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Abstract

Borrowing risk among young home owners: prevention, alleviation and the promotion of sustainable alternatives

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Abstract

During the 1990s, amidst spiraling house prices and accessible credit, national governments in the Netherlands, the US, Australia and the UK promoted home ownership in rhetoric and policy as the main stream housing solution for working households, also for those with a low income. Recent instability in housing prices is particularly concerning for new entrants into the home ownership market. Young households, purchasing at the height of the boom have been saddled with considerable debt. Those purchasing in declining markets have been left little equity in their home. Repayment arrears, especially amongst borrowers affected by the worsening recession and with sub prime mortgages are on the rise in Australia, the US and the UK. This phenomenon raises questions about the way mortgage markets operate and the role of regulatory agencies therein.

This paper examines borrowing risk amongst young home owners, highlighting the situation in Australia, where home ownership has been the centre piece of housing and welfare policy for almost a century. The first section reviews national and international developments in housing markets, with a focus on the generative causes of mortgage default, debates concerning mortgage market regulation and emerging policy responses. the second section combines the use of the Household, Income and Labour Dynamics in Australia (HILDA) survey with other quantitative sources to investigate the repayment capacity of young Australian borrowers with high loan value ratios. The final section argues for a three pronged approach to address mortgage default, which is not only preventative and alleviates mortgage related stress but also promotes alternative forms of mortgage arrangements that promote housing affordability and security.

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Introduction and overview

The housing market policies of traditional home ownership countries face a serious dilemma – on the one hand the buoyant housing markets and rising housing prices of recent years have amply served the interests of almost everyone: established purchasers, mortgage retailers and banks, insurance companies and real estate brokers. Yet for those outside the market trying to get in, such as young households, this source of jubilation represented a rising, if not insurmountable barrier. Indeed, so rapid was the inflation of housing prices that potential owners delayed their purchase and family formation, as they were pushed into higher levels of debt or sought additional paid work. For households who stretched themselves financially, volatile housing markets and rising unemployment inevitability place them at risk – as is apparent through the proportion of arrears, mortgage default and repossessions.

During the 1980s, many governments shifted their attention away from social rental housing, towards the deep promotion of home ownership, encouraging mortgage provision, providing deposit assistance, first home owner grants, even selling public stock to sitting tenants at discounted process. Shared equity and rent to buy options overshadowed efforts to promote long term social rental housing (Stephens, 2008, Lawson and Milligan, 2007, Atterhög and Song, 2003).

Yet despite these strategies, there is growing evidence that some government measures to stimulate home ownership actually fuelled an affordability crisis. These include overly favourable prudential norms promoting the expansion of mortgage business in Europe under Basel II, US requirements to invest in low income lending and the relaxation of borrowing norms, generous tax concessions promoting highly geared purchase in the Netherlands and first home owner grants in Australia. Some have argued that these instruments have promoted declining affordability, generating not only inequality but most recently volatility in housing market leading in part to a major crises in global credit. Despite the flush of cheap credit and demand for homes for purchase, their actual supply has been sluggish in many OECD countries, with the exception of Israel and Ireland. The once lauded expansion of home ownership has recently stalled in some countries (e.g. the UK, US and Australia). A report by Lawson and Milligan (2007) found several home owner societies, which includes UK, Australia and New Zealand (all of which have comparatively high historic rates of home ownership), are either experiencing or predicting a decline in ownership rates.

Meanwhile, the rise in Australian home ownership – the cornerstone of its welfare state, has stalled and while the proportion of purchasers to outright owners has fluctuated, ownership amongst younger and first time buyers declined throughout the 90s (ABS, 2007; Yates, 2003). Indeed, recent research in Australia clearly demonstrates that there has been a steady decline in age-specific home ownership rates from the mid- to late 1970s (11 per cent for 25–29 year olds, 10 per cent for 30–34 year olds, 6 per cent for 35–39 year olds) (Yates, 2007 in Dalton et al, 2009). Rapidly rising housing prices, outpacing household incomes, has significantly widened the deposit gap to income ratio, which Yates argues is now 3 to 4 times greater than in the 1970s (2007a: 9).

Structure of the paper and Research methodology

This paper examines how the situation of young home buyers, in the contemporary Australian context up to the current global financial crises, has required young home buyers to take on much higher loan to value ratios than in the past. It not only attempts to demonstrate their situation quantitatively, but also conceptualise and research the dynamic role of both governments and markets which have both played a role in promoting more risky, highly leveraged home purchase conditions.

Towards this end, a postulated model of the emergent relations underlying structures of home ownership is put forward, which emphasizes the highly contingent nature of national housing markets which explains why some countries have faired better than others not only in terms of their housing outcomes but also their resilience to the global financial crises. It specifies the type of contingent conditions affecting financial, labour, land and housing markets and the kind of institutions, risk mitigating strategies which they can embody. This section is followed by a review of developments in Australian mortgage, labour and housing markets and government policy in the context of more globalising trends. This is based on a review of relevant literature (Berry et al, 2009, AIHW, 2008, BIS, 2006, Lawson, 2004). The outcomes of these developments for young households is investigated using empirical data from a number of data sources, including the Household Income Labour Dynamics in Australia (HILDA) survey (see Appendix 1) to determine the current profile of Australian purchasers and also undertake an international review of promising housing policy interventions that provide a way forward. This paper draws on recent research funded by the Victorian Department of Planning and Community Development in 2009 (Lawson, Parkinson and Wood, 2009).

Conceptualising the relationships underlying home ownership

It is contended that housing outcomes of young people, often recent purchasers, are a mediated outcome of a number interactive relationships, which are always contingently defined and for this reason differ considerably between countries and regions. Given their differences, it is important to abstract from concrete research their definition over time and space. These relationships include amongst others, the nature and conditions affecting the provision of mortgages, the terms and conditions in the labour market and of course, the contingent conditions and risk mitigating strategies present in closely related land and housing markets. In subsequent sections, this paper considers the impact of their definition and impact upon the access of young households to home ownership in Australia. In the first instance, Table 1 pulls together work on mortgage risk from Lawson (2004) and Parkinson (2009) to provide a description of the type of contingent conditions and risk mitigating strategies which may be present at different times in local housing markets.

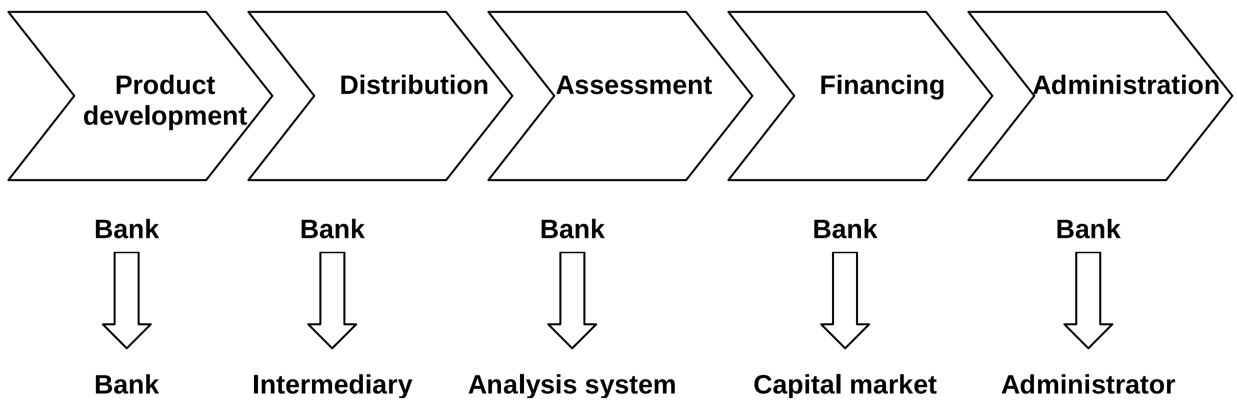
Financial relations		Labour Relations		**Land and housing markets**	
Contingent conditions	Risk mitigating strategies	Contingent conditions	Risk mitigating strategies	Contingent conditions	Risk mitigating strategies
Interest rate conditions in the capital and mortgage markets Existence of lenders offering favourable terms and conditions. Competition, collaboration or monopolisation of credit providers for particular segments of the housing market. Lending criteria, portfolio policies, services offered and territory of operation (including ‘red lining’). Organisation of mortgage retailing (shop front banking, commission dependent brokers, door to door sales, internet, etc.) Risk-return ratio of housing investment relative to other forms of investment, which influence the volume of credit available.	Fixed interest rates, monetarist policies, interest rate subsidies Techniques for assessing credit risk and risk-avoiding conventions. Promotion of certain financial management norms, values, processes and standards. Requirement of a substantial pre-purchase deposit (eg. 30% of purchase price). Conservative estimation of the value of the purchased property, as security in the event of foreclosure Right of repossession over the property or other assets of the borrower. Security funds to protect investors from defaulting borrowers. Government policy regulating the system of credit provision	Economic value of skills possessed by members of household as determined by the labour market or prescribed by the state. Gender relations within a household allocating participation in paid work. Economic relations within the household and wider community networks. Existing labour-market norms, including discrimination against older men, migrants or married women in times of job scarcity. Informal or formal support services, such as affordable or free child-care.	Wage indexation, agreements and more general accords to regulate income levels and working conditions. Income transfers to maintain a certain level of purchasing power amongst households Breaking down traditional barriers to paid female employment (ideas about the role of both parents, division of paid labour, child development and domestic responsibilities) Provisions for paid maternity and paternity leave, child friendly work arrangements Available and affordable child care, education and after school programs Engagement of extended family to provide unpaid child care.	Location of land, accessibility to end users, existence of related infrastructure. Land tenure: leasehold or freehold. Certainty and flexibility of land-use or zoning rights: relative value of existing and potential uses. Cost of developing land, availability of materials, and suitability for development. Costs associated with land holding: taxes, levies, maintenance or transferring property rights. Exclusivity of land title: undisputed ownership or threat of repossession. Land value: inflating, stable or deflating. Competition, collaboration, or monopoly position of landowners or purchasers.	Clear system of land survey, legally enforceable system of ownership, undisputed occupation rights. Right of compulsory purchase or repossession to meet ‘public interest’ goals. Laws permitting the collection of betterment tax on unearned increment in property values. Efficient and cost-effective system for transferring ownership. Price regulation and compensation based on former usage. State-subsidised infrastructure provision. Land use planning clearly defined, long term, and protective of property values. Monopoly selling or buying strategies.

