are occupied by very low income households. However, during the early 2000s, the financial means for continuing federal housing programs were blocked by parliament (Lawson 2009; Bourassa et al. 2009). Nevertheless, due to the history of public subsidisation and the pervasive cost rent regime, rents in housing older cooperatives are considerably lower than in private rental. Indeed, they are an average of 20 per cent lower and may be up to 50 per cent lower in some larger towns (ICA 2009).

The system of rental assistance is far less developed or widespread, although Geneva and Basel have cantonal programs. In the other cantons, the aid is limited to a few communes. Geneva stands out again with 3.4 per cent of tenants benefiting from rental aid, sometimes in addition to occupying a subsidised unit. However, many cantons do not provide any subsidy in this form (Bourassa et al. 2009).

4.4 Regulation and profit making

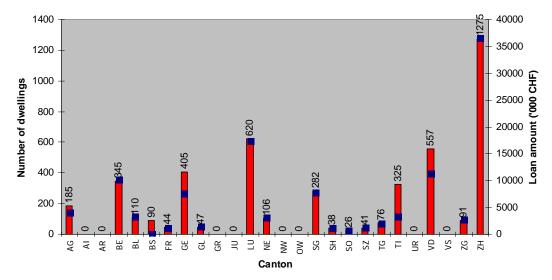
Social housing cooperatives and associations are non-profit organisations and eligible for various tax privileges in the different departments of the Swiss Federation. Any earnings (rents from mature building stock, sales, etc.) are not distributed but must be re-invested in public interest activities. A non-profit housing association restricts these to building and acquiring dwellings of moderate rents or prices and profits must not exceed 6 per cent of social capital. Finally, any residual equity after dissolution of the organisation must be used for affordable housing purposes (Kemeny et al. 2005).

In return non-profit providers are eligible for small subsidies to buy land and prepare it for construction for affordable housing, may obtain loans from the EGW and can enjoy various tax advantages. The application process for these loans requires adherence to social housing standards that have been laid down by the federal government.

To promote good practice, the three umbrella organisations that represent the sector adopted a Charter in 2004 laying down core principles such as no speculative profits, good-quality affordable and sustainable housing, integration of disadvantaged households and tenant participation and self-determination (SVW 2009).

4.5 Housing system outcomes

The number of dwellings assisted by the revolving fund totals 35 000, with most concentrated in major urban areas (see Figure 10).





Source: Hauri (2008)

The EGW has assisted the finance of more than 30 000 non-profit dwellings since inception. It has launched 46 bond issues with 6–15-year terms, funding CHF 3.05 billion (\$3.23b) in loan commitments for renovation and new buildings. The interest rate on EGW loans has decreased from 7 per cent in the first bond issues to 3 per cent in 2008. Current loans issued demand all-in costs to borrowers of 3.16 per cent (EGW 2009).

In theory, limited-profit housing in Switzerland financed by low cost loans and equity is accessible to a wide range of incomes. However, in practice, while rents are much lower than in the private sector, supply is limited and there are long waiting lists for the most affordable dwellings amid a very tight rental market. While established cooperatives can pool their rental accounts to reduce the cost of new dwellings, young cooperatives are expensive and often require tenant equity contributions.

Most social housing has been constructed during an era when subsidised public loans were given, requiring the allocation of dwellings to lower-income households. Over time these loans have expired along with their allocation requirements. However, new

loan programs have been modest (revolving funds) and the EGW is only able to respond to expressed demand from non-profit providers.

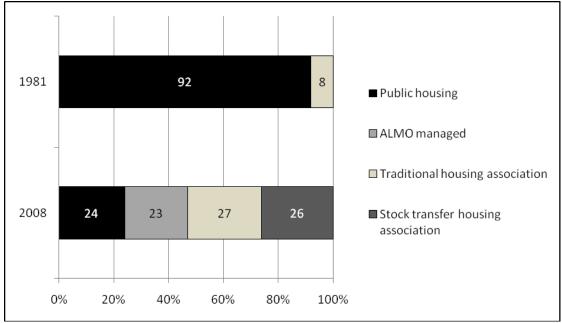
Cooperatives are also building new stock, on a small scale, through favourable planning and land policies. In terms of the use of own-equity, financially mature cooperatives have been able to play an active role in the rental market, acquiring assets from institutional investors during periods of global economic downturn, expanding their numbers in metropolitan areas (Van Wezemael 2009). They have also pooled their rental accounts, to ensure rents on new dwellings are affordable. This is not possible for young cooperatives and the sector provides loans to help reduce their financing costs. The approach in Switzerland using bonds is evaluated in Table 8.

Table 8: Evaluation of the Swiss bond-issuing co-op financing model

Cost effective	The Swiss model is one of the least costly in terms of direct and indirect subsidies. However, it is not able to contribute a large volume of affordable rental dwellings in the tight rental market. In the context of once high mortgage interest rates, absence of investor interest and lack of public finance, the EGW provided an important mechanism to pool demands for mortgage finance as larger bond issues and channel cheaper loans towards the non-profit sector since 1991.
Cost reducing	Loans from the EGW have offered better terms. They finance up to 70 per cent of project costs at around 3 per cent interest. Currently, market rates have declined and commercial banks are now enticing limited-profit housing associations (LPHA), but the EGW remains competitive and on-call when less favourable conditions arise.
Rent reducing	In a liberal cost rent regime, lower-cost finance directly benefits tenants. Currently there are very few subsidies to ensure new dwellings are affordable, compounded by limited demand assistance.
Equitable	Affordable rental housing can be found in more mature cooperatives with older dwellings financed under previous subsidy programs. These dwellings are allocated to income-eligible households, whose incomes may increase over time. New small cooperatives are not able to provide affordable rental housing, without the assistance of solidarity funds and government support.
Appropriate risk allocation	Under the liberal cost rent regime, landlords are entitled to raise rents when financing costs increase. The government bears the risk of non-payment of mortgage loans by non-profit housing associations from the EGW. A fund for this purpose has not been drawn upon since 1991. Solinvest has been established to improve the financial position of new cooperatives.
Impact on public finances	The federal government has provided contributions to the revolving fund, significantly expanding its capacity in recent years. The guarantee fund has not been drawn upon.
Robustness	The EGW is useful when conditions in the mortgage market are unfavourable to non-profit housing developers. When interest rates are low, finance can be obtained elsewhere.
Feasibility	Federal treasury favours contribution to the revolving fund (over which it received income) and guarantees for the EGW mechanism over direct loans.
Effective delivery	Non-profit organisations are typically very small organisations, often managed by volunteers. New cooperatives require significant commitment of members, including tenant equity, to get established. Specialist legal, financial and management expertise is provided by three umbrella organisations. Larger cooperatives have these services in-house.
Enhances capacity	EGW loans with guarantees have promoted stability and security for the sector. All funds are directed towards registered non-profit landlords. However, the scale of provision remains too low to address a serious shortage in affordable rental housing.

5 ENGLAND

During the past 30 years the proportion of social housing has fallen from over 30 per cent to just below 20 per cent of total households, mainly as a result of granting the *right to buy* to sitting tenants in 1980. The composition of social housing has also changed significantly, as shown in Figure 11. Housing owned, managed and financed in the public sector – by local authorities – has fallen from 92 per cent to 24 per cent of social housing stock. A further 23 per cent remains publicly owned, although managed by non-profit organisations run at arm's length from local authorities (ALMOs). Housing owned and managed by non-profit organisations – known as housing associations – has increased from 8 to 53 per cent of the social housing stock. Most housing association growth has been through the transfer of stock from local authority control.





English rental data is shown in Table 9. The private rental sector, which accounts for 44 per cent of total rentals, contains both high-income and low income households. The latter are subsidised through housing benefits, described in Section 5.3 below.

Table 9: Landlords of English rental housi	ing
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Type of landlord	Number of dwellings (000)	% of rental stock
Public housing (approx.)	950	14
ALMO managed (approx.)	880	13
Housing association (approx.)	1967	29
Total social rental	3797	56
Private rental	2982	44
Total rental sector	6779	100

Source: CLG (2009a); Pawson et al. (forthcoming)

Housing associations have become the dominant provider of English social housing. Although tracing their origins back several centuries, housing associations expanded

Source: Pawson et al. (forthcoming).

rapidly after the 1974 Housing Act, which provided generous public grants to them to build new social housing provided they registered with the Housing Corporation. Until 2008 the Corporation, an arm's length national government agency, acted as both funder and regulator. There are 1700 English housing associations, although many own and manage fewer than 250 properties. Just under 400 large associations manage over 1000 properties each and together manage 97 per cent of the 2 million homes in the association sub-sector (TSA 2009). Merger between associations, and the relaxation in stock transfer size restrictions in 2004, has led to the growth of a small number of very large groups managing upwards of 40 000 properties (Pawson & Sosenko 2008).

5.1 Financial support and role of private finance

Finance for the construction of social housing built by organisations other than local authorities has traditionally been through public grants. Since 1974 this has been known as Social Housing Grant (SHG), and non-profit housing associations have been the main beneficiary. The 1988 Housing Act introduced private finance, moving associations to a mixed model of public grants and private bank loans. With the 2004 Housing Act, for-profit organisations have been able to bid alongside associations for SHG. The following types of private finance are used in England.

- → Bank debt. With grants pared back to 75 per cent of construction cost since 1988, housing associations had little choice but to borrow from banks. This option became particularly attractive to government following a Treasury ruling that loans to associations would not be counted as part of the national debt. As at March 2008 the aggregate bank borrowing of housing associations managing more than 1000 properties was £34.9 billion (\$63b). This has been matched by £34.4 billion public loans through SHG and other grants. The sector's gearing, that is, the (adjusted) ratio of bank loans to property values, is just under 41 per cent. There are some £15 billion (\$27b) of funds available under existing loan agreements which have not yet been drawn (TSA 2009, pp.16–17). Interest charged on housing association bank debt is normally variable, linked to three-month London Inter-bank Offered Rate (LIBOR), although several larger housing associations have bought interest rate hedging products to reduce exposure to short term interest rate fluctuations.
- → Bonds. Although considerably smaller in total amounts raised than through bank loans, bonds offer an alternative source of longer-term debt for associations. Bonds are typically purchased by institutional rather than private investors, and normally issued in a minimum size of £100 million (\$180m). Although not underwritten by government, the bonds benefit from the strong cash flows of housing associations' rent-rolls and a closely regulated sector. Bond investors, unlike banks, pay little attention to the associations' underlying trading – greater reliance is placed on assessments by rating agencies such as Standard and Poor's (S&P) and Moody's. Pricing and market conditions can critically influence investor appetite for bonds (Berry et al. 2004). Different bond types are set out below:
 - Syndicated bonds. Products offered by The Housing Finance Corporation, (THFC), where the institutional investors' risks are spread across a number of recipient housing associations, are described in more detail below.
 - Bilateral bonds. Larger housing associations are able to raise their own bond finance without the use of a syndicator such as THFC. Bonds have been arranged for four organisations, all in the top six English housing association groups in terms of stock managed. England's sixth largest association, Sanctuary Housing, which manage 42 000 properties, raised £200 million (\$360m) through a 30-year bond in March 2009. Sanctuary were re-rated up

from A+ to AA- by S&P in July, suggesting the GFC has led to the market viewing housing associations as comparatively low risk.

- Private placements. Contractually similar to bonds, these are debt instruments offered direct to a small number of institutional investors. For example, Metropolitan Housing Trust, England's 11th largest English association with 25 000 properties, raised £75 million (\$135m) in 2006. Private placement involves lower fees than traditional bonds, in part as they are not underwritten.
- → For-profit affordable housing providers. Although SHG has been available to private affordable housing developers since 2004, the take-up has been low.
- → Use of the planning system. Local government can use the planning system to require private companies to include a portion of affordable housing in new developments, under section 106 of the Town and Country Planning Act 1990. Properties could be passed from the developer to a housing association to own and manage, or a cash contribution paid via the local authority and used towards financing an affordable housing scheme delivered by an association. Over 60 per cent of affordable housing produced has utilised developer contributions under section 106 (Burgess et al. 2010)

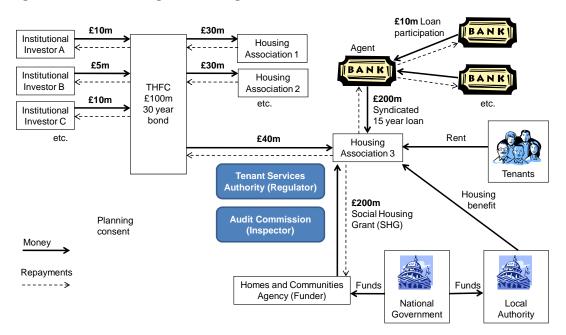
The Housing Finance Corporation (THFC)

The Housing Finance Corporation was established in 1987 by the Housing Corporation (see Section 5.4) and the National Housing Federation (the English housing association trade body) to raise longer-term bond finance for medium-sized associations in England, and to a lesser extent Wales and Northern Ireland. Their role in financing is shown in Figure 12

The formation of THFC coincided with allowing housing associations access to private finance, particularly bank debt, under the 1988 Housing Act. THFC is a non-profit organisation, operating without government control, subsidy or guarantee of indebtedness. Rather, THFC is assessed by credit ratings agencies such as S&P and its bonds priced accordingly. It has maintained a zero default record through its 22-year history, relying on the strong underlying cash flows of housing associations (see Section 5.3) and a comprehensive regulatory regime (Section 5.4).

