



DRAFT



# Housing affordability inquiry

Draft report

December 2011



# Housing Affordability

Draft Report – December 2011

### **The New Zealand Productivity Commission**

The Commission – an independent Crown Entity – completes in-depth inquiry reports on topics selected by the Government, carries out productivity-related research, and promotes understanding of productivity issues. The Commission’s work is guided by the *New Zealand Productivity Commission Act 2010*.

Information on the Commission can be found on [www.productivity.govt.nz](http://www.productivity.govt.nz) or by calling +64 4 903 5150.

Disclaimer: Access to Household Economic Survey and Survey of Family, Income and Employment data used in this report was provided by Statistics New Zealand under conditions designed to give effect to the security and confidentiality provisions of the Statistics Act 1975. The results presented in this report are the work of the New Zealand Productivity Commission, not Statistics New Zealand.

# Terms of reference

The Government has asked the Productivity Commission to undertake an inquiry into housing affordability.

## **New Zealand Productivity Commission Inquiry into Housing Affordability**

Issued by the Minister of Finance, the Minister for the Environment, the Minister of Housing, the Minister for Building and Construction, and the Minister for Regulatory Reform (“the referring Ministers”).

Pursuant to sections 9 and 11 of the New Zealand Productivity Commission Act 2010, we hereby request that the New Zealand Productivity Commission (“the Commission”) undertake an inquiry into housing affordability.

### **Context**

Stability of the home environment is widely considered to be important for social cohesion and family stability. Real house prices in New Zealand are markedly higher than they were a decade ago. The rise in real house prices has been associated with general declines in housing affordability, as indicated by a number of different measures, and in the rate of home ownership. These declines have contributed to increased demand for rental accommodation and additional pressure on the social housing sector. The debt accumulation and wealth effects associated with the rise in house prices may have also exacerbated New Zealand’s last economic cycle. Interest rates and exchange rates were arguably higher than they otherwise would have been during the upturn and there has been greater contraction in demand during the recession. Debt accumulation may also be a factor in ongoing economic risks.

### **Scope**

Having regard to the context outlined above, the Commission is requested to undertake an inquiry to evaluate the factors influencing the affordability of housing (both rental and owner-occupied housing), and to examine potential opportunities to increase housing affordability. For the purposes of this evaluation the Commission should:

- Identify and analyse all components of the cost and price of housing.
- Identify mechanisms to improve the affordability of housing, with respect to both the demand and supply of housing and associated infrastructure.
- Identify any significant impediments to home ownership, and assess the feasibility and implications of reducing or removing such impediments.

Particular attention should be given, without limitation, to the following matters:

- a) factors influencing the supply of land and basic infrastructure for residential construction;
- b) factors influencing the cost of residential construction, including the effect of standards, specifications, approval and title requirements on the cost of new housing construction;
- c) the level and growth of productivity in the land development and residential construction industries, and the effect of government regulations on productivity in these industries;
- d) the efficiency of taxes, levies and charges imposed at all stages of the housing supply chain;
- e) the efficiency of the tax treatment of owner-occupied and rental housing;
- f) the influence of changing consumer housing preferences, willingness to pay, and financing costs on housing affordability; and

- g) the operation of the overall housing market, with specific reference to the availability of a range of public and private housing types, the demand for housing, and the efficiency of use of the existing residential housing stock.

### **Consultation Requirements**

In undertaking this review, the Commission should consult with key interest groups and affected parties.

### **Timeframe**

The Commission must publish a draft report and/or discussion paper(s) on the inquiry for public comment, followed by a final report, which must be submitted to each of the referring Ministers by 1 February 2012.

BILL ENGLISH, MINISTER OF FINANCE  
NICK SMITH, MINISTER FOR THE ENVIRONMENT  
PHIL HEATLEY, MINISTER OF HOUSING  
MAURICE WILLIAMSON, MINISTER FOR BUILDING AND CONSTRUCTION  
RODNEY HIDE, MINISTER FOR REGULATORY REFORM

30 MARCH 2011

# The draft report

The inquiry into housing affordability has proven to be a wide and challenging piece of work. Our inquiry process so far has involved extensive engagement with interested parties, including 73 engagement meetings and receipt of 60 submissions on our issues paper. We have also conducted a substantial amount of original research.

The draft report is intended to show our thinking for further input from interested parties. We are keen to hear from you over the remainder of the inquiry period – as part of ensuring we deliver a high-quality final report by 16 March. Find out how you can provide submissions or feedback to us over the page.

## Key inquiry dates

Issues paper submissions due:	31 August 2011
Release of draft report:	16 December 2011
Draft report submissions due:	10 February 2012
Final report to Government:	16 March 2012

## Inquiry contacts

For further information about the inquiry please contact:

**Administrative matters:** T: (04) 903 5140  
E: [inquiries@productivity.govt.nz](mailto:inquiries@productivity.govt.nz)

**Other matters:** Steven Bailey  
Inquiry Director  
T: (04) 903 5156 E: [steven.bailey@productivity.govt.nz](mailto:steven.bailey@productivity.govt.nz)

**Website** [www.productivity.govt.nz](http://www.productivity.govt.nz)

**Media enquiries:** Jenny Bridgen: T: (04) 903 5160; [jenny.bridgen@productivity.govt.nz](mailto:jenny.bridgen@productivity.govt.nz)

**Postal address for submissions:** Inquiry into Housing Affordability  
New Zealand Productivity Commission  
PO Box 8036  
The Terrace  
Wellington 6143

# Making a submission

The Commission wishes to benefit from the knowledge of people interested in housing affordability. Effective engagement will also help ensure that inquiries are well-informed and relevant.

## How to make a submission

Anyone can make a submission. It may be in written, electronic or audio format. A submission can range from a short letter on a single issue to a more substantial document covering a range of issues. Where possible, you should provide relevant facts, figures, data, examples and documentation to support your views. While every submission is welcome, multiple, identical submissions do not carry any more weight than the merits of an argument in a single submission. Submissions may incorporate material made available to other reviews or inquiries that are relevant to this inquiry.

The Commission seeks to have as much information as possible on the public record. Submissions will become publicly available documents once placed on the Commission's website. This will occur shortly after receipt of the submission, unless it is marked 'in confidence' or accompanied by a request to delay release for a short period of time. We can accept material 'in confidence' only under special circumstances. You should contact us before submitting such material, to discuss its nature and how the material should be handled or presented.

Submissions may be sent through our website [www.productivity.govt.nz](http://www.productivity.govt.nz), or by email or mail. Where possible, an electronic copy of submissions should be sent to [housinginquiry@productivity.govt.nz](mailto:housinginquiry@productivity.govt.nz) in Word or PDF. Submissions should include your name and contact details and the details of any organisation you represent. If the content of a submission is deemed inappropriate or defamatory, the Commission may choose not to accept it.

## What the Commission will do with submissions

Submissions will play an important role in shaping the recommendations made to the Government in the final report. Where relevant, information from submissions may be cited or used directly in inquiry reports. As noted above, the Commission will publish submissions (unless arrangements have been made with the Commission regarding any confidential content).

## Other ways to engage with the Commission

The Commission's engagement on the draft report will be a mix of the following activities:

- *receiving submissions from interested parties* – the Commission encourages you to make a submission either supporting our draft findings or telling us how and why they could be improved;
- *meetings the Commission requests* – from early January, the Commission will be seeking some further meetings with interested parties;
- *meetings requested by interested parties* – the Commission is open to meeting on request to hear and discuss the views of any interested party (and to present the findings of the draft report). If a number of parties from a city or region express interest in meeting, the Commission may run a discussion forum in those locations; and
- *'roundtables'* – the Commission may run its own 'roundtable' meetings for in-depth debate of the evidence and analysis of key issues in the report. It is not practical to invite all interested parties to those meetings. We will, however, ensure an even-handed coverage of different viewpoints.

While it may not be possible due to time constraints to meet with every interested party, the Commission will do its best – across the activities above – to meet the needs of each party in some way. Please also note that meetings do not constitute a submission, so all parties are encouraged to make their views known by way of a submission that can be made public.



# Contents

Terms of reference .....	iii
The draft report .....	v
Making a submission .....	vi
Overview .....	1
<b>1 The housing affordability inquiry .....</b>	<b>1</b>
1.1 <i>What has the Commission been asked to do?</i> .....	1
1.2 <i>Housing and wellbeing</i> .....	2
1.3 <i>The Commission's approach</i> .....	4
1.4 <i>Analysing housing markets</i> .....	6
1.5 <i>A holistic approach to housing affordability</i> .....	7
1.6 <i>Guide to this draft report</i> .....	7
<b>2 The New Zealand housing scene .....</b>	<b>9</b>
2.1 <i>The New Zealand house price cycle</i> .....	10
2.2 <i>Housing market drivers</i> .....	15
2.3 <i>The rise of the private rental market</i> .....	18
2.4 <i>Housing Investment</i> .....	23
2.5 <i>The quality of the housing stock</i> .....	27
2.6 <i>Ongoing challenges for the housing market</i> .....	29
<b>3 Macroeconomic factors are important .....</b>	<b>31</b>
3.1 <i>Introduction</i> .....	31
3.2 <i>A retrospective</i> .....	31
3.3 <i>Implications</i> .....	37
<b>4 Housing affordability: distribution and trends .....</b>	<b>39</b>
4.1 <i>Introduction</i> .....	39
4.2 <i>Why does housing affordability matter?</i> .....	39
4.3 <i>Affordability for renters</i> .....	45
<b>5 Population and demographic change .....</b>	<b>48</b>
5.1 <i>Introduction</i> .....	48
5.2 <i>Population growth</i> .....	48
5.3 <i>The impacts of demographic change on household formation</i> .....	51
5.4 <i>The aggregate impact of population growth and demographic change on underlying demand</i> .....	55
5.5 <i>Implications for tenure choice</i> .....	57
5.6 <i>Implications for house prices</i> .....	58
<b>6 The role of taxation .....</b>	<b>61</b>
6.1 <i>Introduction</i> .....	61
6.2 <i>How does the current tax system apply to housing?</i> .....	62
6.3 <i>Income tax influences on housing affordability</i> .....	66
6.4 <i>GST and territorial government rates – two good taxes?</i> .....	76
6.5 <i>Concluding observations</i> .....	80
<b>7 Urban planning and housing affordability .....</b>	<b>82</b>
7.1 <i>Introduction</i> .....	82
7.2 <i>The evolution of urban planning</i> .....	83
7.3 <i>Urban planning and affordability: what are the issues?</i> .....	87
7.4 <i>Commission's assessment</i> .....	95
7.5 <i>A way forward</i> .....	103
<b>8 Charging for infrastructure .....</b>	<b>108</b>
8.1 <i>Introduction</i> .....	108

8.2	<i>The nature and role of infrastructure</i> .....	109
8.3	<i>Charging for infrastructure: International experience</i> .....	111
8.4	<i>Infrastructure charges in New Zealand</i> .....	111
8.5	<i>Issues raised in the debate about infrastructure charges</i> .....	115
8.6	<i>Assessment</i> .....	119
8.7	<i>A way forward</i> .....	123
<b>9</b>	<b>Building regulations and affordability</b> .....	<b>128</b>
9.1	<i>Why have building regulation?</i> .....	129
9.2	<i>Key features of the regulatory framework</i> .....	130
9.3	<i>In what ways can building construction regulations increase the cost of housing?</i> .....	132
9.4	<i>Are housing standards set at the right level?</i> .....	133
9.5	<i>Is there scope to reduce costs associated with slow enforcement of the consent process?</i> ....	134
9.6	<i>Is there scope to improve the allocation of risk under the Building Act?</i> .....	134
9.7	<i>Is there scope to improve the impact of regulation on innovation?</i> .....	137
9.8	<i>Is there scope to reduce the diseconomies of many small BCAs?</i> .....	140
9.9	<i>Measuring the outcomes of regulation</i> .....	141
9.10	<i>Overall assessment</i> .....	141
<b>10</b>	<b>The performance of the building industry</b> .....	<b>143</b>
10.1	<i>Introduction</i> .....	144
10.2	<i>Are building costs increasing?</i> .....	145
10.3	<i>There is evidence of poor productivity</i> .....	153
10.4	<i>What are the barriers to improved productivity?</i> .....	155
<b>11</b>	<b>Where housing affordability bites</b> .....	<b>168</b>
11.1	<i>Introduction</i> .....	169
11.2	<i>Current government housing assistance</i> .....	169
11.3	<i>Community housing</i> .....	173
11.4	<i>The private rental market</i> .....	181
<b>12</b>	<b>Rural Māori housing</b> .....	<b>188</b>
12.1	<i>Underlying demand for housing in rural Māori communities</i> .....	188
12.2	<i>Current work to address the demand for housing in rural Māori communities</i> .....	190
12.3	<i>Financial challenges to sustainable housing on Māori land</i> .....	191
12.4	<i>Addressing the financial challenges to housing on Māori land</i> .....	192
12.5	<i>Alternative models for managing housing developments on rural Māori land</i> .....	193
12.6	<i>Aligning rural housing solutions with other social service provision</i> .....	196
	<b>Summary of questions</b> .....	<b>200</b>
	<b>Findings and recommendations</b> .....	<b>202</b>
	<b>Appendix A - Public consultation</b> .....	<b>207</b>
	<i>Submissions</i> .....	207
	<i>Engagement meetings</i> .....	208
	<b>Appendix B - Charging for infrastructure: International experience</b> .....	<b>210</b>
	<b>Appendix C - Housing initiatives</b> .....	<b>218</b>

## Tables

Table 2.1	Share of renting households by sector of landlord.....	21
Table 2.2	Proportion of individuals who have a major problem with their house or neighbourhood .....	28
Table 7.1	Typical plan change and planning consent timeframes .....	91
Table 8.1	Development contributions as a share of section prices .....	115
Table 9.1	Breakdown of 2011/12 building consent charges by selected territorial authorities .....	133
Table 10.1	Percentage change in key material costs, 1995–2010.....	148
Table 10.2	Building materials in New Zealand and Australia .....	149
Table 10.3	Cost to build a standard home .....	151

Table 10.4	Traditional versus integrated project delivery .....	159
Table 10.5	Highest qualifications held by individuals in construction industry occupations (2006).....	162
Table 10.6	Government investment in the residential building sector.....	166
Table 11.1	Current government expenditure on housing assistance.....	170
Table 11.2	Example of social service and housing provision .....	179
Table 11.3	Changes in the composition of the private rental market .....	182
Table 11.4	Proportion of individuals aged 65+ in low-income households (after paying for housing costs) by tenure .....	184
Table 12.1	Strengths and weaknesses of mutual insurance schemes .....	193
Table 12.2	Strengths and weaknesses for using the retirement village approach to licences to occupy on Māori land .....	195
Table 12.3	Strengths and weaknesses of using the unit titles approach to managing a housing development on Māori land .....	196
Table 12.4	Features of microfinance and their applicability to repair loans on Māori land .....	199

## Figures

Figure 1.1	Multiple determinants of housing affordability.....	5
Figure 2.1	House prices, real and nominal.....	10
Figure 2.2	The real house price boom in international comparison .....	11
Figure 2.3	Annual change in real house price by Territorial Authority .....	11
Figure 2.4	Convergence in real house prices over the 2000s boom .....	12
Figure 2.5	Distribution.....	13
Figure 2.6	House prices, household disposable income and borrowing capacity <sup>1</sup> .....	13
Figure 2.7	Price responsiveness of housing supply, selected countries <sup>1</sup> .....	16
Figure 2.8	Land prices as a share of house values.....	17
Figure 2.9	House price to rent ratio .....	19
Figure 2.10	Rental affordability and tenure choice, 1995-2009.....	19
Figure 2.11	Tenure choice in New Zealand .....	20
Figure 2.12	Growth in the rental market.....	22
Figure 2.13	Clustering of low-income renters, 1996-2006 .....	23
Figure 2.14	New housing investment, value distribution.....	24
Figure 2.15	House size in New Zealand .....	25
Figure 2.16	The age distribution of rental and owner-occupied dwellings .....	26
Figure 2.17	Dwelling type by number of bedrooms.....	26
Figure 2.18	The share of multi-unit dwellings in Auckland and Wellington .....	27
Figure 2.19	Share of rental and owner-occupied dwellings by capital value .....	29
Figure 3.1	The beginnings of a housing boom.....	33
Figure 3.2	A bank dominant financial system .....	34
Figure 3.3	Financial and non-financial assets (as a percentage of net disposable income 2009 or latest available year) .....	34
Figure 3.4	Housing equity withdrawal.....	36
Figure 4.1	House price ratio.....	40
Figure 4.2	Effective mortgage interest rate, real and nominal .....	41
Figure 4.3	Massey home affordability index .....	41
Figure 4.4	Housing affordability by income .....	43
Figure 4.5	Housing affordability by age.....	43
Figure 4.6	Affordability by ethnicity .....	44
Figure 4.7	Housing affordability median multiple ratings for New Zealand regions, 2010.....	44
Figure 4.8	Affordability by region .....	45
Figure 4.9	Rent price component of CPI and overall CPI .....	46
Figure 4.10	Median rent-to-household disposable income ratio .....	46
Figure 4.11	Median rent-to-household disposable income by disposable income quintile .....	47
Figure 5.1	Average annual population growth for OECD countries, 2000-2009 .....	49
Figure 5.2	Net migration and natural increase in New Zealand .....	49
Figure 5.3	Net migration by selected regions .....	50
Figure 5.4	Average annual internal migration.....	50
Figure 5.5	Population growth by region, 2001-2010 .....	51
Figure 5.6	Family structure in New Zealand.....	52

Figure 5.7 Household size and proportion of population 65+ in 2006 ..... 52

Figure 5.8 Auckland Region’s ethnic structure..... 53

Figure 5.9 Proportion of population living in households requiring at least one additional bedroom, by ethnic group..... 54

Figure 5.10 Household formation by region..... 55

Figure 5.11 Household formation projections by region..... 56

Figure 7.1 Growth in section and dwelling prices in selected regions 1992-2011 ..... 96

Figure 7.2 Sales and prices in the Auckland real estate market ..... 97

Figure 7.3 House Sales and Building in Auckland, 1996-2011 ..... 97

Figure 8.1 Revenue raised from development and financial contributions ..... 113

Figure 8.2 The application of development and financial contributions (2009/10)..... 113

Figure 8.3 The range of development contributions in New Zealand (43 councils) ..... 114

Figure 9.1 Key building blocks of the regulatory framework..... 131

Figure 10.1 Construction costs, building consents and inflation ..... 146

Figure 10.2 Cost components of a standard new house, 2002–2011 (in 2002 \$) ..... 147

Figure 10.3 Labour costs..... 151

Figure 10.4 New Zealand construction industry productivity growth compared to measured sector (1978=1000) ..... 154

Figure 10.5 Estimated size of builders in NZ and Australia and nature of dwellings built ..... 155

Figure 10.6 Firm births and deaths as a proportion of total employees in New Zealand industries..... 157

Figure 10.7 Productivity Partnership skills strategy for the construction sector ..... 163

Figure 11.1 Accommodation Supplement expenditure ..... 172

Figure 11.2 House price-to-rent ratio and long-term trends ..... 181

**KEY**



Findings



Recommendations



Questions

# Overview

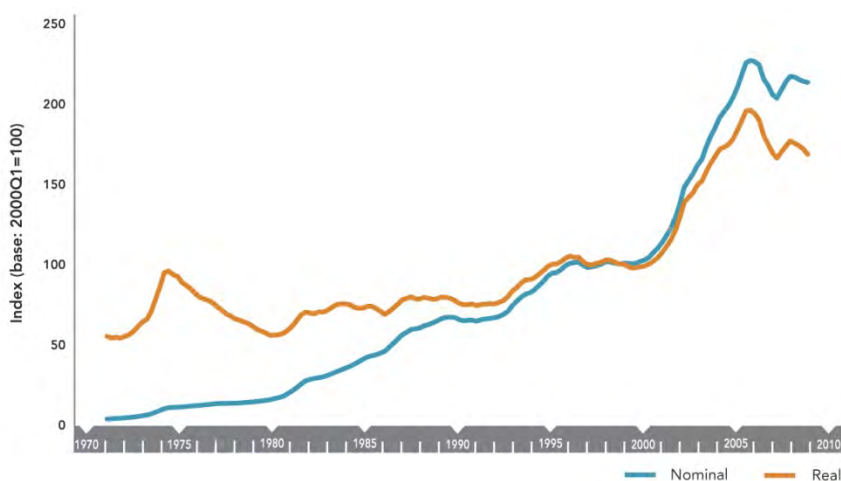
## Why is this inquiry important?

The Government has asked the Commission to evaluate the factors influencing the affordability of housing in New Zealand (both rental and owner-occupied) and to examine potential opportunities to increase affordability.

The context of this inquiry is a recognition that stability of the home environment is important for social cohesion and family stability. There is a concern that real (inflation-adjusted) house prices in New Zealand are markedly higher than they were a decade ago and that this has been associated with general declines in housing affordability and home ownership rates. These declines have contributed to increased demand for rental accommodation and additional pressure on the social housing sector.

The aim of this report is to suggest policy improvements that could enhance the performance of the housing market and the effectiveness with which it meets the needs of New Zealanders. This would be important at any time, but is particularly so in the aftermath of a house price boom between 2001 and 2007 that was unprecedented in recent history and one of the longest and steepest since data began (House prices, real and nominal). Real house prices almost doubled over this period, which equates to an average increase of 12% per year. The boom has started to unwind but house prices remain above long term levels.

### House prices, real and nominal



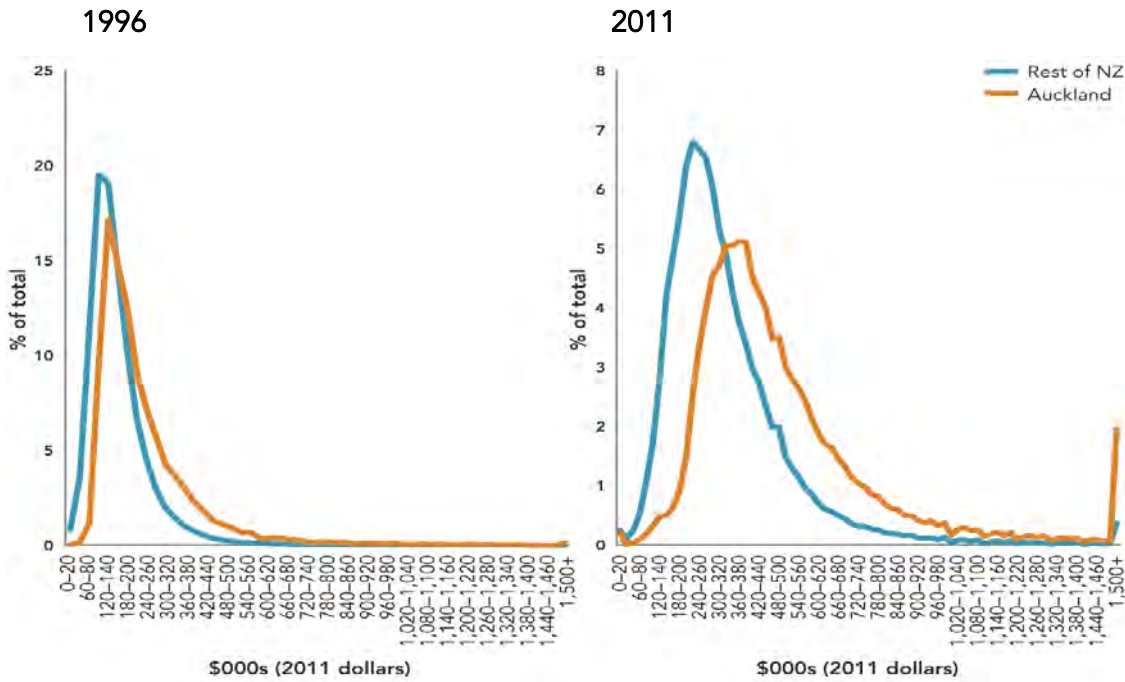
Source: Quotable Value and Statistics New Zealand

#### Notes:

1. Real house prices are measured as the ratio of actual house prices to the CPI.

The house price boom was more widely dispersed across the country than previous house price expansions. However, there were important exceptions to this trend – in the Queenstown Lakes District and metropolitan areas in Auckland and Wellington, houses were among the most expensive in the country in the early 2000s, but these regions still experienced strong real house price appreciations over the boom. In Auckland – home to around one third of New Zealand’s population and 31% and 41% of its housing stock by number and value respectively – this continued a well-established trend of strong real house price increases relative to the rest of the country. As a consequence, the distribution of house prices in Auckland is now markedly different to that in the rest of New Zealand, particularly at the lower end of the Auckland housing market. For example, between 1995 and 2011, the gap between lower quartile house prices in Auckland vis-à-vis the rest of the country increased by over 260% in real terms. The analogous figures for median and upper quartile house prices are 230% and 150% respectively (Distribution of house prices in Auckland and the rest of New Zealand).