Financial relations		Labour Relations		**Land and housing markets**	
Contingent conditions	Risk mitigating strategies	Contingent conditions	Risk mitigating strategies	Contingent conditions	Risk mitigating strategies
Desired liquidity and mobility of investment. Perceived credit worthiness of borrower, existence of desired security. Existence of a range of financial products providing borrowers with a competitive choice. Degree of integration of lenders with other components of the housing network such as mortgage lending, insurance provision, land banking, infrastructure investment, residential construction, retail development, etc. Processing and bundling individual mortgages into mortgage backed securities and operation of a secondary mortgage market, thereby increasing the flow of mortgage credit at the retail end.	(prudential standards, borrowing limits, deposit requirements, product promotion standards, codes of conduct, consumer rights, duty of care provisions, rights to information. Cross-national treaties defining borrowing limits of governments. Subsidies to channel investment into particular sectors. Mutually reinforcing lending strategies, land banking, or company directorships System of bonuses and commissions promoting certain mortgage products Establishment of savings clubs and building societies Packaging of individual mortgages of like terms and conditions into mortgage backed securities	Economic policies of government regulating job growth, wage levels; such trade-offs and conditions that influence the ability of households to consume certain housing services. Role of labour organisations in promoting certain forms of housing production and services. System of social security, which may or may not cover ongoing housing expenses following retirement from the paid workforce. Role of welfare organisations in diverting collective resources to or away from housing-related support.	Housing allowances to assist payment of housing costs. Supplementary paid work (over time, additional (shift) work) Rent regulations to reduce or sustain a certain level of housing costs. Income and life insurance	A secure, long-term method of financing purchase. Capacity to repay the loan, the prospects of return and rising land value. Inflexibility in the adjustment housing price/costs Inadequate supply of affordable housing Timing in the housing market cycle high or low interest, rising or falling house prices Private rental vacancy rates Housing costs to income Access to social housing Access to shared housing Year/duration of purchased property	Maximising formal and informal influence upon land use defining agents. Ability to renegotiate mortgage repayments Ability to relocate Ability to share housing

The flow of mortgage credit and indebtedness in Australia, within an international context.

The cross national phenomenon of rising housing prices and over indebtedness not only has its origins in an excessive flow of relatively cheap capital into the mortgage market but in the restructuring of the mortgage sector in the late 1990s. A quiet revolution within the financial industry channelled investment into the home loans sector amidst scarce housing supply (Lawson, 2004, Brounen, 2001). This affected different components of the mortgage provision process: product development, distribution of credit related products, risk assessment of credit applicants, the financing of these products and the administration of loan contracts, as illustrated below.

Figure 1: The 'revolution' in the mortgage sector (Brounen, 2001).



Traditionally, most of these tasks have been undertaken by banks. However in Australia as in many other developed economies during the late 1990s many of these tasks were contracted out as separate businesses to be undertaken by competing institutions outside the banks themselves. Brounen (2001) argues that the source of profit has shifted from the difference between interest rates of mortgages and savings, to the sale of insurance and investment products. Clients are 'anchored' with a mortgage product are then sold other more profitable products, in a process known as cross selling. Motivated by this trend, banks sell their mortgage obligations to third parties, thereby improving their own balance sheets. This enables more capital to be dedicated to more profit making activities.

As a consequence of shifting profit centres, labour intensive activities related to the sale and administration of mortgages have been standardized and outsourced. For example, mortgage products are increasingly and some times exclusively sold via mortgage brokers offering a range of products. Whilst some banks have their own branch network of distributors, many mortgage retailers do not. Further, the time required to analyse and evaluate mortgage requests has been reduced with standardized risk assessment programs. Even the administration of mortgages is increasingly being passed on to larger, specialized third parties (Brounen, 2001 in Lawson, 2004).

As mentioned, another important development involves the sale of mortgage obligations to increase lending volumes at the retail end. The secondary mortgage market is an increasingly important component of the capital market with implications for the volume of funds released onto the home loans market. This market permits the originator of mortgages to hand over legal responsibility to a special purpose vehicle (SPV). A SPV can issue mortgage-backed securities (MBS) that are rated by assessment agencies and openly traded. This process improves the balance sheet and cash flow of the mortgage originators and allows them to issue more loans

(Lindfield and Baharoglu, 2000, DNB, 2000a, Mersmann, 2002). Originators can go on to accept more risks from clients such as fixed interest rates and devaluation of property prices, which have been passed on to investors as MBS (Assenbergh, 1999:63 in Lawson, 2004). Processing and bundling individual mortgages into mortgage backed securities and operation of a secondary mortgage market, thereby increasing the flow of mortgage credit at the retail end.

The process of securitisation of home mortgages began to develop in 1996 and today a secondary mortgage market has become firmly established in Australia, particular with regards to non-conforming or low documentation loans (BIS, 2006).

In the housing market of the late 1990s, soaring house prices could have closed out first home buyers. However, new mortgage products and more flexible lending norms enabled even this young group to enter the market. As lending institutions moved away from traditional mortgages they created loan products which could be packaged together and sold to home buyers. Today, mortgage contracts typically involve a combination of different types products, including interest only mortgages, investment mortgages and savings mortgages - all designed to minimize monthly instalments.

In Australia, this trend can be seen in the from of flexible mortgages with variable repayments; home equity loans offering a line of credit; split purpose loans (splits loan into two sub-accounts, giving tax advantages); deposit bonds (insurance company guarantee payment of deposit at settlement); non-conforming loans; redraw facilities and offset accounts; new providers, including mortgage originators and brokers (BIS, 2006:11).

Consequently, Australia’s mortgage debt has grown substantially as a percentage of GDP and per capita, following China and the Netherlands as one of the world’s most indebted nations. This growth initially occurred amidst rising housing prices and over inflated housing prices (IMF, 2008). The ratio of household debt as a percentage of total assets (financial and non-financial) also increased very sharply between 1998 and 2005 in Australia, amidst rapidly rising housing prices.

There has also been rapid growth of borrowing by households with impaired or insufficient credit histories, typically referred to as sub-prime lending from 2000 in the United States, the United Kingdom, Australia and Canada, with loan features such as self-certified income or assets and low-documentation loans (BIS, 2006:7).Sub-prime lenders tend to service this group, they operate on different terms to major banks and are typically less well regulated. In Australia, the United Kingdom and the United States subprime lenders rely on securitisation as their primary source of funding. In Australia, nearly 100% of subprime lending is funded via the capital market, while major banks and regional banks securitize only 7% and 25% of their mortgage lending, respectively (BIS, 2006:17)

Unlike countries such as the Netherlands where fixed rate mortgages predominate, Australian mortgagors are more likely to have an adjustable rate mortgages (ARM) subject to interest rate fluctuations. Interest rates do vary considerably and hence are of popular concern. After a peak in 1988, interest rates declined from 17 % to 6% in 2002, thereafter climbing to 8 percent in 2008.

