

How Affordable is Housing in New Zealand and What Strategies are Available to Reduce Housing Stress?

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Introduction

The ability of households in New Zealand to find good quality, affordable and sustainable housing has declined over the last twenty years. This paper will look at affordable housing from a range of viewpoints, theoretical and quantitative, with the objective of providing a range of contextual and background information so as to better inform and shape debate and research around what is considered to be a central housing and social policy issue¹. Specifically the paper will address five key issues around the affordability question.

The first question to be addressed asks why is housing affordability important? Research has consistently found a positive relationship between poverty and housing costs, especially for households in the private rental sector. Individual households, when faced with insufficient incomes or insufficient residual incomes are likely to trade-off housing costs against one or more dimensions of housing adequacy. There is a clear pattern of association between overcrowding and substandard living conditions and a range of adverse health, education and social outcomes. A lack of affordable housing not only poses a threat to the cohesion of the broader society but also impose significant constraints on the economy as well.

The definition and measurement of housing affordability from a policy standpoint is an important issue. Evidence from a recently completed literature review of both local and overseas publications asks the question – what is affordable housing?

Changes in the structure of the housing market in New Zealand over the last twenty years have had a significant impact on affordability. Housing concerns at the beginning of the 1980s were focused on a small minority of lower socio economic households. Recent market evidence clearly shows that affordability is no longer a problem for just a small proportion of households. The paper will present a range of quantitative evidence around housing affordability trends and discuss their implications for the housing market.

A number of overseas countries have experienced declines in housing affordability, like New Zealand, over the last twenty years. A range of different strategies has been adopted to attempt to reduce the level of housing stress associated with the affordability issue. An overview of the different strategies adopted and their relative advantages and disadvantages will be presented.

¹ This paper is based on work undertaken by the authors for the Centre for Housing Research, Aotearoa earlier this year titled Housing Costs and Affordability.

Finally the paper will conclude by considering the proposition that while there is a range of data and information on housing affordability in New Zealand there are significant gaps. These gaps together with areas for further research and potential policy implications will be reviewed.

Why is Housing Affordability Important?

“Housing has profound and often unappreciated impacts upon our lives. It directly affects our quality of life, our health and well being; it determines our transport needs and often our choice of work; it affects our family structures and our friendship networks. Housing also affects our national economic well being: the rate of economic growth and our prosperity. It also influences the distribution of resources between regions, individuals and generations”, (Barker, 2003, p.1).

Housing affordability is important for a wide range of reasons. Perhaps the most fundamental ‘economic’ factor is that housing is the single largest expenditure item in the budgets of most individuals and households (Quigley et al. 2004, p.192). Any changes in housing affordability, up or down, can have significant impacts upon other parts of the household budget. Research has consistently found a positive relationship between poverty and housing costs, especially for households in the private rental sector.

Individual households, when faced with insufficient incomes or insufficient residual incomes are likely to trade-off: housing costs against one or more dimension of housing adequacy, for example, by moving into inadequate housing that is overcrowded, or substandard, or in a remote location” (Working Party on Affordability Issues, 2003, p.66).

Overcrowding can give rise to other consequences. It may also transform into outright homelessness, where housing costs become unsustainable Affordable Housing National Research Consortium, (2001). There is a clear pattern of association between substandard living conditions and an increased incidence of poor health, physical and mental. In addition, poor living conditions are associated with other costs to the individuals concerned including underachievement in education, and lack of skills affecting ability to gain employment, Working Party on Affordability Issues, (2003).

The locational concentration of lower cost housing in areas of low employment can reduce the job prospects of households forced by lack of resources to live there Affordable Housing National Research Consortium (2001). Children living in temporary, overcrowded or otherwise inadequate housing may suffer educational disadvantage. Poor housing leading to poor health can, in turn, adversely affect school attendance and performance. Insecurity of tenure and frequent forced moves will disrupt a child’s schooling and may lead to truancy, Affordable Housing National Research Consortium (2001).

Inadequate housing and associated financial stress can contribute to family breakdown, as well as result from it. According to the Australian based Affordable Housing National Research Consortium, without secure tenure over housing of a reasonable standard, large enough to meet the minimum shelter requirements of a household for its size and composition, normal 'family life' is well nigh impossible to support, Affordable Housing National Research Consortium (2001). By extension, where a household has insufficient resources to meet the barest of necessities, full participation in the normal life of the community is impossible and other problems result, Affordable Housing National Research Consortium (2001).

"There is evidence that permanent, secure housing provides the necessary base for 'social capital' (i.e. the mutual trust and social behaviours) that facilitates civic engagement. Neighbourhood stability, in the sense of low resident turnover, is associated with high levels of social capital and good, basic, housing standards. Conversely, where that social capital disintegrates, so does social cohesion. Where this occurs, segments of the community will experience social exclusion; in effect they will be prevented from full participation in the life of the community. When social cohesion fades, then so does the attractiveness of an environment as a place in which to live and do business. Adequate and affordable housing is a necessary ingredient in the achievement and maintenance of an inclusionary, innovative and productive society", (Affordable Housing National Research Consortium, 2001, p. 19).

A lack of affordable housing not only poses a threat to the cohesion of the broader society but also imposes significant constraints on the economy as well. He has identified six key reasons why, for economic well being, housing affordability is important, particularly for urban regions: Firstly, according to Berry, housing affordability can impinge innovation drivers: He suggests that successful regional economies risk alienating young, creative workers at the beginning of their careers if the struggle to get a foothold in the local housing market is too great, Berry (2003).

Affordable housing also has implications for the concept and goal of 'liveable cities'. The reality or even the public perception of communities rent by polarising differences, visible poverty and homelessness, soaring crime and an impoverished public realm raises strong barriers to the influx of investors and key workers, reinforcing and hardening the emerging patterns of spatial inequality. Housing markets, if left unchecked, may play a central role in this dynamic.

Thirdly, access to labour also becomes problematic when "high housing costs can encourage some low-to-medium paid workers to migrate elsewhere in search of affordable housing and sustainable lifestyles, raising the possibility of labour shortages in particular locations and occupations. At a strictly functional level, successful metropolitan economies need plenty of low-paid service workers and medium-paid essential services workers, as well as high paid knowledge workers. Furthermore, there is little incentive for casual and part-time workers to travel long distances from home for short shifts, reducing 'flexibility' in labour markets."

Housing affordability problems can also place pressure on wages and salaries: High housing costs contribute to upward pressure on local wages and salaries, which tends to undercut the competitive position of local producers, especially in trade-exposed industries." Berry (2003).