As at March 2009, THFC provided £1.90 billion (\$3.42b) of loans to 188 housing associations. The loan portfolio grew rapidly during the 1990s, when conventional bank loans were expensive, but more slowly since 2000 when increasing numbers of banks began lending to housing associations. Total loans have increased by about 4 per cent annually since 2002, when the portfolio was £1.47 billion (\$2.65b). Of current loans, 43 per cent by value are to the top 50 English housing association groups by size of stock holding. THFC loans are used by six of the top ten English groups, including three associations that issue bilateral bonds (Section 5.1). Loans at March 2009, prior to the bond issue shown in Table 10, ranged in size from £202 000 (\$364 000) to Agudus Israel Housing Association, to £48.6 million (\$87m) to Midland Heart (THFC 2009). The loan portfolio is distributed as a small number of very large loans (over £20m (\$36m)) to mid-sized housing associations, with a larger number of modest loans to small and regional associations.

Figure 12: THFC for English housing finance



In this hypothetical example, THFC issue a £100m 30 year bond with funds received from a number of institutional investors. THFC use the proceeds to fund three housing associations: this diagram relates in detail to Housing Association 3. This association's main debt finance, a £200m 15 year loan, is managed by an agent bank who has syndicated the exposure to a number of other banks who provide a smaller amount (for example £10m). The association receives SHG from the Homes and Communities Agency, is regulated by the Tenant Services Authority and inspected every couple of years by the Audit Commission.

Source: authors

THFC, and their various special purpose vehicle (SPV) subsidiaries, act as intermediaries allowing investors to spread their risks across several housing associations. THFC evaluates the credit worthiness of each borrower, and the association's performance is monitored for compliance with loan covenants. This is an additional layer of control beyond the standard regulatory and inspection controls that apply to associations. Although most transactions are undertaken through SPVs, THFC has in place cross-collateralisation documentation. This makes all assets charged by fixed or floating security from housing association borrowers available to support all THFC indebtedness. Therefore, a single credit rating is given to THFC. S&P have rated THFC as 'A+ stable' over the last four years, and have maintained this rating in their latest review in 2009. THFC's rating is as good as, or slightly better than, associations raising bilateral bonds, that are judged by S&P to be either A+ or A. An example recent bond transaction, the largest arranged by THFC, is shown in Table 10.

THFC raises its funding from a variety of sources. Bonds are the most significant component, although they vary in type and in the past included zero-coupon, deep discounted bonds and private placements. One-third of THFC funding is from banks, often for periods up to 25-years. Bank loans to THFC totalled £617 million (\$1.1b) as at March 2009, many provided by the European Investment Bank.

Issuer	THFC (Funding No.2) Plc, a wholly owned subsidiary of THFC.
Date	July 2009.
Product	£191 million (\$344m) 6.35 per cent secured bonds 2039/2041.
Rating	A+ (S&P), same as rating for THFC.
Security	First floating charge over assets of the issuer and parent company.
Covenants	Minimum asset cover 150 per cent; Interest cover 100 per cent.
Manager	Royal Bank of Canada and Royal Bank of Scotland, jointly.
Recipients	Southern Housing Group (£100m), A2 Dominion (£50m), Genesis (£30m), Leeds Federated (£6m), Portal (£5m).
Outcome	Significantly oversubscribed – bids totalled £460 million.

Table 10: Example THFC bond issue

Source: RBS (2009)

5.2 Asset management

Until the 1980s, asset management was coordinated by the local authority, which owned and managed over 90 per cent of social housing within its geographic boundaries (see Figure 11). With the subsequent fragmentation of social housing providers, and the growth of housing associations owning stock across a large number of local authority areas, this clarity has ended. Some local authorities have encouraged minor geographic consolidation of stock by associations, as happened in Manchester and Salford with the Housing Market Renewal program. In other areas, such as Bolton, the local authority manages a centralised social housing waiting lists, which gives tenants a degree of choice between providers (Gilmour 2009). More formal and consistent local coordination is being encouraged by the new social housing and regeneration funder, the Homes and Communities Agency, HCA (see Section 5.4). The HCA are encouraging a 'single conversation' between themselves as funder, local authorities and 'partners' from the public, private and non-profit sectors (Hughes 2008).

5.3 Rent setting

In Britain, the use of welfare payments to low income households to make rent affordable dates from 1919. However, the system was reformed before the advent of private financing in 1982 with the introduction of 'housing benefit'. Local authorities normally pay this direct to landlords, whether they are renting from social or private landlords. Around two-thirds of those receiving benefits are in the social sector. Although administered by local authorities, rules are set and applied consistently across the country. The housing benefit is means tested, rising and falling with changes in household composition and income. Tenants are protected against rent rises, although they are sharply penalised if their income increases. Housing benefit provides predictable, government-supported cash flows for housing associations and underpins their ability to service debt through both bank loans and bonds.

Rent setting varies between different social landlord types. During the 1990s housing association rents increased to meet their private financing obligations, although by 2000 they still remained 30 per cent below private sector levels (Mullins & Murie, 2006). Local authorities can choose the basis and level of rents, although they are constrained by the limitations of national government funding through their Housing Revenue Account. Since 2000 the national government has sought to apply more consistent rent-setting formulas across the social housing sector (housing associations, local authorities and ALMOs). This is based on the level of amenity provided: size of property, number of bedrooms and so on, although full implementation is not due until 2011/12.

5.4 Regulation and profit making

England's housing associations are closely regulated, with the remit of the Housing Corporation expanding since its formation in 1964. The Corporation also inspected associations until 2003 when it lost this role to the Audit Commission (2005), which also inspects local authorities (including their housing services) and ALMOs. Following the Corporation's dissolution in December 2008, its investment role transferred to the Homes and Communities Agency (HCA) and was integrated with regeneration activities. The HCA had an annual budget in its first year of £16.8 billion (\$30b). Regulatory activities passed to the Tenant Services Authority (TSA), which by 2010 will also regulate public housing and ALMOs. These 2008 changes to English regulation might lead to a re-ordering of the social housing sector with a more 'level playing field' between providers, although it is too early to be certain (Gilmour 2009).

The TSA are continuing a system based on rules and regulation, supported by housing provider registration and transparency through disclosure of finance data and audit reports. Described by the Housing Corporation (2005, p.4) as 'risk based regulation', the system imposes lighter reporting and looser controls for smaller associations (below 1000 properties) or those judged after inspection to be less risky. Strong regulation, coupled with the forced rescue of failed organisations by stronger groups, avoided association defaults until 2007. Ujima became the first housing association to be declared insolvent, its 'fate in hands of [its] lenders' (Cooper 2007).

5.5 Housing system outcomes

The introduction of private finance in 1988 has transformed English social housing provision, encouraged management innovation by provider organisations and helped fund an improvement in the condition of social housing stock, such that most properties will reach *Decent Homes Standards* by 2010. However, the *Right to Buy* has led to a reduction in the size of the social housing stock by one-third over 25 years. This will only be partially addressed by significant funding of £8.4 billion (\$15b) through the National Affordable Housing Programme from 2008–11. English social housing is insufficient to meet demand, although production levels have been more robust during the GFC than private sector construction: see Figure 13.

Since the start of the GFC in 2008, bank loans have been harder to obtain with fewer institutions lending to the sector, and banks managing their exposure more cautiously. Although general market interest rates such as LIBOR have fallen sharply, the margins charged by banks over LIBOR have risen for housing associations needing to re-negotiate their borrowing. Britain's largest lender revealed margins had risen from 0.3 per cent above LIBOR before the GFC to 1.5 per cent late in 2008 (Dowler 2008). During this period there has been increasing interest in raising debt through bonds, and an assessment of syndicated bonds raised by THFC is given in Table 11.

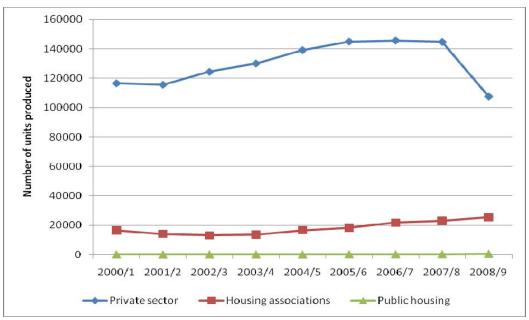


Figure 13: English dwellings constructed across tenures, 2000/1–2008/9

Source: CLG (2009b)

Table 11: Evaluation of THFC in England

Cost effective	THFC is a non-profit organisation with surpluses re-invested in the housing association sector. However, as with all bond issues, professional fees are high as transactions are complicated and compliance costs expensive.
Cost reducing	Bond pricing depends on general market conditions. During the GFC bonds became cheaper than bank loans for housing associations, although this may not continue. Bonds avoid re-pricing risk, which has been a problem for bank loans which have been due for renewal during the GFC.
Rent reducing	Lower borrowing costs could enable housing associations to moderately reduce their real rents. However, as low income tenants receive housing benefit, this will not flow through as a cash benefit to tenants.
Equitable	There is no direct link between THFC funding and the needs of particular tenant cohorts accommodated by housing associations. The associations can use the funding for whatever purpose they consider appropriate provided that they conform to their constitution and meet regulatory requirements.
Appropriate risk allocation	Institutional investment in THFC is low risk due to government support of tenant incomes through housing benefit and a strong regulatory (and rescue) system for housing associations. Bonds are priced accordingly.
Impact on public finances	None. THFC obtains its own rating and is not underwritten by government. However, it is unlikely the government would allow a medium or large housing association to fail due to the social impact on vulnerable tenants.
Robustness	THFC bonds have proven counter-cyclical during the GFC, as a 'safe haven' for investors and a lower-cost form of borrowing for housing associations. In buoyant debt market conditions, costs of complexity with bonds would make traditional bank loans cheaper for most borrowers.
Feasibility	Institutional structures such as THFC require advanced capital markets and good liquidity, i.e. a ready supply of investing institutions.
Effective delivery	THFC operates efficiently, carefully packaging risks for investors. Compliance costs for recipient associations are probably modest.
Enhances capacity	THFC makes only a marginal impact on capacity, supplying less than 5 per cent of debt for English housing associations.

6 THE NETHERLANDS

The Netherlands has a historically large but recently declining share of dwellings in the social housing sector, being 32 per cent in 2008 of the total stock of 7.2 million homes (Table 12). With the growth of homeownership in recent years and sale and demolition of social rental stock, social housing has declined by almost 6 per cent since 2004. However, with the moderation of house prices in recent years, sales have diminished and associations have returned to build more rental houses, rising from 18 000 in 2004 to 27 000 in 2008 (CFV 2009).

The social task of housing associations is to provide decent affordable housing for low to middle income households, recently with a focus on those unable to access housing in the private market. However, in the 1990s housing associations became more active developers of higher-rent and owner-occupied dwellings. This trend occurred amid a perception that there was an over-supply of low rent accommodation, the desire by the government to promote home ownership and the financial independence of social landlords (Nieboer & Gruis 2004).

Virtually all social housing is procured and managed by housing associations, operating under a range of public regulations. Following the corporatisation of municipal housing providers in the 1990s, associations dominated the social sector (99.5%). The number of social landlords has rapidly declined from 620 in 2002 to 434 in 2008, due to mergers. This has led to an increase in their average size, from 3800 dwellings in 2002 to 4600 in 2008 (CFV 2009).

Type of landlord	Dwellings (000)	Total social housing (000)	% of rental stock	Total housing stock %
Housing association		2245		32
Private rental				11
Private investors			40	
Institutional			60	
Total rental sector	3096			

Source: CFV (2009); Elsinga et al. (2007)

6.1 Financial support and the role of private finance

By the mid-1990s, direct financial support through 'bricks and mortar' subsidies and government loans was abolished, leaving housing associations to fully finance their social housing investments with capital-market loans and their own resources The latter consisted of reserves built before the 1990s, proceeds from sales of established dwellings and profits from development of more expensive dwellings for sale (Lawson & Nieboer 2009). Today, there are no publicly funded housing supply programs. However, significant demand-side support continues for both the social and private rental sectors. In addition, the national Social Housing Guarantee Fund (*Waarborgfonds Sociale Woningbouw* – WSW) makes guaranteed loans. The guarantee is funded by fees from social landlords and backed by central and local government. There is also financial support for weaker associations by the Central Housing Fund (*Centraal Fonds Volkshuisvesting* – CFV), a public body that is independent of government and housing associations.

Nowadays, social landlords must fully finance new construction with capital-market loans and their own resources. Many have strengthened their finances by developing for the owner-occupied sector and through sales of a substantial number of dwellings (Gruis & Nieboer 2006). However, this strategy has had a number of unintended consequences, with housing associations facing challenges during the GFC.

Typically, associations have a range of different short and longer loans to cover different funding needs, for example short term loans are often used in the start-up phase of a project (WSW 2009). These are actively managed to minimise interest rate risk. Loans may be guaranteed by the Social Housing Guarantee Fund (WSW), a non-profit foundation mainly assisting registered housing associations (93%) to borrow at relatively favourable terms for new housing construction, renovation and refurbishment. Most loans are obtained from two major public financial institutions, rather than the commercial sector: the *Bank Nederlandse Gemeenten* (BNG) and *Nederlandse Waterschapsbank* (NWB). BNG and NWB have traditionally specialised in providing private finance to the public sector, including the social housing sector.

According to the WSW (2009) banks are currently experiencing difficulties in obtaining funding for periods of more than three years, while housing associations are very much reliant on loans with longer maturities. This mismatch means suitable loans are in very limited supply. Where funding proves to be a problem, WSW can facilitate refinancing by advancing a guarantee for refinancing and only afterwards for new investments. The average maturity of new loans arranged by associations in 2008 was one year less than in 2007, while the fixed-interest periods were on average five years shorter. The average interest rate on new loans rose from 4.5 per cent in 2007 to 4.6 per cent in 2008, largely because of the credit crisis (WSW 2009).