Distribution of house prices in Auckland and the rest of New Zealand



Source: Productivity Commission calculation based on QV data

Notes:

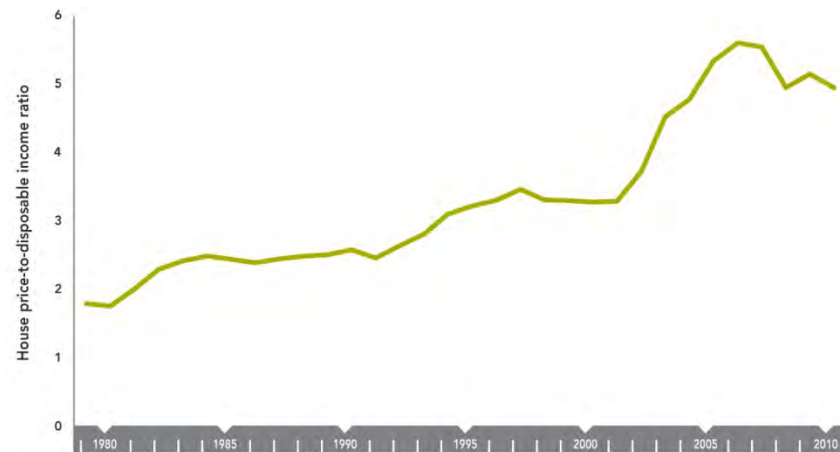
1. House price distributions are shown in constant (2011) dollars (deflated by the CPI).

**What has happened to housing affordability?**

**House buyers**

Ten years after the surge in house prices began, national measures of house price-to-disposable income ratios remain elevated and would require sharp falls in house prices to return to long-term averages (House price ratio). Affordability measures that include financing costs are currently closer to longer term averages, owing to interest rates that are low compared with earlier times (Massey home affordability index). This latter assessment, which properly includes financing costs, is often over-looked.

**House price ratio**



Source: Productivity Commission calculations using Reserve Bank of New Zealand data.

## Massey home affordability index



Source: Massey University Real Estate Analysis Unit.

### Notes:

1. A low index indicates improved affordability.

These aggregate measures do not necessarily indicate what is happening to affordability for different types of households. Disaggregated measures indicate that:

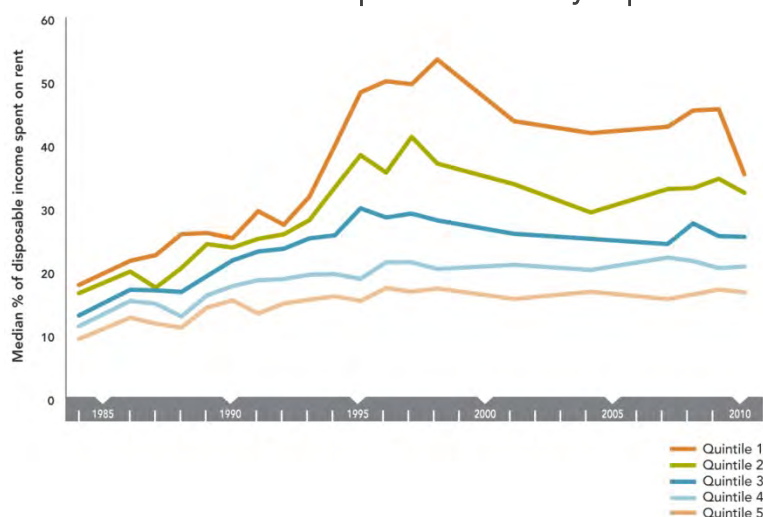
- Affordability pressures are particularly evident in Auckland, reflecting that city's higher house prices.
- Housing affordability is lowest among those who are younger, single, have lower income and wealth or belong to an ethnic group other than New Zealand European.
- During the last house price boom, housing affordability became a constraint for some middle-income groups, whereas it had previously mainly been an issue for those on lower incomes. It is not yet clear if this is a cyclical phenomenon or a structural trend.

## Renters

During the house price boom, rents in aggregate increased at around the same rate as generalised inflation. Even across the territorial authorities, rents grew in a relatively tight range of 2.3% per year (in Dunedin City) to 8.2% per year (in Buller District). In all cases, rent increases were significantly less than real house price inflation and the ratio of house prices to rents increased markedly, a departure from the long term broadly stable relationship.

This apparently benign aggregate situation disguises a more difficult position for renters on lower incomes. In particular, people in the lowest two income quintiles spend a much higher proportion of their income on rent than people on higher incomes (Median rent-to-household disposable income by disposable income quintile). Even though the situation appears to have improved since the late 1990s, those in the two lower income quintiles still spend, on average, more than 30% of their disposable income on rent, after allowing for government assistance.

### Median rent-to-household disposable income by disposable income quintile



Source: Productivity Commission and Treasury calculations using Statistics New Zealand Household Economic Survey (HES) data.

#### Notes:

1. HES was not conducted in 1999, 2000, 2002, 2003, 2005 and 2006. Data for these years was interpolated.
2. Income quintiles are based on the entire HES sample.
3. There is some uncertainty about the reliability of the figures for 2010 for quintile 1.

When house prices increase, people who have to spend a large proportion of their income on rents will find it hard to save for a deposit for a house. Between 2001 and 2006, as rising house prices pushed the affordability constraint further up the income distribution, the number of 'intermediate renters' - people who cannot afford to buy a dwelling at the lower quartile price, assuming standard bank lending criteria - increased by over 150% to 187,400 households or 58% of all private renters. Driven in part by declining interest rates, the share of intermediate renters is estimated to have declined since 2006. One in three renters - and a large proportion of the intermediate renters - lives in Auckland.

### What are the key features of the housing landscape?

Many features of the housing landscape influence housing affordability, which implies that opportunities for improving housing outcomes are likely to be found through small contributions in many places, rather than in any single large 'solution'. As a backdrop to the Commission's suggestions for improving housing affordability, the report outlines key features of the landscape that influence the demand for housing, the supply of housing and the institutional framework within which it operates.

### Housing is a house/land package

Housing is of course a house/land package, as land has to be developed and serviced with infrastructure before it is usable for housing. This inquiry therefore examines the determinants of the cost of land, of the infrastructure needed to service that land, of building materials, and of the costs of assembling those materials to build the house.

Section prices have grown more quickly than house prices over the last 20 years, indicating that appreciating land prices have been a key driver of house price inflation in New Zealand. This suggests a shortage of residential land in places where people want to live. Land price pressures have been particularly acute in Auckland, where section prices now account for around 60% of the cost of a new dwelling, compared with 40% in the rest of New Zealand.

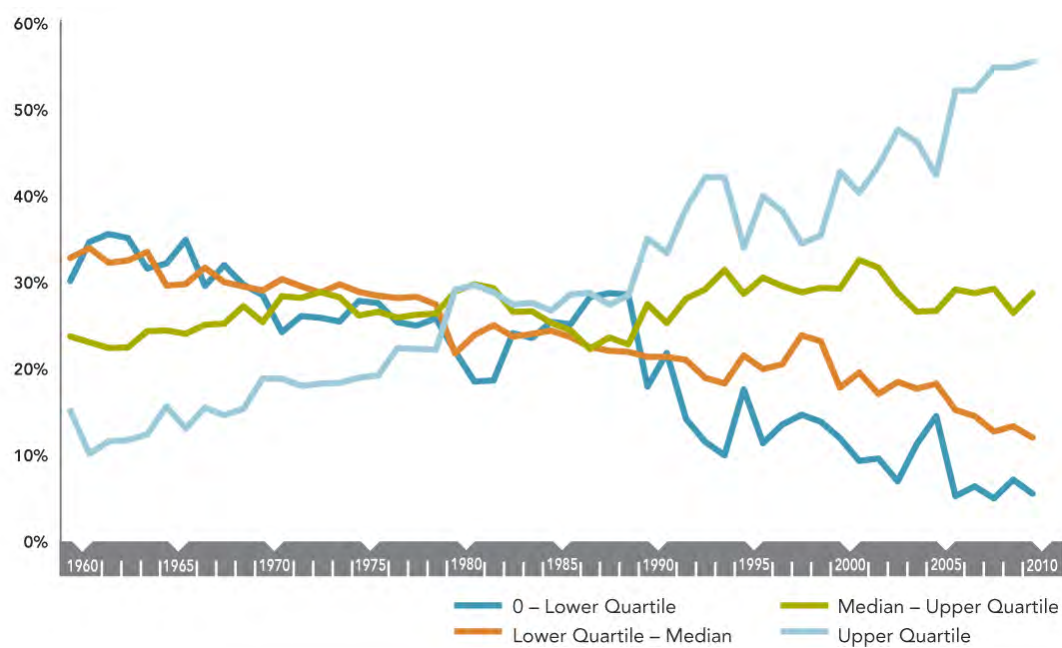
Although much of New Zealand's land area is unsuitable for residential development, the country's low population density is such that the potential supply of raw land is relatively abundant. While pressure on land prices in the biggest and fastest growing centres is expected, the movements in recent years seem excessive. This implies that policy and planning practices may be constraining the supply of residential land. For example, strong land price pressures in Auckland raise questions about the impact of policies aimed at increasing density - such as the metropolitan urban limit and other planning restrictions - on housing



affordability. A major challenge ahead is to improve land release and planning approval processes so that affordability considerations are integrated fully into spatial planning.

A distinctive feature of residential investment in New Zealand, which may be linked to rising land prices, is that new supply has tended to come in the form of large and relatively expensive houses or, to a lesser extent, apartments that are targeted at the top end of the market (New housing investment, value distribution). As such, the majority of new dwellings are currently not targeted at the affordable end of the market, adding to the difficulties faced by intermediate renters seeking to buy a home.

### New housing investment, value distribution



Source: Productivity Commission calculation using QV data

#### Notes:

1. For each year, the data show the share of new houses that are valued within each quartile of the value distribution for the existing housing stock.

## Underlying demand has been strong and is projected to continue increasing

Responsive land release and planning processes are likely to be particularly important given projections that underlying demand for housing will be strong, driven by household formation, which in turn depends on population growth and factors that determine household size. New Zealand's natural population growth has been strong, while migration flows have been highly variable and often focused on Auckland. Population growth has been unequally distributed across the country, largely as a result of internal migration patterns and the regional preferences of international migrants.

Demographic changes – such as population ageing, cultural and ethnic diversification and a radical transformation in family structures – have also been a feature of recent years. Changes in New Zealand's ethnic structure have increased average household size while the ageing population structure has tended to reduce it. The net effect has been an overall fall in average household size and an associated increase in household formation.

Looking to the future, net household formation in New Zealand is expected to continue to increase as the population continues to grow and households become yet smaller. While the extent to which this underlying demand for housing becomes effective depends on whether households have the capacity to pay for housing, demographic projections suggest a need for home construction volumes to increase.

## The housing market is segmented

Housing growth will not, however, be uniform across the country. There are stark regional differences between housing markets. Statistics New Zealand's projections suggest that Auckland will have the largest

increase, accounting for 60 % of New Zealand's population growth and for almost half the number of new households, followed by Wellington and Canterbury. Auckland is also expected to have the highest growth rate in household formation.

One consequence of this segmentation is that adjustments to changing housing needs and preferences will create market and price pressures that are likely to differ across New Zealand. While a complex web of demographic influences are at work in New Zealand, the outcome overall is that household formation is concentrated in and near Auckland and is likely to remain so for the next few decades. For that reason, the challenge of providing adequate housing is largely an Auckland one. A small number of regional centres will also face challenges, albeit to a lesser degree.

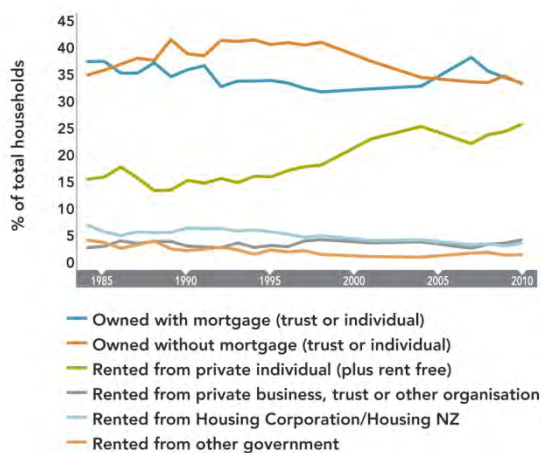
## The rental market is important

The stability of rents while house prices were rising over the 2000s boom allowed the rental market to act as a 'safety valve' in the face of rising house prices. As house prices increased rapidly, the rental market expanded to accommodate an increasing number of households that favoured renting over home ownership given increasing (relative) affordability in the rental market.

This large swing in tenure choice exacerbated the growth of the rental sector and decline in the extent of home ownership that had been underway for some time (Tenure choice in New Zealand). Home ownership peaked in the late 1980s/early 1990s, when around 75% of private dwellings were owned by their occupants. Since then, ownership levels have dropped to around 65% – which is about average for the group of OECD countries for which data is available. Currently, around 408 000 households are estimated to live in private residential rental accommodation. The decrease in home ownership since the end of the 1990s has been particularly marked in Auckland, where around 40% of households now rent.

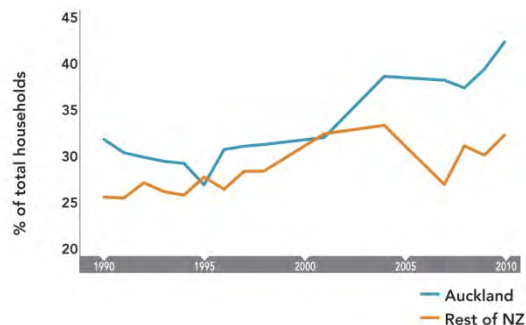
### Tenure choice in New Zealand

#### Tenure choice<sup>1</sup>



Source: HES, OECD, NZ Census

#### Regional profile of tenure type



## The owner occupier and rental markets have been performing differently

Most investors in New Zealand's rental market are relatively small scale. Landlords have been prepared to accept low yields on their rental properties, in part because of expected capital gains in housing and lack of confidence in other investment markets. Although estimates vary, the net cash yield on rental properties over the 2000s house price boom is estimated to be well below 4%. In contrast, capital gains have been relatively strong until recently and New Zealand homeowners have, on average over the 2000s, enjoyed superior returns compared to investing in the share market.

However, since the end of the 2000s boom, capital gains on rental properties have diminished significantly. Although difficult to judge, demand pressure may already be working to increase rents in the bigger cities, with recent data indicating that rental households are spending an increasing share of disposable income on rent.

Outside of student accommodation and retirement villages, large-scale landlords have a very limited presence in the New Zealand market. A low cash yield is likely to be one important reason why institutions have been reluctant to enter the rental property market. In effect, they have been crowded out by small scale private investors. The large scale of investment required to assemble a suitably diverse portfolio of rental properties in different locations with different demographic exposures is also often cited as a barrier to institutional investment in the sector. Challenges around capturing any construction scale economies in the sector may also be inhibiting large-scale involvements. Reflecting these barriers, the share of people living in rental properties owned by private businesses, trusts or other organisations has remained low at under 5%, indicative of a very low level of institutional involvement in the sector.

Because of the burgeoning group of small-scale investors in the rental market, Housing New Zealand Corporation (HNZC) and other local and central government agencies have accounted for a declining share of the market. HNZC currently plans to upgrade or divest 27 000 of the 69 000 dwellings it currently owns. HNZC has introduced reviewable tenancies for its new tenants. This is to help HNZC focus more closely on those in greatest need.

Shifting housing and other services from HNZC and other central government agencies to a range of community and related non-government providers has been suggested. While commonly and successfully done in a number of countries, 'third sector' provision of not-for-profit or not-for-dividend community-based housing is underdeveloped in New Zealand. Instead, policy settings have focussed on demand side assistance in the form of the Accommodation Supplement to increase the affordability of private rental accommodation, together with provision of state housing.

There is a challenging transition ahead that will potentially have significant impacts on the behaviour and performance of the housing sector in terms of delivery of fit-for-purpose housing for low income groups.

## **The residential building industry is fragmented with low productivity growth**

In a typical year, the residential building industry builds about 24,000 new homes and renovates about 32,000 homes. The industry is essentially a fragmented 'cottage industry' dominated by very small independent builders constructing bespoke homes. Sole traders (with no employees) are the most common firm size and businesses employing more than 20 employees constitute only 9% of total sector employment. Most builders construct one house at a time: in the year to May 2010, 4,604 firms built just one house during the year. In contrast, only thirty firms built more than thirty homes, while just five firms built more than 100 houses. As noted earlier, most new homes are being built for the upper end of the market.

Productivity growth is below other industries and submissions also pointed to problems such as: projects exceeding both budget and agreed timeframes; non-compliant or defective work; and reliance on lower quality materials which have a shorter life-span and require higher levels of maintenance.

## **The building materials industry is concentrated but still small scale**

Manufacture and distribution of building materials is relatively concentrated in New Zealand, which has prompted claims that the market suffers from a lack of competition. The firms concerned nevertheless appear unable to reach the scale necessary to match international product prices.

The small size of New Zealand's market, the corresponding small scale of New Zealand material manufacturers, and high domestic transport costs mean that materials are relatively expensive in New Zealand. Building costs for a standard home (including materials, labour, sub-contractor and other administrative costs) have increased by 30% in real terms in the nine years to 2011, with large increases recorded over the 2000s house price boom. The cost of residential construction in New Zealand is significantly higher than in Australia, with negative implications for housing affordability. For example, putting the land cost aside, the cost of building a new house in Auckland is around 25% more expensive than building a house of comparable size and specification in Melbourne.

## Councils perform key roles in the housing market

Councils have a major influence on all stages of house construction, as they are responsible for urban planning, including the release of land for development and zoning decisions; providing or arranging for the provision of infrastructure to land that is to be developed; for issuing building consents that are required before buildings are demolished, removed, constructed or altered; and for ensuring compliance with the Building Code.

The Commission's analysis indicates that the construction and land development sectors are more responsive to changes in housing demand in some parts of the country compared to others. There is also some evidence that, in areas of the country where housing supply is more responsive, an increase in housing demand results in relatively more houses and smaller increases in real house prices, with beneficial implications for housing affordability. Although difficult to show conclusively, differences in supply responsiveness at the territorial authority level may, in part, reflect the efficiency with which local councils implement and enforce regulations governing the land development and building sectors.

## Where has the Commission found opportunities to improve affordability?

The Commission has reviewed these features of the housing landscape in order to identify opportunities to improve the housing sector's capacity to meet consumers' preferences for housing that is safe and comfortable, while also affordable. While housing is largely a private market, the way in which the market operates is heavily influenced by its regulatory and institutional framework. Hence the Commission has focused on ways to improve this framework. While many of the Commission's proposals apply nationally, there is a particular focus on Auckland, given that the challenge of providing adequate housing is largely one for Auckland, although a small number of regional centres will also struggle. The Commission has also concentrated on ways to increase affordability for those on lower incomes, where the biggest social issues are found.

## Planning

Urban planning today requires consideration of a wide range of objectives, including environmental management and economic development goals. Planning practices have not sufficiently adapted to be able to adequately manage and balance these multiple objectives.

The prevailing approach to urban planning in New Zealand has a negative influence on housing affordability in our faster growing cities. The widespread planning preference for increasing residential density, and limiting greenfield development to achieve this, places upward pressure on house prices across the board. Constraints on the release of new residential land create scarcity, limit housing choice, and are increasing prices across the market. These impacts may be disproportionately felt by particular sub-markets. Prices are also likely to be reflecting the significant transaction and compliance costs associated with housing development. These costs include hefty impacts associated with delays encountered in releasing land and through the consenting process.

An immediate release of land for residential development will ease supply constraints and reduce the pressure on prices. This should include a combination of significant tracts of both greenfield and brownfield land catering to a variety of sub-markets, with an immediate focus on Auckland. Any such release should be contingent on meeting requisite geophysical and environmental standards, favour land that can be readily connected to existing urban areas and amenities, and provide for a variety of housing markets. The aim would be to identify, assemble, and develop substantial parcels of land for housing and associated uses of such a scale that it leads to a rapid easing of current supply constraints and consequently a reduction in price pressures.

The long delays associated with bringing both brownfield and greenfield land to the market suggest that a fifteen or even twenty-year pipeline written into plans is likely to be inadequate in practice, particularly if subject to short-term constraints through plan-based staging of land release. Sufficient competition in the supply of construction-ready sections is required to exert downward pressure on prices. Expensive sections encourage a concentration on construction of high cost houses.

The effect of adopting these policies will be to substantially reduce the opportunity for land banking by individual land owners and developers. While it may take some time to implement, commitment to a less constrained planning environment could have an early positive impact on housing in Auckland.

More generally, the Commission recommends that territorial authorities:

- take a more active approach to the identification, consenting, release, and development of land for housing in the inner city, suburbs, and city edge, both with respect to volumes of consented land and the time taken to achieve consents;
- adopt a strategy that allows for both intensification within existing urban boundaries and orderly expansion beyond them; and
- develop strategies that promote adequate competition with respect to the sale of construction-ready sections.

In New Zealand, the task of planning is challenged by the complex array of planning-related legislation and the diverse nature of institutional responsibilities for land use and infrastructure planning. In the longer term, a more fundamental review of the related legislative frameworks may also be required, with a view to considering the long-term rationalisation of the local planning and policy environment.

## Infrastructure charges

There are two forms of infrastructure charge against new developments in New Zealand: financial and development contributions. The former focuses on the environmental effects of particular developments, the latter are intended to compensate councils for capital expenditure associated with development on such facilities as reserves, networks and community infrastructure.

These charges are applied widely across New Zealand and collected \$267m in 2008 (June year), amounting to 4.5% of total local government income (equivalent to 7.5% of rates income). Water supply and waste water services are funded through development contributions by more councils than other types of infrastructure, and tend to attract the highest charges.

The level of charges varies considerably between councils and between types of infrastructure, but can be significant. While some councils do not apply these charges, in other cases they can exceed \$40,000 per developed section. Overall, the increase in development charges is not enough to explain the surge in house prices in the early 2000s (for example, one survey of 10 regions suggested that development contributions made up between about 1% and 10% of median section prices, whereas prices doubled during the boom, as noted earlier), but they affect affordability and oblige households to take on larger mortgages.

Charging for infrastructure, if implemented well, encourages efficient choices in the development of housing in ways and places of greatest value. It requires considerable skill and information, however, to design and implement charges that accurately reflect costs. The Commission has been made aware of concerns about the way in which these charges are applied in New Zealand and is suggesting some ideas for addressing them.

The Commission considers that the Government should encourage development of a set of best practice development contribution guidelines that would help councils to improve the clarity of their decision making with respect to these charges. These guidelines would cover when development contributions should be used, how they should be calculated, and how costs should be recovered. If necessary, the principles in such guidelines might be incorporated into Schedule 13 of the Local Government Act.

A range of measures would both help councils to implement the Guide and strengthen their incentives to do so. These include training about how to implement the Guidelines; monitoring councils' performance in implementing the Guidelines, combined with public reporting of the outcomes; and external auditing of councils' compliance with the Guidelines .

The Government could also consider further strengthening the incentives for good practice by making decisions about development contributions contestable through changes to the Local Government Act. These changes would enable a merit-based test that would cover matters such as whether the charges are based on the actual costs incurred as a result of development, and whether the revenue generated is directed at the capital expenditure incurred.

These proposals should reduce the burden of upfront charging for infrastructure on the cost of new residential development, and improve the quality of decision-making around infrastructure funding. They are, however, a small part of the governance framework within which councils operate, and would not fully address issues that have been raised around how councils arrive at the overall level, composition and timing of infrastructure that they seek to fund through infrastructure charges. Effective governance of infrastructure assets is critical. Analysis of these broader issues would include matters such as:

- the appropriate role for councils in planning and providing infrastructure such as the three waters (which in some jurisdictions are not provided by councils);
- the appropriate corporate form for the entities that provide infrastructure when this remains within councils; and
- reporting and accountability arrangements.

## Building regulation

Regulations relating to building construction can affect the cost of building or renovating a house in six main ways.

1. Imposing standards that buildings must meet with respect, for example, to durability and safety, which exceed levels that consumers would otherwise choose.
2. The additional costs in administering the regulatory framework, some of which are passed on to homebuyers. Inconsistent or slow enforcement of regulatory requirements can delay project completion or otherwise increase project costs.
3. Inconsistent or slow enforcement of regulatory requirements can delay project completion or otherwise increase project costs.
4. Regulation can affect the incentives to innovate with new materials or processes.
5. Regulation can influence how risks are shared between different parties – home owners, architects and engineers, builders and subcontractors, material suppliers and building consent authorities.
6. The structure of the building consenting and inspection service can influence costs. Small building consent authorities (BCAs) may suffer from diseconomies of scale or be unable to take advantage of efficiency-enhancing technology, adding to the costs of administering building regulations.