Table 2 Loan to value ratios in selected countries

Country	Term	LTV
Australia	25	60-70%
Belgium	20	80-100%
Canada	25	75-95%
France	15-20	78%

Germany	20-30	80-100%; 60% for Pfandbrief
Italy	5-20	80%
Korea	3-20	56.4%; max 70%
Japan	20-30	n.a
Luxembourg	20-25	80%
Mexico	10-15	80-100%
Netherlands	30	87%; max 125%
Spain	15-20	70-80%
Sweden	30-45	80-95%
Switzerland	15-20	Max 80%; 65% for Pfandbrief issuance
United Kingdom	25	70%
United States	30	@ 85%

Source: BIS, 2006:14

Countries also vary in regards to the requirement to repay outstanding negative equity. Unlike the US for example, Australian home purchasers wear the risk of declining house prices as the home is security for their mortgage. Where the value falls below that of the loan, the borrower must still pay all outstanding negative equity. Forced sales are therefore common where housing prices have been sustained. Refinancing under poor conditions such as high interest rates and loss of equity is also a strategy, where the value of sale may not recoup the value of the loan. However, where there are spatially concentrated arrears, such as areas of Western Sydney, a high number of forced sales may deflate prices, spreading the risks of negative equity to other vulnerable households in the area (Berry et al, 2009).

High levels of indebtedness amidst precarious housing markets in the US, UK and the Australia, have led to a growing rate of mortgage arrears and a rising rate of repossession. In the UK, the Council of Mortgage Lenders repossessions have increased from 8,200 to an expected 45,000 in 2008 (Stephens, 2008). The latest Mortgage Bankers Association (MBA) report in the US showed that 2.1 million households were affected by arrears and that the delinquency rates had reached a seasonally adjusted figure of 9.12%; this is up from 7.88%. Mortgage foreclosure rates also increased to a staggering 1.37% (May, 2009) with unemployment and negative equity affecting prime lenders.

In Australia, it is difficult to obtain a national picture given the lack of aggregated data. However, in one of the worst affected States Victoria, there are currently 24,373 Victorian households at the most extreme end of housing stress or are at risk of selling or foreclosing on their property (Fujitsu Consulting, 2009). Based on current projected estimates this figure will increase to around 74,964 by December 2009 if unemployment continues to climb at its current rate. Building on these estimates, an analysis of HILDA data indicated that an estimated 36,192 of Victorian households (or 69,266 adult individuals) had difficulties paying for their housing over a twelve month period with Victoria recording the highest population share of 7.6% compared national rate of 6.4% (Lawson, Parkinson, Woods, 2009). In early 2009 the number of claims of possession in Victorian Supreme Court was around 3,000 and was beginning to climb once again. Whilst the numbers are relatively small, the proportions are disturbing high amidst predicted rise in unemployment and rising interest rates – albeit from a low base.

The mismatch between incomes and housing prices

Declining and delayed access to home ownership amongst young and low income households represents in part, the failure of house prices and wages in alignment as well as the mismatch between demand for affordable homes and adequate supply. Further, it has been argued in the UK that risks have been accumulating amongst housing consumers in the context of increasing deregulation of labour markets, polarisation of incomes, reliance upon part time and temporary work, relationship breakdown and reduced role of government in mortgage relief, dwelling allocation and social housing provision (Ford et al, 2001). Labour market policies can have a direct impact on these conditions.

At certain life stages or circumstances, the risk of income loss, causing housing stress or even homelessness, may heighten. It is well established that the risk of mortgage default is enhanced when a home purchaser experiences periods of unstable employment, has a single/part time or casual income, becomes divorced or must provide for a high number of dependants. Vulnerability may increase when caring for the young, taking the first steps from the parental home, during unemployment, when divorced, elderly or disabled. It may also occur at certain stages of the business cycle when housing costs may rise beyond capacity to pay. Further, the level of mortgage arrears is also important, as well as factors such as high loan to value ratios, unexpectedly high mortgage interest rates, and regional market variations (Stephens et al, 2008, Munro et al, 2005, Lawson, 2004, Galster et al 1999). How these risks are moderated, managed and responded to by the safety nets, insurance policies, institutional practices and alternative housing options is crucial, and the focus of the latter section of this paper.

In Australia, attracted by lower interest rates, government grants, employment opportunities and consumer confidence, young households borrowed heavily in the past decade to finance their homes. However, labour market changes which demand more flexible and mobile arrangements are having a dramatic impact on employment security, with profound consequences for long term and large mortgage contracts. Increasingly high levels of debt, amongst professionals and blue colour workers, often interest only, in the context of declining housing prices and rising unemployment is now placing a more households at risk of housing stress (Berry et al, 2009) and there is growing evidence that mortgage defaults are rising rapidly (HILDA analysis for this report, Victorian Supreme Court, 2009, Fujistu Consulting, 2009, 2008, Fitch ratings, 2008, Fujitsu Consulting and JP Morgan, 2007). Nevertheless, home purchase remains an important aspiration and government policy, facilitated even amongst uncertain economic times, by the generous First Home Owners Grant (FOHG).

The role of government in home ownership and assistance policy

A wide variety of policy strategies have been developed and applied in different countries to promote and sustain home ownership and alleviate mortgage stress, especially amongst low to middle income households, as outlined in Table 3:

Table 3: A continuum of policy strategies to promote and sustain responsible home purchase

Strategy	Definition and countries
Subsidies for production	Conditional grants and public loans for the production of affordable dwellings: Ireland, France, Austria
Land use planning	Use of land banking, inclusionary zoning, density bonuses etc to ensure affordable developments US, Canada, New Zealand, UK, France, Austria, the Netherlands, Germany
Promotion of shared equity tenure	Partial purchase, rent over remaining equity owned by a second party, with or without subsidy and associated conditions. United Kingdom United States, Canada, Ireland The Netherlands Austria
Convert social housing to ownership	Sale of public housing at discounted rates to sitting tenants. Some right to buy schemes conditional on period of rent and contribution to initial project costs, others straight transfer. United Kingdom, Austria, Ireland, United States, Netherlands, CEE countries.
Participation in the mortgage market	Establishment of mortgage insurance and secondary mortgage markets to influence provision and cost of mortgage credit and promote cheaper finance, Canada, United States, Netherlands, New Zealand
Regulation of the mortgage market	System of regulation which governs prudential norms, lending criteria, development of products and services, information to customers, dispute resolution procedures,
Demand side subsidies for (low income) purchase	Grant or public loans which lower overall repayments and provide collateral to lever additional private finance for the purchase of a home. Germany France, UK, Ireland
Contract Savings Schemes	A closed system in which mortgage loans from a specialized housing bank are funded exclusively from the savings of future would-be borrower. Interest rates on both savings and deposits can be substantially below market levels, with borrowers subsidizing themselves by accepting low interest during the earlier savings period. *Bausparkassen* Austria, Germany
Access to pension savings	Provisions to access (and later repay) savings accumulated in pension accounts for purchase of first home Switzerland, Germany, Canada
Fiscal incentives	Provision to deduct mortgage interest from taxable income, low rates of imputed rent tax, waivers of property or transfer taxes for first home buyers, etc Netherlands, Switzerland, Germany, Ireland, Belgium, Denmark, United States
Regional strategies to address uneven markets	Key worker housing, local housing agreements to assist low paid workforce in accessing housing, differentiated demand assistance schemes, specific assistance to protect and maintain rural / traditional housing, Germany, United Kingdom, Switzerland, New Zealand
Demand assistance for mortgage payments	Housing assistance applies to mortgage payments as well as rents, within defined income, loan size and time limits. US, UK, the Netherlands (limited direct assistance but substantial tax relief).
Mortgage relief schemes	Temporary or long term assistance with interest payments, renegotiation of loan on behalf for borrower, partial/temporary take over of loan, write down of value of the dwelling, The Netherlands, UK, Belgium, US, Ireland
Consumer education and protection	Financial information, education, advice, counselling, advocacy, protection, United States, United Kingdom New Zealand

Contemporary Australian home ownership policy

Australia's home ownership dominated housing system is partly an outcome of the institutions, regulatory settings and policies which governments have used to influence land, finance and labour markets since the mid 19th century. These include a highly commodified land market, a once regulated now liberalised mortgage finance market, and a once protected and awards based labour regime which has become increasingly casualised, subject to flexibility and individual negotiation (work place contracts). As a historical review of housing policy is not the focus here (Lawson, 2003, Dalton, 1999, Haywood, 1992 and Kemeny, 1983), we now turn to contemporary developments in policy affecting young home purchasers.

After more than a decade of Commonwealth government withdrawal, Australian housing policy is currently undergoing a period of national renewal and rapid development under the Rudd Labour government which includes a Minister for Housing (Plibasek), for the first time in 15 years. Policies to address homelessness and increase social housing supply have been launched and funded, albeit for the short term. Recommendations to improve practices in the mortgage industry have yet to bear fruit, yet there is legislation in the pipeline to regulate brokers.