WSW offer banks a triple underwritten guarantee on loans by members, backed by the stock of the sector, as well as local and central government. Guarantees are only issued for rented properties within a certain price range. The government temporarily lifted the price level for higher-priced dwellings recently to enable associations to purchase, to support the depressed private housing market. In the advent of default, WSW step in under the same terms and conditions that applied to the association and the loan would not be accelerated. Such a mechanism was considered essential as housing associations of varying solvency moved towards financial independence in the 1990s. The guarantee remains a crucial attribute of the social housing system today.

Participating associations must meet WSW's strict assessment criteria, primarily concerning solvency, which is regularly monitored. Assessment involves examination of project development and regeneration policies and strategies relative to actual performance, existing stock management practice and capital adequacy. The WSW focuses on cash flow analysis and applies various stress tests to inform WSW's judgment on likely calls on the guarantee. WSW has long held a AAA rating, reflecting strong links with the Dutch state, sound principles underlying its procedures, stringent membership criteria, and an active role in monitoring members' financial performance.

WSW results for year	2010f	2009f	2008	2007	2006	2005
Guaranteed loan obligations (€m)	7900	7540	7170	6490	5970	5600
Capital (€m)	486	468	436	423	407	390
Committed capital of participants (€m)	3042	2901	2760	2498	2224	2026
Total capital (€m)	3528	3369	3196	2921	2631	2416
Capital/total guaranteed obligations (%)	0.6	0.6	0.6	0.7	0.7	0.7
Total capital/guaranteed obligations (%)	4.5	4.5	4.5	4.4	4.4	4.3

Table 13: Performance of the Dutch social	housing guarantee fund
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Source: WSW (2009); Moody's (2009). f: forecast.

Under the guarantee the government is bound to provide unlimited, interest-free loans to top up WSW's capital when called to do so. However, it must turn to the committed capital from participating associations. Table 13 shows the sound position of WSW's current commitments, albeit with a slightly worsening capital-to-obligations ratio. However, this situation could change with the worsening position of the association sector in the current housing market.

The WSW has 35 employees, who are primarily concerned with monitoring the risk of members and promoting improvements in their financial solvency as well as capital market investments for the WSW. There were considerable changes in participants' monitoring profiles in 2008, with the number of associations in the relatively unfavourable ranking of 3 (of 5 levels) increasing to 41 (WSW 2007, p.22). No housing associations are currently classified in monitoring profiles 4 or 5. In such situations, WSW will: liaise with the housing association to examine opportunities for postponing investments; cancel certain investments (possibly temporarily); increase property disposal activity; and amend maintenance programs (WSW 2009).

In addition to WSW is the Central Fund (CFV), established in 1988 to provide financial assistance to housing associations in financial difficulty or those that do not qualify for the WSW guarantee because of structural rather than liquidity issues. Mandatory fees paid by associations finance this solidarity fund. CFV complements the role and credit rating of the WSW by providing interest-free loans or lump-sum payments and implementing agreed re-organisation plans. It also provides an early warning system for the Housing Minister, who in turn can replace board members and appoint interim managers to a troubled association.

There are increasing cases of financial problems in the sector. In 2008, CFV did not receive any new referrals of associations needing structural support from WSW. However, one housing association did receive additional support of about €24 million (\$38m) for a particular project. Furthermore, three associations have been placed in supervision as directed by the Ministry of Housing. While one instance involved fraud, the other two cases were attributed to mismanagement.

6.2 Asset management

Housing associations are allowed and indeed encouraged to sell dwellings, since the promotion of home-ownership is a prominent issue of Dutch housing policy. Given their financial self-reliance, the sales strategies are often motivated by the landlord's own reinvestment strategies. The financial reforms have been followed by a large number of mergers between social landlords. As a consequence, the number of housing associations has been falling steadily, as discussed previously. As associations expand their horizons nationally to achieve cost efficiencies and market dominance, local housing objectives may weaken.

Currently, the operating cash flows of many housing associations are insufficient to fund their repayment commitments after outlays for normal maintenance expenses, staff and other costs and interest expenses. The structural annual deficit has almost doubled in recent years, rising from €770 (\$1230) per residential unit in 2006 to €1365 (\$2184) in 2009, and is now higher than ever (CFV 2009; WSW 2009). Housing associations will have to fund or refinance this amount, either externally or from the proceeds of property sales.

However, the market conditions in which housing associations operate have changed dramatically from boom to stagnation. It is no longer possible to achieve forecast values and levels of property sales, and this trend is expected to continue over the coming years. Reduced opportunities for internal funding mean housing associations are now also more reliant on external finance. This adds to interest costs and repayment commitments (WSW 2009).

The most recent annual report from the sector's guarantee fund, which analyses the financial position and cash flow position of housing associations, contends that some social landlords will have to use external finance and the proceeds of property sales not only to fund the start up costs of new projects and their development but also to pay for day to day operational expenses. In the financial year 2008-9, the external funding requirement for the sector was in excess of $\in 22$ billion (\$35b) (WSW 2009, p.23).

In the longer term, operating income will need to be sufficient to cover these funding requirements, so developments in rental income and the housing associations' management of their costs will be of paramount importance. However, various political measures have constrained the capacity of associations to generate income: rent increases have been limited to the level of inflation; a regeneration levy and corporate tax has been imposed by central government; and there has been a rise in construction costs, which has been accelerated by new standards to reduce carbon dioxide emissions, according to the sector. In the 2010 national election campaign, which is taking place in the context of considerable public deficits (due to nationalisation of several financial institutions), there have been proposals for deep expenditure cuts as well as revenue raising measures, including additional taxes on housing association assets. If implemented, these measures would clearly worsen their strained financial position.

6.3 Rent setting

The rent setting regime is regulated and maximum rents are nominated by the government in accord with quality standards. Increases are indexed to inflation for 2007–2010, which is a low 1.1 per cent currently. All dwellings with rents under €615 (\$984) per month are subject to these controls. This covers 95 per cent of rental dwellings: only expensive dwellings are exempt. On the basis of a point system for quality, a maximum eligible rent can be calculated. In principle, rents can only be changed on July 1st of each year. The government decides each year the maximum percentage rent increase. For housing associations, the government also determines each year a maximum rent increase at a corporate level. The latter regulation has been in force since 1993. Previously, the government determined the annual rent increase at an individual tenancy level and housing associations were not allowed to vary the annual rent increase themselves (Lawson & Nieboer 2009).

During the transition from public to commercial loans, the government permitted more rapid rent increases. However, this policy increased demand for housing allowances. With a lowered ceiling on eligibility, tenants in a stronger financial position were encouraged to leave the sector. In the context of rising housing prices and generous tax concessions, many social tenants were enticed into home ownership.

Within the current regime housing associations have more freedom to set rents at various levels. The average rent in the social sector is 70 per cent of the maximum permitted for the quality of their dwellings (Haffner et al. 2009, p.220), and reflects their limited profit orientation and social mission. However, this autonomy is confined by rent regulations, limited availability of land, and external agreements, especially with local governments. Since 2002, national rent regulations have limited the freedom of associations on rent. Until 2007 the maximum rent increase for individual dwellings varied between the inflation rate and the same rate plus 2 per cent. From 2007, rent increases have not been allowed to exceed inflation.

Although the regulatory code, the *Besluit Beheer Sociale Huursector* (BBSH) (see Section 6.4), stipulates that housing associations must give priority to accommodating households with a weak position on the housing market (mainly lower-income

households), housing associations are allowed to provide dwellings for other target groups and to deliver high-rent or owner-occupied housing. A national restriction is that relatively cheap homes must be allocated to low income households. At the local level, many associations work with municipalities to develop and manage allocation plans that are based on local criteria (Lawson & Nieboer 2009).

6.4 Regulation and profit making

In the same period as the national government reduced its financial support, prescriptive regulations were replaced by the principle of retrospective accountability. Since the introduction of the Social Rented Sector Management Decree (BBSH) in 1993, housing associations operate in a system in which they are supervised on the basis of general *fields of performance*, such as accommodating particular target groups, preservation of the quality of dwellings and their environment and promoting liveability.

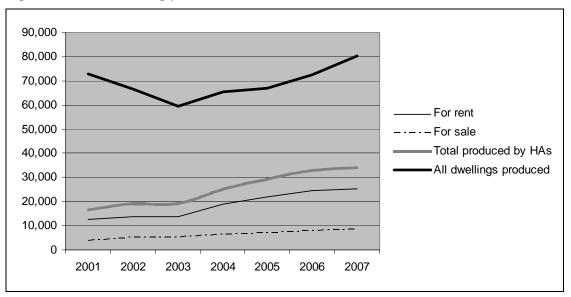
The national minister responsible for housing may impose sanctions if an association performs poorly or in conflict with regulations, such as a directive (to undo or to perform a certain activity) or the appointment of a temporary supervisor. Apart from the national government, external supervision is also carried out by the Central Housing Fund, which combines a funding and supervisory role. Finally, there is also internal supervision, which is carried out by a supervisory board.

The central government is reviewing how the social housing sector is managed and after contentious debate has made proposals for much stricter regulation of this sector. The government's proposals include establishing a new Housing Authority, new rules governing the activities of subsidiary companies that engage in more commercial activities and a process for assessing amalgamations between associations, which will involve local authorities and tenant organisations.

6.5 Housing system outcomes

The total production level in the Netherlands by housing associations has shown a decline from 72 958 homes in 2001 to 59 629 homes in 2003, followed by a gradual increase to 80 193 homes in 2007. It should be noted that a considerable number of social dwellings, around 14 000 annually, were demolished in the same period. Underlying these figures are the financing and regulatory changes outlined above, which have transformed the asset management practices of Dutch social landlords. However, with the sharp downturn in the housing market, past strategies are no longer feasible and there are concerns for the financial health of the sector.

Figure 14: Dutch housing production



Sources: Social housing: CFV (2006; 2008); for all dwellings: http://statline.cbs.nl.

As at December 2008, 415 of the total of 434 registered housing associations (2007: 449 of the total of 468) were registered as WSW participants. The continued reduction in absolute terms is primarily the result of mergers and acquisitions during the year (WSW 2009). WSW participants managed a total of 2 508 000 homes and student and sheltered accommodation units in 2008, compared with 2 350 000 in 2007. EU competition rules could affect what type of units the WSW guarantee can cover, a narrowing of coverage to low income rental housing, which may reduce the credit rating of the WSW and thus the cost of finance for housing associations.

The value of the AAA rating to WSW is seen in the lower financial interest rates for housing associations, leading to an estimated advantage of 0.5 to 1.5 per cent. It has provided guarantees to finance 80 per cent of the financing needs of housing associations. Coupled with their own equity or 'revolving fund', this has allowed them to continue to produce affordable rental dwellings despite the absence of direct supply subsidies. However, two public banks primarily provide these loans. Thus, the move towards a privately funded model has been almost entirely supported by public financial institutions. There are no significant-sized commercial banks lending to housing associations, as they cannot compete with publicly subsidised institutions.

Associations have been encouraged during the GFC to continue expanding their property development despite increasing cash flow problems. The government has enabled them to buy projects unsold by the private sector. WSW anticipate high demand for its guarantee over the next two years, to improve terms on which associations can obtain funding in a challenging market (WSW 2009). WSW issued a record €11 billion (\$18b) guarantees in 2008. Housing associations are both funding their current investment, and covering refinancing requirements over the coming years. At the same time they also refinanced existing short term loans by loans with longer maturities (WSW 2008, p.7). In such a dynamic market and challenging political demands, the Dutch case is one to watch in the coming months.

Table 14: Evaluation of the Dutch Social Housing Guarantee Fund

Cost effective	The WSW has proven to be an influential and cost effective mechanism to improve access to credit markets for approved association developments, even during the GFC. However, the guarantee largely applies to loans issued by banks (88%) that specialise in channelling private finance towards the public sector - Bank Nederlandse Gemeenten (BNG) and Nederlandse Waterschapsbank (NWB), which are both AAA rated.
Cost reducing	It has been able to cover 80 per cent of loans to the housing sector, reducing rates by a considerable 1.0–1.5 per cent, with its triple-funded guarantee structure and AAA credit rating. The spread on WSW paper was around 35 basis points above the rate payable on Dutch state paper in 2008 (2007: approximately 26 basis points) (WSW 2009).
Rent reducing	There is no prescribed, regulated relationship between cheaper finance and lowered rents, as in Austria or France. The Netherlands has a nominated rent system based on a points system, which is determined by government policy that is currently indexed to inflation. In the past, rents have been allowed to increase faster to secure revenue for independent housing associations.
Equitable	The WSW guarantee can only apply to dwellings under a prescribed cost limit. Recently this was increased to enable associations to purchase dwellings in the depressed private market.
Appropriate risk allocation	The risk is shared by players with a vested interest in the financial continuity of independent housing associations. So far associations have largely been financially strong, but the situation should be monitored as there are signs of distress under changing conditions,
Impact on public finances	The Dutch strategy rests heavily on the publicly funded foundations of the past. Since financial independence associations have had to rely on their own equity, rent surplus and commercial funds to survive and fulfil their social task. The WSW was initially financed by the government and is now funded by housing association members. The guarantee has not been drawn upon since its establishment. Its obligations and capital position are very sound and it has sustained a AAA rating for more than two decades.
Robustness	The WSW has been essential in the current crisis, where banks have been reluctant to provide long term credit. With some associations reliant on sales for their financial continuity, and less favourable government policies towards them, there are real questions about their capacity to grow and provide an adequate range of housing options.
Feasibility	In the context of strong public banking corporations with a vested interested in associations' success, the WSW model has been a success. However, there are real tensions in the housing sector concerning the role and regulation of associations since their financial independence.
Effective delivery	The WSW is a non-profit organisation, which is recognised (World Bank, 2003) as a European leader in social housing guarantee funds which have promoted solidarity across a variable housing sector. The WSW has developed innovative monitoring strategies. It cooperates with the CFV.
Enhances capacity	Financing costs play an important role in defining the strategies of housing associations. The WSW plays a very useful role in giving confidence to lenders and has been essential to ensure access to capital markets. The WSW has played an effective role in risk assessment and the development of financial management expertise within housing associations. WSW's work in monitoring and improving the financial position of associations has also helped their transition towards financial independence.