There are incentives for BCAs to be risk averse, and this can add to building costs. The Government intends to change the industry's regulatory arrangements, in part to alter the allocation of risks in the building sector. The Commission endorses the direction of these changes. Given the inherent difficulties in predicting the effects of these reforms, the Department of Building and Housing should report on its evaluation of the reforms five years after introduction.

The Commission has suggestions for additional reforms.

- To reduce delay costs with issuing building consents, Building Consent Authorities (BCAs) should report on the number of occasions that they use the 'stop the clock' provision during the assessment of consents, their reasons for doing so and the total time taken between receiving applications and granting consents. External auditing would strengthen incentives for good performance.

- To reduce the costs faced by builders seeking approval for an innovation as an 'alternative solution', the Department of Building and Housing should provide more specific guidance for BCAs about what is required for an alternative solution to comply with the Building Code.
- Achieving approval for an alternative solution is further complicated by the site specific requirements of the Building Code. This has contributed to the low uptake of the "Multi-proof Building Consent" — a scheme introduced in 2010 to produce time and cost savings for volume builders by removing the need for the same or similar building designs to be repeatedly assessed for compliance by individual BCAs. The Department of Building and Housing 2012 review of this process should identify the barriers to its uptake, and suggest ways to overcome these barriers.
- Increased effort on data collection about the quality of the housing stock and consumers' experience of the building industry would generate information that would inform policy making and assist assessment of the performance of the industry and of the regulatory framework. Statistics New Zealand is the most obvious agency to collect this information, and is well placed to compare the costs and benefits of improving the data in this area with other priorities.

The Commission is seeking further information in two areas:

- Rapid and effective feedback mechanisms to enable emerging deficiencies in building standards to be identified, diagnosed and remedied promptly.
- Opportunities to drive greater national consistency and efficiency in the building regulatory system through consolidation of building consent functions or from a contestable market for building consenting and inspection services, either publicly or privately provided.

## Taxation

In New Zealand, as in many countries, there is a long-standing perception that housing is 'tax-favoured'. The Commission's general sense, however, is that housing is not as tax favoured as appears widely to have been considered to be the case and that tax distortions per se were not a significant driver of the surge in house prices.

There is a tilt in favour of owner-occupied housing, but only to the extent that owner-occupied houses are financed by owner-equity. Even there, property taxes (rates) levied by territorial government, and GST, act to level up the playing field. Also, to the extent that housing – owner-occupied as well as rental housing – is financed by debt, that debt is taxed quite heavily. This arises since tax is applied to the full amount of nominal, not just real, interest. On the other hand, capital gains on housing are generally outside the tax net. Clearly, those gains were substantial during the price boom. However, there are questions about how 'real', and/or permanent, those gains really are, and thus questions about the nature and extent of any tilting of the tax system in favour of housing that stems from their exclusion from tax assessable income.

In the case of rental housing, the high rate of house price inflation and leveraging up of rental investments during the 2000s created opportunities for rental investors to achieve positive economic returns, including capital gains, whilst reporting tax losses. However, investors appear to have traded away some portion of those gains by accepting lower rents. It is possible that over the longer term the capital gains and 'tax breaks' may come in below what was being anticipated (particularly now that depreciation deductions have been eliminated). If that proves to be the case, the economics of the rental market could look different in the decade ahead, with less investment and higher rents than in the last decade.

Against this backdrop, the Commission does not see a pressing need for changes to the taxation of housing. The current taxation of housing is not ideal, but addressing particular anomalies would further complicate the system and could have unintended effects.

In these regards, the Commission notes that the two most recent major tax reviews to report, the McLeod Committee in 2001 and the Tax Working Group (TWG) in 2010, ventured beyond looking at how to 'adapt' the measurement of income to better cope with asset price inflation. They recognised that adjustments required to achieve that within the existing income tax framework are unavoidably complex, and saw merit

in moving to taxing housing capital more directly, and more simply, in particular by applying a 'risk-free rate of return' to the assessed value of the housing investment. The 2010 TWG report additionally explored the application of a 'capital charge' and of a land tax. These approaches would all involve a shift toward taxing property, including but not limited to housing, in a manner more similar to how local government rates are struck.

Potential advantages of these kinds of approach, over applying further patches to address anomalies and inconsistencies in the existing tax system, would appear to be their comparative simplicity, certainty, stability and neutrality in the face of inflation, whether in asset prices or more generally. But they also involve much broader issues, including the appropriate balance overall amongst taxes on income, consumption (GST), and property, and as such, are beyond the scope of the Commission's current Inquiry.

## The building industry

There is scope to improve the productivity of the residential building sector and so reduce construction costs. Key barriers to productivity growth are the industry's small scale, low levels of innovation, skill issues and the "bespoke" nature of our homes. Little can be done about market characteristics which reflect consumer preferences and New Zealand's smallness. As such, the Commission advocates a multi-faceted approach which includes greater innovation and measures to raise skills levels.

First, the small size of most firms prevents them from taking advantage of scale economies that could lower their costs. Some barriers to expansion, such as the small size of some regional markets and consumers' preferences for bespoke designs, are inherent in the New Zealand market. Little evidence has been presented to the inquiry about regulatory impediments to the growth of firms, although it is possible that the Commission's proposals for freeing up the consent process will enable new housing developments on a greater scale.

Second, the industry is fragmented vertically and relies on an increasing number of different sub-trades. Sub-contracting, or outsourcing services is common. Houses are often built using a staged step-by-step approach, with individual trades working sequentially in isolation from each other. This can result in time delays and associated holding expenses caused by sub-contractors not being on site when required, as well as the need for re-work. Improved management skills and practice, together with greater uptake and implementation of collaborative working principles could help increase the efficiency of building processes and improve industry productivity.

Third, industry procurement practices exacerbate the disconnection between main contractors and sub-contractors. The establishment of best practice guidelines, appropriate to the New Zealand context, would be beneficial. The Building and Construction Sector Productivity Partnership would be well equipped to undertake this work.

Fourth, inquiry participants raised a number of issues relating to low skill levels in the industry. The Building and Construction Sector Productivity Partnership has developed a skills strategy document for the industry that matches closely the issues raised by inquiry participants in this inquiry. The Commission supports the findings of the Partnership and their strategy for addressing skills issues in the industry.

## Government housing assistance

For those on lower incomes, the steep increase in real house prices over the 2000s has significantly decreased the likelihood that they will be able to purchase their own home. The current annual cost of government support for housing is estimated at a total approaching \$3 billion – this includes an estimated 'opportunity cost' (calculated at the same rate as other government capital charges) of \$883 million on HNZC's state housing portfolio. Over the past nine years, government housing expenditure (excluding the opportunity cost) has grown at an annual rate of around 7% per year.

The Government's initiatives fall into four broad categories:

- State housing: government owns 69,000 houses with a total value of around \$15 billion. Most are rented to tenants who pay a subsidised rent which is capped at a certain proportion of their income (income-related rent). The difference between market rents and income related rents (the income-



related rent subsidy) cost a total of \$564 million in 2010/11. Additionally, government invests significant amounts in maintaining, upgrading and managing state houses. HNZA forecasts a \$64 million dividend in 2011/12.

- Accommodation Supplement (AS) and other support: AS is a weekly payment to 320,000 individuals who struggle to meet accommodation costs, most of whom are in the private rental sector (around half of all renters receive AS). AS expenditure for the 2010/11 year was \$1.2 billion.
- Home ownership assistance schemes: There is a range of initiatives aimed to reduce the barriers to home ownership. Expenditure on these schemes is relatively small compared with AS and state housing.
- Community Housing: Community Housing is the provision of affordable housing to lower and moderate income groups by non-government, not-for-profit organisations. Government has provided funding to Community Housing providers through a range of mechanisms since 2003 with \$35.35 million budgeted for the 2011/12 year.

The Commission heard mixed views about these initiatives. State housing is not always matched to those individuals or areas where there is the greatest need and the stock is old and needs upgrading. The Accommodation Supplement has eased affordability issues for many households. Some suggest the benefits of the Supplement are partly captured by landlords, but evidence of such capture is difficult to distil. Participants questioned the effectiveness of home ownership assistance programs.

The Government has established the Social Housing Unit (SHU) within the Department of Building and Housing as an interim measure to provide advice that will enable the Government to increase the amount of social housing. The Commission agrees that developing the community sector is an important task. To be effective, the SHU needs to be either wholly separate, or fully integrated with another relevant social service agency.

Community housing organisations in other countries have shown that they can deliver better outcomes to tenants than government, council housing departments, or private landlords. A key part of their advantage lies in the ability to offer a complete “wrap around” package of support that extends beyond just the provision of housing into other needs of the client households. In many countries this has been achieved through the large-scale transfer of council or state housing to housing associations. With a strong equity base and the safeguard of rigorous public audit, housing associations elsewhere have proved able to attract loan and equity capital.

Growing the community sector in New Zealand will, however, be a big challenge. Any transfers of state housing to the sector would need to be designed with consideration to the risks associated with the housing, so that the community provider can be viable in the long term. Transferring obsolete houses in the wrong areas to the community sector will not readily lead to growth in their portfolios. The Commission’s view is that the social housing fund will need to be increased if community housing provision is to increase significantly and contribute to resolving the anticipated shortfall in the housing market.

The private rental market will also continue to play a very important role in meeting the needs of those at the lower end of the housing market. During the recent housing cycle, the private rental market expanded rapidly to provide housing for an increasing number of households who could not (or did not want to) keep pace with rapidly increasing house prices. The rental market delivers good outcomes for a number of tenants, particularly those who are relatively well off, require flexibility and those who seek transitional accommodation due to changing life circumstances. However, the growth in the private market presents a number of challenges with regards to housing affordability in the coming years. Affordability is already an acute issue for lower-income renters, and this situation has potential to be exacerbated if rents rise back to the longer-run house price-to-rent ratio. In addition, this may generate further demand for the AS, implying significant fiscal risks for the years ahead. Because there is no fixed cap on the AS, annual payments are projected to grow to between \$1.7 and \$2.2 billion by the year 2015.

The available evidence suggests that greater numbers of households will be relying on private rental accommodation over the long-term. A range of issues including poor quality, insecure tenure and inadequate income in retirement all indicate that the market is not currently equipped to deliver the volume

or quality of housing necessary for well-being in the long term. These issues appear to have been exacerbated by the dominance of small-scale investors, whose primary focus is on investment returns rather than provision of housing services. The Commission is concerned that the private rental market will be unable to scale up to provide better and more affordable outcomes for a growing market. A model where institutional investment is used to deliver long-term leases, where the tenant has some ownership interest in the property and the landlord is focussed on a sustainable on-going yield appears to be the best approach, but has not developed. The Commission is seeking further information about options that would enable the private rental market to deliver better outcomes, particularly for those tenants who are likely to rely on the rental market for long-term accommodation.

## Rural Māori housing

Generally rural Māori value housing more for keeping whānau connected to land, tradition, tūpuna, and their whanaunga, than as a financial investment. It is “about building communities, rather than building houses.” Sustaining rural communities poses a challenge for some Māori in maintaining a connection to their land and the cultural practices that centre on marae (which have required a stable and continued presence). The fear that dwindling populations in rural communities may lead to an irreversible culture loss is for many whānau a real one.

A lack of certainty about future saleability of homes on Māori land (due to the limited market) reduces prices, and places those homeowners at financial risk. It also reduces the security value of the home from a lender’s perspective.

The Social Housing Unit has opened its funding round for 2011/12, and will be providing grants for up to 50% of the capital costs of a housing development. This is a significant step forward for making housing on Māori land accessible and affordable.

The relatively small amount of money available (\$3m in the Māori fund, and \$5m in the Rural fund), and the intent to use that money to access private money for housing may make it difficult for trusts with few assets to access these funds. They would not be available at all to individual home buyers.

The Commission has reviewed three models to see whether they could provide the necessary security for banks to lend: Trust guarantees, a financial options system, and mutual insurance schemes. Under the right circumstances each of these shows some promise. As well, the Commission has reviewed two models of housing where there is an element of common ownership. These are licences to occupy (as used by retirement villages) and unit titles, under the Unit Titles Act 2010. The Commission has concluded that each of these models could form robust ways to manage housing on Māori land.

The Commission is keen to explore these models further with Māori, and invites further submissions and korero.

There will be a considerable adjustment period between the Rural Housing Programme and the Rural Community Regeneration Programme. During this time whānau living in damaged or dangerous homes will be at risk. The Commission recommends making some seed funding available to local Māori organisations or Whānau Ora provider collectives to deliver loans for essential repairs using a microfinance approach.

## Concluding comments

The entry costs of home ownership increased over the course of the 2000s house price boom for some groups in society. This has had an important impact on the journey of some households up the housing ladder, particularly those living in Auckland.

It is difficult to predict the likely balance between the fundamental drivers of demand, the supply responsiveness of the land development and construction sectors and the associated house price and tenure dynamics. One plausible scenario is that in the absence of improvements in land delivery and the performance of the construction sector, we can expect to see land prices and the costs of new houses continuing to increase, as rapid household formation, especially in the upper North Island, continues to outstrip construction of new houses.

In this scenario, the size of the rental market would increase further as the proportion of families owning their own homes continues to decline, particularly in Auckland. Compromises in housing provision would become more pressing, especially with respect to overcrowding for low income households, as the available housing stock is utilised more intensively. Indicative of missing rungs on the housing ladder, intermediate renters would find it ever more difficult to make the transition into home ownership. In addition, a growing shortage of both private rental and affordable housing would expose the government to increasing fiscal risk in the form of an escalating accommodation supplement and growing state house rental subsidies. This risk would grow significantly if rents move back into line with still elevated house prices, ending the recent and historically unusual period of disconnect and increasing the level of financial distress for many low-income renters.

An alternative scenario is that the housing market continues to be subdued. To date, New Zealand's house price correction post the Global Financial Crisis has been modest in international comparison. Given the prospect of a volatile global economy with considerable recessionary risks, there may be more price falls to come. In this scenario, supply constraints in the construction and land development sectors bite to a lesser extent and real house prices continue to fall. The market would settle at lower house prices and the affordability issue would recede. However, the continuing pressure from increasing numbers of households seeking accommodation is likely to moderate future reductions in house prices, even in the setting of a weak economy.

On top of the range of possible cyclical outcomes, the New Zealand housing market faces a number of additional challenges. The shift in tenure choice outlined above indicates that the housing needs of New Zealanders are changing rapidly and that the rental market needs to be able to provide secure long-term quality rental housing on a much larger scale than it has done previously.

Although the future direction of the New Zealand housing market is difficult to predict, the policy recommendations outlined in this report are not contingent on a particular outlook. These recommendations focus on improving the supply responsiveness of the land development and construction sectors and hastening the development of a third sector for the provision of social housing. Impediments and lack of development in these sectors have had a negative effect on affordability that has accumulated over the years and goes well beyond the impact of house price cycles, including the house price boom over the 2000s. As such, these policy recommendations are welfare enhancing, even in a low-growth scenario.

Perhaps more importantly, the policy improvements outlined in this report are aimed at improving the performance of the housing market and the effectiveness with which it provides housing for New Zealanders. The objective is a housing market capable of meeting changing demands for housing in a cost effective and affordable way over the long term and well beyond the length of a typical house price cycle.



# 1 The housing affordability inquiry

## Key points

- The Government has asked the Commission to evaluate the factors influencing the affordability of housing and identify potential opportunities to improve affordability and reduce impediments to home ownership.
- Housing plays a central role in individual and community health, family stability and social wellbeing, in the operation of the labour market, productivity and development. As such, the issue of housing affordability is at the core of the Commission's mandate.
- Sitting behind the level of house prices is a complex set of supply and demand forces that ultimately determine the level of affordability in the housing market.
  - At its simplest, housing affordability is a function of income, house prices and the day-to-day costs of home ownership, or rents and income in the case of rental affordability. Change in any of these factors has a direct impact on affordability.
- Housing affordability needs to be understood and examined from a holistic perspective. Therefore:
  - Housing affordability, even at entry level ('starter homes') cannot be understood without considering how the entire housing market works.
  - Affordability is relative: the experience of affordability is very different between existing home owners, first home buyers, rental tenants and across different localities and household types. Different segments have quite different housing needs and ability to pay.
  - There are multiple impacts on housing costs that suggest that issues around land, construction, labour, and capital and their regulation contribute individually and jointly to affordability problems – resolving one in a way which compounds another may not enhance affordability.
  - It desirable that the housing market work in such a way as to maximise the options available for quality housing for all New Zealanders regardless of income or tenure choice. This means a housing market that has both depth and diversity.
  - Affordability is influenced by the costs of accessibility – to work, schools, friends and family, recreation and entertainment.

The context of this inquiry is a recognition that stability of the home environment is important for social cohesion and family stability. There is a concern that real house prices in New Zealand are markedly higher than they were a decade ago and that this has been associated with general declines in housing affordability and home ownership rates. These declines have contributed to increased demand for rental accommodation and additional pressure on the social housing sector. The debt accumulation and wealth effects associated with the rise in house prices may also have exacerbated New Zealand's last economic cycle with interest rates and exchange rates higher than they otherwise would have been during the upturn with consequently greater contractions in demand during downturn.

## 1.1 What has the Commission been asked to do?

The Government has asked the Commission to evaluate the factors influencing the affordability of housing (both rental and owner-occupied housing) and examine potential opportunities to increase housing affordability. Specifically the Government has asked the Commission to:

- identify and analyse all components of the cost and price of housing

- identify mechanisms to improve the affordability of housing, with respect to both the demand and supply of housing and associated infrastructure
- identify any significant impediments to home ownership, and assess the feasibility and implications of reducing or removing such impediments.

These tasks can be synthesised into three questions:

- What are the key (demand and supply) components of housing affordability?
- How can the housing market work better to improve housing affordability?
- What can be done to remove impediments to home ownership?

The Government has asked the Commission to give particular attention to a number of specific factors relating to the housing affordability (Box 1):

#### Box 1 **Specific issues for investigation**

- Factors influencing the supply of land and basic infrastructure for residential construction
- Factors influencing the cost of residential construction, including the effect of standards, specifications, approval and title requirements on the cost of new housing construction;
- The level and growth of productivity in the land development and residential construction industries, and the effect of government regulations on productivity in these industries;
- The efficiency of taxes, levies and charges imposed at all stages of the housing supply chain
- The efficiency of the tax treatment of owner-occupied and rental housing
- The influence of changing consumer housing preferences, willingness to pay, and financing costs on housing affordability
- The operation of the overall housing market, with specific reference to the availability of a range of public and private housing types, the demand for housing, and the efficiency of use of the existing residential housing stock.

Housing affordability is important any time, but it is given added weight by the fact that this inquiry takes place in the context of a house price boom between 2001 and 2007 that was unprecedented in recent history (Chapter 2).

## 1.2 Housing and wellbeing

Housing is a basic human need and fundamental to our economic and social well-being. Housing plays a central role in individual and community health, family stability and social wellbeing, in the operation of the labour market, productivity and development. As such, the issue of housing affordability is at the core of the Commission's mandate.<sup>1</sup>

### Economic wellbeing

The housing sector is big (Box 2). Housing market outcomes can therefore have significant ramifications for stability of the wider economy as evidenced by the recent global financial and economic crisis. Conversely, the macro-economy matters for how effectively the housing sector meets the housing needs of the community (Chapter 3).

<sup>1</sup> See section 7 of the New Zealand Productivity Commission Act 2010.

Instability in the housing market can be transmitted to volatility in economic activity due to the links between house prices, credit availability and household consumption and indebtedness. Not surprisingly, this macroeconomic instability can have damaging effects on levels of business investment and long-term growth prospects. A well performing housing market can play a part in reducing economic volatility.

#### Box 2 The housing sector is big

- Housing is the single biggest expenditure for most New Zealand households and comprises the main share of both household assets and debt. In total, the stock of residential housing in New Zealand is currently valued at \$625 billion and lending by banks and non-bank financial institutions is around \$171 billion for housing (Chapter 2). This means that swings and volatility in the housing market have a big impact on the wider economy.
- In a typical year, the building and construction sector typically builds about 24,000 new homes and renovates approximately 32,000 existing homes; builds \$4 billion worth of non-residential building; employs about 178,000 people (as at December 2008); and contributes approximately 4% to New Zealand's GDP (about the same as the agriculture, on-farm, sector), with spillover (multiplier) productivity effects to other sectors and industries (Building and Construction Sector Productivity Taskforce, 2009). So improvements in the building and construction sector productivity, and through that, housing affordability, will have large aggregate benefits (Chapter 10).
- The government invests and spends a significant amount on housing in the form of social housing provision, including: \$15 billion investment in state housing accommodation, along with \$219 million on state housing maintenance (year to June 2010), income support for accommodation (Accommodation Supplement) \$1.2 billion (year to June 2011) and Income Related Rents, \$564 million (year to June 2010), and many other housing programmes (Chapter 11).
- Aggregate rental flows (residential) amount to approximately \$7.5 billion per year.

The significance of the housing sector and its associated interdependencies with the wider economy, underlines the importance of ensuring housing markets are efficient – in the sense of meeting the needs of the wider community at best value.

A well-functioning and responsive housing market can improve the flexibility and performance of the labour market through greater mobility of the labour force within and between regions and work locations. This has a wider impact on economic performance and efficiency as prohibitive housing costs hamper the movement of skills to where they are valued most. Access to affordable housing can therefore play an important role in avoiding labour market skills shortages (see for example Yates, Randolph and Holloway, 2006).

High house prices can also impact on the competitiveness of New Zealand as an attractive business destination for overseas business and skilled workers. High New Zealand housing costs could become a disincentive to locate here thereby potentially forgoing opportunities for growth. Conversely, it is just as likely that firms and skilled workers that are priced out of particular regions of New Zealand will move internationally.

Finally, an inadequate housing sector constitutes a long-term fiscal liability for government. Ultimately, government bears part of the cost where unaffordable or inadequate housing leads to higher demands on the welfare system to meet their housing needs (for example, state sponsored social housing), and health and education consequences.

## Social wellbeing

A well-performing housing market that provides affordable high quality housing contributes to positive social outcomes in society. For example, there is a strong link between home ownership and better educational outcomes and future income prospects for resident children (eg, Haurin et al, 2001), more civic

engagement, higher trust in others and a positive sense of community (Roskrug et al, 2011), family and social stability (eg, Glaeser and Shapiro, 2002), and higher average living standards in retirement (Ministry of Social Development, 2006).

The quality and affordability of housing is also closely linked to health outcomes (eg, Maani et al, 2006, and Howden-Chapman et al, 2007, Auckland Regional Public Health Service, sub. 10), particularly for children's health and wellbeing and their transition to adulthood (Families Commission, sub. 9, James and Saville-Smith, 2010). Put simply, declining affordability falls unduly on young families (DTZ, 2008)

Affordable, high quality rental housing could also be expected to provide such social benefits, although there is evidence that home ownership provides greater benefits (eg, Rohe, et al, 2000 and Glaeser and Shapiro, 2002).

High housing costs can exacerbate wealth differences in society. Because housing wealth is a significant proportion of overall wealth, obstacles or impediments to housing equity have the potential to further increase differentials in wealth between those who own a house and those who don't.

New Zealand has always had a strong culture of home ownership, and it is an important aspiration for many New Zealanders. Apart from meeting the basic need for shelter, the desire to own a home is commonly linked to benefits such as greater security, flexibility to adapt the dwelling as needs or preferences change, and as a store of wealth. A house is therefore both a home and an investment.

### 1.3 The Commission's approach

The context of this inquiry is a concern about distortions in the New Zealand housing market that have led to rising house prices and declining housing affordability. While there is widespread use of the term 'housing affordability', there are different ways to think about what affordability means in practice and what are the underlying drivers of affordability.