Fifthly, poor housing affordability can crowd out other consumption and expenditure and this constraint may impinge disproportionately on younger people, especially those carrying student debts. Finally, Berry argues that housing affordability stands as a key to community cohesion: "Poorer households disadvantaged in the labour market suffer reduced effective access to affordable housing. This helps to lock or entrap people in areas where employment opportunities are shrinking, reinforcing their low-income status and further limiting their effective housing choices in a cycle of decline and deprivation. The other major cost to the community of problems caused, at least in part, by inadequate housing, tied to broader exclusionary forces, is the rising fiscal cost to government in dealing with the many resultant social problems." Berry (2003).

What is Affordable Housing? – Affordable Housing Defined and Measured

"There is no such thing as "affordable housing." Housing, in and of itself, is neither affordable nor unaffordable. Affordability is not an inherent characteristic of housing, but a relationship among housing cost, household income, and a standard of affordability. The term "affordable housing" is at best meaningless and at worst misleading, for it ignores or obscures the central question of who can and cannot afford housing", (Stone, 1994, p.443).

Over the last fifteen to twenty years the term 'housing affordability' has come into widespread popular usage. Although housing policy statements often include some statement such as 'the provision of decent housing for all at 'affordable costs', governments have often been reluctant to explicitly define what they mean by affordable housing. Bramley (1994) suggests that the lack of official clarity on definitions reflects inherent ambiguities in the housing affordability concept as well as political caution or expediency. Definition has for the most part been left to academics and practitioners working in the housing sector. Having said that, governments have set objective benchmarks for measuring housing affordability – a necessary prerequisite for intervention.

This section will consider a range of housing affordability definitions both from an academic and a policy perspective. It will then go on to consider the ways in which affordable housing has been measured both in terms of rental tenure affordability and in terms of home owner affordability measures.

Before looking at definitions of housing affordability it would be useful to briefly note some of the issues around housing affordability which make definition difficult. First off it is worth asking why we need to define housing affordability? Whitehead (1991) suggests that because markets deliver affordability outcomes that are deemed unacceptable to society, suitable definitions of what is regarded as affordable need to be developed to facilitate operational interventions. Such definitions inherently involve value judgements about not only the quality and merit-good attributes of housing but also about the relationship between housing expenditure and household income and acceptance of the view that housing should represent no more than a given element within that income (i.e. normative affordability – society defines what households should pay).

Affordability according to Bramley (1990, p.16 cited in Hancock, 1993, p.127) means that "households should be able to occupy housing that meets well-established (social sector) norms of adequacy (given household type and size) at a net rent which leaves them enough income to live on without falling below some poverty standard."

A definition described by Whitehead "(Maclennan and Williams, 1990a, p. 9 cited in Whitehead, 1991, 872) as the then most quoted affordability definition stated that "affordability is concerned with securing some given standard of housing (or different standards) at a price or rent which does not impose, in the eye of some third party (usually government) an unreasonable burden on household incomes."

"The answer is that any rent will be affordable which leaves the consumer with a socially-acceptable standard of both housing and non-housing consumption after rent is paid" (Hancock, 1993, p.144).

"A household is said to have a housing affordability problems, in most formulations of the term, when it pays more than a certain percentage of income to obtain adequate and appropriate housing" (Hulchanski, 1995, p. 471).

Field (1997) suggests affordable housing can be thought of as "physically adequate housing that is made available to those who, without some special intervention by government or special arrangement by the providers of housing, could not afford the rent or mortgage payments for such housing."

"Definitions of affordability concentrate on the relationship between housing expenditure and household income and define a standard in terms of that income above which housing is regarded as unaffordable" (Freeman et al, 1997, p.2).

"The Australian Government's National Housing Strategy (ANHS) defines affordability as "the notion of reasonable housing costs in relation to income: that is, housing costs that leave households with sufficient income to meet other basic needs such as food, clothing, transport, medical care and education" (Berry et al. 2001, p.10). In looking at affordability issues, the ANHS distinguishes between accessibility, i.e. the cost of becoming a home purchaser or entering into a rental arrangement, and affordability, i.e. the ongoing cost of housing in relation to gross income. (Australia National Housing Strategy, 1991, ix).

In the UK, a key guidance statement with respect to how affordable housing might be defined is contained in Circular 6/98 which states "the policy should define what the authority regards as affordable, but this should include both low-cost market and subsidised housing, as both will have some role to play in providing for local need" (Deputy Prime Ministers Office, 2002, p.12). Affordable housing is thus housing that is defined as being 'affordable' in the local context, and which covers a spectrum of outcomes including 'low cost' and 'subsidised'.

The New Zealand Housing Strategy Affordability Report published in 2003 as part of the work undertaken developing the NZ Housing Strategy discussion document defined housing affordability in similar terms. "Housing affordability relates to the ability of households to rent or purchase housing in an area of choice at a reasonable price, the capacity of households to meet ongoing housing costs, and the degree that discretionary income is available to achieve an acceptable standard of living. There is an underlying principle that expenditure on housing should leave enough residual income to cover other basic living costs, as well as allowing households to save for irregular but unavoidable costs such as medical and dental care"(Working Party on Affordability Issues, 2003, p.66).

Most, but not all of the preceding affordability definitions, include both an adequacy of accommodation component and a residual income component. These two components can be considered the core of any definition of housing affordability.

It is important to remember that affordability refers both to rental affordability and home ownership affordability. Bramley (1994, p.10) for instance describes affordability as a dual concept. It may be used to refer to middle income, first time housing buyers who face access problems to the mainstream tenure of owner occupation and who are also vulnerable to interest rate variation. Equally, affordability can refer to the provision of rented homes to people with low incomes, and the way in which their rents and benefits alter their residual income.

The normative basis of the housing affordability definition has been widely criticised. Bramley (1994, p.103) notes that normative definitions of affordability tend to define the limits or norms of affordability in terms of certain ratios. He goes on to say that the basis for such ratios is often not very explicit, and may simply refer across to other cases or observed averages or arguments of fairness.

From an economic perspective normative based definitions of housing affordability are inherently flawed. "To us a housing affordability crisis means that housing is expensive relative to its fundamental cost of production – not that people are poor. Affordability advocates often argue for the ability to pay (for example, some percentage of income) as a relevant benchmark, but this again confuses poverty with housing prices. We believe that a more sensible benchmark is the physical construction costs of housing" (Glaeser & Gyourko, 2003, p.21)

Quigley et al. (2004) argue that economists are wary with the rhetoric of "affordability," which jumbles together in a single term a number of disparate issues: the distribution of housing prices, the distribution of housing quality, the distribution of income, the ability of households to borrow, public policies affecting housing markets, conditions affecting the supply of new or refurbished housing, and the choices that people make about how much housing to consume relative to other goods. According to Quigley et al. this mixture of issues raises difficulties in interpreting even basic facts about housing affordability.

Before going on to look at measures of affordability it is probably worthwhile concluding our discussion on affordability definitions with this quote from Linneman and Megbolugbe (1992, p.371). "Talk of housing affordability is plentiful, but a precise definition of housing affordability is at best ambiguous."