7 AUSTRIA

Affordable rental housing plays a strong role in Austria's housing markets in all regions, but especially Vienna. There, affordable rental housing is provided by limited-profit housing associations, cooperatives, municipal housing companies and, more recently, private landlords. Across the nine provinces of the Federation, medium to small social landlords with 200 to 4000 dwellings provide housing on a cost rent limited-profit regime to a broad range of tenants, including lower-income households. Their mission is the provision of affordable rental housing, which is managed cost-effectively, ensures assets are used appropriately and limits profit making. This sector is the main vehicle for expanding affordable rental housing, via a mixed funding regime of public subsidies, developer and tenant equity, and increasingly, market loans.

Type of landlord	Dwellings (000)	Total social housing (000)	% of rental stock	Total housing stock %
Co-operatives	238			5
Limited profit companies	267			7
Municipal landlords	300			9
Social sector		805	57	21
Private landlords	600		43	20
Total rental sector	1405			41

Table 15: Austrian rental housing landlords

Source: GBW (2009); IIBW (2007)

7.1 Financial support and the role of private finance

Total housing expenditure in Austria is about 1 per cent of GDP, which is mid-range in terms of European levels. Until 2008, public loans were financed by a predetermined proportion of federal government revenue, which was capped around €1.78 billion (\$2.8b) annually for a defined period, typically 5-years. In addition to tax-funded expenditure (72%), subsidy funds also included additional contributions by provincial (state) governments (6%) and returns on outstanding loans (22%) (Amann & Mundt 2007; Czerny et al. 2007). Various sources of taxation revenue and contributions are dedicated towards subsidisation programs for the refurbishment of older dwellings and development of new residential buildings (92%) and a small budget for demand assistance (8%). Non-profit developers also benefit from corporate tax exemptions, as do purchasers of housing-related bonds.

To finance affordable supply, each province designs subsidy schemes. Reflecting local policy preferences, these schemes provide long term low interest public loans with various conditions for selected target groups that may differ across provinces. In turn, loan repayments are re-invested into revolving funds for housing purposes in the provinces. Since 2008, provinces have received *unconditional* transfers from the federal government. Thus, they no longer have to dedicate a defined share of revenue towards housing subsidies.

In Austria's cost rent regime, affordability is assisted by reducing housing supply costs and does not heavily rely on demand-side assistance. To achieve this, well-regulated limited-profit organisations building cost-capped, modest-sized projects are the key. Demand assistance currently plays a modest role in supporting affordability. It is available for those receiving social security in social and (more recently) private rental housing. A second form of assistance that varies across provinces may be available depending on the type of dwellings occupied.

In addition to conditional public loans, social landlords must access additional private funds, such as own equity, tenant equity or debt finance. However, they are subject to strict maximum rent levels, which contain overall project costs, including financing. This approach drives providers to seek the most efficient and cost-effective mix of finance. Figure 15 illustrates financing components for a typical project.

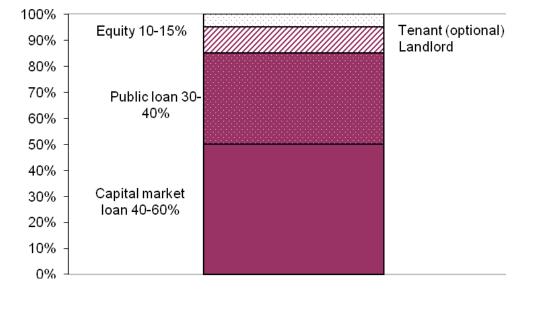


Figure 15: Components of financing social housing projects in Austria

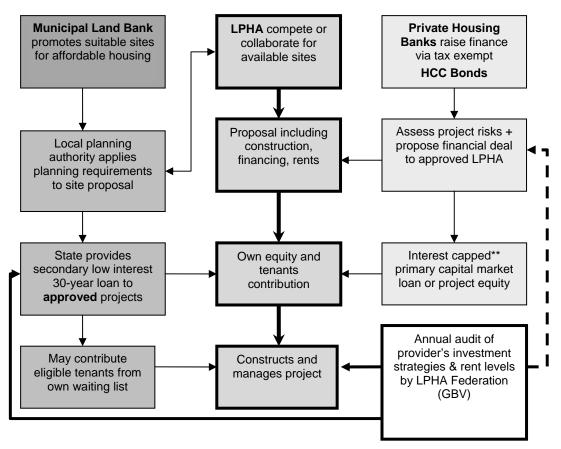
Source: Amann et al. (2009)

The proportion of private loans has gradually increased as higher construction costs have not been compensated for by rising grants or public loans, which are also capped over the 5-year period of a Federal-Provincial agreement. However, this shift has occurred in the context of declining interest rates on commercial loans. To further drive down the financing costs, match the long term deposit needs of banks and promote interest rate stability, commercial finance has been raised via the sale of bonds to low risk investors, promoted by tax incentives. Funds raised via the sale of special bonds must be invested in cost–rent, cost-capped housing within 3-years.

In 1993 the Austrian government created a special circuit of capital involving the sale of bonds in order to channel investment into new affordable housing (see Figure 16). The Austrian Tax Office offers progressive incentives for purchasers of Housing Construction Convertible Bonds (HCCB) and requires that any funds raised through the sale of bonds have to finance high-volume new housing and refurbishment projects, of modest size (up to 150m² depending on household size) and within defined rent limits. The 1993 legislation has enabled several major banks to create subsidiaries, called housing banks, to sell special-purpose bonds.

Housing Construction Convertible Bonds, which were launched in the Austrian market in 1994, provide a double tax advantage. The initial cost is income tax deductible after 10 years for certain income groups and most importantly interest coupons are exempt from the first 4 per cent of the annual investment income tax charge. In Austria returns on bonds are subject to a withholding tax of 25 per cent. This is deducted from the bond coupon upon disbursement to institutional and individual bondholders alike. The capital gains tax exemption for HCCB is only granted for individuals and specific institutions, such as councils. The tax exemption on a 4 per cent coupon bond equals an interest return of 5.33 per cent when adjusted for the tax benefit.

Figure 16: Austrian housing banks fund raising



** Interest capped: either fixed or floating cap with defined spread on a basis rate Source: Lawson et al. (2009)

The cost of the bonds is tax-deductible and deduction rates vary progressively according to household income and family type. The maximum yearly amount which can be deducted for this kind of special expense is €2920 per person (\$4670), plus €2920 if there is only one family income and an additional €1460 (\$2300) where the family has three or more children. For households with an annual income of €36 400 (\$58 200) to €60 000 (\$96 000) there is less tax deductibility and none where household income is above €60 000. Thus, higher-income groups do not benefit from tax deductibility, but still they have exemption from capital gains tax for the first 4 per cent of returns. Bonds are also purchased as safe long term investments by councils and other public bodies, most commonly by private individuals.

Most bond purchasers are small-scale individual investors. Take-up of the bonds has been widespread, involving an estimated 300 000 households (Schmidinger 2009). These investors seek a secure, low risk investment and, if on low to moderate incomes, receive a tax advantage. Some banks have focused on institutional investors, municipalities and so on, but these are not eligible for tax deduction of initial purchases. It has been claimed that for every $\in 1$ (\$1.60) of foregone tax, $\in 19$ (\$30.40) of investment has been committed to affordable housing production (Housing Bank Austria 2008). The cost to government of the bonds, in terms of foregone tax revenue, has been estimated at $\in 120$ million (\$200m) per year (Schmidinger 2009).

Housing banks have been able to assist finance an increasing proportion of new rental housing and refurbishment. Bond-financed loans cover an increasing proportion

of total construction costs (currently around 50%), with the balance met by housing subsidies and provider contributions. Since 2000, there has been a sharp rise in demand for tax-privileged bonds, which peaked in 2007 at $\in 2.29$ billion (\$3.66b) and since declined to $\in 1.46$ billion (\$2.33b) in 2008, with a further drop expected due to the GFC. Overall, HCCBs have been very successful in raising the level of investment in affordable housing. It is claimed the presence of the HCCB facility has promoted stability in Austrian mortgage markets by narrowing the gap between deposits and long term loans on the balance sheets of banks and reducing interest rate spreads for housing loans (European Central Bank 2009).

7.2 Asset management

To produce new dwellings and to renovate old ones, social landlords rely on the provision of grants and subsidies, which depend on the varying political will of municipal and regional governments. Federal commitment to loan programs has been capped and increasingly LPHAs are being encouraged to rely on commercial loans, their own reserves and (tenant) equity, with consequences for production levels and affordability of housing outcomes.

In 1993, national regulation enabled tenants to buy their dwellings after 10 years, where they had made a financial contribution above €50 (\$80) per square metre (2009: €60 (\$96)) to the project. This could be in the form of a loan from the tenant to the provider, which is repaid when the tenant wishes to purchase after ten years. There has been a broad application of right to buy options across the LPH sector. By 2004, around 55 000 dwellings had been sold this way and it is estimated that by 2006 a total 10–15 per cent of LPH will be sold to tenants (Housing Statistics in the EU 2006, p.113). The growing rent-to-buy segment of the market, which is considered more favourably by tenants than traditional owner occupation, has been promoted by the attractiveness of tenant contributions towards financing costs and the affordability of potential home ownership for tenants (Bauer 2009). Ad-hoc sales of older units have not been popular among social landlords, because of the implications of multiple ownership in residential complexes (Bauer 2004; Ludl 2004).

7.3 Rent setting

In principle, affordability in the Austrian system is promoted by cost-efficient limitedprofit housing promotion assisted by bricks and mortar subsidies in the form of discounted land, public loans and grants and tax relief. Initial rents define a rental cost per square metre which can be increased each year with the consumer price index, and revenues should be sufficient to repay the annuity of the capital loan as well as the interest on the public loan (Neuwirth 2004, p.1). Calculated in the costs must also be an amount set aside for maintenance, repairs and renewal. LPHA can earn 2 per cent above this for risk mitigation. Following repayment, rents remain at the former level but must stay below a legislated maximum (Bauer 2004).

Rent assistance schemes vary across Austria. Typically rents are fixed annually and balanced at the end of the year, with tenants either receiving a return or making additional payments to cover financing and operating costs. Where tenant income falls below that able to pay for decent housing, they can draw on assistance from regional governments. However, demand assistance is not a dominant feature of the social housing system and its expansion has been resisted by the sector (Ludl 2004).

LPHA is a mainstream, non-stigmatised housing option in Austria, which is widely available in urban areas. Access to social housing is broader in Austria than in most social housing systems. Typically, municipal dwellings are available to households under the sixth income decile and LPHA dwellings under the eighth income decile. Each province sets income limits for projects via conditions placed on subsidy programs. In allocating loans, municipalities can add their own requirements, often as a condition of preferential access to land. The City of Vienna has allocation rights for between 25 and 50 per cent of available dwellings, depending on a scheme's financing arrangements and land use planning priorities. It also sets aside 2000 units of its own municipal stock for very low income households in urgent housing need.

Notably, non-Austrian citizens have only been able to access this segment of the rental market since 2006. Not surprisingly, the recent establishment of new migrant communities has challenged traditional forms of social interaction and expectations on Austrian housing estates. There are rising social issues in these neighbourhoods and the perception of municipal housing more generally is changing, with Austrian households tending to leave these areas and seek higher-cost, newer housing elsewhere. Unlike more mixed neighbourhoods, the homogenous form of rental buildings restricts opportunities for small economic enterprises and support services for these new communities.

7.4 Regulation and profit making

Regulation plays a strong and prescriptive role in the Austrian model. There is a suite of national laws concerning the setting of costs, rents, restriction of activities, reinvestment of profits and supervision of activities. Regulation defines acceptable activities for housing providers, sets rules for rent-setting, imposes an income ceiling on managers and promotes national design principles (Bauer 2004; Amann & Mundt 2007). At the regional level, guidelines specify the conditions which must be met in order to receive subsidies (such as cost, size and target households) and, together with municipalities, establish building and planning regulations. Profits are limited to 6 per cent and there are restrictions on the interest received from *own funds*.

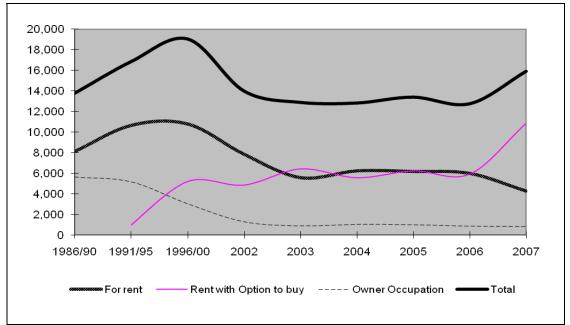
There are a range of national decrees that establish rules for proper business conduct and detail how accounts should be prepared and presented (Ludl 2004, p.3). A distinct part of the work of the national Federation of Limited Profit Housing Associations (GBV), of which membership is compulsory, concerns financial supervision and fulfilment of these conditions. GBV employ 40 qualified accountants, specially trained to audit non-profit organisations and cooperatives. Annual reports are sent to the regional government for approval. Housing associations that fail to reinvest their profits in new production are obliged to merge with another LPHA. Supervision of municipal housing is undertaken by the federal government's Audit Commission (*Rechnungshof*) and, in the case of Vienna, municipal housing supervision is by the Vienna Control Department (Bauer 2004).