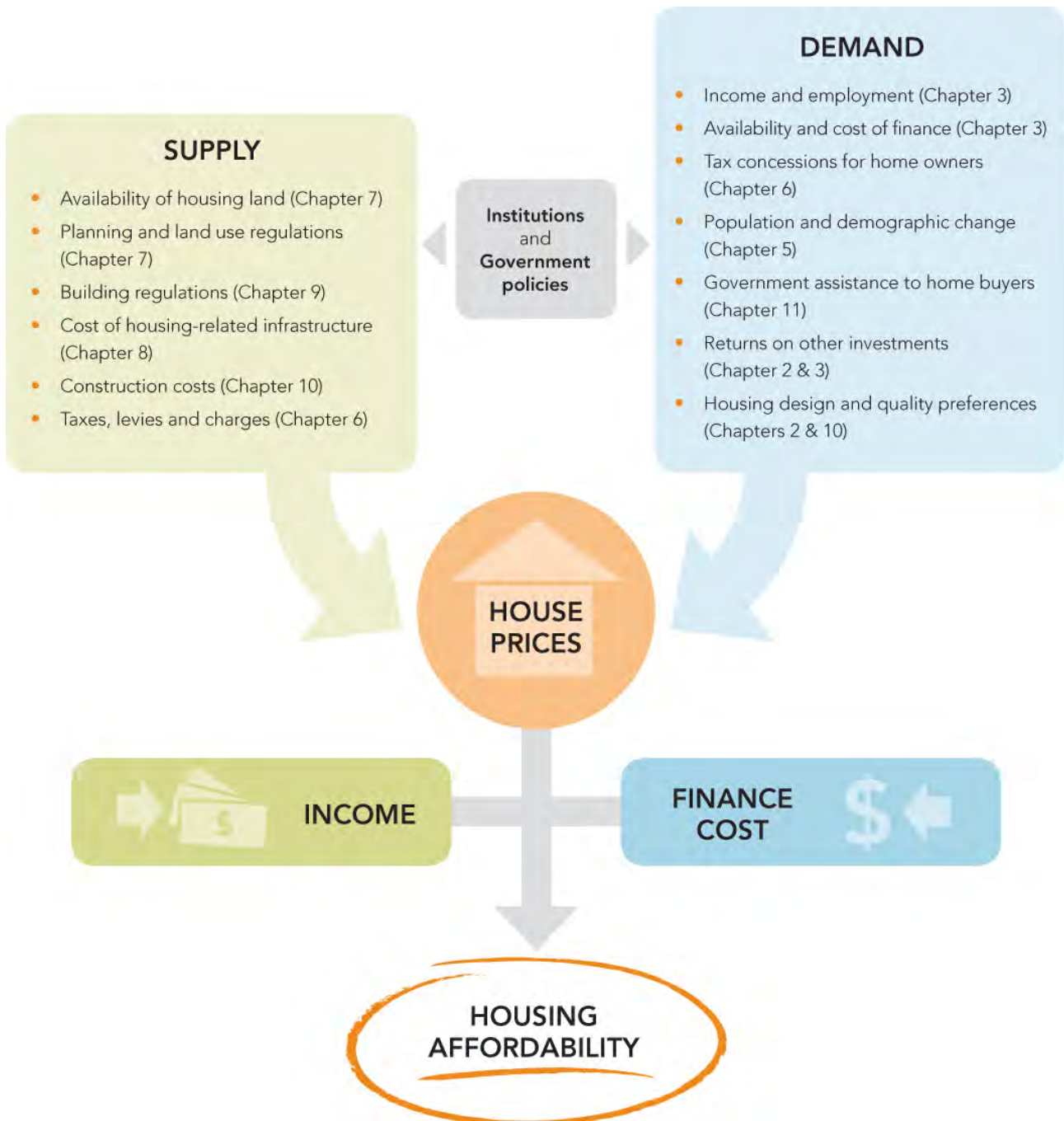
At its simplest, housing affordability is a function of income, house prices and the day-to-day costs of home ownership (including financing, rates, insurances and general maintenance costs), or rents and income in the case of rental affordability. Change in any of these factors has a direct impact on affordability. An important affordability hurdle for home ownership is the upfront cost (deposit) of purchasing a home which, in turn, also depends on income and house prices.

Sitting behind the level of house prices is a complex set of supply and demand forces that ultimately determine the level of affordability in the housing market. A stylised illustration of the multiple determinants of housing affordability is provided in Figure 1.1. The Commission's task is concerned with identifying and analysing any factors that may be distorting demand and supply with adverse effects on the efficiency of the housing market and recommending ways to remove such distortions.

It can be seen that house prices and affordability are the outcome of numerous influences on the demand for housing and the cost of supply. Some demand and supply factors are cyclical in nature, with their effects felt primarily in the short term. Others are structural and influence prices over the medium to longer term. Demand and supply factors can also vary from cycle to cycle and between different regional markets. For example, the Auckland housing market dynamic is distinctly different to the rest of New Zealand.



Figure 1.1 Multiple determinants of housing affordability



The ultimate effect on housing affordability will depend on how demand and supply interact - for example, the less responsive is supply, then the greater will be the price increases arising from an increased demand for housing. However, housing markets may not deliver efficient or appropriate outcomes for the following reasons:

- Demand may become excessive if people develop unrealistic expectations about the returns from housing relative to other investments. Although people eventually adjust their expectations to market realities, such adjustment can be very disruptive and can take a long time with long lasting effects.
- The demand for housing may be inflated or distorted by government policy settings - for example, poorly designed and targeted housing support or the taxation treatment afforded to housing compared to other assets or services.
- A demand for housing may spike as a result of strong population growth and demographic change leading to an increase in household formation.

- The supply of new housing may be unduly slow to adjust to increases in demand due to, for example, any inefficiencies in the building and construction industry or any deficiencies in government regulation (or its administration) such as insufficient and delayed land release for housing, or planning and consenting constraints.

It is desirable that the housing system is responsive and able to respond to price signals about the desired nature of supply and changing market conditions. This requires good decision-making processes and price signals.

## 1.4 Analysing housing markets

The housing sector can usefully be thought of as a large complex system characterised by market and non-market sectors, local boundaries and global drivers, and significant links to markets for land, labour and finance (Maclennan, 2008). The housing market has some distinctive features which are relevant to the analysis of price trends and affordability (APC, 2004).

- *The nature of the asset* - Houses are assets that provide a stream of consumption (a place to live) and investment services (an asset that can be treated as a store of value and can be sold for a subsequent gain or loss). This dual function adds considerable complexity to the analysis of housing markets. Formally, the price of a house will implicitly reflect the discounted 'present value' of that stream of services and depend on expectations about future demand and supply, as well as current market conditions. The value of a house represents the combined value of the dwelling and the land on which it is sited.
- *Price volatility* - While there is an upward trend in real house prices in most countries, there is much fluctuation such that, at its extreme, it can result in booms or busts. The cyclical nature of housing demand is responsible for much of this price fluctuation. Because most house purchases are financed by debt, this makes demand sensitive to the accessibility of finance and movements in interest rates, as well as to income and employment trends. Investment in rental housing is influenced by the returns available on alternative investments such as equities, which similarly fluctuate over time.
- *Supply lags* - Short-term constraints on the responsiveness of supply make it difficult to accommodate cyclical surges in demand. It can take several years to transform basic housing land to a construction-ready state (including the supporting infrastructure). At the same time, there are high search and other transaction costs (such as legal, commission and administrative costs) associated with buying and selling houses that make them much less liquid assets than, say, equities. This can delay and thereby accentuate adjustments to changing market conditions. Likewise, depending on circumstances, households may take years to modify their housing requirements in response to changes in prices, incomes and borrowing costs.
- *Segmentation of the market* - There are multiple segments making up the housing market. The market is split geographically, by dwelling type and by price/quality bands. It can also be divided into owner-occupied, rental, and social housing. These submarkets are not unconnected, with substitution occurring across them in response to changes in relative prices and rental yields. The linkages and flow on effects between market segments in turn mean that prices in each segment (and therefore affordability) are influenced by broader market trends. It also means that the analysis of any policy intervention should consider not only its expected impact on the targeted submarket but also its ripple effects to other submarkets.
- *Government housing assistance* - There is through the provision of social housing, income support (such as the Accommodation Supplement and income related rents) and other housing assistance programmes, a high level of government involvement in the housing market. Such government involvement can have an important impact on incentives, house prices and overall affordability. Most developed countries have some form of government housing assistance. Approaches range from housing subsidies to direct provision of housing.

## 1.5 A holistic approach to housing affordability

A strong theme coming through from inquiry participants was the need to take a holistic approach to understanding and examining housing affordability. The Commission endorses this approach (Box 3).

### Box 3 A holistic approach to housing affordability

A holistic approach to housing affordability recognises that:

- Housing affordability, even at entry level ('starter homes'), cannot be understood without considering how the entire housing market works, which includes the quality and turnover of existing stock.
- Accessible and affordable housing is implicated in a wide range of social issues relating to health, family stability, community development, and education. These social issues need to be taken into account in considering the efficiency of the housing market and role of government.
- Affordability should be considered in terms of lifecycle costs, with building standards that, for example, ensure safety and durability and, importantly, lower ongoing costs (for example, maintenance needs, and power, lighting and heating demands).
- Affordability is relative: the experience of affordability is very different between existing home owners, first home buyers, rental tenants and across different localities and household types. Different segments (defined in part by demographics) have quite different housing needs and ability to pay.
- Affordability is influenced by the costs of accessibility – to work, schools, friends and family, recreation and entertainment – both by way of the trade-offs households might have to make between dwelling location and transport costs and in terms of the total demands housing and transport jointly make on household incomes.
- There are multiple impacts on housing costs that suggest that issues around land, construction, labour, and capital and their regulation contribute individually and jointly to the overall problem – resolving one in a way which compounds another may not enhance affordability.
- It is desirable that the housing market work in such a way as to maximise the options available for quality housing for all New Zealanders regardless of income or tenure choice. This means a housing market that has both depth and diversity.

## 1.6 Guide to this draft report

The next chapter (Chapter 2) provides an in-depth look at the New Zealand housing scene, including an examination of the last house price cycle, key features of the New Zealand housing stock, the key supply and demand drivers in the New Zealand housing market and, finally, identifies the key issues for the New Zealand housing market and housing affordability looking forward. Housing also matters for the macro economy. The housing market is both an important driver of, and is importantly influenced by, developments in the wider economy. This is examined in Chapter 3.

How broad house price trends have affected the affordability of housing for both home buyers and renters is examined along with the key differences in affordability across regions and income levels (Chapter 4). Chapter 5 then investigates more closely the underlying demand for housing and considers how national and regional trends in population growth and demographic change affect household formation and the demand for housing. The taxation system has an important influence on the housing market, primarily through affecting the returns to housing vis-à-vis other assets. The impacts of the tax system on housing and affordability are considered in Chapter 6.

The report then moves to the supply side of the housing market and examines the impediments and distortions impacting on home ownership and housing affordability from urban planning regulation (Chapter 7), infrastructure charges on new developments (Chapter 8), and building regulation (Chapter 9). Recommendations are made to remove impediments that may be keeping house prices elevated and reducing affordability. An important driver of housing is the productivity and performance of the building industry which is examined in Chapter 10.

Finally, the issues facing the private rental market, state housing and community housing are examined in Chapter 11 where affordability issues bite most. The specific housing issues facing rural Māori are considered in Chapter 12. The Commission suggests ways to address the affordability of housing in rural areas and invites further feedback and engagement with Māori on options for addressing affordability of housing for Māori in ways that preserve connection to land, tradition and tūpuna.

## 2 The New Zealand housing scene

### Key points

- Reflecting a confluence of global and domestic drivers, New Zealand experienced a house price boom over the 2000s that was widely dispersed across the country. Although unprecedented in recent history, this boom was not out of line with the experience of a number of other OECD countries.
- Over the course of the 2000s boom, house price increases tended to be stronger in areas with relatively low house prices initially. However, despite houses being among the most expensive in the country, the Auckland market continued a well-established trend of relatively strong house price increases. This 'divergence' in Auckland house prices *vis-à-vis* the rest of the country was especially pronounced at the lower end of the Auckland housing market.
- The responsiveness of housing supply in New Zealand is around average in international comparison, but about half as effective as in a number of better-performing OECD countries. As such, demand increases are estimated to lead to proportionately larger increases in house prices than in new house construction.
- Supply responsiveness varies across the country, with implications for house price dynamics in regional housing markets. This may be related to the efficiency with which local councils implement and enforce regulations governing the land development and construction sectors.
- Land prices are a large and increasing share of the price of dwellings, particularly in Auckland. Available evidence suggests that construction costs have increased and are high in international comparison. This highlights land release and other regulatory hurdles, along with a poor performance in the construction sector, as impediments to a more effective supply response.
- Reflecting a number of factors including high land prices, most new housing supply is directed at the top end of the market, with very little new supply aimed at affordable housing.
- The available evidence indicates that the quality of the New Zealand housing stock is poor, particularly for rental dwellings.
- Over the 2000s boom, rents increased by significantly less than house prices, allowing the rental market to act as a 'safety valve'. This exacerbated a tenure shift away from owner-occupied dwellings to rental. Indicative of missing rungs on the housing ladder, the share of "intermediate renters" – who have at least one member in paid employment but still can't afford to buy a house – increased markedly, particularly in Auckland.
- The rental sector is populated by numerous small-scale landlords, rather than institutional investors. This raises questions about its capacity to provide secure long-term quality rental housing on a much larger scale than it has done previously. In addition, Housing New Zealand is reducing its role in the rental market to focus on 'high-needs tenants'. In its place, the third sector is expected to play a greater role in the provision of social housing. However, this sector is very underdeveloped in New Zealand.
- Impediments to the efficient functioning of the housing market have a negative effect on affordability that accumulates over the decades and goes well beyond the impact of house price cycles, including the house price boom over the 2000s. By the same token, even if supply responsiveness can be significantly improved, the New Zealand housing market will still experience house price cycles to some extent, with attendant implications for affordability.

The housing sector is a very large part of the New Zealand economy. The stock of residential housing, which is currently valued at around \$625 billion, is the largest component of the wealth of New Zealanders and housing is of central importance to the workings of the economy as a whole. In addition, households spend a significant and growing share of their income on housing and the quality of the home environment is a central element of family stability and social cohesion. As such, access to affordable housing is a key policy issue for New Zealand.

As well as being of central importance, the housing market has a number of distinctive characteristics. In particular, houses are durable and are owned for both consumption and investment purposes. The time lags involved in construction can be long and new houses are a small share of the total stock – new supply in a given year is usually only 1 to 2% of the housing stock. For these reasons, adjusting to changing housing needs and preferences can be slow and lead to significant periods of disequilibrium with attendant price pressures.

Against this background, this chapter sketches out the key characteristics of the New Zealand housing market within the context of the supply and demand framework described in Chapter 1.

## 2.1 The New Zealand house price cycle

### In aggregate

From the beginning of the 1970s to the early-2000s, real house prices cycled around a slightly increasing trend (Figure 2.1). Over this period, real price cycles in the New Zealand housing market looked a lot like cycles in a number of other OECD countries.<sup>2</sup> In particular, the number, duration and amplitudes of New Zealand's real house price cycles were broadly similar to other countries, with upturns generally lasting longer and being slightly larger than downturns (Girouard et al., 2006). Over this period, although cycles looked more or less the same across countries, the timing of peaks and troughs were quite different, suggesting that the underlying drivers of real house price cycles were country-specific to a large extent.

Figure 2.1 House prices, real and nominal



Source: Quotable Value (QV) and Statistics New Zealand

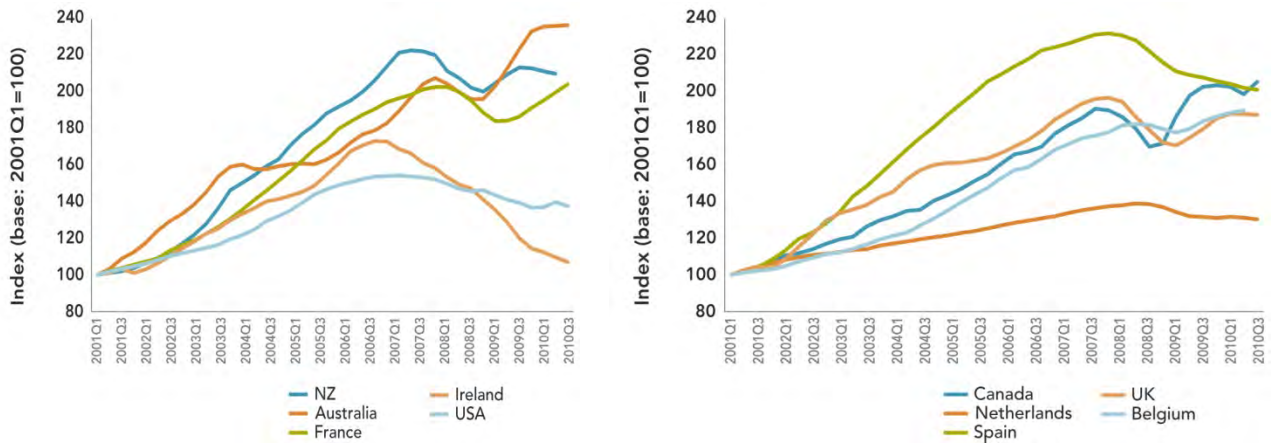
Notes: Real house prices are measured as the ratio of actual house prices to the CPI.

Between 2001 and 2007, New Zealand experienced a house price boom that was unprecedented in recent history. Real house prices almost doubled over this period, which equates to an average increase of around 12% per year. The New Zealand housing market has not experienced such rapid real house price appreciation since a short sharp expansion in the early 1970s. The duration of the 2000s upswing was also around two years longer than the average expansion since the 1970s, making it one of the longest and steepest since the data began.

<sup>2</sup> Real house price cycles referred to in this section are calculated using the Bry-Boschan method of dating turning points. A description of this technique, in the context of house price cycles in New Zealand, is given in Hall et al. (2006).

Although unprecedented in history, New Zealand’s recent house price boom occurred more or less at the same time as rapid house price expansions in a number of OECD countries. Indeed, co-movements in real house prices have been unusually strong internationally over the 2000s, suggesting a significant role for global factors in propagating this period of real house appreciation (Box 2.1). As discussed in chapter 3, a rapid expansion in global credit and financial market innovations – some of which turned out to be highly destabilising – are prime candidates for explaining the coordinated nature of strong house price appreciations over the 2000s. However, it is notable that over this period, New Zealand’s real house price appreciation exceeded that of most other OECD countries, suggesting that domestic factors also played a role in propagating the house price boom (Figure 2.2).

Figure 2.2 The real house price boom in international comparison

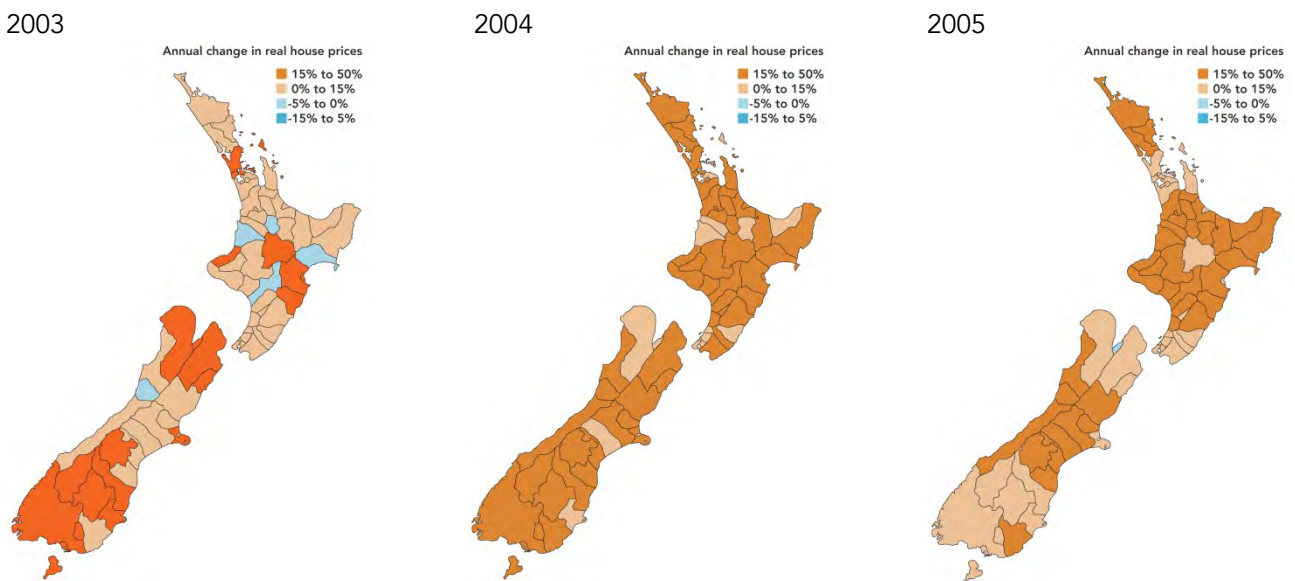


Source: OECD

### In the regions

A distinctive feature of New Zealand’s house price boom over the 2000s is that it was more widely dispersed across the country than previous house price expansions. In its early stages, the boom began in Auckland and a few high-growth tourism areas (Central Otago, Kaikoura and Tasman) (Figure 2.3) However, by 2004, it had spread across the country with 55 of the 72 Territorial Authorities (TAs) for which data exists recording real house price increases in excess of 15% per year. By 2005, house prices were slowing in Auckland and the other areas that initially led the boom, but still growing strongly in other parts of the country. By 2006, the slowdown had become more generalised across the country.

Figure 2.3 Annual change in real house price by Territorial Authority



Source: Productivity Commission calculations based on QV data

Although widespread, the extent of real house price increases varied markedly across the country, ranging between 70% to 240% across the TAs. With some important exceptions, regional house price dynamics over the boom displayed a 'convergence pattern' whereby price increases were larger in areas where houses were initially relatively inexpensive (Figure 2.4). Compared to previous house price expansions, this suggests that households were more prepared to relocate or invest further afield in search of affordable housing.<sup>3</sup> As a consequence, the (normalised) distribution in real house prices is now flatter across the country than it was prior to the 2000s boom.

Figure 2.4 Convergence in real house prices over the 2000s boom



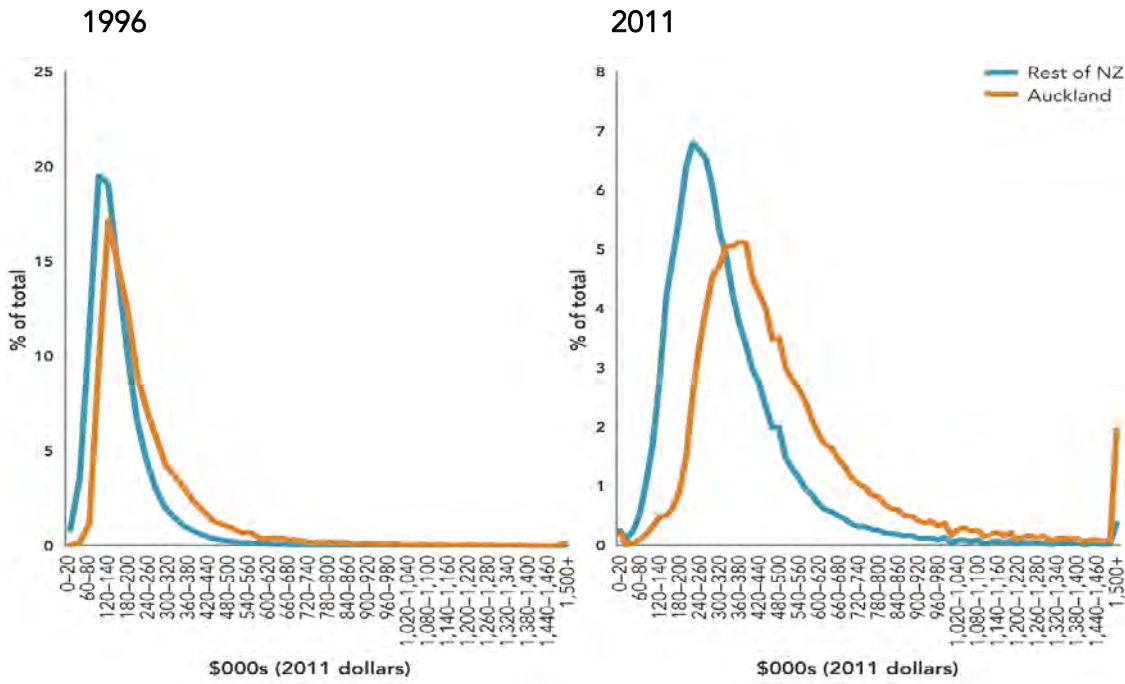
Source: Productivity Commission calculation based on QV data

There were some important exceptions to this trend – in the Queenstown Lakes District and metropolitan areas in Auckland and Wellington, houses were among the most expensive in the country in the early 2000s, but these regions still experienced strong real house price appreciations over the boom (Figure 2.4). In Auckland – home to around one third of New Zealand's population and 31% and 41% of its housing stock by number and value respectively – this continued a well-established trend of strong real price increases for already expensive houses. As a consequence, the gap between house prices in Auckland and the rest of the country continued to widen and the distribution of Auckland house prices is now markedly different to that in the rest of New Zealand (Figure 2.5). This divergence has been particularly pronounced at the lower end of the Auckland housing market – for example, between 1995 and 2011, the gap between lower quartile house prices in Auckland vis-à-vis the rest of the country increased by over 260% in real terms. The analogous figures for median and upper quartile house prices are 230% and 150% respectively.