A wide range of affordability measures is used. These reflect the differing circumstances of people being housed (for example, renters compared to home purchasers); different objectives in attempting measurement (for example, assessing particular affordability configurations compared with changes over time); as well as conflicting views on the validity of different measurement techniques. In this subsection rental housing affordability measures and owner-occupier housing affordability measures will be considered in turn. There are, however, various commonalities between the two tenure types in terms of affordability measurement and these will be noted.

Measures of rental affordability are used in different contexts. As such they sometimes relate to the rent of the dwelling in relation to the position of potential tenants or to the actual expenditure incurred by tenants in particular circumstances. They may also relate to the numbers and proportions of households, who, on some standard, require additional assistance (Freeman, et al. 1997, p. i)

There are two main rental tenure affordability measures. They are the rent-to-income-ratio and the residual income method. Each of these measures will be considered in turn.

The rent-to-income-ratio takes an individuals or households rent payment as a percentage of their income. The formulae for the rent-to-income-ratio varies according to whether gross or net income is used, whether dwelling rent or rent net of housing allowance is used, and whether utilities and some service charges are included in the rent (Freeman et al. 1997):

Freeman et al. (1997) who reviewed the international literature on rental affordability have identified five ways in which the rent-to-income-ratio has been used. As a tool for national analysis and policy; for setting rent levels in social housing; for selecting tenants for these units; for setting housing allowances; and for determining grant levels.

Freeman's review showed that the rent-to-income-ratio had been used as a tool for analysing the national and regional housing situation in all countries² by housing researchers and in some countries such as Great Britain, the United States and Australia by national housing bodies. They noted that in most countries the rent-to-income-ratio, in an analysis and policy sense, had been used primarily as a tool to monitor trends in housing costs.

In some countries, the rent-to-income-ratio is used to determine rents for properties in the social housing sector (Freeman et al. 1997). For instance the Australian State Housing Authorities, the sole landlords of public housing in that country, use the rent-to-income-ratio in rent setting. Rents are set to between 20% and 25% of household income and a notional 'rent rebate', administered by the State Housing Authority, represents the difference between the actual rent charged and the market rent. The ratio used varies by State and by household type (Freeman, 1997). We would note that the Freeman review was undertaken during the mid 1990s. At that time New Zealand operated a demand side subsidy, the Accommodation Supplement, which was applied across rental tenures, including central government social housing. Since the late 1990s, when Labour under various coalition arrangements has been in power, New Zealand has returned to using the rent-to-income-ratio as a tool for rent setting in the central government social housing sector.

Freeman's review showed that the rent-to-income-ratio is used in a number of countries by public housing landlords as one, often the most important, means of rationing and targeting the scarce resource of government subsidised housing towards lowest income households, and thus keeping higher income households out. According to Freeman (1997, p.5) "administrators have to draw the line somewhere and they do so subjectively, prescribing a certain rent-to-income-ratio."

² The review of rental affordability covered the following countries. The United States, the United Kingdom, Australia, New Zealand, Germany and Sweden

The rent-to-income-ratio is also used to determine eligibility for demand side housing allowances (Freeman et al. 1997). The trend amongst Organisation for Economic Co-operation and Development (OECD) countries since the end of the 1970s had been to shift the emphasis of housing assistance from supply-side 'bricks and mortar' subsidies to demand-side housing allowances (Freeman, 1997, p.6). Freeman noted that one of the key arguments behind this shift was the supposed greater effectiveness of targeting subsidy to those most in need through demand-side subsidies. Because many countries during the 1970s and into the 1980s had experienced a rapid escalation of the housing allowance bill there was a strong desire, according to Freeman, to constrain this growth.

The setting of levels of housing allowance is a key part of these subsidies, for the levels at which they are set determines the degree of targeting and the total subsidy bill (Freeman et al. 1997). A ratio is prescribed for a particular group of households and the allowance is set to bring households' ratios to below the prescribed ratio. The ratio is used both to evaluate the need for housing allowances and the outcome of rents plus allowances in terms of household expenditure (Freeman et al. 1997). In terms of the New Zealand situation at that time Freeman (1997) observed that it was one English-speaking country where the rent-to-income-ratio was not used at all, explicitly or implicitly, in setting eligibility levels for the Accommodation Supplement.

Freeman's (1997) review showed Great Britain to be the only country where the rent-to-income-ratio is used, and indirectly at that, in the setting of grant levels to social housing provision, namely the Housing Accommodation Grant (HAG) paid to housing associations.

Many authors have pointed out a number of shortcomings in using the rent-to-income-ratio as a measure of hardship, for assessing a household's capacity to pay rent or for targeting housing assistance (Thalmann, 2003). The Australian National Housing Strategy notes that it "recognises some of the inherent limitations of measuring affordability primarily in terms of housing costs and income and the difficulty of developing a fully 'objective' measure" (Australia National Housing Strategy, 1991).

A number of generic problems have been identified around the rent-to-income-ratio. Firstly, any prescribed ratio is subjective. That is to say rent-to-income-ratio 'rules of thumb' were developed without any scientific basis. Who sets standards for the consumption of other commodities as a percentage of income and when does a specified ratio level move beyond affordable to non affordable? (Hulchanski, 1994, Thalmann, 2003, Australia National Housing Strategy, 1991).

A second problem with the rent-to-income-ratio approach is that it does not accurately describe a household's ability to pay a particular housing costs – some households may not even be able to pay as much as 20% of income and still cover other costs. (Hulchanski, 1994, Bogdon et al. 1997). Related to this the rent-to-income-ratio takes no account of upfront costs that renters need to meet such as bond money and rent in advance (Australia National Housing Strategy, 1991).

A third problem with the rent-to-income-ratio is that it does not explicitly include the standard of housing quality being referred to, but rather relates to a particular set of minimum standards which are specified by regulation nor does it control for housing quality change over time³ (King, 1994 cited in Freeman et al. 1997 and Bogdon et al. 1997).

Also, the rent-to-income-ratio does not control for differences in preferences. High rent-to-income-ratios may conceal a strong taste for residential comfort. Low rent-to-income-ratios may conceal situations of deprivation (Bogdon et al. 1997 and Thalmann, 2003). In addition it does not account for differences in housing costs resulting from accessibility premiums or perceived higher neighbourhood quality (Bogdon et al. 1997 and Australia National Housing Strategy, 1991).

Another issues identified is that rent-to-income-ratios may increase in a situation where in fact more affordable housing becomes available and families no longer need to double up. Looked at another way, the measure cannot indicate the extent to which housing arrangements, such as sharing, which may be unsatisfactory, are resorted to in order to obtain affordable housing (Thalmann, 2003 and, Australia National Housing Strategy, 1991). Finally, for what is essentially a straightforward measure of the ratio between rent and income, there has been considerable debate about which formula to use to calculate the ratio in part because it is being used in different contexts. The choice of formula affects the way the ratio behaves, leading to different perceptions about affordability. There has also been considerable discussion about the need to take account of after tax disposable income rather than before tax or gross income (Freeman et al. 1997).