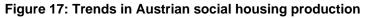
7.5 Housing system outcomes

Bonds have been highly successful in generating a flow of low cost funds to meet demand for affordable rental housing. According to the Financial Stability Report 7, published by the Austrian National Bank, between September 2001 and January 2004, five home loan banks operating in Austria issued \in 6.2 billion (\$9.9b) housing bonds. After rising in volume significantly until 2007, the volume of bonds has declined during 2008–2009 with the GFC.

During the 1990s, overall output in residential construction, including the subsidised sector, amounted to approximately 36 000 dwellings annually, rising to nearly 60 000 by the end of the decade. As production of housing in Austria is subsidised broadly, production levels are vulnerable to not only economic cycles but also changing subsidy conditions. In recent years, a cap on Federal funding of provincial programs has constrained housing programs and increased reliance on private investment. However, in social democratic governed jurisdictions, social housing production has been bolstered in recent years and is a significant component of house building. Overall, social housing production contributes around 13 000 dwellings annually across the nation.

Production levels in the Austrian social housing sector are provided in Figure 17, which shows stable levels of total production between 2001 and 2007. There have been changes in the composition of the tenure produced. While the production of *rental* housing has remained fairly stable, dwellings with the option to buy have increasingly replaced those sold at completion. This is due to the introduction of regulations in 1993 allowing tenant equity contributions, the capping of federal subsidies, and rising construction costs, which have influenced both affordability and tenure choice since 2005





Source: GBV (2009) and Institute for Real Estate, Construction and Housing (IIBW) in Lawson and Nieboer (2009)

Austrian households spend on average €420 (\$672) per month or 18 per cent of their household income on housing (using SILC data for 2007, Statistics Austria), relatively low for West European standards. However, the share of housing costs is particularly high among single-parent households (31%) and single-female households (33%). For households at-risk-of-poverty housing costs are a considerable burden; on average they have to spend €363, corresponding to 38 per cent of their household income, on housing (Statistik Austria 2009). This is not surprising given increasingly polarised household incomes, insecurity of employment facing many European countries, coupled with the low rate of Austrian demand assistance

Nevertheless, in 2007 the average rent burden in Vienna, across both the private and limited-profit sector, for couples with children was only 20 per cent of household income (Kalmár et al. 2008; Czasny & Bständig 2008), which is very low compared to other western European capital cities. In this city, the cost-capped limited-profit housing sector continues to play a very important role across the entire rental sector, where today it provides 48 per cent of all rental housing. Nevertheless, rising construction costs are placing increasing pressure on new cost-capped limited-profit projects, with tenants of new dwellings being required to make increasing up-front contributions, albeit with the opportunity to purchase after 10 years.

Social rental housing plays a central role in many Austrian housing careers; it is not a stigmatised or residualised tenure. Cost rent housing is available in sufficient quantities to promote affordability across the housing sector. Households access social rentals at various times, often returning later in life. It caters for the young when

they enter the housing market, during periods of stress due to family breakdown and loss of income, and when the elderly become attracted by the convenience of compact housing and nearby services offered by social rental housing in urban areas. Deutsch (2008) has researched 'astonishing mobility into and out of social renting', even if some tenants remain in social rentals for the long term, and notes that social renting is able to offer well-located accommodation for key workers close to employment, contributing to regional productivity. Unlike in contemporary public housing in Australia, Austrians do move from the social rented sector to ownership and sometimes visa versa (Deutsch 2008).

An evaluation of the Austrian affordable housing financing system is provided in Table 16.

Table 16: Evaluation of the Austrian housing bonds and housing banks

Cost- effective	During the 2000s the HCCB quickly established itself as a mainstream investment choice for individual households. While the take-up of bonds are considerable (300 000) the main cost to government in terms of tax deductions is modest, but more evidence is required to substantiate estimates. The low rate loans able to be issued from the bonds are targeted to the cost rent cost-capped rental sector.
Cost- reducing	Tax privileges make low return bonds attractive to investors, consequently allowing for low interest loans at up to 1 per cent below market rates. There are regulations which require LPHAs to use loans under a defined basis point limit above the EUROBOR rate.
Rent- reducing	Under the cost rent system, lower financing costs have a direct impact on rent levels. Any landlord can use the funds raised by the bonds, providing the conditions of cost rent cost-capped housing are met. HCCB-financed loans contribute 50 per cent to project costs, thus their capacity to reduce financing costs is significant.
Equitable	All investors receive a basic tax benefit on the first 4 per cent of returns. Low and moderate income HCCB holders can also deduct the cost of purchasing the bond. The amount which can be deducted is capped but increases as their incomes decline.
	The financing of new housing increasingly relies on both developer and tenant equity (the latter leading to right to buy), prompted by the declining role of public loans amid rising construction costs.
Appropriate risk allocation	There is no formal guarantee in the case of default by LPHAs, which is given by the government to the banks for the loans based on HCC bonds. This is not considered necessary, given the role of public loans in project finance.
Impact on public finances	Austrian governments, at all levels, play a key role in subsidising social housing estimated to cost 1 per cent of GDP. Federal government indirectly subsidises social housing via HCCB's tax exemptions at an estimated €120 million (\$192m) p.a. State governments provide subsidy programs and local governments play an important role in facilitating access to land.
Robustness	The housing banks, coupled with subsidy programs and cost rents have provided a tool for countercyclical construction activity, stabilising housing markets and moderating rents in a growing city. However, the provision of a guarantee on regular savings products during the GFC has drawn investors to supposedly safer investment products.
Feasibility	Declining public loans and the strict cost rent limits required a joint approach by the federal government and banks. The HCCB is a mechanism supported by private banks, which compete for LPHA business.
Effective delivery	Five housing banks, subsidiaries of bank groups, compete to fund the LPHA sector, increasingly with competition from commercial banks. They have strong expertise in assessing proposals within the cost rent regime. There are cost efficiencies being located within the mother bank.
Enhances capacity	Given the increasing reliance on commercial loans, the housing bond and housing banks play a crucial role in reducing the volatility and level of interest rates affecting mortgages.

8 CONCLUSIONS

This chapter draws together key themes that have emerged from the descriptions of financing instruments within the context of their respective national housing policies. It briefly reflects on the particular issues facing Australia and raises questions to be addressed through further research and evaluation, policy development and stakeholder consultation. As the research methods were limited to secondary analysis of quantitative data supplemented by a small number of stakeholder interviews and qualitative review, our assessment does not attempt to quantify the comparative costs and benefits of different approaches. However, a number of important principles underlying alternative strategies have been derived.

8.1 Comparison of case studies

The criteria that have been used to analyse different financial approaches to funding social and affordable housing are set out in Table 2. These have been used at the end of each of the country chapters to provide an assessment of each mechanism using a common analytical framework. This section draws out key comparisons across the cases studies on each criterion.

8.1.1 Cost effective

One of the most important measures when evaluating different schemes concerns the total cost to government to leverage private investment, relative to providing direct public loans, and effectiveness in achieving defined public policy goals.

The schemes that have been reviewed employ explicit subsidies, such as grants or public loans, to improve the financial position of landlords. They also benefit from implicit subsidies that are designed to stimulate housing supply, such as guarantee funds and foregone tax revenue, and/or offer revenue support (e.g. rent assistance and rent setting and rent indexing policies). The targets and outcomes expected from investment are either clearly defined (specific housing forms, production targets and eligible households) or loosely formulated (general performance targets that may not be enforced).

Two countries serve to illustrate the cost effectiveness of different policy choices mentioned above. At first glance, the Swiss model appears very cost-effective – reducing interest rates on commercial loans via the bond-issuing cooperative, using revolving funds for providing low interest loans and drawing on minimal support from the government in the form of a guarantee. However, the bond-issuing cooperative has only generated a low volume of supply through the cooperative housing sector. Furthermore, a revolving fund takes decades to accumulate in order to play a useful role in providing low cost loans. In 2008, only 1000 dwellings were constructed by the cooperative sector in Zurich, which has one of the most active limited-profit sectors. Affordability and allocation outcomes are not well-defined.

In contrast, the mixed funding Austrian model, involving public and private loans, has promoted higher levels of housing production over time and, in Vienna particularly, has enabled Limited Profit Housing Associations to play a strategic role in the housing market—with a far greater level of affordable output than Zurich (Lawson, forthcoming). In terms of private finance, the housing banks have been effective in providing a robust flow of low cost funds over the past 15 years which, by supporting asset growth, may eventually enable some reduction in public loan and grant programs. Foregone tax revenue costs the Austrian government an estimated €120 million per year but the scheme attracts more than €2 billion in private investment, helping to generate 12 000 to 15 000 LPHA dwellings per year, about half in Vienna. Funds raised from the sale of bonds are well-targeted towards approved projects, in

keeping with the rules of the various subsidy programs of different provinces. However, being a cost rent model, new projects may only be affordable to the lowest income households when additional rent assistance is provided.

8.1.2 Cost reducing

The extent to which financial mechanisms provide social and affordable housing at the lowest possible cost is difficult to determine, given the mix of subsidies involved and complex national finance and housing markets. The question which needs to be asked in each context is: 'What difference did this instrument make and what would have happened if it was not used?'.

Several mechanisms that are used to ensure that the lowest possible interest rate is achieved have been identified in the study. For example in France, off-market, off-budget CDC loans transform a large volume of short term, low interest savings deposits into long term finance for affordable housing. Savers are attracted by a tax exemption on interest earned and government guarantee on deposits. In Austria, regulations governing the use of private finance for LPHA projects set a basis point limit above the EUROBOR rate, which loan interest must not exceed. In order to ensure investment, a tax incentive offers an attractive rate of return for bond holders, who would receive an uncompetitive return on their bond holdings otherwise.

In the Netherlands, housing associations turn to semi-public banks (rated AAA) for their financing needs, coupled with the WSW guarantee. The guarantee only applies to modest housing within a certain price range. The high rating of the guarantee ensures that the lowest possible interest rates can be achieved for financing housing association projects, whether from large or small associations. This rating has been achieved by improving the financial viability of the entire housing association sector, with the assistance of substantial cash and asset transfers, continuous financial monitoring and a solidarity fund to support organisational restructuring. In England, although the THFC syndicated bonds are not guaranteed by government, they still achieve an AA rating based on predictable rental income.

The management costs associated with raising finance can outweigh its value relative to public loans. Use of complex products, such as syndicated bonds in England and tax credits in the US, leads to higher professional fees. Professional fees are rarely disclosed in full, making true cost comparisons between countries difficult. In the US, where there has been detailed research on the costs of tax credits, the system has been shown to be inefficient both for fees and for the risk premium demanded by investors, which remains around 10 per cent. Similar research needs to be undertaken for each of the mechanisms featured in this report, to enable more detailed evaluation and comparison. Public grants and bank loans are, by contrast, relatively cheap to administer.

8.1.3 Rent reducing

The nexus between financing costs and rent setting varies according to the rent regime applied – cost rent in its various forms, market-related rents or nominated rents – as well as the mechanism for raising or lowering rents. Lower private financing costs only necessarily flow on to benefit tenants in the form of lower rents when a cost rent model is applied dynamically (that is, rents adjust directly with changes in costs). Of course under this model, higher financing costs will also result in higher rents, so there is pressure in cost rent systems to reduce all cost components and promote efficiency.

Of the examples in this survey, only Switzerland and Austria use a cost rent regime. The pervasive and long term development of limited-profit businesses, developing cost-capped dwellings and applying cost rents in Vienna, coupled with substantial grant and loan contributions and low cost finance, have produced an affordable long term rental housing sector in this growing city. In Switzerland, the legacy of generous past public subsidies has left many of the housing cooperatives with a low cost base, allowing them to charge rents significantly less than those in the private sector.

Under other models of rent setting the relationship between affordability of rents and the costs of private financing is indirect. However, rents (and any associated subsidies to tenants) have to cover costs, including financing costs in any system to be viable. Thus, lower financing costs and efficiency drivers have the potential to support lower rents and greater access for lower income households.

8.1.4 Equitable

The relationship between the equitable distribution of housing outcomes and the private financing mechanism employed is determined through the rent-setting regime (including any rent assistance) and tenant eligibility rules. While there has been a general tendency over the last two-decades across the countries in this study to narrow eligibility criteria and target subsidies to those who need them most, there has also been recognition of the need to balance targeting by promoting socially inclusive communities.

Approaches to targeting privately financed dwellings to higher-needs households vary. In France, the lowest cost CDC loans are allocated to projects targeting the lowest income households and co-financed by subsidy programs. In the US, the tax credit scheme is structured such that a minimum portion of dwellings are provided for lower income groups based on a comparison of their income to local median figures. In certain states, tax credit proposals that assist even higher needs groups will be favoured, although the pattern is not uniform across the country.

The Swiss model is not of sufficient scale to respond to housing needs, and subsidies are no longer made available to ensure access and affordability by those most in need. Former loan programs in Switzerland did require that subsidised dwellings were allocated to low income households. However, these dwellings are dwindling in number without new subsidy programs to replace them. In England, the use of private finance in the form of *global* bank loans to housing associations, rather than finance for specific projects (as in the US), allows associations to have more say as to which groups they assist. However, policy settings (such as requirements to give priority to the homeless) and a transparent reporting and regulation system moderates their flexibility.

In Austria, as the cost of housing has risen and the availability of public finance has declined, successful financing of housing projects has relied increasingly on both developer and tenant equity. Loans are available to enable low income households to make an equity contribution.

8.1.5 Appropriate risk allocation

It is important that risk allocation mechanisms do not exacerbate social and spatial inequality; i.e. that poorer regions or households are not discriminated against through more expensive financing costs arising from perceived risks. The risk to lenders can be reduced by a variety of strategies and shared by different parties: the borrower, a guarantee fund, the housing sector, municipal, state and national governments and tenants.

The Dutch WSW is one of the most developed and successful housing institutions for risk allocation, and has strong expertise in monitoring and supervising housing associations. Solidarity is also an important element in the Netherlands. The financial performance of weaker housing associations serving particular locations or target

groups is strengthened by mutual cooperation and risk sharing across the housing association sector, supported by financial assistance through the CFV.