The following programs are most relevant to young home purchasers. One of the few housing policies of the previous government the First Home Owners Grant, has been built upon and extended to sustain the housing market and support the housing building industry amidst the recession.

First home owners grant - This Commonwealth grant is administered by each state and territory and in most jurisdictions it is coupled with concessions or exemptions from stamp duty. It was originally introduced to compensate for the introduction of GST in 2000, but other objectives such as maintaining housing prices and protecting employment in construction are more recent motivations. The grant aims to stimulate demand by bridging the gap between accumulated savings and the deposit required. Whilst the grant is currently larger for new dwellings, most FOHG applicants use the grant to purchase an existing dwelling. As the grant is not income limited it does not specifically assist those on a low income. Although considered a temporary Commonwealth program implemented by State Governments, this program was recently revised and extended. In Victoria, new homes in regional areas have been favoured, via an additional bonus, bring the total grant to $22,500 for first home buyers purchasing a new home in regional areas, $18,000 for a new home in metropolitan Melbourne and $9000 for an existing home as of 1 July this year.

Taxation - Home ownership continues to enjoy a privileged position within the Australia taxation system via the non-taxation of capital gains (CGT) (that does apply to rental investors) and imputed rent. These exemptions primarily benefit established owners who are able to reap considerable gains from rising house prices, especially those owners at the upper end of the market.

Savings scheme - Most recently the Commonwealth government has introduced the matched saving scheme for home owners. In October 2008, the Commonwealth launched the First Home Savers Accounts (FHSA) to assist households in saving for a deposit or making repayments on a first home. Individuals can divert up to 10% of their income into FHSA accounts. Interest on these accounts will be taxed at a favourable15% by the Australian Tax Office. The Commonwealth will contribute 17% of annual contributions, to a maximum of $850.00 per year. Accumulated funds can only be used for a deposit or mortgage repayments on a first home, otherwise the balance of the account is diverted towards the individuals superannuation account.

Home loan programs - A variety of home loan programs are offered by most states, typically for low income households, public tenants and households with special needs and some of them involve shared equity of government partners. These state based loan programs are summarised briefly below.

Table 4: State and Territory home loans programs

Active State or Territory	**Loans programs for low income households**
Victoria	No lending program, however, Tenant House Sales Program, enables public housing tenants to purchase the property they rent, subject to extensive conditions.
NSW	No lending programs, except bridging finance for Group Self Build participants.
Queensland	Housing Finance Loan to assist low to moderate income households to buy or build a house, State Housing Loan to assist eligible public tenants and other people to buy public housing, Pathways Shared Equity Loan to assist eligible public tenants to purchase a share in the property they are currently renting.
Western Australia	Keystart home loan for low income, no deposit, reduced fees First start shared equity scheme – for first home buyers Good start shared equity loan Aboriginal home ownership scheme
South Australia	HomeStart Low Deposit Loan for low to moderate income, no deposit, 100% finance.
Northern Territory	HomeNorth Xtra Standard Variable Loan - low deposit loan. HomeNorth Xtra Shared Equity Loan agreement between the Government and the home buyer HomeNorth Xtra Public Housing Sales Program for Tenants.

As mentioned above there are a variety of state funded *shared equity* schemes which allow for shared equity ownership housing. These apportion different rights and responsibilities to shareholders affecting their equity contribution and share of the risks for any change in value (for a review, see Pinnegar et al, 2008).

Mortgage Relief Scheme - Originally a federally funded scheme, now a discretionary program operated by some State Governments (primarily NSW), this program provides interest free loans or grant to assist mortgages in temporary repayment difficulty

Efforts to inform, protect and advocate on behalf of home purchasers

A number of agencies play a key role in informing, protecting and advocating on behalf of home purchasers at the national and state level. Under the Australian Securities and Investments Commission (ASIC) Act 2001, ASIC regulates Australia's corporate, markets and financial services. It does so in co-operation with the Australian Prudential Regulation Authority (APRA), which is responsible for ensuring financial institutions will be able to honour their commitments when they fall due. It promotes the safety and soundness of deposit-taking institutions, life and general insurance companies, and larger superannuation funds. The Financial Reporting Council (FRC) is a statutory body established under the Australian Securities and Investments Commission Act 2001 and is responsible for providing broad oversight of the process for setting accounting standards in Australia and giving the Minister reports and advice on that process (ASIC, 2009). There are also various organisations which promote financial literacy amongst potential borrowers and young people (Australian Government Financial Literacy Foundation from ASIC). For households needing financial advice on their home loan, currently they can turn to the various government funded consumer advocacy and financial counselling services.

Under Uniform Consumer Credit Code (UCCC) mortgagors can ask lender to relax repayment obligations for a short period of time due to illness or loss of employment however, this only applies to UCCC members. (Berry, et al 2009:10) and typically, non-ADI which broker many re-negotiated loans, are not covered by this code.

Having outlined the both market and government conditions affecting home ownership more generally, we now turn to the situation of young home purchasers in Australia, drawing on a range of quantitative sources, particularly the HILDA survey of 2007.

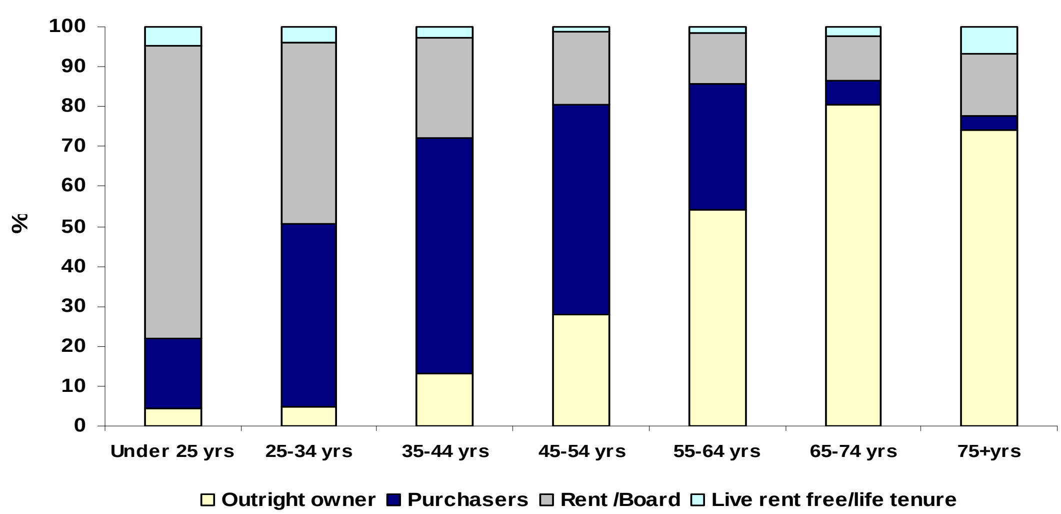
Australian home ownership across the life course

The rate of home ownership, comprised of outright owners and purchasers paying off their home, has remained around 70 percent for the past 40 years. While the overall rate has remained fairly stable, the proportion of purchasers to outright owners has fluctuated over time, especially amongst younger or first time buyers where the proportion began to decline throughout the 90s (ABS, 2007; Yates, 2003).

The issue of whether higher proportions of young home owners have been permanently excluded or temporarily delayed from purchasing their own home until a later stage of life, continues to be debated. However, households in the lower income distribution are certainly remaining in the rental sector for longer periods of time, with many low income households likely to be precluded from access altogether, especially single earning households (Yates, 2007b, Baxter & McDonald, 2004, Yates & Milligan, 2007).

Drawing on the most recent wave of HILDA data in 2007, around 80 percent of adult individuals are home owners after 45 years of age. As figure 2 illustrates nearly three quarters of those 25 years or younger rent their dwelling with the proportion of purchasers and outright owners increasing with each age cohort, reaching the highest peak amongst those aged between 65-74 years and declining thereafter. Repaying a mortgage is most common (59%) between the ages of 34-44 years.

Figure 2: House Tenure by Age, Weighted Individuals First Income Units, HILDA 2007



Recent market trends impacting on affordability for young home owners

Access to credit by young home owners and the attached conditions are critically related to issues of affordability. Indeed, the affordability of home ownership is dependent on a number of dynamic relationships including house prices, household income, available deposit and the cost and conditions of mortgage finance (Pope and Rowland, 2008). There is growing recognition that declining affordability of home ownership is not merely a cyclical phenomenon but is here to stay (Yates and Milligan, 2007). The real measure of the extent of the affordability problem for the current generation of buyers is a widening of the deposit gap to income ratio, which Yates (2007a: 9) argues is now 3 to 4 times greater than in the 1970s.