Despite all of the issues noted the rent-to-income-ratio has the advantage of being easy to calculate and easy to comprehend. In addition, data for computing this measure are readily available from a number of sources. Because the measure is a ratio, it can be easily compared across areas and over time. According to Freeman et al. (1997) the rent-to-income-ratio measure is the simplest and most common affordability measure, used in some way in each of the countries studied. This is largely due to the lack of an alternative that can be computed and understood with as much ease (Thalmann, 2003). Hulchanski (1994) concludes that the rent-to-income-ratio can be used in a valid and reliable way for the description of household expenditures and the analysis of trends, but it cannot be used in a scientific way for defining eligibility levels for housing allowances, tenant selection or rent setting. This is because the ratio does not accurately describe a household's ability to pay a particular housing cost.

³ To control for distortions that improvements in housing quality introduce into housing affordability measures, Lerman and Reeder (1987) developed a quality based measure of housing affordability problems based on the cost of housing that just meets the standard of adequacy (cited in Linneman and Megbolugbe 1992, p.372)

The residual income approach⁴ addresses one of the most significant criticisms of the rent-to-income affordability measure, that many of the lowest income households cannot afford to pay even 30%, 25% or 20% of their incomes for housing.

Residual income is calculated as net income, less the rent, less a minimum income amount laid out, generally in a country's welfare system (Freeman et al. 1997). The use of residual income measures in assessing housing affordability emerges mainly from the discussion of the social security system and household budget standards. General income policy hardly uses the rent-to-income-ratio. Rather, income assistance commonly relies on estimates of the income families need to pay for a basket of necessities, which includes suitable housing.

A variant of the residual income approach is the 'shelter-poverty' standard (Stone, 1993,1994). Stone advocates the "shelter poverty" standard, a sliding scale on which the maximum proportion of income available for housing varies with income and household size and type. The maximum amount available for housing is disposable income less the cost of achieving a minimal standard of non-housing consumption. If a household actually pays housing costs, which exceed what they are presumed to be able to afford, the household is classified as shelter poor. According to Stone, the rent-to-income-ratio understates the affordability problems of families with children and other larger households in comparison with one and two person households. The rent-to-income-ratio also overstates the affordability burdens of higher income households.

According to Freeman (1997) the residual income approach is looked at by a number of government and non-government housing institutions, but it is most discussed by academic commentators in relation to the discussion of merit goods. Freeman noted that amongst the countries considered, the residual income measure is rarely prescribed as a specific measure of housing affordability.

While the residual income approach addresses one of the most significant flaws of the rent-to-income-ratio - that not all households can afford to pay a defined percentage of income for housing, most of the other flaws of the rent-to-income-ratio also affect his measure. Philosophically, the residual income approach focuses more attention on income than on housing, since it shows the general inability of certain households to purchase the basic necessities of life (Bogdon et al. 1997).

Chaplin et al. (1994 cited in Freeman, 1997) proposed the combined approach of using both the rent-to-income-ratio and residual income measures, recognising that each measure provides a different perspective to the fundamental interplay between rents, incomes and housing allowances. Freeman and Whitehead (1991 cited in Freeman, 1997), however, noted that there are difficulties in interpreting the two measures together, for in places results of the two measures suggest conflicting conclusions. They go on to suggest that the two measures have complimentary relative strengths, such that residual income is better at comparing the affordability situation of two household types, whilst the rent-to-income-ratio is better able to measure changes in affordability of one household type geographically and through time.

There are a number of home owner affordability measures. The most commonly used is one similar to the rent-to-income-ratio and relates average house price to average household incomes⁵.

⁴ See Bourassa, S. (1996);

⁵ Alternatively, median house prices to median household income.

As with the rent-to-income-ratio a number of problems have been identified around the average house price to average income ratio. Firstly, monthly home owner costs may be a misleading measure because the true measure for home owners is the user cost, which includes expected appreciation which, if positive, may offset some high current costs (Bogdon et al. 1997 and Linneman and Megbolugbe 1992). Secondly, it ignores other components of ownership costs, including mortgage interest rates and deposit payments. Deposits can result in too high entry-level costs for some purchasers, whose incomes could sustain mortgage payments. While lower interest rates reduce the income necessary to purchase a home, they do not directly reduce the deposit requirements. (Bogdon et al. 1997 and Linneman and Megbolugbe 1992).

In addition a house price to income ratio fails to control for locational variations in median income and the mix of homes available for sale (Linneman and Megbolugbe 1992). Nor is it clear why the housing cost burden should be expected to be constant over time; given the life cycle patterns of housing demand where younger households buy more housing than their current income may bear, based on the expectation of future income growth (Linneman and Megbolugbe 1992). Finally a house price to income ratio does not control for changes in the quality of the housing stock over time or increased ratios that result from changing tastes for housing amenities (Linneman and Megbolugbe 1992 and, Gyourko and Tracy, 1999).

Two other types of home owner affordability measures are commonly used. One calculates accessibility by calculating the time taken, earning a certain level of income, to build a deposit, which will enable entry into the local housing market at accepted equity/loan ratios.

The second calculates affordability for existing home owners by a combined measure of interest rates, house prices and income. AMP's Affordability Index is of this type.

While recognising the significant subjective issues and associated difficulties around the measurement of housing affordability, various national and other agencies have set objective measures for measuring affordability.

The Canada Mortgage and Housing Corporation determines a household to be below its "affordability standard" if it spends more than 30 percent of its income on housing costs.

The Affordable Housing National Research Consortium in Australia notes that "affordability is a complex issue, yet it can perhaps best be dealt with using a benchmark know as 'housing stress.' They set a conservative benchmark of 'housing stress' specifically chosen in order not to overstate the problem which shows that households in the lower forty percent income bracket who pay more than 30% of their gross income on housing costs, whether renting or buying, are said to be in 'housing stress' (Affordable Housing National Research Consortium, 2001).

How to measure affordability is not specifically defined in the NZ Housing Strategy discussion document, however, it does state that most countries judge housing to be unaffordable if its cost exceeds 25% to 30% of the net income of low-income households (Housing NZ Corp, 2004).