Within the banking sector, many banks increasingly face a lack of deposits sufficient to issue credit, especially now interbank lending is so costly (ECB 2009). Mechanisms that are designed to increase long term deposits are helpful in this regard. For example, bonds (such as the housing bond instrument in Austria) that must be held for defined periods for a modest return help to reduce the gap and improve the banks' balance sheets.

When landlords rely on commercial debt, competition for business must be robust to ensure that funds are provided at the lowest cost under the most favourable conditions. Monopolistic practices in lending can present a real risk to borrowers. There are some concerns in the Netherlands that commercial loans for housing associations, which originate from just two banks, could expose housing associations to a lack of competition, and indeed credit, in the event of a change in bank policy. Fortunately both lenders are highly rated public corporations with a long history of financing social housing. However, diminished access to loans by the sector in the recent Global Financial Crisis has raised concerns again about reliance on these institutions. In Austria and the UK, more banks compete to make loans to social landlords. The Austrian housing banks, as subsidiaries of larger banking groups, are efficient and competitive. Further, the bonds they sell perform an important task, improving the flow of demand for deposits on the banks' balance sheets. They also claim to have promoted greater stability in the Austrian mortgage market overall (Schmidinger 2009).

The risk to government of particular financing strategies may depend on the link between assets, rent revenue and debt. The English private finance model is reliant on strong rental revenue and provides a clear illustration of the paradox that higher levels of commercial lending have only been possible through generous government support of tenant income through Housing Benefit. In the Netherlands, housing associations are dependent on government to steer a rent adjustment and to set housing assistance rules that are favourable to them (and the desired housing policy outcomes). This relationship has come under pressure in recent years in a challenging political and economic environment.

Last but not least, the risk to tenants of specific financing strategies must also be addressed explicitly. Again the rent regime is crucial to affordability and security of tenure. The introduction of private finance to the Dutch system was secured via an agreement between housing associations and the government to increase rents faster than the CPI for a defined period (now ended). Cessation of this arrangement contributed to acceleration of demolitions and sales, with unaccounted-for costs to tenants. In Austria, the increasing reliance on tenant equity to contribute to project costs may be providing an affordable wealth-based alternative to full home ownership (which is yet to be thoroughly assessed) but it has reduced the affordability of new rental housing for those not wishing to purchase.

8.1.6 Impact on public finances

The cost to government of supporting private investment in affordable rental housing was discussed in general in Section 8.1.1. Given the complex range of explicit and implicit costs accruing to different levels of government, more detailed research is required to enable a quantifiable comparison across the countries in this study. However, a number of initial pointers about the costs of the various financing mechanisms emerge from the research.

France's CDC mechanism provides the largest share of finance for affordable housing projects of those examined, but it does not draw directly on any public funds to do so.

Tax revenue is foregone (as interest on small deposits is not taxed); however, the CDC is able to generate a return from deposits for the French government. Revolving funds, such as those used in Switzerland, also provide a positive return to government. Austrian public loans provide a return to state governments, which are accounted for explicitly in receipts. In the past, repayments were used to replenish housing subsidy programs, however, this is no longer a requirement.

Several other affordable housing financial intermediaries cost the government very little as they are self-financing, non-profit institutions. England's THFC is not underwritten by government, unlike the Dutch guarantee fund WSW and the Swiss bond issuing cooperative. America's LIHTC does not appear to be a cost to the government as there are no direct Federal grants. However, the tax foregone is a true cost, though less visible and, therefore, arguably more politically acceptable.

8.1.7 Robustness

Understanding the robustness of the various financing mechanisms in this survey is complex, although the advent of the recent GFC offers insights into the effect of a shock to finance and property markets. Both the English and the Dutch social housing sectors, which are heavily reliant on commercial lending, have been dramatically and adversely affected by the GFC resulting in higher financing costs, reducing construction of new housing and strong action by housing regulators to prevent housing association failure. By contrast, the French system has been less vulnerable. According to Schaefer (2009) there was a rush of depositors to the CDC in 2008–9, as French households considered it one of the safest places to invest. This provided a continuing pool of funds for public investments, such as social housing.

The provision of a guarantee on savings deposits from private investors was important in the recent crisis in some countries in this survey. For example, it allowed France's CDC to increase its scope of activities as depositors were protected. Other institutional mechanisms that were not government guaranteed were adversely affected during the GFC. Austria's HCCB became less attractive to investors who were drawn to regular savings products that were guaranteed. In Switzerland, commercial interest rates declined making commercial loans competitive with loans issued by the bond-issuing cooperative, and many limited-profit builders were able to access commercial loans. Conversely, in England the increasing cost of bank loans during the GFC, and their reduced availability, encouraged housing associations to turn to the bond market. During 2009, several large associations issued direct bonds, and THFC fund-raising increased.

The US system, reliant on both tax-break subsidised private equity and bank debt, provides another instructive case of the risks of changing investor appetite. The GFC caused considerable disruption for affordable housing developers, as both equity and debt markets were affected. Prior to the GFC, some 80 per cent of tax credits had been purchased by commercial banks and the US special purpose mortgage fund raisers, Fannie Mae and Freddie Mac. With these institutions making heavy losses, tax credits lost their appeal. The price of credits plummeted, leaving funding gaps for housing projects. Despite US government financial support, the tax credit market remains seriously depressed and the entire LIHTC scheme may need to be overhauled (Joint Centre for Housing Studies 2009).

8.1.8 Feasibility

The appropriateness of the financing mechanisms described in this study for application to a particular country will depend on a variety of institutional factors. Many approaches have evolved over time—over two centuries in France—and all approaches depend on political appetite, and specific housing policy setting and financial market structures and capabilities, in particular countries. Thus while pointers

can be gained from individual countries, replicating approaches can be fraught with difficulty.

In the political realm, long term cross-party support is important as private finance requires market confidence. This can be seen in the US where the LIHTC became supported by both political parties and in England where there has been general agreement about housing associations accessing private finance. While US investors and English banks took several years to become comfortable with government policy, once the schemes appeared 'permanent' the costs of private finance fell in both cases due to competitive pressures. Prior to the GFC, both countries had developed advanced capital markets with a ready supply of investors.

In several of the European case studies, public involvement was more important. In Switzerland, Treasury facilitated the guarantee of funds and determination of contributions to the revolving fund. The Netherlands and England provided strong support to their respective non-profit sectors through housing assistance and rent policy. In Austria and France there was backing through grants and subordinated public loans. Robust regulation and procedures to rescue failing housing providers has often been tailored to create an environment where investors can feel more secure. Therefore moves towards private finance have led to a continuing and, in some cases, increasing role for public sector agencies.

Increasingly, governments are moving from direct intervention in housing markets, for example through grants or public housing construction, towards using the tax system to encourage private investment. Among the cases studies for this research, tax benefits for investors and savers are used in France, Austria and the US. In most cases, non-profit housing providers also enjoy a range of taxation benefits and exemptions to keep their cost base low. The benefit of this approach is that government expenditure on housing is treated as a reduction in taxation revenue rather than a direct payment, which would be classed as spending. Though the net effect on public finances is neutral, the use of the tax incentives (rather than grants or subsidies) reduces government spending as a proportion of GDP. Thus, although grants may be a cost effective way to deliver affordable housing, they have become less politically acceptable over the last two decades.

8.1.9 Effective delivery

The manner in which private finance is incorporated into the business strategy of a housing provider may enhance or impede the effective delivery of housing outcomes. Having a secure and stable steam of low cost finance provides one of the fundamentals for ensuring continued supply and renovation of housing stock. Other catalysts, such as conditions attached to financing, vary considerably between countries.

To qualify for loans in France and Austria, projects must meet the requirements of cofinancing subsidy programs. In England and the US financial loans and incentives are offered in a competitive financial market, promoting efficiency and good service among providers. In Austria, all potential providers (public, private, non-profit) compete for developable sites and subsidies on the basis of quality standards and operating rules that promote innovation, tenant responsiveness and management efficiency.

The trajectory of developments in private financing shows how understanding about the business of affordable rental housing increases as the financing regime becomes more established. Thus, specialised financial institutions have emerged in several countries (Austria, England, US, the Netherlands). Specialist financial expertise has also been developed in-house by large housing providers in England and the Netherlands. In other cases, such as Switzerland that has many smaller providers, it has proved more cost effective for this to be offered by an umbrella organisation. Other developments evident in several countries include more expertise in risk management, and more active asset management strategies that give greater attention to the suitability and performance of dwellings and to consumer preferences.

Private finance may also have a negative influence on the capacity of housing providers. As private finance is more costly than public loans, rents (but also quality) will tend to be higher on newer projects than older ones. There have also been trends – most apparent in the Netherlands – for providers to develop more profitable housing forms, to the neglect of low income housing needs. Financially motivated asset sales and demolitions (as have also occurred in the Netherlands) can be very disruptive to established tenant communities.

Another arena of tension is organisational scale and change. By expanding their businesses, providers may extend their operations well beyond the communities they once served, weakening the connections. As traditional forms of management are replaced with new organisational cultures aligned to more complex business and financial transactions, community ties and accountability to tenants may be disrupted, unless these are enforced.

8.1.10 Enhances capacity

The capacity of the housing market to deliver good quality affordable rental housing has been considerably enhanced by the mechanisms outlined in this report, in the context of declining public funding in many cases. Although the various investment approaches have increased affordable housing supply, it is harder to assess whether they have been sufficient in the face of persistent demand.

One successful example of increasing capacity is France where the CDC has supported the expansion of social housing, channelled lowest-cost finance to house lowest-income households and, amid the GFC, has helped to play a market-stabilising role in the housing market. In Austria, the housing bonds and housing banks have played a crucial role in providing low interest stable sources of private funding for affordable rental housing, and have also played a useful role in moderating interest rates affecting all mortgages.

In other countries impacts have been more mixed. The Swiss bond-issuing cooperative, in the absence of strong federal support, has enabled the limited-profit sector to continue, albeit growing only modestly. It provides the majority of loans to registered limited-profit builders at a competitive price in a once unreceptive financial market. In the US, the LIHTC now provides more funds and dwellings than public housing programs, helping to establish an increasingly important third sector in the housing market. However, the activities of non-profit providers in many city regions in the US have not been on a sufficient scale to prevent rising housing affordability problems for low and moderate income renters.

In the cases of the large social housing sectors of England and the Netherlands, there has been an overall decline in social rental supply, as home ownership has been expanded through the *Right to Buy* scheme in England and through large scale demolitions and sales of association dwellings in the Netherlands. However, in both cases, housing associations utilising private finance have played an important role in renewing existing social housing and replacing unsuitable housing with better quality new dwellings.

8.2 Reflections for Australia

Across Australia, governments have been taking positive steps to build the foundations of an affordable rental housing industry (Milligan et al. 2009). However, financial incentives on offer have been small scale and one off until recently. The

National Rental Affordability Scheme, introduced by the Australian Government in 2008, offers for the first time a large-scale funding mechanism with the potential to generate a new investment strategy for affordable housing. Governments have also committed to building the scale and balance sheet of leading non-profit providers, using funds provided under GFC-linked economic stimulus measures and targeted transfers of social housing.

Concurrently, a regulatory framework for non-profit housing provision in Australia is being advanced, and is subject to national consultation (FaHCSIA 2010). Further progress on building a policy and funding framework for affordable housing under the umbrella of the National Affordable Housing Agreement has also been foreshadowed (Housing Ministers Council 2009). In this context, the Western Australian Government commissioned this research, among other strategies, to identify good ideas and lessons from international practice and to inform consideration of what else will be needed in Australia.

In previous reports, researchers and industry stakeholders have identified several key requirements in order to attract private finance into affordable housing in Australia, as follows:

- → Institutional and subsidy arrangements at a scale that will be sufficient to attract and retain private investment.
- → A consistent national framework for using the planning system to promote affordable housing. This should involve: promoting social inclusion, environmental sustainability, urban regeneration and affordable housing outcomes in residential development; capturing a share of development gain to direct towards affordable housing; and providing access to suitable sites for affordable housing.
- → A regulatory framework for social and affordable housing organisations that gives high levels of confidence and assurance to all stakeholders, including institutional investors.
- Rents that cover the cost of operating and financing decent housing, breaking the nexus between rents received for affordable housing and the incomes of resident households.
- → Adequate rent subsidies to address the gap between capacity to pay and the cost of decent housing for lower income households.
- → Management of assets by housing providers in a manner that enhances their value and will support further leverage of private funding over time (Lawson et al. 2009; Milligan et al. 2009; Berry et al. 2006; Milligan 2005).

The six international case studies demonstrate an array of different strategies and provide a rich source of ideas to catalyse the development of an Australian model. These models feature in common a private finance mechanism that is underpinned by some combination of government guarantee, tax privileged investment and public grants or loans, coupled to a secure and predictable rent revenue stream that is secured via rent regulation and / or rent subsidies.

Within this broadly universal approach, distinct policy choices have been applied in each national setting. Australia has reached the stage where a clear vision of desired housing outcomes now needs to be agreed upon, legislated and implemented. This should encompass an ongoing but flexible growth strategy; an asset management strategy, initially focussed on restructuring existing social housing assets; and a coherent rent regime and an eligibility policy, each of which is responsive to local housing needs and market conditions. As illustrated by the case studies, getting the mix and balance of these settings right will require a careful and constant process of monitoring, evaluation and adaptation to tailor the instruments so that they continue under dynamic market and financing conditions to achieve the housing vision and goals.