Easing of lending criteria to accommodate shortfalls in the deposit gap has been met with a growing preparedness of Australian households to borrow larger and larger amounts in order to secure a home of their own. Young home owners continue to aspire to home ownership trading off higher levels of debt with remaining in the rental market and increasing the labour supply of all earners in the household in order to sustain repayments.

While many young households in are in position to manage their mortgage, the past decade has witnessed growing numbers struggling to meet their repayments. Trends in mortgage stress measured by Fujitsu Consulting reached an all time high of 900,000 in 2008. The stability of households' financial position has however been influenced by various stimulus interventions to curb the impact of the recession, including the reduction of interest rates by 4.25 percent since September 2008 to April 2009.

The numbers in mortgage stress in the most recent quarter for May 2009 reversed the upward trend for the first time in years to an estimated 546,000 persons, while the numbers identified as severely stressed, including those at risk of selling or foreclosure was 99,000 households (Fujitsu Consulting, 2009: 2) 1. The groups most stressed include suburban mainstream, disadvantaged fringe and battling urban young families (ibid, 2009:27)

A similar pattern is evident for mortgage arrears. After mortgage arrears reached the highest level in January 2009, data compiled by Standard and Poors showed a decline in both the prime and sub prime market segments during March, 2009[2]. Between January and March 2009 the overall rate of arrears calculated for prime mortgages declined from 1.84 percent to 1.63 percent whilst in the sub-prime declined from 17.09 percent to 16.46 percent.

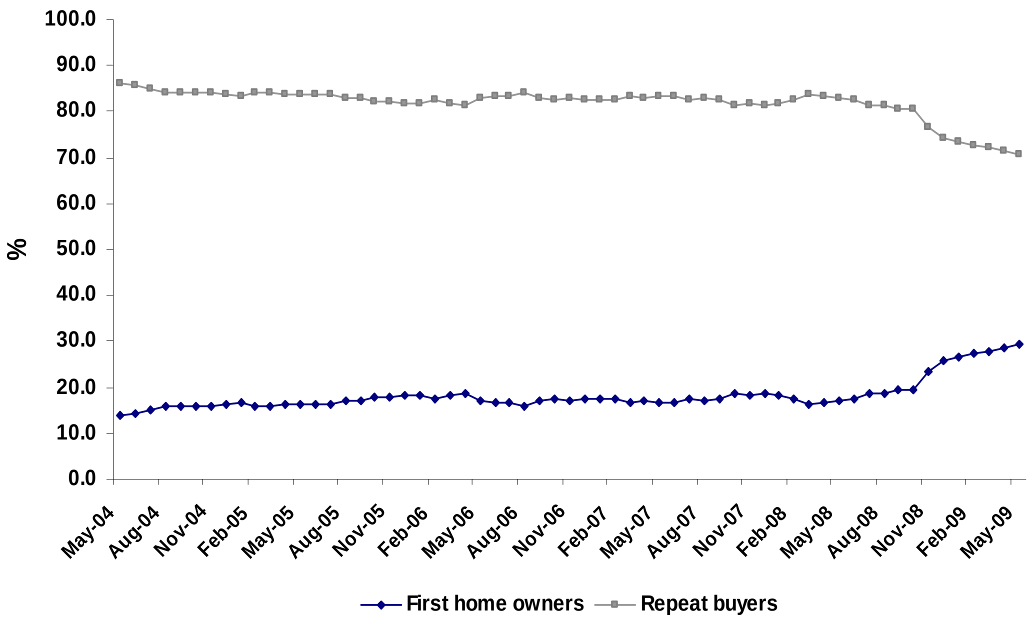
The reduction in arrears and mortgage stress are however expected to increase once again, particularly in the sub-prime segment as unemployment is forecast to reach 8 ½ percent by June 2010 (Standard & Poors, 2009:viii). Despite the growing risks of rising unemployment and market instability, young home owners have entered the mortgage market in unprecedented numbers during the past 12 months in order to take advantage of the significant increases in the first home owners grant (FHOG), falling prices and lower interest rates. Between October 2008

[1] There are various measures of mortgage stress including the traditionally applied criteria by banks of housing costs of 30% or more of household income. More recently Fujitsu Consulting have developed the "Stress O Meter" to monitor the incidence of mortgage stress which draws on a regular survey of 2,000 households added to a rolling pool of 26,000 households. Mortgage Stress is graded according to levels of severity and groups according to household typologies or different market segments.

[2] Standard and Poors have collected data on the percentage of loans in 31-60, 61-90 and 90+ days arrears since 1996 and use the Standard and Poor's Mortgage Performance Index (SPIN) to calculate the weighted average of arrears of residential mortgage loans underlying RMBS transactions.

and March 2009 the proportion of first home buyers relative to repeat buyers increased by 10 percent from 20 percent to 30 percent. Many of these new entrants are likely to be highly leveraged, capitalising on the additional grant to bring forward their purchasing decision without necessarily having a large deposit to fall back on.

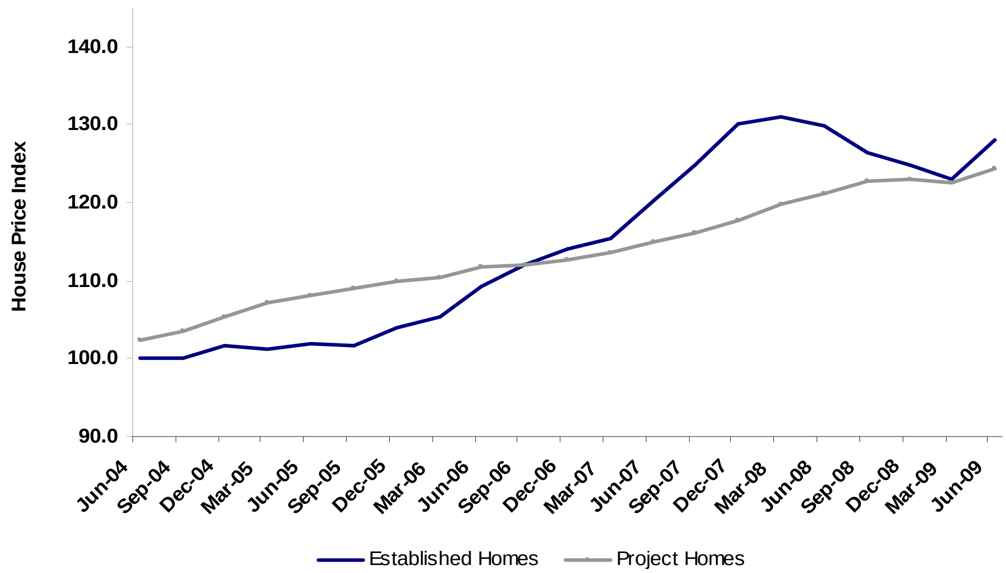
Figure 3: Percentage of all dwellings financed



Source: ABS Housing Finance, June 2009 Quarter, ABS Cat. 5609.0

First home buyers entering the home ownership market in the current climate have done so during a period of great uncertainty in the value of the purchase price of their homes. As illustrated in figure 4, the house price index of established homes has been highly volatile, flattening out in late December 2007, declining rapidly from early 2008 and then increasing once again by a substantial 4.2 percent in the latest quarter. The prices of project homes have continued to rise steadily through out this period reinforcing growing affordability concerns (ABS, 2009). The more steady increase in project homes could reflect different practices relating to the sale of properties via auctions versus more rigid price structuring of land and home packages.

Figure 4: House Prices of Established and Project Homes, Australia



Source: House Price Indexes: Eight Capital Cities, June 2009 Quarter, ABS Cat. 6416.0

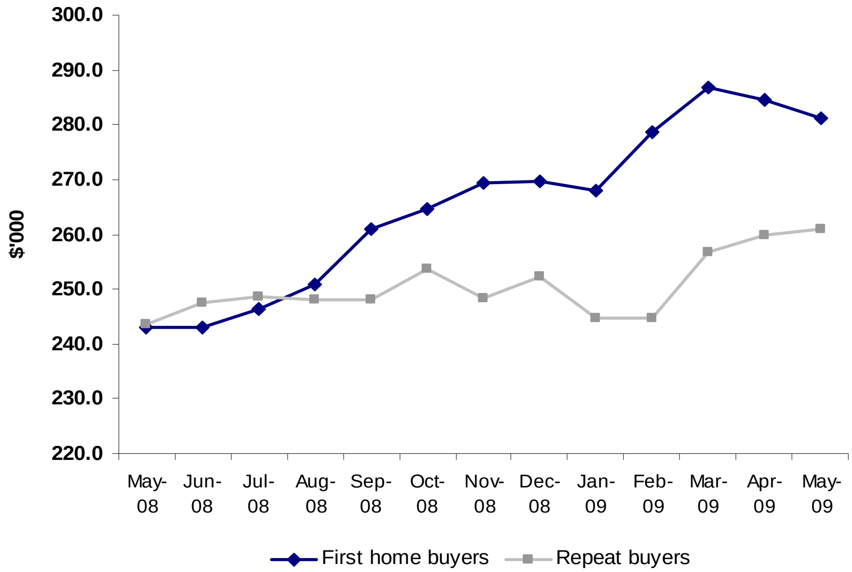
Such a rapid turn around in established house prices in the midst of a recession points to the flow on effects from adjustments in interest rates and FHOG and whilst helping to sustain the building and housing industry there are still concerns that an over inflated market combined with a shortage in the supply of dwellings is highly unstable. The shortage in the supply of housing is likely to see continued declines in affordability before prices start to fall again. Volatility in established house prices could result in a high number of new entrants facing negative equity if house prices should suddenly decline once more.