It is of interest to note that the New Zealand Housing Strategy Affordability Report published in 2003 stated “a 25% outgoings to income (OTI) or similar ‘affordable’ threshold is not considered the most appropriate indicator of affordability. Residual income (i.e. household income less housing costs) adjusted for household composition, can link affordability to standard of living, and is a preferred indicator of housing affordability” (Working Party on Affordability Issues, 2003, p.68)

The Auckland Regional Affordable Housing Strategy states “for the purposes of this strategy housing is considered to be affordable if households can sustain suitable and adequate housing by spending a maximum of 30% of their gross income” Regional Growth Forum, (2003). It notes that this definition is consistent with those used by a number of other countries and that the strategy is focused mainly on households in the bottom four deciles (40%) of household income, as it is these households who are least likely to be able to afford to purchase suitable and adequate housing. The Auckland Regional Affordable Housing Strategy includes people who are paying rent as well as people servicing mortgages on their own homes Regional Growth Forum, (2003).

We find the affordability measure proposed by the Affordable Housing National Research Consortium (Australia) and the Auckland Regional Affordable Housing Strategy, i.e. spending no more than 30% of household income on housing by the bottom four deciles (40%), to be perhaps the most useful intuitive working affordability measure, chiefly because it focuses on those lower income households known to face the greatest affordability constraints. The issue, however, of sufficient residual income post housing costs remains.

Housing Affordability Trends in New Zealand

This section will consider, from a range of sources, trends in housing affordability in New Zealand over the last twenty years. Recognise that the review here is not exhaustive, but merely a synopsis of some of the key trends.

DTZ New Zealand Ltd in early 2004 prepared a report for the Centre of Housing Research Aotearoa New Zealand titled "Changes in the Structure of the New Zealand Housing Market" which among other things summarised trends in housing affordability in New Zealand since 1980 using a range of sources DTZ New Zealand, (2004). A number of key affordability trends were identified.

Mortgage costs for households with mortgages increased from 14.3% of household income in 1988 to 20.7% in 2001 while the proportion of income paid as rent by renter-households increased from 11.5% in 1988 to 16.8% in 2001. Looked at another way total housing costs for renters increased by 166% since 1987 and their incomes by only 59% while housing costs for all tenures (rented and owned combined) increased by 80% while incomes increased by 69% over the same period.

In 2001 households with mortgages had the highest total housing costs as a percentage of income at 24.2%. The figure for renters was 21.7% and for owner occupiers without a mortgage, 9.7%.

In terms of the AMP Affordability Index which combines the cost of finance, median disposable income and median house values at a regional level into an index, the trend shows that affordability as at late 2003, was in fact better than it had been in the late 1980s, early 1990s and during the mid 1990s and not greatly different to affordability during the early 1990s and late 1990s. Auckland has consistently had the worst regional affordability in the period since 1989 according to the AMP Affordability Index. Wellington closely followed the national average whereas the majority of the other main centre regions had slightly above average national affordability. With the exception of the Nelson/Tasman regions over the last couple of years, the smaller regions in New Zealand have all had consistently better affordability levels than the national average since 1989.

The Massey University Real Estate Analysis Unit in late 2003 published a report that focused on household's ability to save the minimum deposit needed in order to purchase a property (Massey University Real estate Analysis Units, December 2003). Information on the savings patterns of New Zealand households was accessed from the Household Economic Survey carried out in 2001 by Statistics New Zealand. The data showed that average weekly savings for all households, from the survey, was \$20.60 and for renter households \$10.20. It was assumed that the typical first home purchase would be at the median house price for the region in which the household was purchasing and that the required deposit would be 10%. On that set of assumptions the unit calculated, by territorial local authority, the number of years required to save a 10% deposit assuming that savings earned an average after tax interest rate of 4% and that this was accumulated (Table 1).

Table 1: Years Taken to Accumulate Minimum Deposit for House Purchase

As at late 2003	Monthly Savings		
	\$50	\$60	\$70
Whangarei	26.47	22.22	19.14
North Shore	57.56	48.70	42.21
Waitakere	39.81	33.53	28.97
Auckland	60.98	51.64	44.79
Manukau	48.18	40.66	35.18
Papakura	33.76	28.39	24.49
Hamilton	29.10	24.44	21.07
Tauranga	36.50	30.72	26.52
Rotorua	21.99	18.44	15.87
Gisborne	20.18	16.91	14.55
Hastings	27.42	23.02	19.84
Napier	31.06	26.10	22.51
New Plymouth	22.51	18.87	16.25
Wanganui	11.48	9.60	8.24
Palmerston North	25.36	21.28	18.33
Wellington Region	37.43	31.50	27.20
Nelson	38.13	32.10	27.72
Christchurch	29.7	24.95	21.51
Dunedin	22.86	19.17	16.50
Invercargill	14.82	12.40	10.66
New Zealand	33.91	28.51	24.60

Source: Massey University Real Estate Analysis Unit

According to McKinlay Douglas (2004) the assumption that the purchase price will be the median dwelling price may produce overly pessimistic outcomes as the typical first home purchaser is likely to buy a cheaper rather than a dearer property. On the other hand, assuming a 10% deposit may be unduly optimistic.

Statistics New Zealand in 2001 initiated a housing indicators project looking at a range of housing indicators, including affordability (Statistics New Zealand, 2004). Stage one has been completed and the data published. Stage two, which will address indicators that housing statistics users would like developed but for which Statistics New Zealand does not currently have data, is underway. With respect to affordability the two key indicator streams, which came out of stage one were housing cost indicators and rental costs indicators.

Statistics New Zealand (2004) notes that measuring the affordability of housing is complex and inexact. Household composition and choice are significant factors. As the composition of households varies, so does their ability and desire to spend large proportions of their income on housing. Households with dependent children, for instance, may be less able to spend more of their income on housing than households with no dependent children. Furthermore, households with higher incomes are able to exercise more choice over how much they spend on housing costs.

Table 2 presents data on the percentage of households by region with housing costs that are at least 25%, 30% or 40% of total net income.

Table 2: Household Housing Costs -% of Net Income – as a % of all Households 2000/2001

	Housing Costs as percentage of Net Income		
	25% or more	30% or more	40% or more
Regional Councils			
Northland	20.4%	13.5%	
Auckland	41.4%	32.2%	22.8%
Waikato	32.0%	23.2%	11.0%
Bay of Plenty	24.5%	19.6%	11.8%
Gisborne	21.4%	17.2%	13.7%
Hawkes's Bay	31.9%	26.3%	13.7%
Taranaki	30.2%	24.1%	15.1%
Manawatu-Wanganui	33.0%	23.7%	11.9%
Wellington	31.4%	24.0%	12.0%
Tasman	26.4%	22.5%	
Nelson	34.2%	18.4%	
Marlborough	33.5%		
West Coast	22.3%	17.2%	
Canterbury	32.4%	24.1%	14.4%
Otago	25.5%	21.6%	12.3%
Southland	12.8%	9.5%	
HES Regions			
Upper North Island	27.7%	21.0%	10.5%
Auckland	41.4%	32.2%	22.8%
Rest of North Island	31.7%	23.9%	12.4%
South Island	28.7%	21.4%	12.1%
New Zealand	32.7%	24.9%	14.8%

Source: Statistics New Zealand HES

In the Auckland Region, 22.8% of households spent forty percent or more of their net income on housing related costs. This was one of the highest proportions among all regions. Only 11.8% of households in the Bay of Plenty Region spent forty percent or more of their net income on housing costs, one of the lowest proportions for all regions. In the Canterbury Region 14.4% of households spent forty percent or more of their net income on housing, close to the national figure of 14.8%.