Specifically in the Australian context, key dimensions of a national strategy should incorporate:

- → A permanent subsidy stream (or incentive) to reduce the cost of housing procurement by designated providers. Policy choices concern the use of deep or shallow subsidies, whether operating or financing costs are subsidised and which providers are used.
- → A coherent rent regime (cost, market-related or nominated) governing the level and indexing of rents to secure revenue and promote affordability.
- → Explicit eligibility criteria (broad or narrow) coupled with adequate demand-side assistance.
- → A delivery regime that promotes cost effective housing services, tenant accountability and efficient and effective asset management strategies, to ensure that social tasks continue to be met and to foster revolving investment.

Determination of the specific financial and subsidy strategies for Australia needs to take into account important contextual factors. Existing social housing is characterised by an ageing and under-maintained asset base, much of it mismatched in terms of client and geographic needs. Because the existing stock has been funded through government grants and low cost public loans only, it offers some potential for further leveraging, although this is constrained by relatively low cash flows from rents under current policy settings. Moreover, there is no long term growth strategy to maintain the proportion of social housing at 5 per cent of dwellings, let alone to raise it to a level that is more commensurate with outstanding need.

Hence, Australia requires a housing finance strategy that is capable of attracting large volumes of low cost funding over the longer term to meet the need for additional social and affordable housing *and* to enable accelerated restructuring of the existing social housing asset base. Each of these policy objectives may require a different form of financing, or a different mix of financial products. New stock construction requires funding over the longer term, probably in excess of 25-years. This is suited to equity investment, bonds or long term debt finance, if commercial banks are comfortable with the regulatory structure.

Recent evaluations of international social housing strategies suggest that having a broad range of incomes is preferable to narrowly provided welfare housing: for liveability reasons; to build stronger communities; to promote social inclusion; and to enhance the viability of housing providers relying on private finance (CECODHAS 2010; Amman *et al.* 2009; Scanlon & Whitehead 2008; SOCOHO 2004). Given that declining affordability of Australian housing affects a growing number and range of low and middle income households, there is much to be gained from the promotion of an intermediate affordable rental tenure—which provides a broadly accepted and non-stigmatised housing option, operating as a stepping stone and refuge at different times throughout Australian housing careers.⁴ In this regard, there is much that can be learned from the Austrian model, especially with regards to its efficiency (driven by a cost-capped, cost rent regime) supporting a broad tenancy base. Such a model can offer secure tenure for very low income or disadvantaged households and a housing pathway for moderate income households, while they save for home ownership.

Whatever financial mechanism may appear most attractive from the review of the overseas cases, remaining barriers to raising institutional investment in residential

⁴ This is not to say that the needs of households that require tailored and supportive housing options should be addressed only by mainstream social landlords.

property in Australia need to be overcome (Berry 2000; Gilmour & Milligan 2009). Both investors and banks need to become more familiar with the nature of risks in the affordable housing sector, and to appreciate that it can be a profitable and low default investment opportunity, given adequate public support on both the demand and supply sides. There are also issues about the liquidity of Australian institutional markets and the degree of competition in the domestic banking sector that will need to be considered. While much recent debate has centred on the capacity of non-profit housing providers, there could be a variety of problems with capacity in the Australian financial system. Capacity building in the financial sector will require an active and assertive strategy by key stakeholders towards the design of an appropriate instrument, development of a specialist financial intermediary and/or savings and investment circuit, supported by adequate regulation, incentives and monitoring.

International examples cannot provide a ready-made solution to the issues faced by Australia in reforming its social housing system and increasing its overall supplies of affordable and social housing. However, they can act as useful catalysts for creative policy making in Australia. They also help to demonstrate that mixed funding mechanisms can thrive and even play a strategic economic role in moderating market conditions or redressing adverse market circumstances, as has occurred in Austria and France, respectively.

Financial mechanisms to expand affordable housing sit within broader housing policy debates. For example, the adequacy and design of income support for housing costs, through mechanisms such as Commonwealth Rent Assistance or income-related rent setting, will affect the suitability of different financial approaches. Issues such as the allocation of responsibilities between the Commonwealth and the states will also impact on pathways for housing finance. Successful federated systems use intergovernmental agreements to drive appropriate allocations of resources; foster cooperation of key government departments (concerned with housing policy, economic development, urban planning and land release, treasury, taxation and subsidy programs); and allow for regional flexibility and responsiveness in program design.

8.3 Next steps and guiding principles

This report has described financial products used in six countries to promote affordable housing within the context of their respective housing systems. However, within a tightly defined brief and timeframe, it has not been possible to give a detailed cost/benefit analysis or to provide a quantified comparison of different financing mechanisms. Thus, while the study provides good ideas and valuable pointers for future strategy, more empirical analysis of how affordable housing financing systems function and how they adapt to change would sharpen the comparative analysis.

As well, the debate in Australia now needs to be extended beyond particular financial tools and techniques. We have argued that the stepping off point for choosing a national affordable housing financing strategy should be the development of a clear vision and targets for what is to be achieved. There also needs to be a review of broader housing policies and programs to ensure that these align with the housing financing regime that is to be promulgated. For example, in several countries in this report, private finance has been underpinned by strong cash flows arising from government support of tenants' incomes. Without this, lower proportions of debt on projects would be sustainable, as evidenced by contrasting the level of debt in US tax credit projects with levels of housing association debt in England and the Netherlands.

Clearer identification of capacity gaps should inform the financing debate, in particular the robustness of Australian debt and institutional investment markets. While there is a general understanding of benefits that could flow if superannuation funds invest in affordable housing, remaining barriers need to be recognised and mechanisms developed to make this happen.

While this report has given indications of the cost-effectiveness of various financial products for affordable housing, where available from the secondary literature, a more detailed costing is needed. This is a complicated task. Bond markets and bank debt pricing are volatile, and this has been accentuated during the GFC. In a period of turbulence, it is difficult to determine whether current price differentials will be maintained. In England, for example, bank debt became cheaper than expensively structured bonds in the early 2000s, although the balance appears to have shifted back in favour of bonds. Recommendations for modifying housing finance approaches in Australia must take account of cyclical patterns in both housing and financial markets, and be based on more detailed cost data than were available for this study.

Further consideration could be given in Australia to the most effective use of the tax system to promote additional supply of affordable and social housing. As we have seen in this report, some overseas countries have used tax incentives to boost investment in bond products or savings schemes, with proceeds used to fund affordable housing. The NRAS tax credit has been a move in this direction, although it is limited to the extent that longer-term retention of properties as affordable is uncertain and fund raising and distribution mechanisms are not yet efficient.

The Australian debate on affordable housing finance could benefit from identifying, then questioning, various normative judgements. For example, despite the current prevalence of private finance in the Netherlands and England for social housing, much of the comparatively larger supply of housing there was built using direct government finance. What is the ongoing role for public finance, at what scale, and what are the relative cost differentials between public and private finance?

There has been sustained analysis over more than a decade of alternative affordable housing financing approaches that may be suitable in the Australian context. A housing bonds circuit has been suggested repeatedly as a means to raise and channel investment more efficiently and cheaply towards housing goals (Yates 1994; Hall et al. 2001; Lawson & Milligan 2007; Lawson et al. 2009). Although this debate seems to have contributed to occasional policy developments, particularly the introduction of NRAS, much remains to be done. How can a systemic shift happen in Australia's approach to increasing the supply of and access to affordable housing? The desire of governments for private finance for affordable housing must be understood in conjunction with the appetite, and the ability of, private sector investors. Thus in addition to research, regular and sustained dialogue between governments (through their treasuries *and* housing and land development agencies) and investors and their financial institutions is crucial.

To sum up, the findings of this comparative study of the affordable housing financing systems of six countries suggest that design of an affordable housing financing strategy for Australia should be guided in overall terms by the following considerations:

- 1. Public and private co-financing of affordable housing can work, but the relationship between private financing mechanisms and public subsidies must be carefully designed and well-coordinated. Regular monitoring and adjustments to the chosen funding model will be required to respond to dynamic housing and finance market conditions, and to changing needs.
- 2. A clear public vision, goals and targets for affordable housing should be developed from the outset so that private financing models do not dictate social policy.

- 3. Specific mechanisms that are designed to raise and distribute large tranches of private finance can be strategic and cost effective but will require careful structuring in keeping with the local institutional context. This necessitates finance market cooperation in the design phase and appropriate competition in the implementation stage.
- 4. Appropriate industry norms and an effective regulatory framework must be established to ensure decent standards, drive costs down and, importantly, optimise benefits for tenants.
- 5. A balance of supply and demand side subsidies will be required on a long term basis, with the balance to be adjusted over time to reflect dynamic housing needs and market conditions. To support this, there is a clear role for state and local governments to develop locally responsive affordable housing strategies, targets and requirements, under a national framework.
- 6. It should be governments' (not the providers') responsibility to support incomes that are inadequate to afford decent housing.
- 7. It should be the responsibility of housing providers to provide housing and housing services that are cost effective. Competition for funding allocations and the regulation of costs can be used to drive costs down.
- 8. Income mix in housing projects should be used not only to promote their social acceptance but also to integrate weaker households and to contribute to a more secure revenue stream for providers and investors.

REFERENCES

- ABT Associates (2007) HUD national low income housing tax credit database: projects placed in service through 2005. Cambridge, Massachusetts: ABT Associates.
- Aedes (2009) Corporations sound warning bell about financing, National Federation of Housing Corporations, Hilversum, accessed online November 19 2009 <u>http://www.aedesnet.nl/nieuws,2009/11/Corporaties-luiden-noodklokover-financiering.html</u>
- AHNRC (2001) Policy options for stimulating private sector investment in affordable housing across Australia. Melbourne: Affordable Housing National Research Consortium (AHNRC) and AHURI.
- Allen Consulting Group (2004) Better housing futures: Stimulating private investment in affordable housing. Sydney: Brotherhood of St. Laurence.
- Amann, W. and Mundt, A. (2007) Limited profit housing associations in Austria: A network approach. Paper presented to Understanding Housing Policy Networks conference, 15–16 March, Dublin.
- Amann, W, Lawson, J. and Mundt, A. (2009) Structured financing allows affordable housing in Austria, *Housing Finance International*, International Union for Housing Finance, July
- Amzallag, M and Taffin, C (2003) *Le logement social* [Social Housing], Paris: Collection Polletiques Locales
- Audit Commission (2005) Inspection, regulation and investment in housing associations. The roles of the Audit Commission and the Housing Corporation. London: Audit Commission.
- Australian Government (2009) National Housing Supply Council: State of supply report 2008. Canberra: Commonwealth of Australia.
- Bauer, E. (2004) 'Austria.' I Grius, V. and Nieboer, N. (eds) Asset management in the social housing sector. Dordrecht: Kluwer Academic Publishers.
- Bauer, E. (2009) Notes from interview with Eva Bauer and Chief Auditors, Umbrella Organisation for Limited Profit Housing Association by J Lawson, Vienna: November 10
- Berry, M. (2000) 'Investment in rental housing in Australia: small landlords and institutional investors'. *Housing Studies*, 15(5): 661–681.
- Berry, M., Whitehead, C., Williams, P. and Yates, J. (2004) *Financing affordable housing: a critical comparative review of the United Kingdom and Australia.* Melbourne: Australian Housing and Urban Research Institute (AHURI).
- Bougrain, F. (2004) France in Grius, V. and Nieboer, N. Asset management in the social housing sector. Dordrecht: Kluwer Academic Publishers.
- Bourassa, S., Hoesli, M. and Scognamiglio, D. (2009) 'Housing Finance, Prices and Tenure in Switzerland', *Swiss Finance Institute Research Paper Series* No.9-16
- Burgess, G. Monk, S. and Whitehead, C. (2010) *How can the planning system deliver more housing*? Joseph Rowntree Foundation, March, accessed online April 6 2010 at <u>http://www.jrf.org.uk/publications/planning-system-more-housing</u>
- CDC (2009) Official web site of the *Caisse des Dépôts,* accessed online November 19 2009: <u>www.caissedesdepots.fr</u>

- CECODHAS (2009) Symposium on Financing Social Housing in Europe, *European* Social Housing Observatory, September 10, Brussels
- CECODHAS (2010) Financing social housing after the economic crisis, CECODHAS, Brussels
- Central Fond voor Volkshuisvesting (2009) *Trends in de Corporatie Sector 2004–2008*, CFV, Naarden , accessed online November 19 2009: <u>http://www.cfv.nl/images/stories/publicaties/trends%20corporatiesector %202004-2008.pdf</u>
- Cooper, K. (2007) *Ujima's fate in hands of lenders. Inside Housing*, 20th December 2008. Available at: <u>http://www.insidehousing.co.uk</u>.
- Cummings, J. L. and DiPasquale, D. (1999) 'The Low income Housing Tax Credit: an analysis of the first ten years'. *Housing Policy Debate*. 10(2): 251–307.
- Czasny, M. and Bständig, T. (2008) 'Housing Conditions in Vienna Changes as Mirrored in the Austrian Mikrosensus', *Vienna Housing Research*, accessed November 1: <u>http://www.wohnbauforschung.at/en/Projekt_Mikrozensus.html</u>
- Czerny, M., Weingärtler M., and Dusek, M. (2007) *Housing construction as a tool of economic prosperity*, Österreichisches Institut für Wirtschaftsorschung, WIFO, Vienna
- Davis, J. E. (2006). 'Between devolution and the deep blue sea. What's a city or state to do?' In Bratt, R. G., Stone, M. E. et al. (eds) *A right to housing*. Philadelphia: Temple University Press, pp.364–398.
- Deutsch, E. (2008) *The Estimation of Cohort Effects in Social Renting*. Paper presented to the 17th international AREUEA-conference Istanbul, July 4–6, 2008
- Deutsch, E. (2009) *Efficiency of social housing finance*. Paper presented to RC43 ISA conference, September 1–4, Glasgow.
- Deutsch, E and Lawson, J. (2010) International measures to channel investment towards affordable rental housing: Austrian case study, Report for the Western Australian Government, Melbourne: AHURI
- Dowler, C. (2008) 'Banking misery prompts price hike'. *Inside Housing*, 7 November 2008. Available at: <u>http://www.insidehousing.co.uk</u>.
- Dreier, P. (2006). 'Federal housing subsidies. Who benefits and why?' in Bratt, R. G., Stone, M. E. et al. (eds) *A right to housing*. Philadelphia: Temple University Press. pp.105–138.
- EGW (2009) Emissionszentrale EGW [Swiss Bond Issuing Cooperative] Annual Report 2008. Available at: <u>http://www.egw-</u> ccl.ch/upload/docs/jahersberichte/EGW_Geschaftsbericht_2008-d.pdf
- Elsgina, M., Haffner, M., Hoekstra, J., VandenBroeke, P. and Winters, S. (2007) Beleid voor de private huursectgor:een vergelijking van zes landen [Policies for the private rental sector in six countries] Brussel: Ministerie van de Vlaamse Gemeenschap, Department RWO-Woon-beleid
- Ernst and Young (2003) The impact of the dividend exclusion proposal on the production of affordable housing. Washington: Ernst and Young.
- European Central Bank (2009) *Housing finance in the Euro area*, Occasional Paper Series 101, Frankfurt am Main: ECB. Available at: <u>http://www.ecb.int/pub/pdf/scpops/ecbocp101.pdf</u>