Capacity to repay mortgages

An increasing deposit gap is reflected in a nationwide trend towards higher loan to value (LTV) ratios. Higher loan to value (LTV) ratios place increasing numbers of home owners at risk given their higher probability of default over other borrowers (Berry et al, 1999 & 2009). In 2007, the LTV average for Australian mortgagors was 66.4 percent but there were significant differences between the states, with Western Australia at 55.3 percent and Victoria 70.2 percent. Recent figures on mortgage characteristics reveal that loan to value ratios have risen to 72.5 percent and have become more uniform across each state, with Victoria still the second highest with 74.4 percent after NSW.

Recent housing finance figures from ABS on the average amounts borrowed suggest that that this trend is likely to continue. Figure 5 illustrates that in the twelve months from March 2008-09 first home buyers outstripped repeat purchasers in the average size of the loans taken out to purchase a property. During this period the average amount borrowed by first home owners increased by $36,000 from $250,000 to $286,000. A significant proportion of this increase was between January and February 2009 when there was a steep increase from $268,000 to $281,700.

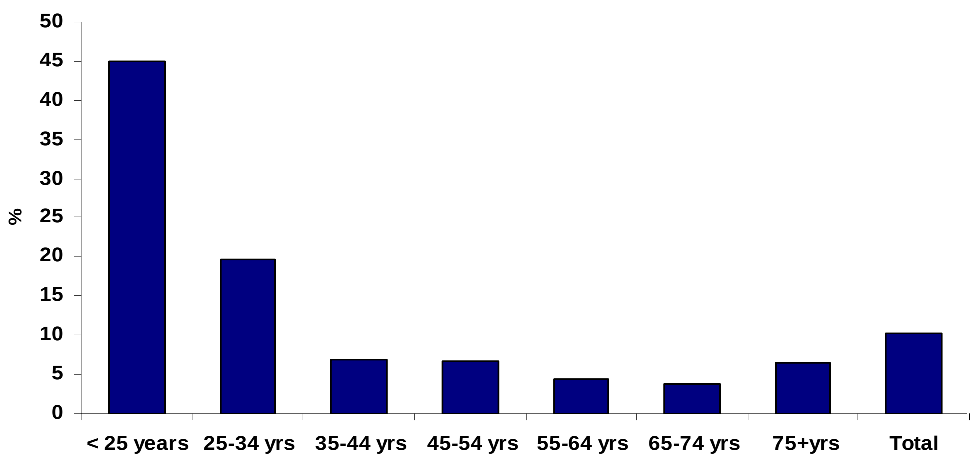
Figure 5: Average size of loan



Source: ABS Housing Finance, June 2009 Quarter, ABS Cat. 5609.0

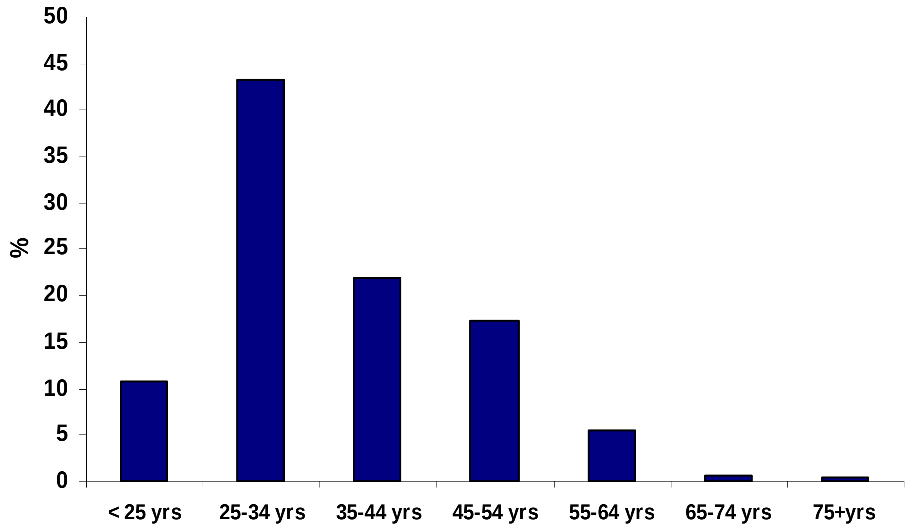
Single property owners in the youngest age groups are becoming increasingly vulnerable to high leveraged borrowing. Drawing on the most recent wave of HILDA data, in 2007 there was an estimated 223,834 households (corresponding to 422,180 adult individuals) with loan to values ratios of 80 percent or more, representing 10 percent of all single property purchasers. Figure 6 shows that this proportion increases to 45 percent amongst borrowers under 25 years and to 20 percent amongst borrowers aged between 25-34 years. Figure 7 to follow shows that amongst all borrowers with LVRs 80 percent or above, 76 percent are aged less than 45 years.

Figure 6: Age groups by Loan to value ratio 80% or above, HILDA 2007



Weighted responding adult individuals in first income unit, single property owners with reported mortgage debt

Figure 7: Loan to value ratio 80% or above by Age Groups, HILDA 2007



Weighted responding adult individuals in first income unit, single property owners with reported mortgage debt

These findings suggest that those who do enter home ownership at a young age do so at a very high risk, borrowing significant amounts to make up for the deposit gap and reduced time available to have generated high earnings and savings. Two indicators of housing risk closely corresponding with age and high LVRSs are lower after housing incomes and high income to housing cost ratios. Borrowers under 44 years of age typically spend over 40 percent of their gross median income on housing. The proportion increases to 48 percent for those entering home ownership under 25 years of age. Borrowers with LVRs of 80 percent or more pay 52 percent of their gross median income on housing. Borrowers with high LVRs are left with a gross after housing income of $20,400[3] (see appendix 2).

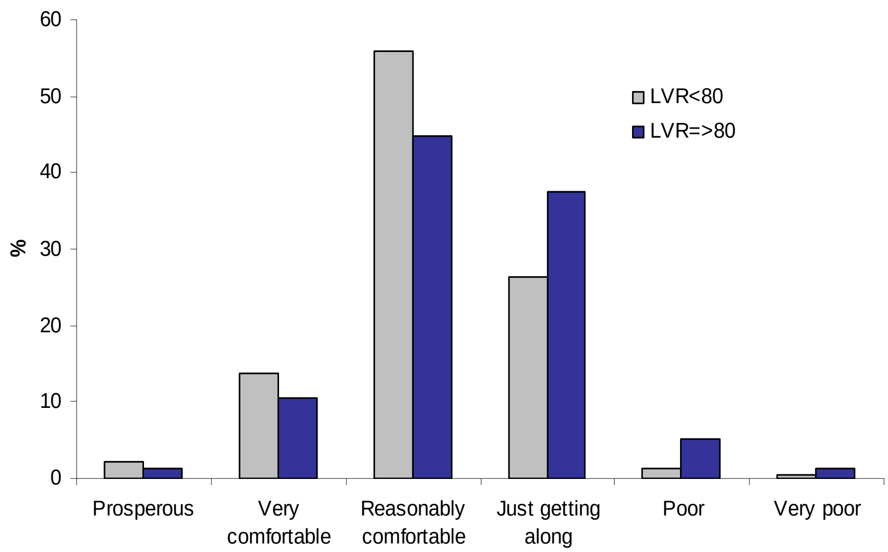
The high proportion of income devoted to housing repayments increases the importance of continuous employment for households with high LVRs, especially amongst those with limited scope for renegotiating new terms on their loan. Young borrowers typically enter into home ownership with two earners; once children arrive the second income is often reduced in hours and also security. While the majority of borrowers with high LVRs (78%) have one or more members permanently employed, 22 percent of borrowers had only one member in permanent employment. Although borrowers with high LVRs are most likely to live in a dual full-time earning household (42%), a quarter (25%) is reliant on only one full-time income, whilst a further 17 percent have a full-time and 1 part-time member in their household.