Table 3 presents data on the percentage of households by major region and tenure with housing costs that are at least 25%, 30% or 40% of total net income.

Table 3: Households Housing Costs-% of Net Income- as a % of all Households by Tenure –2000/2001

	Tenure of Household	
	Households Living in owner occupied dwellings	Households Paying rent for the dwelling they occupy
Regional Councils		
Auckland		
25% or more	32.0%	62.5%
30% or more	24.7%	49.5%
40% or more	16.2%	36.3%
Waikato		
25% or more	21.3%	44.7%
30% or more	13.4%	33.1%
40% or more	5.4%	19.2%
Wellington		
25% or more	19.3%	55.6%
30% or more	14.4%	40.1%
40% or more	9.2%	18.9%
Canterbury		
25% or more	20.5%	73.1%
30% or more	15.4%	49.7%
40% or more	10.5%	22.1%
New Zealand		
25% or more	23.4%	58.0%
30% or more	17.5%	45.2%
40% or more	10.8%	26.3%

Source: Statistics New Zealand HES

It is evident from Table 3 the difference in housing costs by tenure. Across the board households in rental tenure are paying a much larger proportion of their net income in housing costs than are those in owner occupier dwellings.

Table 4 presents data on the trend in rent-to-income-ratios by region over the period 1991 to 2001.

Table 4: Rent-to-Income-Ratio (%) for Households Paying Rent

	Year		
	1991	1996	2001
Regional Councils			
Northland	22.3%	28.2%	28.5%
Auckland	29.8%	30.6%	30.8%
Waikato	19.9%	24.3%	26.6%
Bay of Plenty	24.1%	28.1%	30.5%
Gisborne	20.3%	29.3%	25.8%
Hawkes's Bay	21.0%	29.4%	27.6%
Taranaki	19.8%	25.5%	26.0%
Manawatu-Wanganui	19.3%	25.5%	24.8%
Wellington	23.0%	26.5%	25.6%
Tasman	19.7%	24.4%	27.4%
Nelson	27.5%	30.1%	31.6%
Marlborough	20.6%	24.7%	24.5%
West Coast	19.4%	24.5%	24.2%
Canterbury	22.7%	27.3%	28.6%
Otago	21.7%	26.2%	26.0%
Southland	16.7%	21.1%	20.2%
Area Outside Region	8.5%	12.1%	14.3%
New Zealand	22.4%	28.4%	28.1%

Source: Statistics New Zealand Census

Across all regions and the country as a whole rent-to-income-ratios have increased since 1991. However, over the period 1996 to 2001 rent-to-income-ratios remained relatively stable which we attribute to the re-introduction of income related rents in the state housing sector.

Affordability across a range of measures has reduced for both main forms of tenure in New Zealand over the last fifteen years. Affordability has reduced most significantly for those in rental tenure. The decline in affordability across both owner occupier and rental tenure has been most marked in the Auckland Region.

It is worth noting that in terms of the AMP Affordability Index, which combines the cost of finance, median disposable income and median house values at a regional level into an index, the trend shows that affordability as at late 2003, was in fact better than it had been in the late 1980s, early 1990s and during the mid 1990s and not greatly different to affordability during the early 1990s and late 1990s. It does seem likely, though, that those aspiring to home ownership are facing increased difficulty in crossing the threshold into home ownership as the deposit gap has increased.

Overseas Strategies Adopted to Reduce Housing Stress

This section will review the literature around housing affordability policy interventions. Note, that the scope of the literature review here is very much a synopsis of key themes rather than a comprehensive treatment. There has been a range of options tried internationally to address housing affordability. Here, policy interventions will be considered in the context of demand side responses to housing affordability; supply side responses to housing affordability; and regulatory interventions.

Demand side interventions are intended to increase the ability of people to purchase or rent affordable housing. Supply-side interventions are designed to either directly or indirectly increase the supply and/or reduce the cost of housing. Regulatory interventions use local government mechanisms to foster the provision of low-income housing, usually as part of large-scale development.

Demand side assistance involves giving direct assistance to households (subsidising people) with a housing need. In terms of rental housing such assistance includes accommodation supplements, short-term assistance to households threatened with eviction and programmes to help low-income renters search for affordable housing in the private marketplace. They also include measures to assist households into owner occupation such as low interest or interest free loans and loan guarantees. Such forms of assistance should increase the ability of the recipients to purchase or rent housing affordably.

A reoccurring theme in the literature is that their effectiveness will depend, to some extent, on supply conditions. "In a relatively unconstrained market increased demand for housing would be met by an increase in supply of affordable housing. In a highly constrained market the increase in demand could simply drive prices up", Regional Growth Forum, (2003). In New Zealand during the 1990s it was widely claimed that the introduction of the Accommodation Supplement acted simply to raise rentals.

Demand-side programmes assume that housing markets, especially private rental markets, will generally provide suitable housing in response to the needs of householders, if householders have sufficient income to participate. Demand side programmes are seen as promoting consumer choice and self-reliance and are usually viewed as more efficient. They cost less (than supply side interventions) in the short term to provide affordable housing to low-income households; and they are more flexible, more portable and able to be delivered at a very short notice to households in need, Housing NZ Corp (2004).

Katz et al. (2003) writing about the US experience around demand side housing subsidies argues that the "overarching lesson that emerges from analysis of federal rental assistance policies is that achieving affordability is highly dependent upon the depth and duration of federal subsidies."

Katz et al's(2003) comments suggest that very often demand side housing subsidies are neither deep enough or long enough. That has been the experience in New Zealand with the Accommodation Supplement over the last fifteen years, although May 2004 budget measures will go some way to addressing that issue.

The quantum of evidence from most markets, however, would seem to be that demand side subsidies/interventions by themselves, especially when lacking depth and duration, are not sufficient to address housing market failures. This would seem to be especially the case when housing markets are going through a period of significant change in pricing levels.

Thus the Affordable Housing National Research Consortium (2001) based in Australia writes that while “conventional economic models of housing markets and rent assistance programs assume that urban housing rental markets are competitive and that rent levels are determined solely by the supply and demand for housing (our research) and information contained in each of the three reports show clearly that such conventional economic models cannot be applied to the current situation. The allocative efficiency of the private rental market in Australia must be seriously questioned.”

Homeownership demand side assistance programs seek to expand access to homeownership. Demand side programs include low-interest-loans; homeownership counselling and deposit assistance programs that help make home ownership more affordable and accessible. In addition, many of the most effective government home ownership initiatives have focused not on specific householders per se but on the availability and cost of mortgage financing.