- FaHCSIA (Families, Housing, Community Services and Indigenous Affairs, Department of) (2010) Regulation and growth of the not-for-profit sector. Discussion Paper. Available online at <u>http://fahcsia.gov.au/about/news/2010/Pages/housing regulation discussio</u> <u>n_paper.aspx</u>
- Federal Office of Housing (2006) 'Human settlements in Switzerland: spatial development and housing', Vol. 78 *Housing Bulletin*. Grenchen: FOH.
- Gilmour, T. (2009) Network power: an international study of strengthening housing association capacity. Available at: <u>www.ahuri.edu.au</u>.
- Gilmour, T. and Milligan, V. (2009). 'Stimulating institutional investment in affordable housing in Australia. Insights from the US.' In Dalton, T., Colic-Peisker, V. et al. (eds) Refereed papers presented at the 3rd Australasian Housing Researchers Conference, Melbourne, June 18th–20th 2008. Melbourne: RMIT University.
- Gilmour, T, Washer, M and Lawson, J (2010) International measures to channel investment towards affordable rental housing: English case study, Report for the Western Australian Government, Melbourne: AHURI
- Gruis, V. & Nieboer, N. (2006). Social housing investment without public finance: the Dutch case. Public finance and management, 2006(1): 122–144
- Gurtner, P. 2009 Director Swiss Bond Issuing Cooperative, EGW Correspondence
- Haffner, M, Hoekstra, J., Oxley, M. and Van der Heijden, H. (2009) 'Bridging the gap between social and market rented housing in six countries?' *Housing and Urban Policy Studies* No.33, Delft: University of Technology.
- Hauri, E. (2004) Financing the non-profit housing in Switzerland. Accessed online
 November
 19
 2009: <u>http://www.europaforum.or.at/site/HomepageUNECE/Paper Session3</u>
 Hauri.pdf
- Hauri, E. (2008) Head of Housing Policy, Federal Office of Housing notes taken during interview by the author, 31 January, Grenchen.
- Housing Corporation (2005) *How we regulate. Our overall approach*. London: Housing Corporation.
- Housing Minsiters Council (2009) Implementing the National Housing Reforms. A progress report to the Council of Australian Governments from Commonwealth, State and Territory Housing Ministers, November. Accessed online February 22 2010 at <u>http://www.coag.gov.au/coag_meeting_outcomes/2009-12-7/docs/implementing_national_housing_reforms.doc_http://www.housing.vic.gov.au/publications/reports/</u>
- Housing Statistics in the European Union 2005/2006 (2006) Federcasa Italian Housing Federation and Ministry of Infrastructure of the Italian Republic. Accessed online November 19 2009: <u>http://www.federcasa.it/news/housing statistics/Report housing statisti</u> <u>cs_2005_2006.pdf</u>
- Housing Summit (2007) A national affordable rental incentive: outline of a proposal by the Australian Council of Social Service, Australian Council of Trade Unions, Community Housing Federation of Australia, Housing Industry Association Ltd and National Shelter. Accessed online March 3 2008 at: http://www.housingsummit.org.au

- HUD (2009) Website of the US Department of Housing and Urban Development (HUD): <u>http://www.hud.gov</u> (accessed 3 November 2009).
- Hugentobler, M. (2006) 'New Cooperative Housing in Zurich Steps towards Sustainability', Paper presented at the International Conference of the *European Network on Housing Research*, Ljubljana (Slovenia), July.
- Hughes, C. (2008) Homes and Communities Agency and Tenant Services Authority. York: HQN.
- Hulse, K. (2003) An international review of housing allowances. Melbourne: AHURI.
- ICA (2009) Housing Cooperatives in Switzerland, International Cooperative Alliance, Accessed November 18 2009. Available at: <u>http://www.ica.coop/al-housing/attachments/ICA%20Housing%20Cooperatives%20in%20Switzerland %20-FINAL%2013-02-09.pdf</u>
- Jenkins, P. (2009) *The role of bonds in financing social housing*, presentation to Symposium on Financing Social Housing in Europe, European Social Housing Observatory (CECODHAS), September 10, Brussels
- Joint Center for Housing Studies (2009) *The disruption of the low-income housing tax credit program: causes, consequences, responses, and proposed correctives.* Cambridge, Massachusetts: Joint Centre for Housing Studies, Harvard University.
- Kalmár, M., Kernbeiss, G., Löffler, R., Städtner, K., Wagner-Pinter, M. 2008 'Affordability of Housing Supply across Vienna 2007', Vienna Housing Research <u>http://www.wohnbauforschung.at/en/Projekt Affordability_Housing</u> Supply.html Accessed November 18, 2009
- Kemeny J., Kersloot J., and Thalmann, P. (2005) *Non-profit housing influencing, leading and dominating the unitary rental market: three case studies*, Housing Studies, 20 (6): 855-872
- Lawson, J. (2009) 'The transformation of social housing provision in Switzerland mediated by federalism, direct democracy and the urban/rural divide', *European Journal of Housing Policy*, 9(1): 45-67.
- Lawson, J. (forthcoming) 'Path dependency and emergent relations: explaining the different role of limited profit housing in the dynamic urban regimes of Vienna and Zurich', *Housing Theory and Society*.
- Lawson, J. and Milligan, V. (2007) International trends in housing and policy responses, *Final Report*, Melbourne: AHURI.
- Lawson, J. and Nieboer, N. (2009) *The regulation of social housing outcomes: a micro examination of Dutch and Austrian social landlords since financing reforms*, paper presented to the 2009 ENHR Conference, June 29–July 1, Prague.
- Lawson, J., Berry, M., Milligan, V. and Yates, J. (2009) 'Facilitating investment in affordable housing: Towards an Australian model'. *Housing Finance International*, September Edition, Brussels: IUHF
- Ludl, H (2004) Limited Profit Housing in Austria, Vienna: GBV
- McNelis, S., Hayward, D. and Bisset, H. (2002) A private retail investment vehicle for the community housing sector, *Final Report*. Melbourne: AHURI.
- Milligan, V. and Pinnegar, S. (2009) *Recent developments in housing policy in Australia in comparative perspective*. Paper presented at the International Housing Conference, 'Housing Assets, Housing People', Glasgow September 1–4.

- Milligan, V., Gurran, N., Lawson, J., Phibbs, P. and Phillips R. (2009) Innovation in affordable housing in Australia: Bringing policy and practice for not-for-profit organisations together, *Final Report*. Melbourne: AHURI.
- Ministry of Housing (2009) Official web site. Accessed online November 19 2009. Available at: <u>www.logement.gouv.fr</u>
- Moody's Investor Service (2009) *Waarborgfonds Sociale Woningbouw*, Moody's Global Credit Research. Accessed November 1 2009. Available at: <u>http://www.alacrastore.com/research/moodys-global-credit-research-Waarborgfonds_Sociale_Woningbouw-PBC_119534</u>
- Mullins, D. and Murie, A. (2006) *Housing policy in the UK*. Houndmills: Palgrave Macmillan.
- Neuwirth, G. 2004 How residential construction banks are refinancing to raise construction capital in Austria, Bank Austria Creditanstalt, Mimeo, 30 September
- Nieboer, N and Gruis, V (2004) Asset management in the social housing sector. Dordrecht: Kluwer Academic Publishers.
- Pawson, H. and Fancy, C. (2003) *Maturing assets: the evolution of stock transfer housing associations*, Bristol: Joseph Rowntree Foundation and The Policy Press
- Pawson, H. and Sosenko, F. (2008) *Sector restructuring. Housing Corporation sector* study 61. London: Housing Corporation.
- Pawson, H., Mullins, D. and Gilmour, T. (2010, forthcoming) *After council housing: Britain's new social landlords*. Basingstoke: Palgrave Macmillan.
- RBS (2009) Offering circular: THFC (Funding No.2) PLC, £191 000 000 6.35% secured bonds due 2039/2041. Issued by Royal Bank of Scotland (RBS). Available at the web site of THFC: <u>www.thfcorp.com</u>.
- Scanlon, K., Whitehead, C. (Eds.) (2008) Social housing in Europe II. A review of policies and outcomes. London, London School of Economics and Political Science,

London http://www.york.ac.uk/inst/chp/HAS/SocialHousinginEuropell.pdf

- Schaefer, J-P (2008) 'Commitment to Housing in France', presentation to London *School of Economics*, December.
- Schaefer, J-P. (2003) 'Financing Social Housing in France', *Housing Finance International*, IUHF, June: 27-34
- Schaefer, J-P. (2009) Personal communication with Lawson, J. 5 February, 2009
- Schmidinger, J. (2009) Interview notes from meeting with Director of the s WohnBank, Eerste Bank with J Lawson, Vienna, November 9
- Schwartz, A. (2006) *Housing policy in the United States: an introduction*. New York: Routledge.
- Schwitter, S (2008) Director Swiss Housing Federation (SVW), notes taken during interview by J Lawson, 29 January, Zurich
- Social Housing Task Force (2009) *More than a roof and four walls*, Final Report of the Social Housing Task Force, Western Australia.
- SOCOHO (2004) The importance of housing systems in safeguarding social cohesion in Europe, edited by K. Czasny Stadt + Regionalforschung GmbH (SRZ) and

funded by the European Commission as part of the Fifth Framework Report <u>http://www.srz-gmbh.com/socoho/project/</u>

- Standard and Poors (2009) *Ratings direct* Waarborgfonds Sociale Woningbouw, Accessed online November 19 2009. Available at: <u>http://www.wsw.nl/uploads/_site_1/5%20WSW/Downloads/WSW%20full%2</u> 0FA%202009.pdf
- Statistics Austria (2007) EU SILC in Austria Report on 2007 Results, Vienna: Statistics Austria. Available at: <u>http://www.statistik.at/web_en/dynamic/statistics/social_statistics/publdetail</u> <u>?id=6&listid=6&detail=514&lang=EN</u>
- SVW (2009) Annual Report Solidarity Fund, Zurich: Swiss Housing Federation, Accessed online November 19 2009. Available at: <u>http://www.svw.ch/data/JAHRESBERICHT 1827.PDF</u>
- Taffin, C (2004) Social housing finance, presentation for the World Bank, Washington Accessed online November 18 2009. Available at: at <u>http://www.worldbank.org</u>
- THFC (2009) The Housing Finance Corporation Limited (THFC) annual report and accounts 2009. London: THFC.
- TSA (2009) *Global accounts of housing associations 2008.* London: Tenant Services Authority (TSA).
- Tutin, C. (2008) Social housing another French exception? Presentation by Christian Tutin, Professor of Economics, University of Paris East (Créteil) and GIS Réseau Logement / Habitat, for ENHR Working Group on Comparative Housing Policies, Istanbul, 23–24 October 2008.
- UNECE (2006) Guidelines on social housing: Principles and examples. Geneva: United Nations. Available from website of United Nations Economic Commission for Europe (UNECE), online at http://www.unece.org/pub_cat/topics/hs.htm
- Van Wezemael, J. (2009) 'Switzerland'. In Gruis, V, Nieboer, N, Schenkova, S. (eds) Management of privatised social housing: international perspectives, London: Blackwell.
- VROM (2009) Housing Funds, Ministry of Housing Spatial Planning and the Environment, The Hague. Available at: http://www.vrom.nl/pagina.html?id=37432
- Whitehead, C. and Scanlon, K. (2007) Social Housing in Europe I, London: LSE.
- Wood, G. A. (2001) 'Promoting the supply of low income rental housing. *Urban Policy and Research*, 19(4): 425–440.
- World Bank (2003) Social housing finance. Presentation by Claude Taffin, Director of Research, L'Union Sociale pour l'Habitat and Senior Housing Finance Specialist at the World Bank, March 10–13 Washington: World Bank. Accessed November 18, 2009. Available at: <u>http://www1.worldbank.org/finance/html/housingfinance/pdf/Taffin.ppt</u>
- WSW (2009) Annual Report 2008; Cash flow forecast 2009–2013, Waarborgfonds Sociale Woningbouw, Huizen Accessed November 18, 2009. Available at: <u>http://english.wsw.nl/uploads/_site_6/Downloads/annual%20report/WS1012</u> <u>408A_DEF_060409.pdf</u>

Yates, J. and Milligan, V. with Berry M., Burke T., Gabriel M., Phibbs P., Pinnegar S and Randolph B. (2007) Housing Affordability: a 21st century problem, *Final Report*. Melbourne: AHURI.

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