<sup>3</sup> For example, and as discussed in Chapter 5, internal migration in Auckland, where houses are typically among the most expensive in the country, turned sharply negative in the mid-2000s.



Figure 2.5 Distribution of house prices in Auckland and rest of New Zealand



Source: Productivity Commission calculation based on Quotable Value data

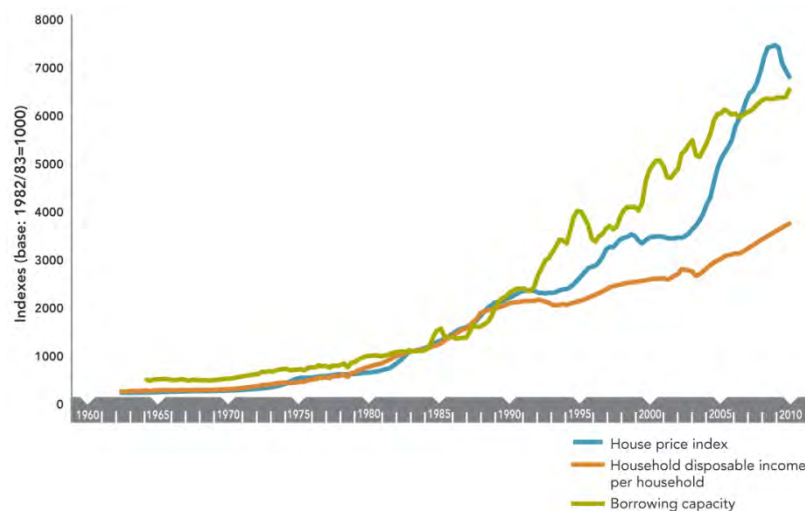
Notes:

1. House price distributions are shown in constant (2011) dollars (deflated by the CPI).

### Impact on housing affordability

As discussed in detail in chapter 4, New Zealand’s house price boom over the 2000s exacerbated a steadily increasing trend in the number of years of median incomes needed to buy a median-priced house. On the face of it, this simple measure indicates decreased housing affordability. However, housing affordability is influenced by a much broader range of factors than just the level of house prices relative to income. For example, low interest rates and strong credit growth over the initial phase of the boom increased the borrowing capacity of households and, to some extent, offset the negative impact of increased house prices on the general level of affordability (Figure 2.6).<sup>4</sup>

Figure 2.6 House prices, household disposable income and borrowing capacity<sup>1</sup>



Source: Briggs & Ng (2009)

<sup>4</sup> Of course, as discussed in chapter 3, these factors also contributed to real house price inflation over this period, highlighting the complex interdependencies between the underlying drivers of housing market activity.

*Notes:*

1. For each year, borrowing capacity is calculated as the amount a household on the average income could borrow via a table mortgage at the effective mortgage interest rate. This amount is determined by the household's monthly payments, which are set at 35% of monthly income. It is assumed that the term of the mortgage is 25 years.

It is clear, however, that for some groups in New Zealand society, the steep increase in real house prices over the 2000s has decreased the likelihood of them being able to purchase their own home and begin the climb up the property ladder. As elaborated on in Chapter 4, this tends to be the case for younger people and others on lower incomes, particularly those living in Auckland.

#### Box 4 What drove the surge in New Zealand house prices in the 2000s?

The sharp rise in house prices in New Zealand during the 2000s reflected a number of cumulative demand-side factors against a degree of stickiness in housing supply. Internationally, a range of influences came together to encourage a strong increase in global credit growth, much of which increased effective demand for housing in a number of OECD countries:

- In conjunction with loose monetary policy in the United States, high savings from some Asian and oil exporting countries worked to lower interest rates in global credit markets.
- A move from an 'originate to distribute' strategy in the United States reduced the quality of the loan books without a commensurate increase in capital requirements for relatively risky loans.
- A progressive relaxation of credit standards in originating banks also led to a reduction in the quality of banks' mortgage portfolios.

Although the first of these factors facilitated increased credit availability in New Zealand, the impact on the mortgage market was less pronounced than in the United States. In particular, securitisation was nowhere near as prevalent as in the United States and there was not the same disassociation between lenders and borrowers. Intermediation continued to be the dominant model in New Zealand, implying little incentive for banks to expand loan volumes without paying adequate regard to risk.

On top of these global developments, a number of New Zealand-specific factors also worked to increase housing demand:

- Net migration flows turned from losses of around 10,000 people per year in 1999-2001 to strongly positive, peaking at over 40,000 people in 2003.
- Partly reflecting a higher terms of trade, real GDP per capita increased by around 14% between December 2000 and June 2007. Rising household incomes increased effective demand for house ownership and for 'trading-up' to a larger, higher-quality or better-located house.
- Interest rates were relatively low in 2002 and 2003 when the OCR ranged around 5%.<sup>5</sup> This partly reflected the falling price of a wide variety of imported goods as low-cost Asian manufacturing increased in scale and scope, lowering inflation pressures in New Zealand (Bollard and Smith, 2005).
- The New Zealand exchange rate was relatively low up to 2003 but began to increase thereafter as interest rates increased. A lower exchange rate may have increased the attractiveness of New Zealand residential property to overseas buyers.
- As a result of house price inflation and financial market innovation, households felt wealthier and found it easier to 'borrow on the house' in the form of increased withdrawal of housing equity. The released funds were used for housing purposes (upgrading existing homes, 'trading up' to better ones and purchasing investment properties) that further fuelled the housing boom, and also for spending on consumer goods and services.

<sup>5</sup> The OCR troughed at 4.75% at the beginning of 2002, but rates were under 6% from May 2001 to July 2004.

## 2.2 Housing market drivers

Rapid house price escalations, and house price volatility more generally, are particularly concerning if prices deviate from long-run fundamentals for significant periods of time. In this case, investment decisions in the economy may not reflect underlying resource costs, with negative implications for productivity and incomes. Of course, unpicking the drivers of the New Zealand housing market and the extent of any imbalance between supply and demand is not straightforward. Notwithstanding this caveat, this section sketches out a framework for assessing the key drivers of house price dynamics from a New Zealand perspective.

### Demand side

On the demand side, it is useful to distinguish between *underlying* and *effective* demand for housing:

- *Underlying* demand is driven by household formation, which reflects population growth and changes in household size. In turn, population growth is a function of natural increases (births minus deaths) and net migration. Household size is essentially determined by demographic factors.
- *Effective* housing demand reflects the combined effect of consumer and investor aspirations to rent or buy a dwelling and their financial ability to do so. As such, it is influenced by the prevailing set of economic factors, including incomes, availability of finance and the economic situation more generally.

Empirical work undertaken by the Commission and others indicates that both *underlying* and *effective* demand-side drivers have, to varying degrees, played a role in the New Zealand housing market.<sup>6</sup> In particular, the evidence outlined in chapter 5 indicates that population and demographic influences have been important drivers of household formation, with implications for the quantity and type of dwelling required in the New Zealand market. Population growth has been relatively strong in international comparison and migration flows have been volatile and mostly focused on Auckland. Further, demographic changes – such as population ageing, cultural and ethnic diversification and a radical transformation in family structures – have also been pronounced over recent years. Although there is some debate in the New Zealand literature on the significance of migration for house prices (discussed in chapter 5), across OECD countries, higher population growth is associated with real house price appreciation (Sánchez and Johansson, 2011).

Changes in *effective* demand have also been significant in the New Zealand housing market. Although income growth has been relatively weak in international comparison, as outlined in chapter 3, it has still led to some upside demand pressures in the housing market as households seek to ‘trade up’ and improve the quality of their living environment. However, perhaps more importantly over the course of the recent house price boom, increased access to credit, low interest rates and innovations in financial instruments have increased the ‘borrowing capacity’ of households and have been a key source of increased *effective* demand for housing (Figure 2.6 above). As mentioned above, these changes in financial markets, which have occurred across most OECD countries, are commonly cited as a predominant reason why the last house price boom was so synchronised across countries (for example, André, 2010).

### Supply side

The extent to which new housing construction responds to changes in demand is perhaps the most important factor for the effective functioning of the housing market. This reflects a collection of determinants, including the time taken to acquire land and complete construction. As such, the responsiveness of housing supply depends not only on geographic and urban characteristics, but also on policies – such as land use and planning regulations – that directly impact on housing supply.

The supply responsiveness of the housing market influences the extent to which an increase in housing demand leads to more housing construction or to higher house prices. As such, it is a key determinant of housing affordability. The international evidence indicates that if the supply of housing is constrained in some way, then increased demand will tend to feed into higher house prices, rather than an expansion in

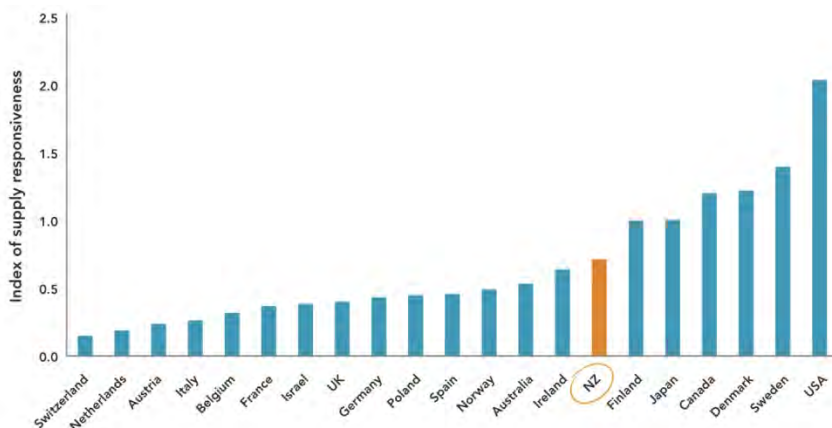
<sup>6</sup> The Commission’s model of supply and demand in the housing market will be outlined in an annex in the final Housing Affordability Report and a forthcoming Productivity Commission Working Paper. Other models of the New Zealand housing market include: O’Donovan and Rae (1997), Grimes, Aitken and Kerr (2003) and Briggs and Ng (2009).

housing supply (Glaser *et al.*, 2008; Gyourko, 2009). Conversely, if housing supply is relatively responsive, then the impact of demand shocks will tend to show up as changes in housing investment.

The empirical evidence for New Zealand suggests that the responsiveness of housing supply to changes in demand is around average across the countries for which data is available, but almost half as effective as in a number of the better-performing OECD countries (Figure 2.7). With a long-run supply elasticity that is less than one, an increase in the demand for houses in New Zealand is estimated to lead to a proportionately larger increase in house prices than in new house construction. In some of the better-performing countries, with supply responsiveness that is more than twice as vigorous as in New Zealand, much less of the adjustment ends up coming through as higher house prices.

Figure 2.7 Price responsiveness of housing supply, selected countries<sup>1</sup>

Estimates of the long-run price elasticity of new housing



Source: Sánchez and Johansson (2011)

Notes:

1. Estimates of the long-run price-elasticity of new housing supply are derived from a stock-flow model of the housing market that is estimated with an error correction framework. The estimation period is from the early 1980s to the mid-2000s.

### Land availability

These supply-side rigidities are apparent in relative price pressures for the various inputs into the house building process in New Zealand. As outlined in Chapter 7, section prices have grown more quickly than house prices over the last 20 years, indicating that land supply has become less responsive to increases in housing demand (Figure 2.8). As a result, appreciating land prices have been a key driver of house price inflation in New Zealand over recent years.<sup>7</sup>

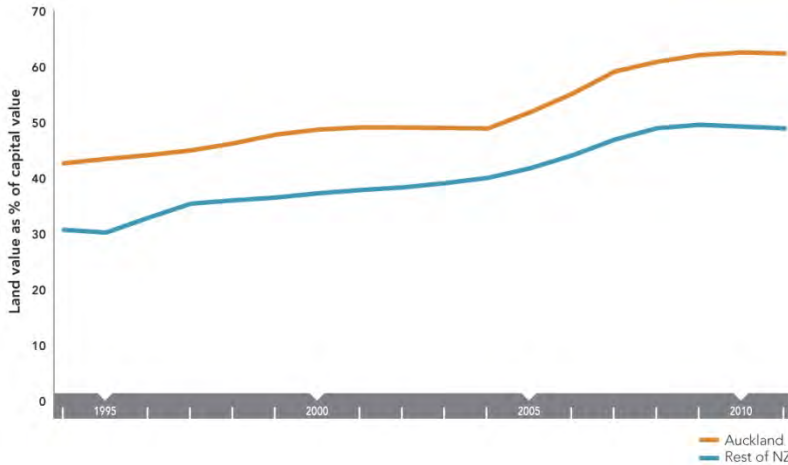
Steadily increasing section prices as a share of the cost of new dwellings indicates a shortage of residential land in places where people want to live. Land price pressures have been particularly acute in Auckland where, as discussed in chapter 7, section prices have increased by significantly more than in the rest of New Zealand. Land now accounts for around 60% and 40% of the cost of a new dwelling in Auckland and the rest of New Zealand respectively. Although comparable international data is scarce, the share of land in the value of a dwelling may be around 20% or less in the United States (Glaeser and Gyourko, 2003). Across Australian cities, the land share in the value of new dwellings ranges from 10% (in Adelaide) to 25% (in Sydney) (chapter 7). Land price increases in New Zealand have been particularly pronounced since 2003, which may be related to the introduction of development levies by territorial authorities (discussed in chapter 8).

Much of New Zealand's land area is unsuitable for residential development. However, a very low population density suggests that raw land is potentially relatively abundant. Although data on the quantity of land at various points of the development process is not collected in New Zealand (House Prices Unit, 2008), this

<sup>7</sup> Work by Grimes and Aitken (2010) indicates that increases in the price of land may actually lessen supply responses in the housing market and exacerbate price spikes.

suggests that policy and planning practices may be constraining the supply of residential land. For example, strong land price pressures in Auckland raises questions about the impact of policies aimed at increasing density – such as the metropolitan urban limit and other planning restrictions – on housing affordability. Going forward, the challenge is to improve land release and planning approval processes so that affordability considerations are taken into consideration.

Figure 2.8 Land prices as a share of house values



Source: Productivity Commission calculations using QV data

### Construction costs

As outlined in chapter 10, construction materials are more expensive in New Zealand than in Australia. This reflects a number of factors including the small size of the New Zealand market, and corresponding small scale of New Zealand material manufacturers, and high domestic transport costs. Also, there are only two major materials manufacturers in New Zealand, which has raised questions about the extent of competition in the market. From 2002 to 2011, the cost of building materials increased by almost 20% in real terms, although about one third of that reflects the introduction of new materials (such as double-glazed windows).

More generally, the costs of all the major inputs into housing construction have typically increased more quickly than both generalised inflation and the costs for other forms of construction (Briggs and Ng, 2009). The available evidence suggests that the construction industry is populated by a large number of small businesses that predominantly operate on a cost-plus basis. As such, productivity growth in the sector has, at best, been flat over recent years and lower than in the economy in general. This indicates limited scope for the sector to respond to demand increases without upward pressure on relative prices.

Reflecting these issues, total construction costs have increased by 30% in real terms in the nine years to 2011, with large increases recorded over the 2000s house price boom. The cost of residential construction in New Zealand is significantly higher than in Australia, with negative implications for housing affordability. For example, the cost of building a new house in Auckland is around 25% more expensive than building a house in Melbourne.

Lowering construction costs to improve affordability calls for productivity improvements driven by a range of factors, including improvements in government procurement and technological and regulatory changes that allow a greater use of internationally traded house components and building supplies.

### Supply responsiveness at the local level

Some of the regulations that influence the supply side of the housing market are administered by local councils. As such, the extent to which housing supply responds to changes in demand, and the associated price dynamics, may vary across the country to some extent. In areas where council policies and practices allow for rapid expansions in new house construction, house prices should be less volatile than in areas where new supply is more constrained. This type of dynamic has been detected across cities in the United States. For instance, Green et al. (2005) find that housing supply is highly-responsive to demand pressures

in cities with 'pro-development' regulatory environments and readily available land. In contrast, supply responsiveness is low in cities with high regulatory barriers to expansion and cities with declining populations.<sup>8</sup>

The Commission has estimated a model of housing demand and supply at the level of the Territorial Authorities (TAs) to investigate supply responsiveness across New Zealand.<sup>9</sup> Consistent with the work of Grimes and Aitken (2010), the results from estimating this model indicate that the responsiveness of housing supply does indeed differ across TAs. This implies that the construction and land development sectors are more responsive to changes in housing demand in some parts of the country compared to others. There is also tentative evidence that in areas of the country where housing supply is more responsive, an increase in housing demand results in relatively more houses and smaller increases in real house prices, with potentially beneficial implications for housing affordability. In technical terms, there is a negative correlation across TAs between the extent of supply responsiveness and the speed with which house prices adjust to their new equilibrium.

Although difficult to show conclusively, differences in supply responsiveness at the TA level may, in part, reflect the efficiency with which local councils implement and enforce regulations governing the land development and building sectors.

### **Charging for infrastructure and the cost of building regulation**

Infrastructure charges vary across the TAs and can be significant – a survey conducted across ten regions found that development contributions account for between about 1% and 10% of median section prices and can influence housing affordability (Chapter 8). There is no reliable data available on the impact of building regulations on construction costs.

It is clear that regulations governing residential building construction increase the cost of building a house. However, the benefits of these regulations, which include increased safety and comfort, also need to be taken into consideration. The challenge is to develop, administer and enforce regulation in the sector so as to maximise its net benefits.

The impact of land release policies, infrastructure charges and building regulations are discussed in Chapters 7, 8 and 9 respectively.

## **2.3 The rise of the private rental market**

### **The rental market to the rescue**

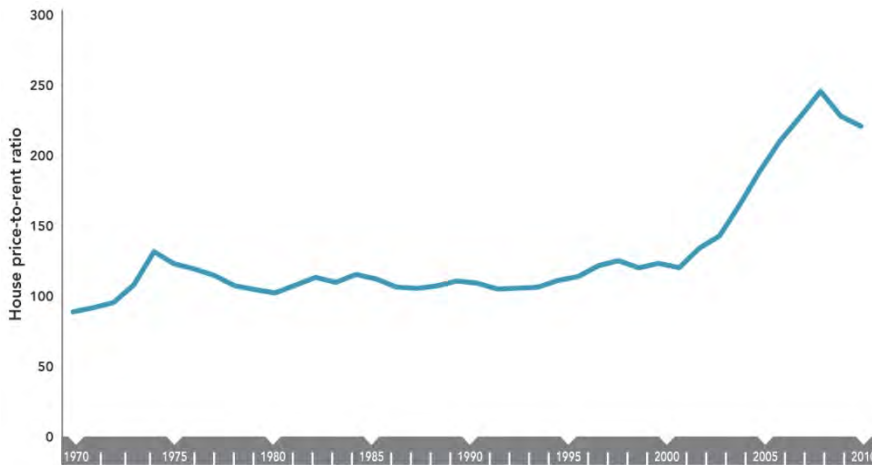
The sharp increase in house prices over the 2000s, driven by a confluence of increased housing demand in the context of some stickiness in housing supply, contributed to a marked change in tenure choice in New Zealand.<sup>10</sup> Over this period, rents in aggregate increased at around the same rate as generalised inflation. Across the TAs, rents grew in a range of 2.3% per year (in Dunedin City) to 8.2% per year (in Buller District). In all cases, rent increases were significantly less than real house price inflation and the ratio of rents to house prices increased markedly (Figure 2.9). This was unusual historically – from the 1970s to the end of the 1990s the ratio of house prices to rent was basically flat, indicating that rents moved broadly in line with house prices up until the 2000s house price boom.

<sup>8</sup> Arguments about the role of regulatory and geographical constraints have subsequently been strengthened Gyourko, Saiz and Summers (2008) and Saiz (2010).

<sup>9</sup> This model is based on Grimes and Aitken (2010) and Sánchez and Johansson (2011). It is estimated across 72 of New Zealand's Territorial Authorities in an error-correction framework. The model will be outlined in an annex in the final Housing Affordability Report and a forthcoming Productivity Commission Working Paper.

<sup>10</sup> This is consistent with a theoretical model of the New Zealand housing market, which shows that homeownership rates are affected by changes in housing costs relative to incomes, especially if the availability of credit is constrained. See Coleman (2007). Other underlying factors that have been linked to the decrease in home ownership include a marked increase in the distribution of household income from the late 1980s (Perry, 2010) and changing housing preferences, especially amongst younger people (Beacon Pathway, 2010).

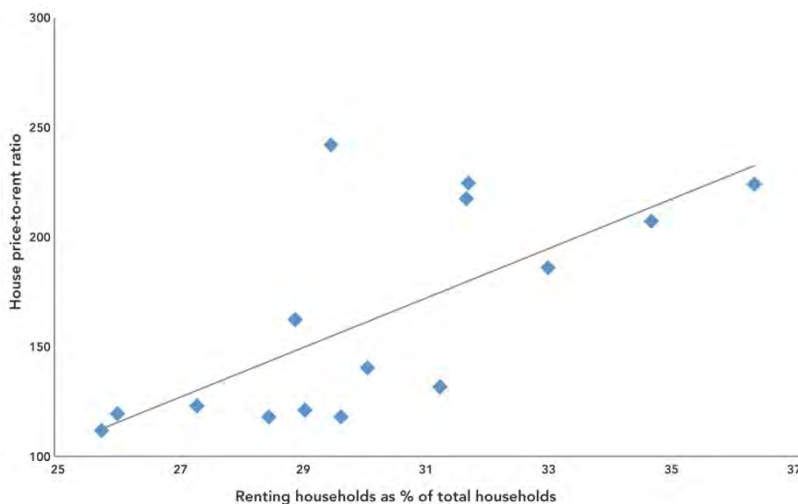
Figure 2.9 House price to rent ratio



Source: Productivity Commission

This insensitivity of rents to rising house prices over the 2000s boom allowed the rental market to act as a 'safety valve' in the face of rising house prices. As the housing market boomed, the shift from owner occupancy into the private rental market intensified – there is a significant link between the ratio of house prices-to-rents and tenure choice from the mid-1990s (Figure 2.10). In broad terms, this indicates that rental affordability relative to home ownership has had an important influence on tenure choice.

Figure 2.10 Rental affordability and tenure choice, 1995-2009



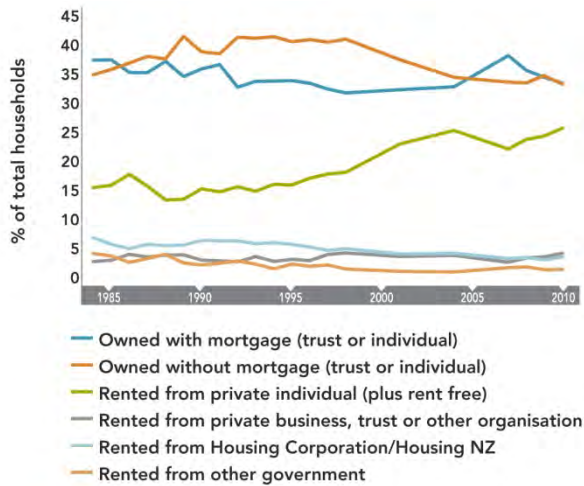
Source: Productivity Commission calculations based on OECD and Statistics New Zealand data

This large swing in tenure choice exacerbated the growth of the rental sector and decline in the extent of home ownership that had been underway for some time (Figure 2.11). Home ownership peaked in the late-1980s to early-1990s when around 75% of private dwellings were owned by their occupants. Since then, ownership levels have dropped to around 65% – which is about average for the group of OECD countries for which data is available (Figure 2.11).

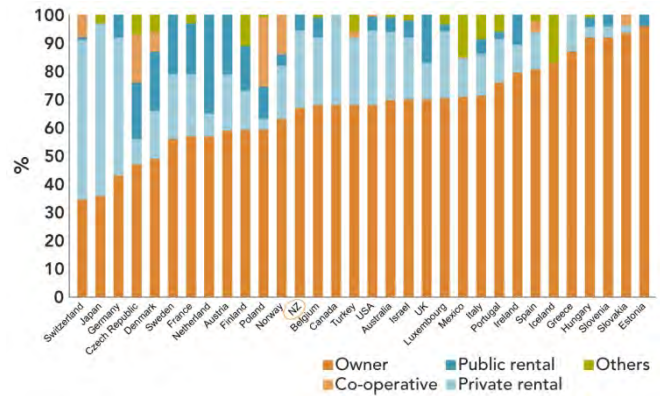
At the regional level, the decrease in home ownership since the end of the 1990s has been particularly marked in Auckland, where around 42% of households now rent their dwelling (Figure 2.11). Among the group of people who own their own home, the share that do so without a mortgage increased to peak at around 40% in the mid-1990s but has since fallen to around one third.