Home ownership demand side assistance programmes remain popular in the US, UK and Australia although have all but disappeared from the now quite limited suite of New Zealand housing market interventions. In Australia, the First Home Owners Grant (FHOG), a deposit assistance programme set up to address affordability issues of first home buyers in that market has been heavily criticised on a number of fronts. Firstly, it would seem that the lion's share of grant assistance has been secured by reasonably well to do first home buyers. Secondly, the grants seem to have been very quickly capitalised into prices.

According to Katz et al (2003, p.36), over the past decade, far more research has focused on the performance of demand-side assistance than on the performance of the latest generation of supply side strategies. This is surprising in one sense especially given the view that “by addressing the supply side of the affordable housing equation, that mechanism targets the heart of the problem”, Affordable Housing National Research Consortium (2001). However, as indicated earlier the thrust of government interventions in recent years has been very much on the demand side, which logically accounts for the research focus given to that area.

Supply side assistance involves giving a variety of discounts to those people and businesses involved in the production side of the housing sector. Supply side assistance can also be referred to as the market adjustment approach. By adjusting the market directly where failure has occurred, it is implied that the supply of appropriate and affordable housing will be encouraged. Supply-side strategies, driven by governments desire to keep their fiscal commitment to a minimum, have focused on the ways and means of securing affordable supply via the non-government sector. Berry (2002a) writing about the Australian experience argues that given current effective political limits on direct public expenditure, the only way that the stock of affordable housing can be increased substantially to meet the growing need is by attracting more private investment into the low-cost end of the housing market.

Supply side rental programs focus on producing and maintaining housing units that are earmarked for occupancy by low and moderate income households. Examples in the US include the public housing program, the Low Income Housing Tax Credit program and local grants or low-interest loans for non-profit organisations that build or rehabilitate affordable rental housing. Katz et al (2003) note that while affordable housing production programs add to the supply, they do not always successfully provide decent-quality housing. Building low-cost rental housing is not enough; owners of such housing need to have both the capacity and resources to maintain and operate them effectively.

One of the main areas of research interest in Australia over recent years has been looking at the barriers which impede expanding investment in affordable housing, particularly by institutions. Some of the more significant barriers identified for institutions include, high risk, high management costs, low liquidity and absence of a reassuring track record, Affordable Housing National Research Consortium (2001).

Researchers' attention has increasingly been focused on avenues and structures that enable a partnership between the private and public sectors, Affordable Housing National Research Consortium (2001). It is hoped that such arrangements will enable governments to access the large amount of investment dollars available in superannuation funds and other institutions. "In so doing, they would acquire the means to address the matter of affordable housing at a much lower overall cost than would otherwise be the case, were they acting without private sector involvement", (Affordable Housing National Research Consortium, 2001, p. 28).

For residential rental investment to be attractive to private sector institutions a number of risk-return criteria need to be met. This means that some level of government assistance is required to bridge the gap between what institutions require and what the market can deliver. In Australia a good deal of research attention has been focused on the ways in which government support could be combined with alternative forms of private financing, with a clear focus on expanding the supply of affordable housing, Affordable Housing National Research Consortium (2001).

Internationally (e.g. UK, Europe and Canada) the 'community' sector or 'third sector' is a much more active player in the provision and management of social housing or other forms of affordable housing, Regional Growth Forum (2003). Badcock (2000 cited in Regional Growth Forum, 2003, p. 19) cites major potential benefits from greater community sector involvement in housing. The key lies in being able to leverage additional gains from combining public sector resources with community sector resources, which may include voluntary labour, skills and expertise and resources such as land and buildings. There is a range of possible models including housing associations, housing co-operatives, community land-trusts, co-housing, and housing trusts.

According to Katz et al (2003) writing in the context of the US, regulatory policies are often neglected as potential tools for an affordable housing policy because they do not directly subsidise either housing units or households. He comments that state and local regulations governing land use, residential development, construction standards, subdivision design and property maintenance play critical roles, even when they are not explicitly considered as part of an affordable housing strategy.

In general, local zoning, land use, and building regulations have not had as their primary purpose the promotion of affordable housing. In fact many regulatory regimes have been designed to exclude lower-cost housing and its residents, so as to maximise local property values (Choppin 1994; Pendall 2000 cited in Katz et al. 2003, p. 67). Historically, according to Katz et al (2003, p. 67) local land use and development regulations have tended to undermine the goals of affordable housing policy, whether intentionally (through large-lot zoning, large lot width and set-back requirements for subdivisions, minimum house size) or not. A review of the literature on the impact of regulatory regimes on the cost of housing by Hayward (2003, p.1-7) concluded, among other things, that growth controls lead to sharply higher housing prices, increases land prices and retards general economic growth.

Until at least the late 1980s the established orthodoxy was that the 'affordability' of housing was not a legitimate concern of the land use planning system. However, this view has changed across a range of jurisdictions over the last twenty years. It is seen as having worked successfully in Canada (especially in Vancouver) while in the US the use of inclusionary zoning initiatives has become well established, McKinlay Douglas (2004) and; Katz et al. (2003).

Currently in England, two planning-based strategies are used to secure affordable housing. Firstly, the negotiation of site specific quotas of affordable housing within sale housing schemes and secondly, the granting of 'rural exceptions,' usually to housing associations, on non-housing land in and around existing settlements, Gallent (1997). In the former case, the research has demonstrated that, despite a limited application of agreements to provide affordable housing, where they are employed, they appear to be effective, Carmichael et al. (1999). Crook et al (2002) noted, however, that the use of planning mechanisms to require developers to make provision for affordable housing works only when there is significant demand in the local housing market. Their research showed that the overwhelming proportion of affordable housing resulting from the planning obligations provisions in England has been in London and the South East, with little in the North, even where there is significant need for good quality affordable housing.

In the U.S. remedies to the exclusionary effects of traditional regulatory regimes have taken three basic forms, Katz et al. (2003). Firstly, reform of zoning requirements, subdivision regulations and building codes to eliminate exclusionary provisions. Secondly, the adoption of explicitly 'inclusionary' zoning and land development regulations and thirdly, state-wide efforts to rein in local exclusionary practices and promote regional strategies for meeting affordable housing needs.

With regard to zoning reform Katz et al's review of the literature suggests that getting rid of such exclusionary regulations works. In terms of inclusionary zoning, Katz et al cite several studies, which have assessed the effectiveness of various inclusionary zoning provisions, generally concluding that these programmes provide an effective and low-cost way for local governments to encourage affordable housing production. Katz et al note, however, that such programmes generally do not produce housing units that are affordable to the poorest households and relatively few produce rental housing units. Katz et al's review of the literature shows, however, that the biggest constraint on the effective use of regulatory tools is fragmentation of authority among individual cities and counties. Action at the regional level is often needed to establish and empower regional decision-making bodies and without this level of intervention the use of regulatory tools by individual localities can have only limited impacts, Katz et al. (2003).