The amount of mortgage debt is highest and house values are lowest for those aged under 45 years and this is borne out in observed differences in the amounts of equity held. While borrowers are able to accumulate a sizeable amount of equity by 45 years of age (see appendix xx), this is largely dependant on when they enter home ownership. Amongst borrowers with loan to value ratios of 80 percent or higher, the average amount of equity held is around $25,329 (median 30,000) or $263,694 lower than the total sample of purchasers.

[3] Gross income is equivalised by multiplying annual income by the square root of the number of persons in the household.

Building on this profile, Figure 8 reports self assessed ratings of prosperity for home owners with high and lower LVRs. As shown, 37 percent of purchasers with high LVRs indicated that they were just getting along compared with 26 percent with LVRs below 80 percent. They are also more likely to report that they were poor (5%) compared with those with lower LVRs (1%) and are less likely to report that they are reasonably comfortable (45%).

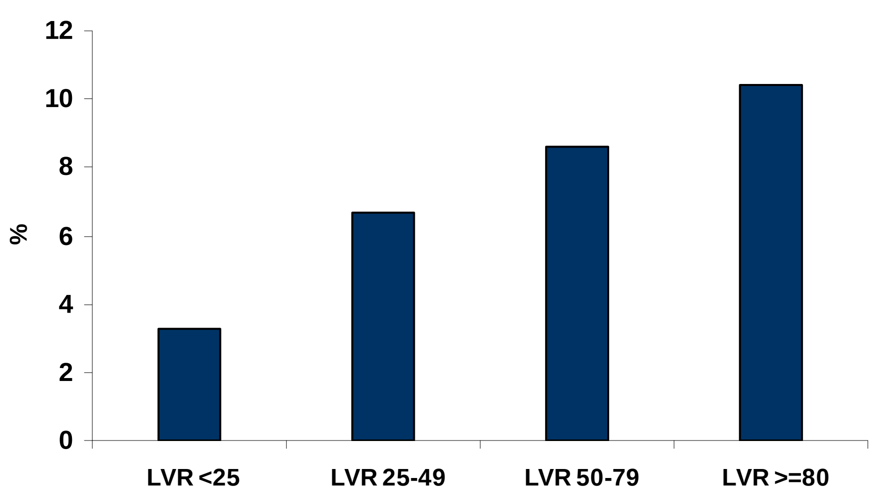
Figure 8: LVR groups by ratings of prosperity, HILDA 2007



Weighted responding adult individuals, single property owners with reported mortgage debt

Highly leveraged borrowers as shown in Figure 9 are also more likely to report payment difficulties, with the proportion increasing as LVR increases, reaching 10 percent for the most leveraged borrowers. Amongst these leveraged borrowers, around three quarters are in the first three income quintiles, indicating that the majority encountering difficulties are concentrated in the middle to lower income groups.

Figure 9: Payment Difficulties by LVR, HILDA 2007



Together these findings suggest that a sizeable proportion of home owners have over extended themselves financially in order to access home ownership, especially those in their early to mid twenties. While a number of young borrowers will be able to absorb unexpected changes to their income stream by reducing expenditure in other areas, around 40 percent of new home owners with high LVRs have little or no room to move based on their equity position, constrained income and self assessed perceptions of getting by.

Conclusions and recommendations

In this paper we have sought to investigate the generative causes and extent of borrowing risk amongst young Australian home owners drawing on the most recent data sources available. The broad review of current labour and housing market trends and policies has shown increasingly worrying patterns of home lending and borrowing globally and locally despite continued uncertainty in the employment prospects of many thousands of households. Growth in the size of the amounts borrowed by first home owners at a time of such uncertainty is a point in case.

Given the rising rate of mortgage default in Australia, concentrated amongst young first home buyers employed in the private sector, it is now time to draw on the cautionary lessons and promising strategies from countries which are dealing with similar issues at a more advanced stage. In particular is important to re-assess the generate causes of mortgage default and the adequacy of risk mitigating strategies currently in place.

Promising risk mitigating strategies aiming to inform Australian policy development fall into three domains. First, they can be grouped according to their role in *preventing* mortgage default by not only promoting savings and improving buyer education but also ensuring responsible lending. Employment and wage conditions amongst young mortgagors are also critical, and consequently efforts towards secure and adequate incomes are most relevant. Second, strategies which aim to *alleviate* mortgage problems when they do occur, such as appropriate handling of arrears and reduction of mortgage payments are covered in this section, with the aim of preventing repossessions and stabilising the housing market. Third and most importantly are strategies *promoting more sustainable housing options* for Australian households such as rent to buy schemes and shared equity, which offer the benefits home ownership without the burden. Further a number of schemes to increase opportunities to develop affordable housing are also mentioned.

Building on the results of this paper, and the emergent causal relations underlying home purchase in Australia, we therefore recommend a three pronged policy response incorporating prevention, alleviation and promotion of sustainable housing options. Recommendations have been grouped according to their role in reducing mortgage default by not only promoting savings and improving buyer education but also ensuring responsible lending. Given that employment amongst young mortgagors is of critical importance, efforts supporting job security are also highly relevant. Second, strategies which aim to alleviate mortgage problems when they do occur, such as expert independent advice, appropriate handling of arrears and renegotiation of mortgage obligations, can not only prevent repossessions they can also help to stabilise weaker housing markets. Third and most importantly are strategies promoting more sustainable housing options for Australian households such as rent to buy schemes and shared equity, which offer the benefits of home ownership but with a lower cost burden. Towards this end the following recommendations are put forward in Table 5 below.

Table 5: Mortgage risk amongst young households – policy recommendations: Prevention, Alleviation and Sustainable Alternatives

Emergent relation	Prevention	Alleviation	Sustainable alternatives
1 Financial relations mediating agency between borrowers, brokers, lenders, insurers, financial advisors, counselors and regulators	1 Review borrowing norms and conditions, including deposit requirements. Households engaged in less secure types of employment should have other guarantees including larger deposit and lower LVR as a buffer for their increased risk.	6 Ensure provision of free, easily accessible advice for households in arrears, via independent financial counselors with expertise in the mortgage market, loan renegotiation, relief schemes and alternative tenure arrangements (buy to rent). Developments in the Netherlands (AFM, VEH) and Shelter (UK) are of interest in this regard.	10 Promote sale of standard low risk loans to those least able to take on risk (opt out system). The sale of non-standard products with increased risks should trigger requirements for increased information and require a second opinion.
	2 Require open, plain English and sufficiently detailed information on all loan products and services and expand online consumer guides on this issue. Translate this guide into appropriate languages and promote amongst relevant communities.	7 Ensure the timely promotion of adequate mortgage relief to households with repayment difficulties to improve borrower's knowledge of support and relief systems available to those in financial distress.	11 Review role of Australian mortgage guarantee funds in reducing the cost of finance for low to moderate income households, reflect on the role of the NHG in the Netherlands, CMHC in Canada and recent schemes in New Zealand to expand access and reduce costs amongst low income households
	3 Investigate incentive structure which may promote risky lending and require all bonuses and commissions to be explicit.	8 Ensure that the current Mortgage Relief program is significantly expanded, redefining hardship and taking into account temporary emergency measures during down turns and linked to other strategies such as a potential Buy to Rent scheme, which can assists households facing temporary difficulty to remain in their homes (either as tenant or part owner). The Buy to Rent scheme and Flexible Tenure schemes in the UK are of interest.	12 Ensure there is a free, independent service for households renegotiating their loans with a mortgage broker or bank, through which they can rely on for a second opinion.
	4 Prevent low-documentation loans by sub-prime lenders and regulate non-ADI mortgage brokers to ensure good advice, sales practice and transparent commissions.	9 Repossession, especially in an era of negative equity, must be avoided at all costs. Lenders must develop capacity in handling arrears, renegotiating obligations and agreeing on sustainable short and long term solutions. Efforts by CML and Shelter in the UK are of interest in this regard.	
	5 Publish cases of irresponsible lending by disreputable lenders. Identify and publicise through the popular media those lenders taking most court actions, as well as borrower types, and loans kinds most prone to default.		

Emergent relation	Prevention	Alleviation	Sustainable alternatives
2 Labour relations mediating agency between employers and casual and permanent employees and their associations, self employed, job promotion and employment assistance agencies.	1. Continue to monitor metropolitan and regional developments in employment (hours of work as well as jobs) especially in the private sector amongst first home buyers in weak housing submarkets 2. Conduct a public campaign to promote responsible borrowing amongst young first home buyers and other vulnerable groups, in the context of declining housing prices and increasing unemployment. 3. Closely monitor types of industries where employment loss is greatest – develop greater linkages with industry to reach potentially vulnerable home owners in sectors of the economy particularly exposed to the impacts of recession, and inform them of strategies to prevent mortgage problems.	4. Liaise more closely with employment assistance agencies including Centrelink to disseminate housing assistance advice for recently unemployed home owners to ensure that home owners with early onset of payment difficulties obtain timely advice, make appropriate strategies and access available assistance.	5. From more strategic research, to develop an armory of strategies to support industries vulnerable in credit crises and protect their employees from loss of income, which are tailored to specific situations (as in cases of production slow down and plant closure).