Figure 2.11 Tenure choice in New Zealand

Tenure choice<sup>1</sup>



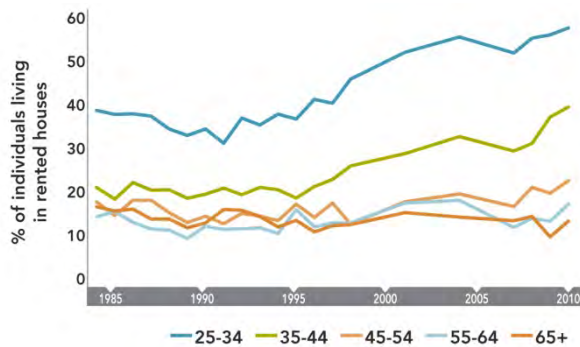
Homeownership in selected OECD countries



Share of rental households by region



Share of rental households by age



Source: Statistics New Zealand Household Economic Survey, OECD, NZ Census

Notes:

1. These data come from the Household Economic Survey and are consistent with census data for 2006. The 2006 Census (Statistics New Zealand, 2009) counted 451,965 dwellings 'not owned by usual resident(s)' representing 32% of the total dwelling stock (1,454,175). However, if the 90,333 dwellings 'Not Elsewhere Included' (NEI) are excluded from the count, the proportion rises to 33%. As well as the 388,275 'usual residents who make rent payments', the count also includes 57,378 'usual residents who do not make rent payments' and 6,315 where 'rental arrangements (could) not (be) further defined'.

Landlords

The apparent disconnect between house prices and rents suggests that increased demand for rental properties has, to date, been met with increased supply. A large and growing share of New Zealand renters rent their homes from private individuals (Figure 2.11, Table 2.1). For instance, between 1991 and 2007, the number of rental property investors rose from 75,000 to over 200,000 and the debt on rental properties increased from an estimated 21% of total mortgage debt in 1991 to around 33% in 2006 (House Prices Unit, 2008).

Most investors in the New Zealand rental market are relatively small scale and only work part-time in the sector – the annual ANZ Property Investment Survey indicates most landlords own 1-3 rental properties. As well as operating on a very small scale, the available evidence also suggests that New Zealand landlords are reasonably 'self-sufficient' in that they are disinclined to use professional property management services.<sup>11</sup>

Consistent with the steep increase in the ratio of house prices to rents outlined above, landlords have been prepared to accept low yields on their rental properties, given in part an expectation of capital gains. Although estimates vary, the net cash yield on rental properties over the 2000s house price boom is

<sup>11</sup> For example, anecdotal evidence collected in engagement meetings suggests that only around 20% of rental properties in New Zealand are managed by a property manager compared with 80% in Australia.



estimated to be well below 4% (Department of Building and Housing, 2008). In contrast, capital gains have been relatively strong until recently and New Zealand home owners have, on average over the 2000s, enjoyed superior returns compared to investing in the share market (OECD, 2011).

However, since the end of the 2000s boom, capital gains on rental properties have diminished significantly, placing strain on the sector. Although difficult to judge, demand pressure may already be working to increase rents in the bigger cities, with recent data indicating that rental households are spending an increasing share of disposable income on rent (Statistics New Zealand, 2011). In addition, some rental agencies have adopted the 'open home' approach, which results in potential tenants making offers of increased rents to secure the tenancy.

Outside student accommodation and retirement villages, large-scale landlords have a very limited presence in the New Zealand market. A low cash yield is likely to be one important reason why institutions have been reluctant to enter the rental property market. The large scale of investment required to assemble a suitably diverse portfolio of rental properties in different locations with different demographic exposures is also often cited as a barrier to institutional investment in the sector. The share of people living in rental properties owned by private businesses, trusts or other organisations has remained low at under 5%, indicative of a very low level of institutional involvement in the sector (Figure 2.11).

Reflecting the growth of small-scale investors in the rental market, Housing New Zealand Corporation (HNZC) and other local and central government agencies have accounted for a declining share of the market (Table 2.1, Figure 2.11). Going forward, HNZC would like to narrow its focus to 'high needs' tenants and have its clients living in communities in which only 20% of the houses are HNZC tenancies (Housing Shareholders Advisory Group, 2010). Accordingly, HNZC currently wants to redistribute, reconfigure or upgrade at least 27,000 of the 70,000 dwellings it currently owns. Consistent with this focus, HNZC envisages moving households out of state houses and into the private rental market once they are better able to fund their housing needs.

For some, the transition into the wider rental market is likely to be difficult given the small scale of a third sector committed to providing 'non-profit' or 'not-for-dividend' community-based housing. In large part, the underdevelopment of the third sector in the provision of social housing reflects an approach that has, up until now, relied on the private rental market, with demand-side assistance in the form of the Accommodation Supplement, and on the legacy of the state housing stock. As a result, and in contrast to a number of other countries, third-party supply of social housing is extremely underdeveloped in New Zealand (discussed in chapter 11).

Table 2.1 Share of renting households by sector of landlord

	Private person or business	HNZC	Local council	Other state landlord
1996	72.1	5.4	19.4	3.1
2001	78.4	4.2	15.6	1.9
2006	81.8	3.0	13.5	1.7

Source: Statistics New Zealand (2009)

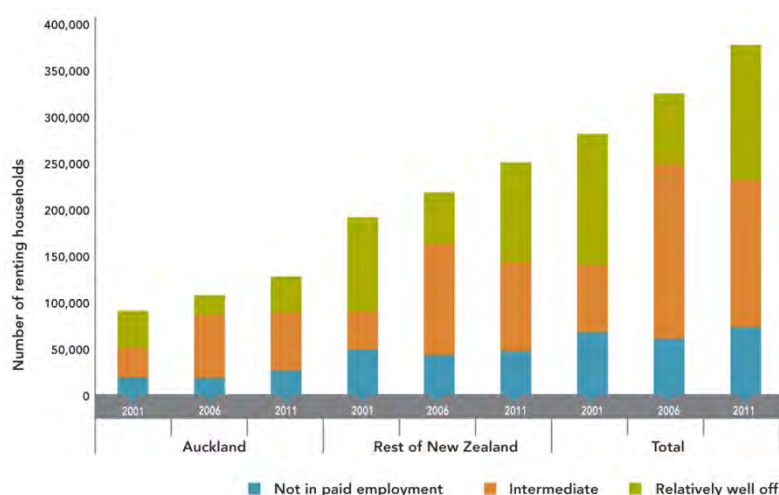
## Tenants

Declining home ownership is concentrated in age cohorts traditionally associated with the transition into home ownership (Figure 2.11). This is consistent with decreasing affordability for younger cohorts, discussed in detail in chapter 4, and marks a distinct change in the function of the rental market. Up until the mid-1980s, when home ownership peaked, rental accommodation traditionally acted as a 'stepping stone' on the way to a preferable owner-occupied mode of housing. However, since then, affordability constraints have become more binding for a growing share of households, who tend to be young and/or with relatively low incomes.

This group of 'intermediate renters' typically has at least one member in paid employment but cannot afford to buy a dwelling at the lower quartile price, assuming standard bank lending criteria. Many intermediate renter households include "middle income couples and families and older households who would normally be expected to achieve stable housing through home ownership" (The New Zealand Housing Report, 2009/10). In effect, this group are at the margin of home ownership in that they are unable to bridge the deposit and/or mortgage-servicing gaps given the price of lower-quartile dwellings.<sup>12</sup> As such, the size of the intermediate rental market provides a good indicator of housing affordability.

Between 2001 and 2006, as rising house prices pushed the affordability constraint further up the income distribution, the number of intermediate renters more than doubled to over 187,000 households and 58% of all private renters (Figure 2.12). Between 2006 and 2011, driven in part by declining interest rates, the share of intermediate renters is estimated to have declined while the number of well-off renters increased. In aggregate, and consistent with the tenure results outlined above, the total number of renter households in New Zealand increased by almost 35% in the ten years to 2011. In Auckland over this period, the number of renter household increased by 40% and one in three of New Zealand's renter households now live in this part of the country.

Figure 2.12 Growth in the rental market



Source: Productivity Commission

An important advantage of rental housing is that it is more flexible than home ownership, allowing tenants to relocate in response to changes in employment or other circumstance. On the other hand, increased flexibility can also be problematic for tenants who value the stability of tenure that home ownership provides. For instance, whereas home owners effectively lock on to the property ladder and thereby insulate themselves from future swings in the housing market, tenants are continuously exposed to market conditions through changing rents.<sup>13</sup>

Although rent increases have been modest over recent years, the location decisions of low-income households appear to be sensitive to rent changes. In particular, between 1996 and 2006, there was an exodus of low-income renters out of the Auckland isthmus as rents in these neighbourhoods increased more quickly than in other parts of the city (Figure 2.13). In contrast, in neighbourhoods on the city fringes, where rent increases have been lower, the concentration of low-income renters increased over the ten years to 2006. At least some of these relocations are likely to reflect tightening budget constraints, with negative consequences for local connections to schooling and other community-based networks.

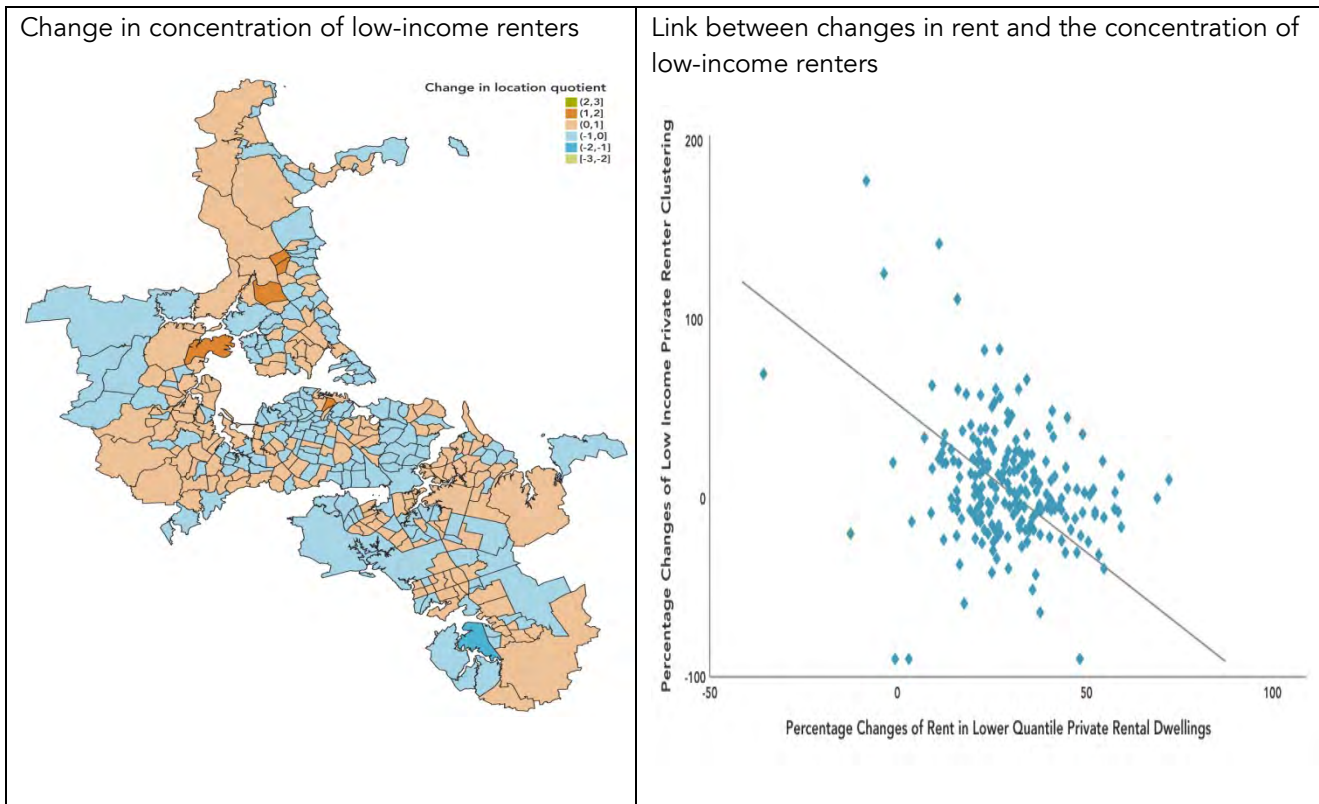
In effect, large increases in the number of rental households and the average duration of rental tenure require the rental market to perform in a way that it has not done previously – that is, provide secure, long-

<sup>12</sup> For example, if housing affordability improves, households at the top end of the intermediate renter group either move into home ownership or join the group of 'relatively well-off renters' who can afford to buy a house but choose not to. Conversely, a reduction in affordability will see households at the bottom end of the relatively well-off renters group become intermediate renters.

<sup>13</sup> By way of illustration, data from the 2006 Census on tenure length in the private rental market indicates the transitory nature of renting. Specifically, 44% of all renters reported having tenancies of less than one year, 39% rented for between one to four years, 10% rented for five to nine years and 5% for ten or more years (DTZ New Zealand, 2008b).

term, quality, rental housing on a much larger scale than in the past. The challenges around this transformation are discussed in chapter 11.

Figure 2.13 Clustering of low-income renters, 1996-2006



Source: Productivity Commission calculation using Census and DBH Tenancy Bond Board data

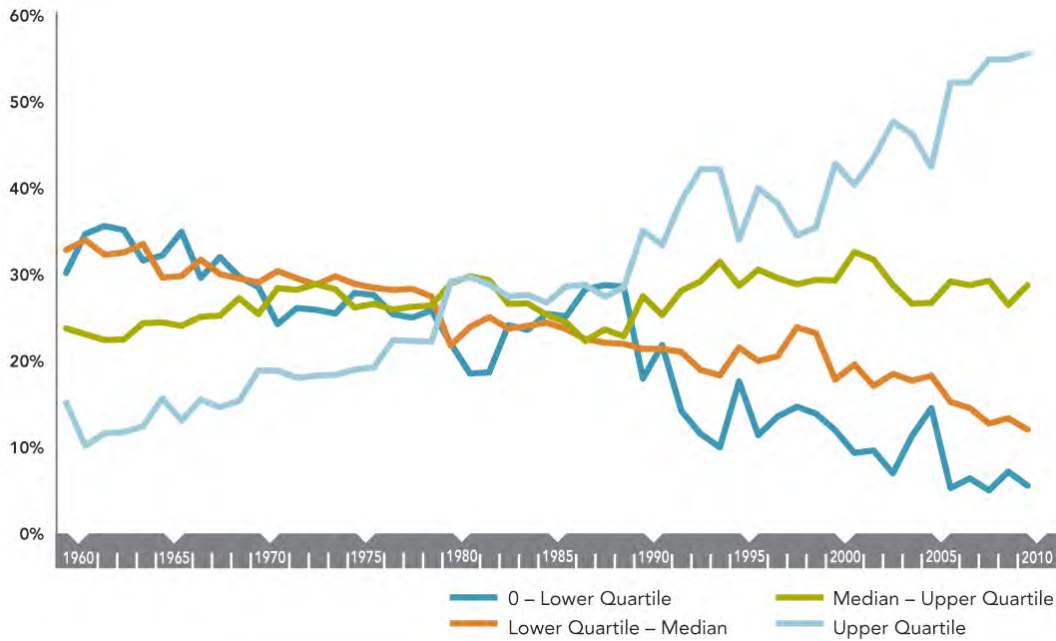
Notes:

- Location quotients measure the over or under representation low-income renters at the TA level relative to its proportionate share in the Auckland region. The figure shows the percentage point change in the location quotient over the period 1996-2006. A number greater (less) than zero indicates an increasing (decreasing) concentration of low-income renters.

## 2.4 Housing Investment

A distinctive feature of residential investment in New Zealand is that new supply has tended to come in the form of large and relatively expensive houses or, to a lesser extent, apartments that are targeted at the top end of the market. This represents the culmination of a distinctive trend that has been on going at least since the 1960s (Figure 2.14). Since then, the share of new dwellings with values greater than the upper quartile value of the existing dwelling stock has steadily increased from around 10% to over 50%. Conversely, the share of new dwellings in the lower quartile has fallen from around 30% to 10%. As such, the majority of new dwellings are currently not targeted at the affordable end of the market.

Figure 2.14 New housing investment, value distribution



Source: Productivity Commission calculation using QV data

Notes:

- For each year, the data show the share of new houses that are valued within each quartile of the value distribution for the existing housing stock.

There are a number of reasons why housing investment in New Zealand is typically high end.<sup>14</sup> First, new houses are usually built to higher specifications and with larger floor areas than the existing stock, indicative of quality improvements (Box 2.2). Second, with land prices constituting a large and increasing share of the value of a dwelling, particularly in Auckland, the incentive is to build high-spec houses so as not to under-capitalise the value of the land. Third, anecdotal evidence also suggests that the margins available to builders on low-cost homes are typically lower than on high-priced homes. In addition, there are a number of issues that complicate the building of affordable houses on rural Māori land (Box 2.3).

Changing demographics may also play a role in encouraging investment into high-spec housing. A theoretical model suggests that population ageing increases the share of older households living in high-quality housing (Coleman, 2010). In contrast, this model predicts falling home ownership rates among younger people, who are squeezed out of the housing market by higher taxes and house prices. The empirical evidence in New Zealand is consistent with these predictions. In particular, as well as the increased rental tenure for younger cohorts outlined above, the share of older households living in houses with at least three bedrooms increased from 59% to 68% between 1996 and 2006 (Coleman, 2010).

### Box 2.2 New Zealand houses are big

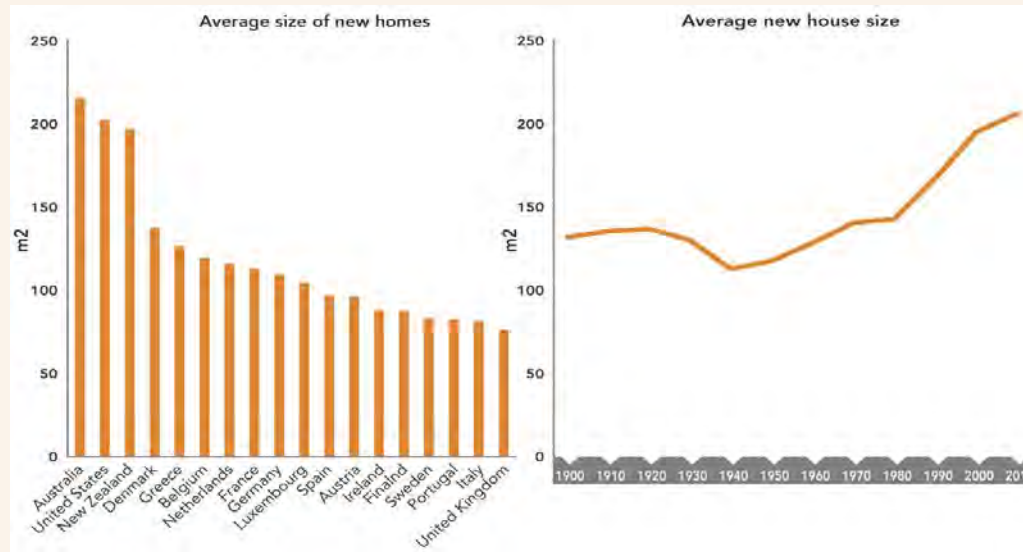
At the national level, New Zealand houses are, on average, among the largest in the world (Figure 2.15). This has not always been the case. Since the 1950s, the average size of a new house has steadily increased, with particularly rapid growth between 1980 and 2010 (Figure 2.15). By 2010, the average new house was around 200m<sup>2</sup>, a great deal larger than a standard 1960's three-bedroom bungalow. Indeed, in the 1960s, three-bedroom houses accounted for about 70% of all houses. But since 2000, new houses are more likely to have four rather than three bedrooms and five-bedroom houses have accounted for over 10% of new construction. In international comparison, the average size of a new house in New Zealand is now over double that in a number of European countries.

The areas of the country that have experienced the largest increases in house size have typically

<sup>14</sup> In technical terms, the supply of more affordable housing largely depends on the relative profitability of constructing this type of housing compared to more expensive housing. In turn, depends on the relative size of the selling price / construction cost ratio for dwellings at different price points in the market (Rosen, 1974).

evolved from small rural areas into fringe areas attached to larger centres or from holiday destinations to substantial centres supporting local families or attracting larger holiday homes (Ingerson, 2011).

Figure 2.15 House size in New Zealand



Source: James (2009) and Ingerson (2011)

### Box 2.3 Māori housing in rural areas

Māori wishing to invest in housing on their own land face a number of challenges. First, banks have been reluctant to lend money to build homes on Māori land. Banks can accept Māori land as security for a loan without 'triggering' processes under the Te Ture Whenua Māori Act 1993 for 'alienation'. However, although banks could take possession of Māori land in the event of default, it would be difficult to on-sell the land and recover the loan.

The simplest way in which this could be achieved would be to have the Māori Land Court convert the land to General Title. However, there is a cost involved in this process, which would reduce the amount of the money that could subsequently be recovered. Also, alienating Māori land is an emotive issue, implying significant risk for the bank involved.

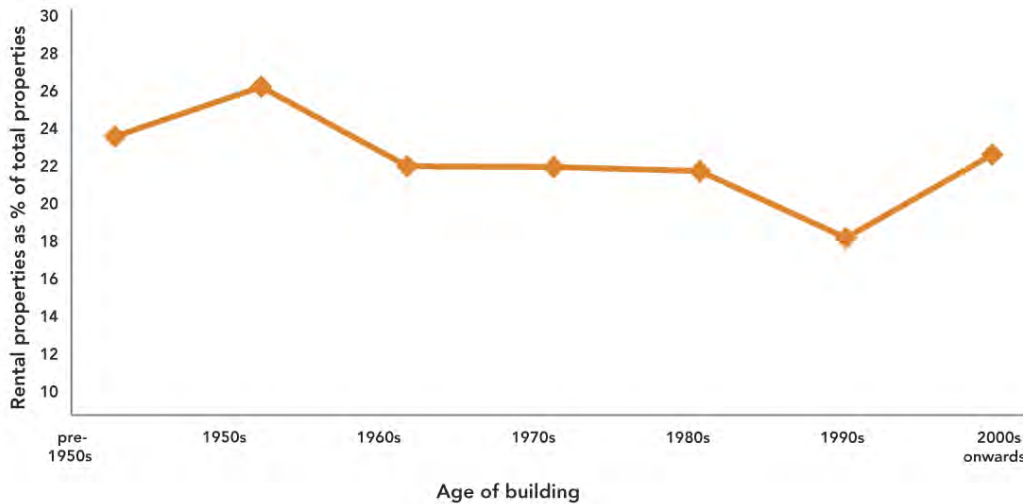
Another difficulty is that a "limited market for houses on Māori land means that a house on Māori land is likely to lose rather than gain value" (OAG, 2011). This suggests increased uncertainties about the future value of a particular home on Māori land, given a limited secondary market for some such homes. This may exacerbate the financial risk involved in building houses on Māori land and thereby undermines the confidence of lenders.

Chapter 12 suggests a number of different models to address these issues.

With a strong tendency towards high-spec new housing, the construction sector does not provide for low-to-middle income households and anecdotal evidence suggests that very few first-home buyers buy a new house. In addition, with the exception of multi-unit dwellings, there is very little purpose-built rental construction coming on stream (Page, 2007). Instead, the increase in the stock of rental dwellings has been met by 'filtering', through which newly constructed dwellings free up existing dwellings for use in the rental market. As a result, older dwellings are more likely to be part of the rental stock while newer dwellings are more likely to be owner occupied (Figure 2.16).<sup>15</sup> However, this doesn't hold for dwellings constructed in the 2000s, reflecting an increase in the construction of multi-unit dwellings specifically for the rental market.

<sup>15</sup> Moreover, survey evidence indicates a distinct preference amongst property investors for second-hand as opposed to new properties. In particular, SHORE, 2011 finds that 67% of the sample of landlords only bought existing dwellings.