Distinguished from growth control policies are policies designed to manage metropolitan growth. The distinction is important. Growth control policies are designed to limit the growth of the housing stock; growth management policies to accommodate projected development. Growth management strategies globally have faced very significant criticism. Katz et al's (2003) review of the US literature concluded, however, that even areas with strict growth management strategies can continue to produce affordable housing if controls are designed and implemented intelligently. The Auckland Regional Growth forum argued that growth strategies can be consistent with affordable housing objectives, providing an appropriate policy-mix is put in place to enable a supply of low-cost housing to be provided, BERL (1999). Nelson et al (2003) have developed the most comprehensive and complete review of the literature on the link between growth management and housing affordability.

To conclude there is substantial research evidence demonstrating that regulatory and planning instruments can have a substantial impact on affordable housing – either restricting the potential for its provision or actively encouraging its provision. Housing Costs and Their Impact on Affordability

Gaps in the market information, areas for further research and their policy implications

The objective of this section of the report is to pull together the information traversed in the body of the paper to identify the gaps in the research base and suggest areas for further research. We would emphasise that the research areas identified here are intended to complement the broad direction set out in the NZ Housing Strategy discussion document by providing a sound research based foundation that will ensure policy initiatives and interventions around housing affordability and cost are related to the realities of the market. At the same time it is hoped that the research areas proposed will assist government interventions around affordable housing to the extent that they can be better designed, implemented and measured.

At this point in time, we do not have an explicit, agreed measure of housing affordability. Consequently, we do not have a good understanding of the size of the issue, nor are we able to quantify the causes of the apparent decline in affordability. Before we can consider potential solutions, a good understanding of the quantum and causes of the problem is necessary. Specifically our scoping research has identified four key gaps in the research base.

To begin with there is a need to develop an understanding of what is meant by housing affordability and come up with some agreed measures and ways to analyse affordability in the New Zealand context. Unless this necessary methodological groundwork is laid it is likely to prove difficult to reach agreement on the exact dimension and geographic extent of the issue. In short, it is necessary for policy makers, researchers and others to be speaking the same language, or to be able at least to understand one another when they are talking about housing affordability.

Once the agreed definitions and measures have been developed these then should be tested at a local level and across different groups to determine the depth and breadth of the affordability issue across New Zealand. It is assumed that there is an affordability problem in New Zealand and that it is most pressing in certain geographic locations and for certain socio-economic groups occupying rental tenure. We believe there is a need to quantify, using the agreed definitions and measures, the current position so that the impact of future interventions can be determined.

Once the depth and breadth of housing affordability issues by area and for different groups within those areas have been established the causes of the local variations and the decline or improvement of affordability over time can be analysed. An understanding of the causes of the housing affordability problem at the local level is necessary to enable the development of potential solutions.

Finally, a comprehensive strategy for the development of likely options for overcoming affordability issues needs to be developed which would provide an appropriate amount of affordable housing to the right individuals and groups in the required locations. Affordability is a dynamic problem and consequently any strategies need to be flexible so they can be adjusted to take into account changes in market conditions.

Out of these gaps in the market knowledge we have identified three main areas or topic groupings for further research. We would emphasise that to be policy relevant any research programme must relate to the actions proposed by the NZ Housing Strategy discussion document to address the areas identified as the key foci of the strategy. That is to say, what does government (central and local) need to know to better design, implement and measure the results of its intervention to improve affordability?

We are proposing three main research strands or topic areas. The first strand focuses on affordability definition and measurement, the second on barriers to accessing affordable housing and the third on potential solutions. Each of these will be addressed in turn.

In terms of affordability definition and measurement research is needed which would develop, in the context of the New Zealand market, a number of measures of affordability (for renters, first home buyers and owner occupiers) capable of being applied at a local level. These measures would need to be fully traversed with key stakeholders to obtain their buy-in. This acknowledges that there is a range of uses (research, policy and delivery of accommodation support) such measures might be put to. Once agreed measures of affordability have been settled on it would then be possible to scope across the country the local variation in affordability. This should include focusing on the groups in society who are most exposed to unsustainable levels of housing costs and the implications for the individuals, households and communities affected. It would also at this point be important to obtain a good understanding of the trends in affordability, at the local level, for different groups over time. In our view the research emphasis here should be on the private rental sector given the importance of this tenure to the achievement of the government's wider housing policy objectives.

Turning to a consideration of the barriers to accessing affordable housing our research has pinpointed five main impediments or considerations worthy of investigation. They are regulatory barriers, governmental considerations, institutional barriers, land value barriers and other market factors. Regulatory barriers include among other things, the impact of the Resource Management Act on housing affordability. That is, the way in which regional and local councils implement the Resource Management Act and how that flows through into the availability of residential land, land values and housing costs.

The role of government acknowledges that in the past government policy settings, both general and housing specific, have played a significant role in furthering housing affordability in New Zealand. The issue that needs to be addressed here is how government policy settings have influenced housing affordability in the past and whether current policy settings and interventions are improving housing affordability or acting as an impediment to housing affordability. Institutional issues focuses on the identification of any structural factors with the economy that are limiting the supply of affordable housing in areas of greatest housing stress.

Our research indicates that the significant appreciation in land values over the last decade has clearly had major affordability implications and we are of the view that research into the determinants of land pricing is clearly warranted. Finally, there is a need for research which addresses the question as to whether the market is responding appropriately to the demand for affordable housing or are their issues that typically deter developers from providing affordable housing. This should also address issues associated with the impact that the increase in the flow of capital has had on the supply of affordable housing in both the private renter and first home buyer markets.

In terms of potential solutions research is needed that would investigate the options open to government (central and local) to address barriers to affordability. This should encompass a comprehensive review of techniques adopted both inside and outside New Zealand to address affordability. The outputs from this research should include the identification of a range of potential strategies, their relative strengths and weakness as well as recommendations, which take into account New Zealand's specific affordability issues. In addition, this research should address the sustainability of household tenures within New Zealand or affordability over time.

The three research areas identified above link both to the gaps that paper has identified and also to the broad direction identified in the NZ Housing Strategy discussion document. The first (definition and measurement) and the third (potential solutions) research strands link most closely to the directions in the NZ Housing Strategy discussion document. The second research strand (barriers to accessing affordable housing), however, is not clearly tied in with the proposed actions identified in the NZ Housing Strategy discussion document. It would seem to us that the NZ Housing Strategy discussion document assumes that the barriers to accessing affordable housing in New Zealand are well understood or a given. We are not of this view and believe that an understanding of the barriers to access to affordable housing is a necessary prerequisite before potential solutions can be considered.

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