Emergent relation	Prevention	Alleviation	Sustainable alternatives
3 Land and housing markets mediating land owners, developers, investors, builders, home buyers and renters.	1. Continue to monitor metropolitan and regional developments in house prices amongst first home buyers segments and geographical areas	2. Investigate rent to buy and shared equity schemes involving non-profit housing associations and public agencies, as mentioned in this report, which are well established in Western Australia, South Australia and overseas as reviewed by Pinnegar et al (2008), which can expand options for low and moderate income households	3. Ensure that planning and land development agencies are sufficiently orientated towards the promotion of affordable housing, in line with current policy which seeks to do so; potentially through inclusionary zoning linked to a non-profit housing developer and further expanding efforts to promote and develop affordable housing efforts by State land agencies. 4. Significantly expanding the development of housing options which are more sustainable and affordable and also able to compete with owner occupation in terms of security of occupation and potential wealth accumulation (shared equity, flexible tenure, rent to buy, etc), which involve non-profit developers to ensure cost effectiveness, quality and tenant responsiveness.

Appendix 1 Household Income Labour Dynamics in Australia (HILDA) Survey

HILDA is a nationally representative longitudinal survey that seeks to interview the same households and individuals each year. A particular strength of HILDA for this research is a number of questions relating to individual employment characteristics allowing a more detailed understanding of the labour market position of vulnerable home owners. There are also a number of questions relating to housing costs, house values, wealth and debt and several indicators of financial stress including difficulties meeting mortgage repayments.

The sample of home purchasers included in the HILDA analysis comprises single property owners who had reported debt from primary and second mortgages and also from non lending financial institutions. This group are of particular social policy concern as any low or negative equity is the result of buying a home to live in rather than what might be viewed as a speculative investment. The analysis of HILDA is also supplemented by recent ABS data on changes to the house price index, housing finance and labour force, national comparisons of LVR rates, Victorian Supreme Court writs for possession, arrears data analysed by Standard & Poors and Mortgage Stress data from Fujitsu Consulting

The latest data available from the survey is for 2007 and most of the analysis contained in the report corresponds with this period. The total number of responding individuals in 2007 was 12,789 for a total of 7,063 households. Drawing on HILDA data we identify an at risk sample of home owners who have Loan to Value Ratios (LVR) of 80 percent of more[4].. Home owners with high LVRs have according to previous research, a much higher probability of default than other home buyers (Berry et al, 1999 & 2009). The analysis of HILDA is also supplemented by recent ABS data on changes to the house price index, housing finance and labour force, national comparisons of LVR rates, Victorian Supreme Court writs for possession, arrears data analysed by Standard & Poors and Mortgage Stress data from Fujitsu Consulting. A detailed review of the recent policy and labour and housing market literature was also undertaken to inform methodology, policy implication and recommendations.

The sample of home purchasers included in the HILDA analysis comprises single property owners who had reported debt from primary and second mortgages and also from non lending financial institutions. This group are of particular social policy concern as any low or negative equity is the result of buying a home to live in rather than what might be viewed as a speculative investment. The final sample of borrowers also excludes dependant & independent children.

[4] The 80% figure can be justified by the observation that this is when mortgage insurance is required.

Appendix 2

	Total mortgage debt		Home value		Equity	
	Mean	***Median***	**Mean**	***Median***	**Mean**	***Median***
< 25 yrs	226,568	*220,000*	312,073	*300,000*	85,506	*60,000*
25-34 yrs	225,121	*200,000*	413,646	*370,000*	188,525	*157,000*
35-44 yrs	184,061	*155,000*	467,956	*400,000*	283,896	*222,000*
45-54 yrs	153,432	*130,000*	500,940	*400,000*	347,508	*280,000*
55-64 yrs	140,568	*90,000*	531,690	*430,000*	391,122	*311,000*
65-74 yrs	90,955	*70,000*	626,079	*400,000*	535,124	*279,320*
75+yrs	90,678	*50,000*	438,375	*330,000*	347,697	*250,000*
Total	178,201	*150,000*	471,407	*400,000*	293,207	*229,000*

Weighted purchasers by age – responding individuals

	Proportion of income spent on housing		Gross income after housing costs		Loan to value ratio	
	Mean	***Median***	**Mean**	***Median***	**Mean**	***Median***
< 25 yrs	49	*48*	23,264	*21,674*	73.4359	*76.0000*
25-34 yrs	48	*43*	28,496	*24,261*	57.1485	*57.5000*
35-44 yrs	47	*41*	25,873	*23,036*	42.2980	*40.0000*
45-54 yrs	41	*34*	30,314	*29,386*	35.0767	*30.0000*
55-64 yrs	34	*28*	34,044	*32261*	27.8743	*21.0526*
65-74 yrs	32	*25*	25,774	*23,065*	20.0899	*13.3333*
75+yrs	25	*25*	28,940	*22,236*	23.8313	*16.6667*
Total	44	*38*	28,660	*25,373*	42.0826	*38.6667*

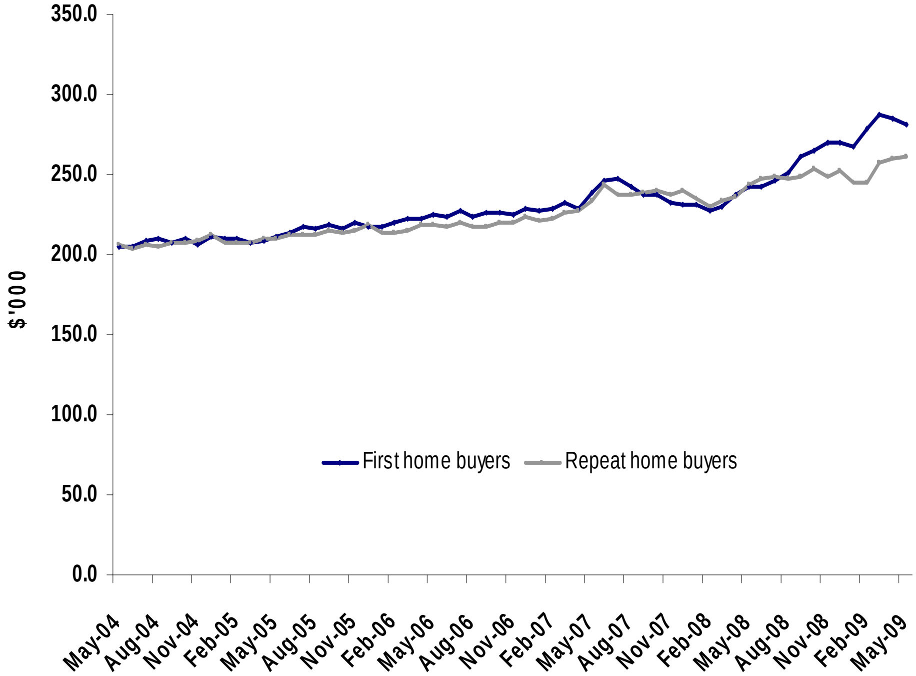
Weighted purchasers by age – responding adult individuals in the first income unit
Proportion spent on has been truncated at 99% level to remove extreme values bring the mean and median amounts closer.
Weighted purchasers by age – responding first income units individuals

Income and Housing Costs

	Annual housing costs $		Gross squared income $		Total mortgage costs		Gross squared monthly income	
	Mean	**Median**	**Mean**	**Median**	**Mean**	**Median**	**Mean**	**Median**
< 25 yrs	21,482	*19,812*	44,357	*44,639*	1,790	*1,651*	3,696	*3,720*
25-34 yrs	23,084	*20,076*	51,429	*44,616*	1,924	*1,673*	4,286	*3,718*
35-44 yrs	19,256	*16,944*	45,165	*41,459*	1,605	*1,412*	3,764	*3,455*
45-54 yrs	17,659	*14,400*	48,661	*45,244*	1,472	*1,200*	4,055	*3,770*
55-64 yrs	17,475	*13,032*	51,380	*46,986*	1,456	*1,086*	4,282	*3,915*
65-74 yrs	11,623	*8,160*	37,960	*34,982*	969	*680*	3,163	*2,915*
75+yrs	10,201	*6,036*	29,568	*18,958*	850	*503*	2,464	*1,580*
Total	19,408	*16,680*	48,072	*43,664*	1,617	*1,390*	4,006	*3,639*

Weighted purchasers by age – responding individuals

Figure 9 Average size of loan



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