Figure 2.16 The age distribution of rental and owner-occupied dwellings



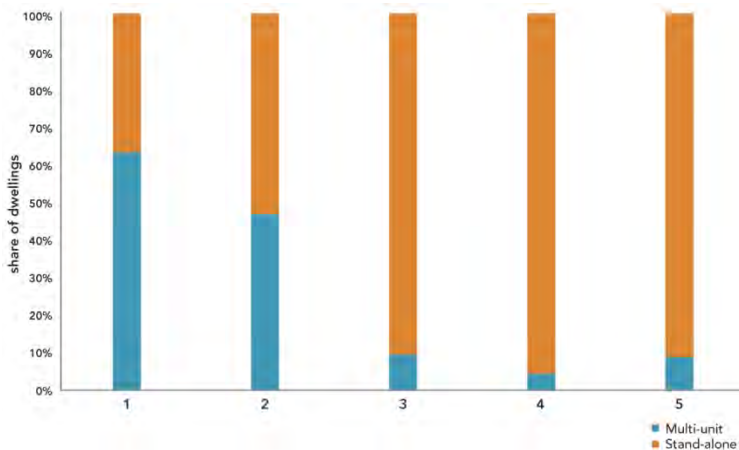
Source: Productivity Commission calculations based on QV data

## Multi-unit dwellings

Increased construction of multi-unit dwellings has been an important driver of a modest increase in medium density housing in New Zealand over recent years. Across the country, multi-unit dwellings now account for around 18% of the number and 16% of the floor space of all privately occupied dwellings.<sup>16</sup> Multi-unit dwellings typically have fewer bedrooms and are smaller than stand-alone dwellings (Figure 2.17).

As in most OECD countries, multi-unit dwellings in New Zealand typically cater for a large proportion of renters. In aggregate, the available data indicate that 55% of multi-unit dwellings are rented as compared to only 26% of stand-alone dwellings. In the urban centres, this distinction is even more pronounced. For example, in Auckland, Wellington and Christchurch only 27% of residents of inner city apartments own their homes, compared to the national ownership share of 65% (Statistics NZ, 2010).

Figure 2.17 Dwelling type by number of bedrooms



Source: Productivity Commission calculations using QV data

### Notes:

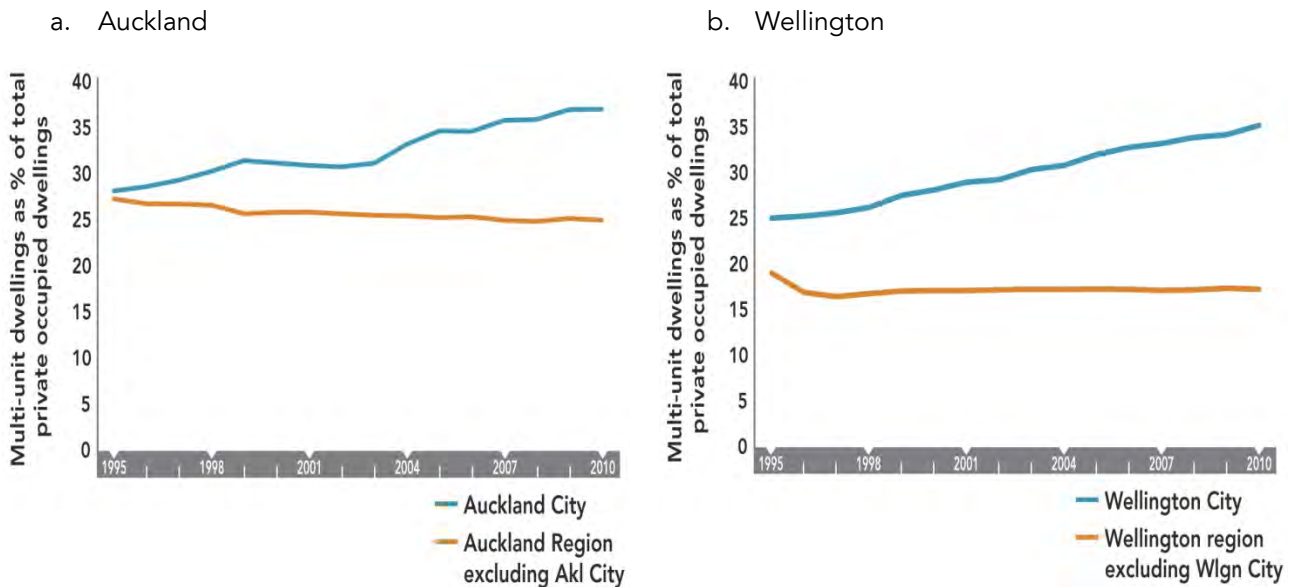
- Shows the split of multi-unit and stand-alone dwelling by number of bedrooms.

In broad terms, the construction of multi-unit dwellings was strong from the late-1990s, before declining noticeably over more recent years. The intensification of multi-unit dwellings has been particularly pronounced in Auckland and Wellington. In the Auckland region, the share of multi-unit dwellings has gradually increased by a couple of percentage points since the mid-1990s, and one in four dwellings are currently multi-unit (Figure 2.18). Much of this growth has been concentrated in the former Auckland City, where the number of multi-unit dwellings has almost doubled since 1995 and now accounts for over one

<sup>16</sup> Multi-unit housing covers everything from 'double units', flats, home units, row housing, townhouses, and apartments. Figures on the tenure split are based on provisional QV data on tenure type at the house level. These data currently do not cover the entire housing stock with around 15% of dwellings being of an unknown tenure type.

third of total dwellings. In Wellington, the intensification of multi-unit dwellings has been one of the most rapid in the country and the share of multi-unit dwellings has converged to around the Auckland level of about one in four dwellings (Figure 2.18). The bulk of this growth has taken place in Wellington City, where, as in Auckland City, just over one third of dwellings are multi-unit.

Figure 2.18 The share of multi-unit dwellings in Auckland and Wellington



Source: Productivity Commission calculation using QV data

Reflecting their smaller size and inner-city locations, increased penetration of multi-unit dwellings in urban centres has, in large part, been driven by distinctive groups of people that favour inner city living – young people in education or early career stage, singles and couples and non-family households and frequent movers (Dunbar and McDermott, 2011). Notwithstanding increasing intensification, the public perception of multi-unit dwellings has tended to be negative in New Zealand (Dunbar and McDermott, 2011). However, this may be changing with improvements in the quality and functionality of multi-unit dwellings.<sup>17</sup>

## 2.5 The quality of the housing stock

Anecdotally, the New Zealand housing stock is generally considered to be of poor quality. This perception has been reinforced over recent years by the leaky homes episode, which has seen a significant number of homes built between 1992 and 2005 suffer from failing weather tightness. The total cost of this crisis is estimated to be \$11.3 billion (2008 dollars).<sup>18</sup>

There is very little quantitative information available on the quality of New Zealand houses. Currently, the most comprehensive survey of housing quality is periodically conducted by BRANZ (Buckett, 2011).<sup>19</sup> Consistent with the anecdotal evidence, all of the houses included in the 2010 BRANZ Survey were found to suffer from at least one component in a poor or serious condition. Overall, and accounting for changes in methodology, the BRANZ surveys have found that the condition of New Zealand houses has changed little since the mid-1990s. Consistent with this, previous surveys have found that the amount owners spent on maintenance is lower than expected, suggesting that maintenance is inadequate to maintain the housing stock in a satisfactory condition.

<sup>17</sup> According to survey evidence in Dunbar and McDermott (2011), medium-density housing is often perceived to be characterless, drab, monotonous, cramped, leaky, subject to the complications of bodies corporate, lacking privacy, noisy, insecure, lacking an outlook, lacking hobby and storage space, having parking problems, not allowing pets and with poor prospects for capital gains. However, in the same study, residents relatively new multi-unit dwellings were generally happy with their dwellings, indicating that the quality of multi-unit dwellings is improving.

<sup>18</sup> In May 2010, the Government announced its financial assistance package to help people get their leaky homes fixed, under which the Government and local authorities each contribute 25% of the agreed-upon repair costs, with the affected home-owners funding the remaining 50% backed by a government loan guarantee.

<sup>19</sup> BRANZ have run their Housing Conditions Survey in 1994, 2000, 2005 and 2010. Although the sample size in the BRANZ Surveys, typically around 600 houses, is very small relative to the 1.6 million dwellings estimated to exist in the 2006 Censuses, it is by far the largest survey on the quality of the housing stock in New Zealand.

Although objective measures of housing quality are not conducted on a comprehensive basis, there are a number of questions in Statistics New Zealand's *General Social Survey* that aim to assess the quality of the New Zealand housing stock from the perspective of its inhabitants.<sup>20</sup> Overall, 51% of respondents report that they have a major problem with their house or neighbourhood (Table 2.2). The most commonly reported problem is that New Zealand houses suffer from cold and damp. Across all of the quality areas surveyed, people who rent their homes are more likely to be dissatisfied with the quality of their dwelling compared to owner occupiers, indicating that the quality of the rental stock is relatively poor.

**Table 2.2 Proportion of individuals who have a major problem with their house or neighbourhood**

	Rented	Owned with mortgage	Owned without mortgage	Total
Overall	66	51	37	51
Too small	18	12	6	12
Poor condition	12	5	3	7
Damp and/or cold	34	16	11	20
Too expensive	14	6	1	7
Too far from work and/or other amenities	12	10	6	9
Street/neighbourhood is unsafe	8	4	2	4

*Source:* Productivity Commission calculations using Statistics New Zealand, *General Social Survey*

*Notes:*

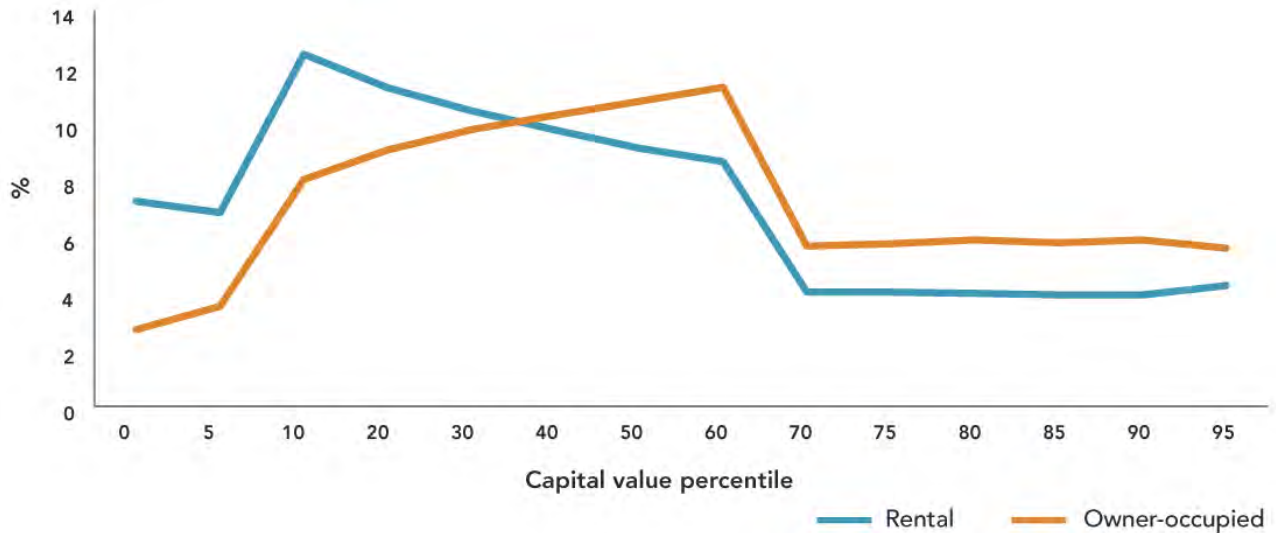
1. Respondents aged 15+

Indicative of relatively poor quality, rental dwellings tend to be worth less than owner-occupied dwellings (Figure 2.19). For instance, around half of the rental dwellings in New Zealand are in the bottom 30% of dwellings by value, whereas only one third of owner-occupied dwellings fall below this threshold. Although part of this value difference reflects different characteristics, even when the number of bedrooms is controlled for, rented dwellings are still typically of lower value than owner-occupied dwellings. In addition, the tendency for rental dwellings to be older than owner-occupied dwellings (Figure 2.16 above) also suggests that they are typically of lower quality.

<sup>20</sup> The GSS collects data on the well-being of New Zealanders aged 15 years and over. It covers a wide range of social and economic outcomes and how they are distributed different groups within the New Zealand population.



Figure 2.19 Share of rental and owner-occupied dwellings by capital value



Source: Productivity Commission calculations based on QV data.

The generally poor condition of the New Zealand housing stock has been linked to poor health outcomes and is a key contributor to health inequalities (Howden-Chapman *et al.*, 2007). For instance, the New Zealand Nurses Organisation points to:

Aotearoa New Zealand's unprecedented levels of rheumatic fever, particularly for Māori and Pacific peoples, [as] just one indication of the overcrowded, cold and unsanitary conditions that many families are living in. (sub. 36, p.2)<sup>21</sup>

In response to the poor quality of New Zealand houses, the Building Code was amended in October 2007 to include more stringent requirements for insulating new houses and existing houses that undergo major renovations. Also, in July 2009 the Government introduced a new insulation and clean-heating programme with the aim of retrofitting more than 20% of homes with substandard insulation over the next four years.

## 2.6 Ongoing challenges for the housing market

The entry costs of home ownership increased over the course of the 2000s house price boom for some groups in society. This has had an important impact on the journey of some households up the housing ladder, particularly those living in Auckland. Affordable Housing New Zealand characterise the problem as “missing rungs on the housing ladder – homes in the \$320,000 to \$380,000 price bracket – that does not allow a natural progression into home ownership” (sub. 12, p. 16).

Going forward, it is difficult to predict the likely balance between the fundamental drivers of demand, the supply responsiveness of the land development and construction sectors and the associated house price and tenure dynamics.<sup>22</sup> One plausible scenario is that, in conjunction with other demand-side drivers, the population and demographic pressures outlined in Chapter 4 continue to fuel housing demand over coming decades, particularly in Auckland. In the absence of improvements in land delivery and the performance of the construction sector, this would see land prices and the costs of new houses continuing to increase, with any volatility in the housing market appearing in volumes and, to a lesser extent, in the prices of older houses in cheaper suburbs.

In this scenario, the size of the rental market would increase further as the proportion of families owning their own homes continues to decline, particularly in Auckland. Indicative of missing rungs on the housing ladder, intermediate renters would make up the bulk of this increase. In addition, a growing shortage of

<sup>21</sup> The work underpinning this submission can be found in Jaine *et al.*, 2008.

<sup>22</sup> The relationships between each are complex and interdependent. For example, house price increases dampen household formation by encouraging young people to stay at home longer and increasing overcrowding, homelessness and the size of multi-family households beyond what would be expected given cultural considerations. Rental values influence the income accruing to investment interests, and hence their value. In turn, the value of investment interests is a major determinant of site values and activity in the development sector.

both private rental and affordable housing would expose the government to increasing fiscal risk in the form of an escalating accommodation supplement and growing state house rental subsidies. This risk would grow significantly if rents move back into line with house prices, ending the recent and historically unusual period of disconnect and increasing the level of financial distress for many low-income renters.

An alternative scenario is that the housing market continues to be subdued. To date, New Zealand's house price correction post the Global Financial Crisis has been modest in international comparison. As such, and given the prospect of an extended and volatile world near-recession, there may be more price falls to come.<sup>23</sup> In this scenario, supply constraints in the construction and land development sectors bite to a lesser extent and real house prices continue to fall. The market would settle at lower house prices and the affordability issue would recede.

On top of the range of possible cyclical outcomes, the New Zealand housing market faces a number of additional challenges. The shift in tenure choice outlined above indicates that the housing needs of New Zealanders are changing rapidly and that the rental market needs to be able to provide secure long-term quality rental housing on a much larger scale than it has done previously. As discussed in chapter 11, it is not clear whether a rental market based on small part-time private investors is capable of rising to this challenge. In addition, the generally poor quality of the housing stock indicates latent demand for housing renewal and refurbishment if incomes increase sufficiently. On top of all this, the fallout from the Christchurch earthquake presents an additional major challenge for the construction sector going forward.

Although the future direction of the New Zealand housing market is difficult to predict, the policy recommendations outlined in subsequent chapters of this report are not contingent on a particular outlook. These recommendations focus on improving the supply responsiveness of the land development and construction sectors and hastening the development of a third sector for the provision of social housing. Impediments and lack of development in these sectors have had a negative effect on affordability that has accumulated over the years and goes well beyond the impact of house price cycles, including the house price boom over the 2000s. As such, these policy recommendations are welfare enhancing, even in a low-growth scenario, although perhaps less urgent.

By the same token, even if supply responsiveness can be significantly improved, the New Zealand housing market will still experience house price cycles, with attendant implications for affordability. Given its stock-flow nature and the time lags involved in construction, the housing market is invariably sticky to some extent and new houses cannot be built instantaneously in response to jumps in demand. For example, even with optimal regulatory settings, the construction sector would not have been able to supply enough houses over the 2000s to prevent significant price increases. However, improvements in the policy environment would most likely reduce the intensity of house price cycles going forward (Glaeser and Gyourko, 2006; Glaeser, Gyourko and Saiz 2008).

Perhaps more importantly, the policy improvements outlined in this report are aimed at improving the performance of the housing market and the effectiveness with which it provides housing for New Zealanders. The objective is a housing market capable of meeting changing demands for housing in a cost effective and affordable way over the long term and well beyond the length of a typical house price cycle.

---

<sup>23</sup> For instance, in its 2011 Article IV report on New Zealand in April 2011, the IMF assessed New Zealand real house prices as being 15-25% overvalued. In its May 2011 Financial Stability Report, the Reserve Bank assessed the house price overvaluation to be probably no more than about 10%. A less official, but more recent (November 2011), cross-country survey of house prices in relation to both household disposable incomes and rents puts New Zealand house prices at about fair value in relation to the former, but substantially over-valued relative to the latter (The Economist, November 26, 2011).

## 3 Macroeconomic factors are important

### Key points

- Housing matters for the macro economy. The housing market is both an important driver of, and is importantly influenced by, developments in the wider economy. This interdependence has the potential significantly to amplify economic disturbances that originate both within and outside of the housing market.
- The housing market boom in the 2000s was not unique to New Zealand. A number of other OECD countries had a similar experience, pointing to a confluence of global influences as having been at play. These included the emergence of global economic and financial imbalances and innovations in financial policy frameworks (both monetary and prudential) that turned out to be destabilising.
- New Zealand-specific factors were also at work, some of which amplified the housing boom and others that helped to soften the subsequent 'bust'.
- Overall, the housing boom over the 2000s created significant complications in moderating the business cycle and mitigating the associated economic and welfare costs. One such complication was a tendency for monetary policy responses to amplify the exchange rate cycle, to the detriment of the tradables sector of the economy and, as a consequence, productivity performance overall.
- In the future, one of the central challenges is how better to manage house price inflation expectations and monetary/credit expansions. The emerging development of macro-prudential policy frameworks and instruments provides one, if not the main, way forward.

### 3.1 Introduction

The housing market is a large part of the economy and, as such, is both an important driver of, and is importantly influenced by, macroeconomic developments. A short-term disturbance to the economy – for example, a sharp shift in immigration or changes in fiscal or monetary policy – can manifest prominently in the housing market and feedback to the wider economy in ways that amplify the impact of the initial disturbance.

This chapter considers these types of linkages between the housing market and the macro-economy against the backdrop of the 2000s house price boom.

### 3.2 A retrospective

As discussed in Chapter 2, the 2000s saw a housing boom, and bust, across a number of OECD countries. While by no means all of the story, that boom and bust was a large component of what came to be known as the Global Financial Crisis. As well as a range of global influences having been at work, regional and New Zealand-specific factors have also had a bearing on the course of events here.

#### The global context

At the global level, a confluence of circumstances in the early 2000s created the conditions for what was to follow. Outside the United States, these developments were mainly focused on the financial sector, rather than the housing sector. In no particular order, these developments included:

- An increase in Asian savings, particularly in China, looking for a home.
- Exceptionally low policy interest rates in some of the main destinations for these savings (notably, but not only, the US) as a result of monetary policy easings in the wake of the 'dot.com' bust early in the

2000s. In turn, low interest rates fostered both an appetite for borrowing and a search by investors ‘for yield’.

- This facilitated the emergence of new innovative and opaque, channels for intermediating savings to housing loans (eg, loans that were securitised and repackaged into products such as collateralised debt obligations). Combined with social policy goals and interventions aimed at increasing home ownership among low-income households, particularly in the US, this led to a marked drop in home loan underwriting standards (ie, sub-prime lending).
- The inherent difficulty for financial regulation and prudential supervision in keeping up with financial innovations. In addition, financial market disciplines proved to be much less effective than policy-makers assumed.
- A prevailing view that asset price ‘bubbles’, such as a bubble in house prices, should not be a policy concern. According to this view, provided consumer prices remained anchored, asset prices would also eventually re-anchor of their own accord. In this scenario, the least-cost policy approach was to let asset prices run their course, with central banks standing ready to ‘clean up’ afterwards if necessary.

These global factors go a long way toward explaining the financial laxity that emerged during the 2000s in a number of OECD economies (though much less so in Asia). In turn, this manifested as rapid house price inflation. Although house prices in most countries have since re-anchored, and have fallen substantially in some, the financial ‘mess’ to be cleaned up has proved much greater, and the associated recession much deeper, than previously anticipated.

### **...and some New Zealand specifics**

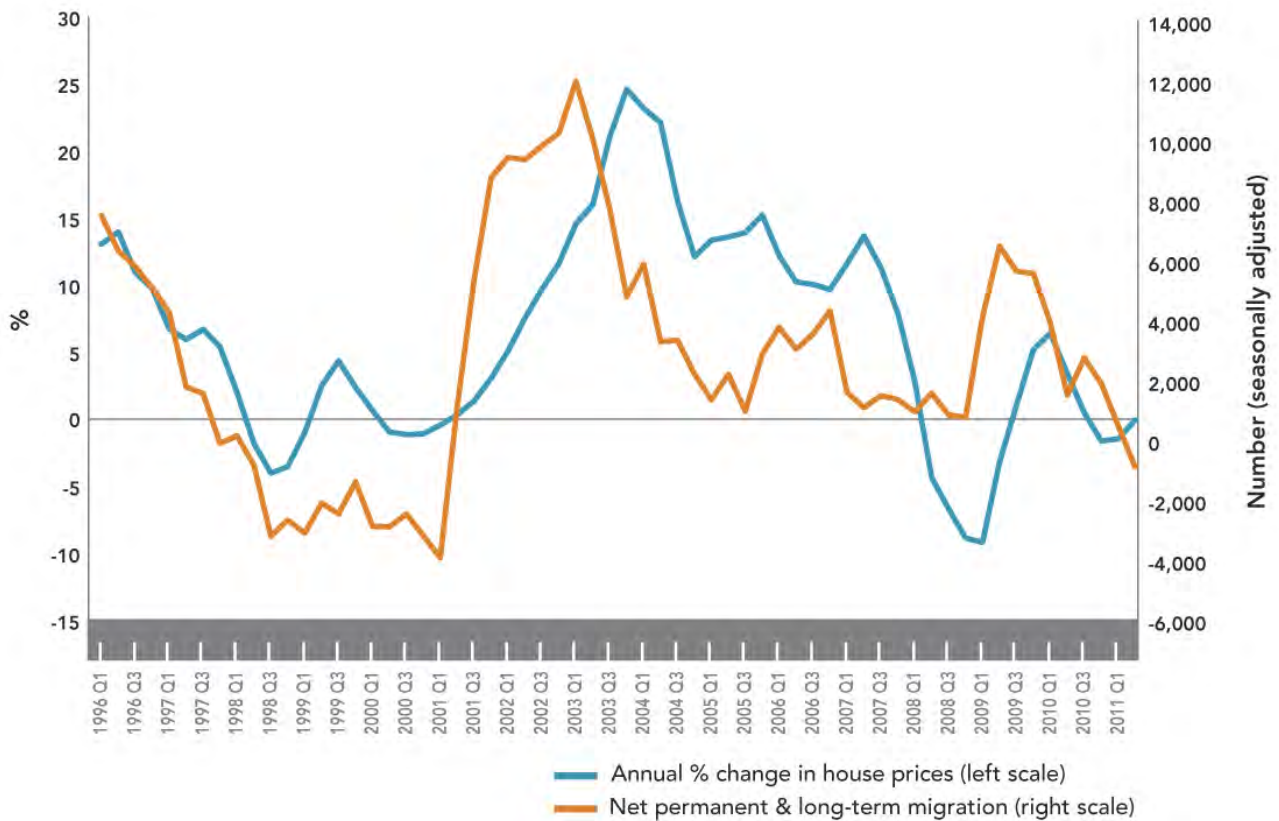
Over the 2000s, New Zealand’s financial and housing markets followed many, but by no means all, of these international patterns. For instance, New Zealand was a destination market for Asian savings (uridashi bonds<sup>24</sup>), maintained low and reasonably stable CPI inflation, and had strong house price inflation broadly in line with some of the other OECD countries. New Zealand also experienced some stresses in the financial sector, albeit confined to the finance company sector, mainly stemming from property development rather than from housing *per se*.

New Zealand-specific factors that contributed to the house price boom included a sharp increase in immigration in the early 2000s at around the same time as consumer price inflation pressures, and hence the policy interest rate, were comparatively low (Figure 3.1, Figure 3.2). As discussed in previous chapters, this combination of demand pressures most likely stimulated the housing under a set of conditions that allowed further momentum to take hold.

---

<sup>24</sup> For an account of how New Zealand banks were able to use the uridashi bond structure to access comparatively cheap offshore funding, see Drage *et al.* (2005).

Figure 3.1 The beginnings of a housing boom



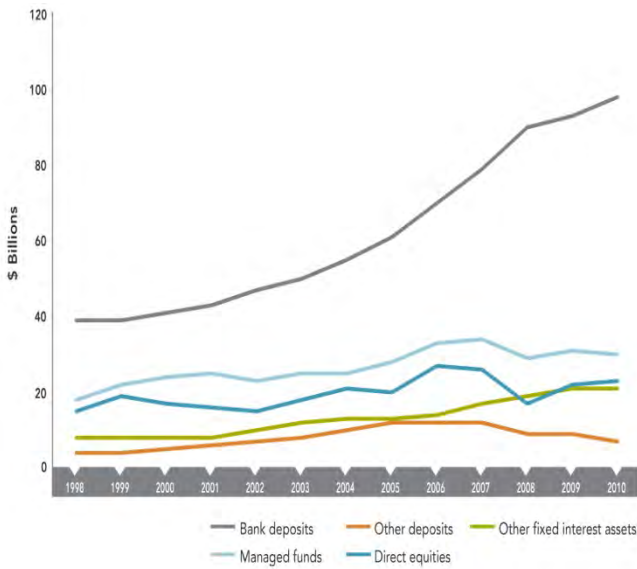
Source: Reserve Bank of New Zealand, Statistics New Zealand

Another distinctive feature of the New Zealand economy was a financial system composed of a strong banking sector and a comparatively shallow investment services sector (ie, managed funds, investment advisors, the share market and share brokers). This picture remains largely unchanged and is apparent from the sizes of the respective sectors as savings repositories and the extent of public confidence in different segments of the financial system (Figure 3.2).

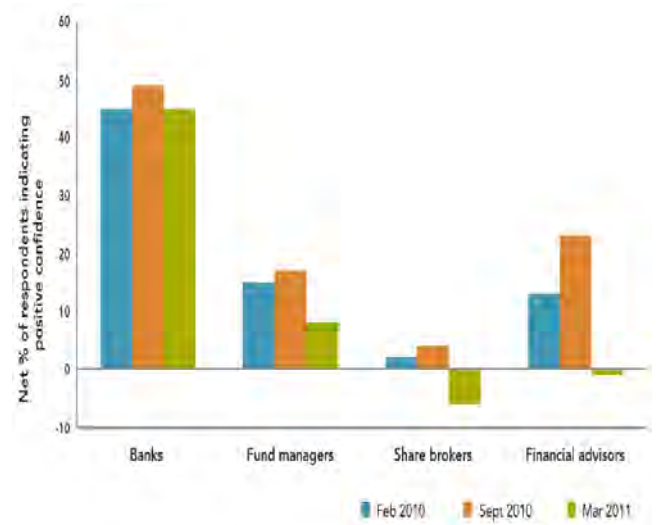
Relatively weak public confidence in non-bank investment channels and with financial products as an asset class is an important reason why the investment behaviour of New Zealand households is tilted toward housing (OECD, 2011) (Figure 3.3). In addition, given that housing investments can be readily financed in a way that most other investments cannot, easy access to credit for housing also helps explain why, in a low-saving economy, housing dominates households' (gross) asset portfolios.

Figure 3.2 A bank dominant financial system

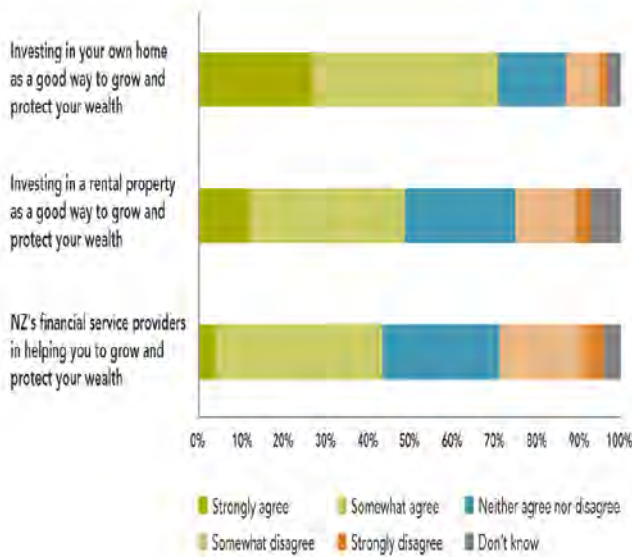
Household financial assets



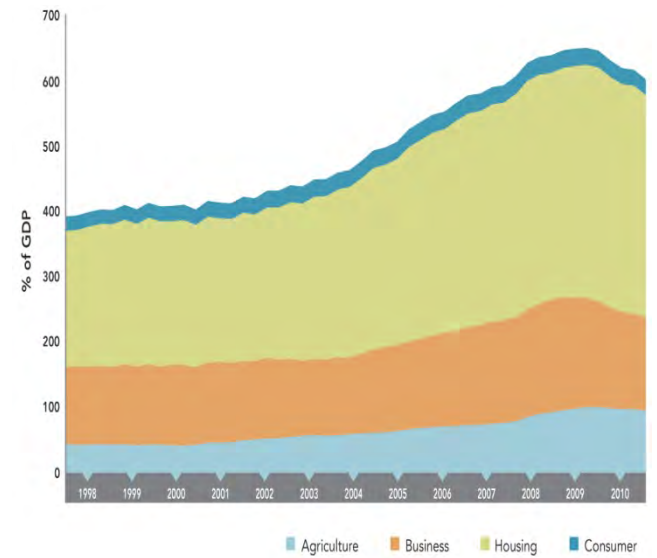
Public confidence in financial service providers



Confidence in financial service providers compared with housing



Composition of banks' assets



Source: Reserve Bank of New Zealand, RaboDirect

Figure 3.3 Financial and non-financial assets (as a percentage of net disposable income 2009 or latest available year)



Source: Reserve Bank of New Zealand; OECD National Accounts database and OECD Economic Outlook 88 database

These aspects of New Zealand's financial system need to be viewed in a longer-term context. The structure and focus of the New Zealand financial system, especially the banking sector, evolved considerably in the 1990s and 2000s. From around the beginning of the 1990s, banks began to shift their lending away from business loans secured over business assets towards household lending secured over houses. In part, this shift was driven by substantial losses incurred by New Zealand and Australian banks following a number of major corporate collapses in the early 1990s after the 1987 share market crash and subsequent crash in the commercial real estate sector. The Australian experience over this period, which closely paralleled the New Zealand experience, is particularly relevant given the close ownership links between the New Zealand and Australian banking systems.

In some respects, this episode of home-grown financial stress in Australasia 20 years ago, which was at least as big a financial crisis locally as the impact of the more recent Global Financial Crisis (GFC), has been a significant factor in shaping the development of the financial sector ever since. With deregulation in the early 1990s improving banks' access to an under-leveraged household sector and perceptions that mortgage lending is 'as safe as houses', the expansion of the banking sector into the home lending market was a natural development. In large part, this explains the ready availability of money for housing, which, in turn, most likely contributed to surges in house prices in the mid-1990s and mid-2000s. These house price booms were punctuated by macroeconomic slowdowns and financial uncertainties associated with the Asian Financial Crisis in the late 1990s and the bursting of the 'dot.com' bubble early the next decade.<sup>25</sup>

## The macroeconomic impact

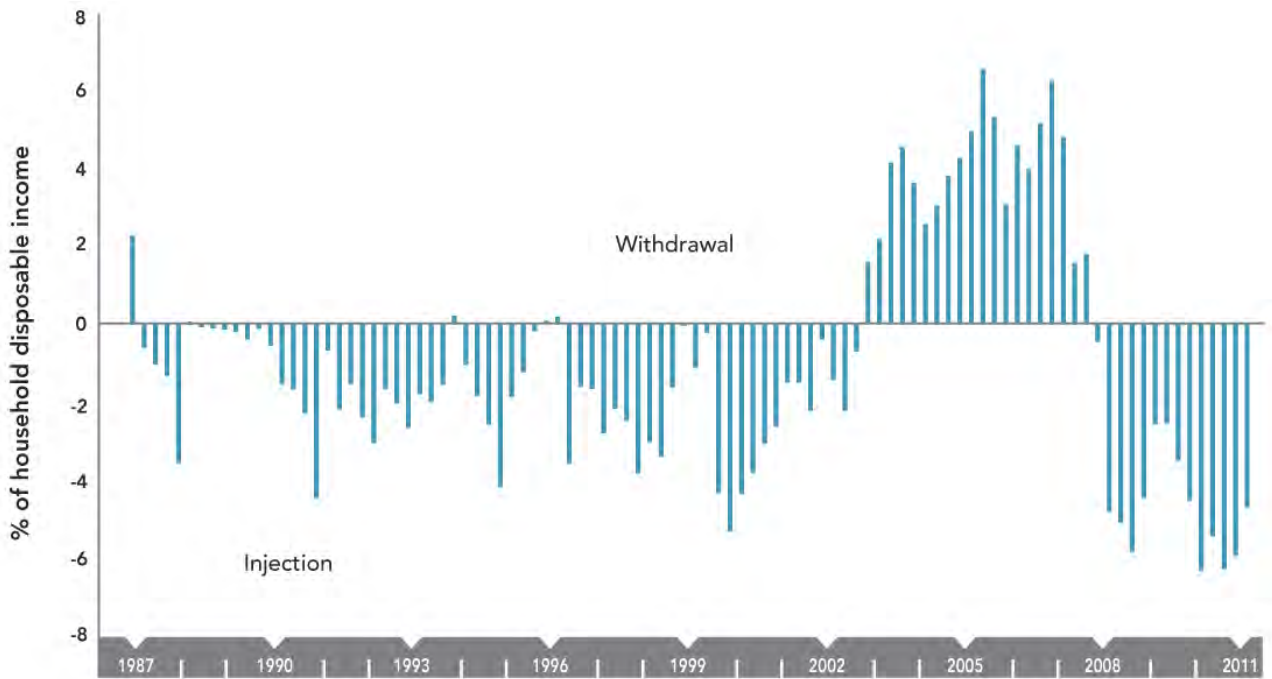
These developments in the New Zealand housing sector have been an important driver of, and have been significantly influenced by, developments in the wider economy over the past couple of decades. For instance, during a housing market upswing, home owners feel wealthier and increase their appetite for debt while lenders become less risk averse given that borrowers' incomes and available collateral appear more assured.

This dynamic in the credit cycle was particularly pronounced during the mid-2000s as home owners increased spending by leveraging up using the house as collateral (**Figure 3.4**). During this episode, the share of disposable income committed to building housing equity swung by about 7 percentage points from around 3% in the ten years to 2002 to minus 4% during the middle part of the 2000s. This swings represents a large stimulatory impulse to the macro economy. Since the house price boom came to an end, housing equity accumulation has moved solidly back into positive territory, acting as a drag on the economy's momentum. Part of this surge in mortgage repayments may stem from home owners maintaining mortgage payments at previous levels to accelerate principal reductions given relatively low interest rates.

---

<sup>25</sup> Prior to deregulation of the banking system, most housing finance was sourced from non-bank institutions, including a significant share via solicitor nominee companies. Banks maintained restrictive home lending policies, for example, lending only where the borrower had been a deposit customer of the bank for a number of years.

Figure 3.4 Housing equity withdrawal



Source: Reserve Bank of New Zealand, (unpublished, subject to change)

## Weathering the Global Financial Crisis

Whereas the New Zealand housing market fully participated in the global housing boom over the 2000s, it has not experienced as sharp a correction subsequently as some other countries (for example, Ireland, the US and Spain). This has contributed to a less severe macro adjustment than faced by other economies and the avoidance of the very difficult recession, deflation and default dynamics that can develop if adjustment proceeds too quickly. Over the past decade, a significant number of New Zealand households took on more debt than they are now comfortable with. However, there are few signs of deleveraging occurring under conditions of debt stress.<sup>26</sup> Home mortgage arrears, while up slightly, remain low by international standards.

Two main factors have contributed to this softer correction in New Zealand relative to a number of other countries. First, home loan defaults have been comparatively rare and, as a consequence, a relatively small number of homes have been put on the market under 'forced sale' terms. In large part, this reflects a more prudent approach to home lending by Australasian banks, which regulators have tended to bolster rather than undermine. For instance, in both New Zealand and Australia, when the Basel II capital standards came into effect, it was made clear that banks would not be permitted as much capital relief in respect of their home loan portfolios as the international standards allowed. The fact that the RBNZ and the RBA both used monetary policy to 'lean into' the run up in housing markets a little more forcefully than in some other countries probably also helped.

Similarly, the prudential requirements applicable to securitisation of mortgage loans were also stricter and less conducive to seriously imprudent conduct than in some other jurisdictions. In particular, securitisation never really got underway, thereby avoiding the conflict of incentives inherent in the 'originate-to-distribute' model for lending.<sup>27</sup> Indeed, to the extent that the 'originate to distribute' model took hold in New Zealand, it was mortgage brokers doing the origination and 'distributing' the resulting lending *onto* the balance sheets of the banks. This is contrary to the situation typical in some other countries, notably the US, where banks originated home loans and, by securitisation, moved them *off* their balance sheets.

<sup>26</sup> The March 2011 RaboDirect Financial Confidence Index survey recorded 70% of respondents as being uncomfortable with the amount of debt they had, and a further 21%, whilst comfortable, as still taking available opportunities to reduce debt.

<sup>27</sup> This reflects the incentive to lower lending standards to bolster origination fee income, with the increased risk passed to the ultimate securities investors being masked by the opacity of the final investment products.



Second, external influences may also help explain why the New Zealand housing market has proved to be comparatively resilient since the onset of the GFC. In particular, economic resilience in a number of Asian economies has kept demand for primary commodities strong, thereby mitigating the impact of GFC-induced recessions in the US and Europe on the New Zealand macro economy. This effect has also been transmitted via Australia, which has benefited from strong Asian demand for mineral and energy commodities. With Australia being New Zealand's largest export market, primarily for non-commodity exports, this has complemented Asian demand for New Zealand's food and fibre commodity exports.

As a consequence of these factors, unemployment in New Zealand has risen by less than in the worst affected economies and has made smaller inroads into the 'mortgage belt', where job losses can result in otherwise sound housing loans quickly turning delinquent.

### 3.3 Implications

The Global Financial Crisis has been the single largest macroeconomic event in the past 70 years. Policy lessons are now being drawn and policy paradigms adjusted as a result of that experience. While much of this remains a work-in-progress, some of the issues and new policy directions are already becoming reasonably clear.

#### House price inflation and leverage

One of the main lessons from the crisis has been that asset price inflation, including house price inflation, matters, particularly if financed by credit (ie, monetary) expansion. While the experiences of the last decade – both the 'dot.com' bubble and subsequent house price boom – are consistent with the view that asset price inflation cannot permanently stray from well-anchored CPI inflation, there is now a better appreciation of the macroeconomic consequences that can result if re-anchoring involves significant de-leveraging. Indeed, the fallout from the GFC has seen a number of OECD economies thrown into severe recessions as a result of banking failures and credit lines being cut.

This brings developments in credit markets squarely back into the frame. While there is no appetite for a return to the money and credit targets of the 1970s, there is a renewed appreciation of the way changes in commercial risk appetite influence the impact of policy interest rates on the macro-economy. These impacts are just as likely to manifest as asset price inflation, rather than inflation in the prices of goods and services. As such, the monetary conditions faced by firms and households do not just reflect the policy interest rate, but also include an overlay of risk pricing implicit in the credit terms set by commercial lending institutions.

Prior to the GFC, the incentives and disciplines imposed by stakeholders on financial institutions (shareholders, bondholders and depositors), combined with supervisory oversight, were considered sufficient to keep lending decisions anchored to monetary policy settings. The occasional failure of an individual institution occurred for reasons idiosyncratic to that institution. However, this view is being fundamentally re-evaluated in the wake of the GFC, with greater recognition being given to the importance of effectively anchoring the commercial financial system to maintain macro-economic stability.<sup>28</sup> In this sense, the housing boom and bust of the 2000s was more a symptom than a cause of the ensuing macro-instability – it has been a global *financial* crisis rather than a global *housing* crisis.

#### Global integration

A second feature of the GFC has been the extent to which it has been *global*. To be sure, different countries and regions have been affected in different ways. But it is no coincidence that housing booms and busts occurred more or less simultaneously across a number of OECD countries. As outlined in Chapter 2, a set of global influences, including both commonality in policy frameworks and global financial linkages, have played a role. This reflects a world that is becoming increasingly globally integrated. Even housing markets, which might have been thought of as falling on the 'non-tradeable' side of the 'tradeables/non-tradeable' divide, are globally connected, particularly if global trade is taken to include trade in capital.

<sup>28</sup> A by-product of policy progress in this area may be some easing of the load carried by monetary policy in maintaining macroeconomic stability and, for small open economies like New Zealand, less volatility, over the macro-economic cycle, in the exchange rate.

## Housing and macro stability – important interdependencies

Finally, the events of the past few years have highlighted important interdependencies between housing and the macro economy. As discussed above, these run in both directions: macro-stability matters for how effectively the housing sector meets the housing needs of the community; and developments in the housing sector have an important influence on the economy as a whole.

With the benefit of hindsight, the macro conditions in the few years running up to the GFC, at least from the perspective of the housing sector, were not as 'moderate' as implied by the description of this period as 'the great moderation'. What does this imply about the way policy might have been managed differently, if policy makers could have known then what they know now? Such an examination needs to consider how the housing sector itself contributed to the ensuing instability. Specific points in that connection include:

- Home lending is not necessarily 'as safe as houses'. Prudential regulations and practices that assume otherwise can be, and in some countries were, more a source of instability than stability. There is a need for policy regimes to always be alert to how markets and practices are changing in ways that are not anticipated.
- Similarly, subsidies and assistance for housing may end up not helping, but instead hurting, those they are intended to help. If widely available, and therefore not well-targeted, subsidies tend to be capitalised into house prices and improve the welfare of people that already own houses as much, if not more, than new entrants.

It is also evident is that the house sector more generally was one of the main engines of the pre-crisis expansion: credit was the fuel, and much of that fuel was channelled into, or via, the housing sector. The scale of housing equity withdrawal was one manifestation of the impetus that the housing sector was delivering to the macro economy. That points to macro policy makers – monetary, prudential and/or fiscal – needing to keep a weather eye on the housing market, as much as a driver, as a potential casualty of macro-economic instability.

# 4 Housing affordability: distribution and trends

## Key points

- House price increases have significantly reduced housing affordability over the past decade, but this has been at least partially offset by lower interest rates.
- Housing affordability differs across New Zealand, with dwellings in Auckland typically the least affordable.
- Most indicators suggest that housing affordability has improved in recent years from the peak of the 2000s house price boom. However, house price-to-income ratios remain elevated and would require sharp falls in house prices to return to long-term averages. Affordability measures that include financing costs are currently closer to longer term averages.
- During the last house price boom, housing affordability became a constraint for some middle-income groups, whereas it had previously mainly been an issue for those on lower incomes. It is not yet clear if this is a cyclical phenomenon or a structural trend.
- Housing affordability is lowest among those who are younger, single, have lower income and wealth, live in Auckland, or belong to an ethnic group other than New Zealand European.
- Over the last decade, rents have increased far less rapidly than house prices and the share of income that households spend on rent has fallen in most years since 1996. This apparently benign aggregate situation, however, disguises a more difficult situation for those on lower incomes. Also, the most recent data suggest that upward pressures on rents may be beginning to emerge.

## 4.1 Introduction

This chapter considers how the broad price trends outlined in Chapter 2 have affected the affordability of housing for home buyers and renters. To the extent the data permit, it also outlines differences in affordability across regions and income levels. The chapter considers four questions:

- Why does housing affordability matter?
- How has housing affordability changed for potential home buyers?
- How has affordability changed for renters?
- What conclusions can be drawn about affordability?

## 4.2 Why does housing affordability matter?

Something is 'affordable' if it can be paid for without financial difficulty. While housing affordability can be measured in a number of different ways, as will be outlined below, all measures effectively attempt to assess people's capacity to pay for their housing needs.

Housing affordability is particularly important because, whether renting or owning, accommodation services usually absorb a large proportion of household income. House buyers typically have to service their mortgages on top of additional housing costs, such as rates and maintenance. For renters, affordability reflects their capacity to meet housing costs without going short on other essentials such as food and transport. Declining affordability is a particularly serious concern for low income earners, who may have

difficulty meeting basic housing needs. Expensive rents may also make it difficult for renters to save for a deposit to enter the housing market.

Households choosing to spend a large proportion of their income on housing may not necessarily be evidence of an affordability problem. For example, some people will spend more on housing because they have a preference for high-quality housing or want to live in a certain suburb. Younger people, particularly those who anticipate higher future incomes, may also be willing to spend a relatively large proportion of their income on servicing a mortgage in order to enter the housing market.

As discussed elsewhere, from a policy perspective, government has a number of reasons for being interested in the affordability of housing. Given the size and reach of the housing sector, policy changes that increase affordability will have significant implications for welfare. Also, as discussed in Chapter 5, developments in the housing market have important implications for the macro economy (and vice-versa).

## Affordability for potential home owners

There is no agreed best measure of housing affordability. So this chapter presents a number of measures of affordability for would-be home owners, each of which has different strengths and weaknesses.<sup>29</sup>

### House price ratios

The ratio of house prices-to-income, which shows the number of years of disposable income needed to cover the purchase price of a house, is the simplest measure of affordability. During the 1980s, median house prices fluctuated between about 2 and 3 times annual disposable income (**Figure 4.1**). Over the 1990s, house prices rose to more than 3 times annual disposable income before accelerating sharply to about 5.5 times income by 2007. Since then, the number of years of income required to buy a house has declined slightly to just under 5 in 2010, but remains well above the long-term average.

Figure 4.1 House price ratio



Source: Productivity Commission calculations using Reserve Bank of New Zealand data

### Affordability measures that include borrowing costs

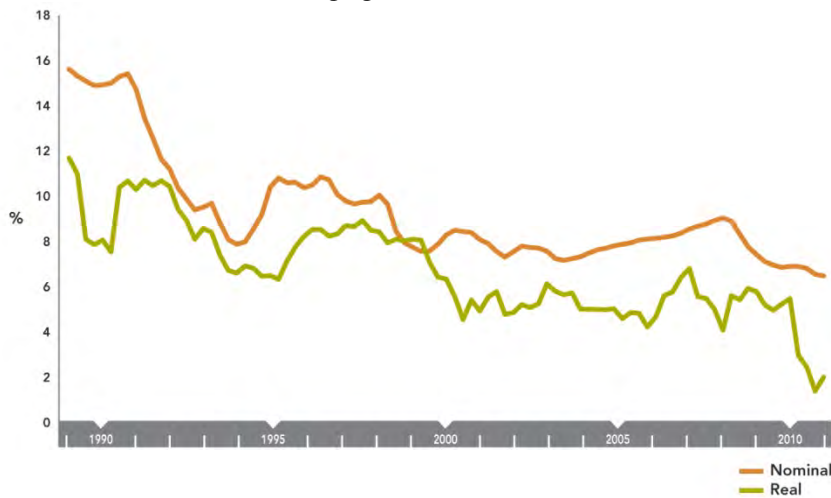
The ratio of house prices-to-income does not account for the cost of housing finance, which is the largest ongoing cost for most home buyers. As well as being large, financing costs can fluctuate noticeably over the course of the business cycle and thereby have an important influence on changes in affordability (Figure 4.2). This is apparent from the measure of 'borrowing capacity' developed by Briggs & Ng (2009) and shown in Figure 2.6 in Chapter 2. This measure reflects the amount a household earning the average income could borrow via a table mortgage at the effective mortgage rate.<sup>30</sup> This measure shows that although the ratio of house prices-to-income increased sharply during the 2000s, the borrowing capacity of households also increased strongly over this period. In effect, and as discussed in Chapter 5, lower mortgage rates enabled households to service larger home loans, and thereby reduced the impact of rising

<sup>29</sup> For a discussion of strengths and weaknesses of different affordability measures, see Law & Meehan (2012).

<sup>30</sup> The effective mortgage interest rate is the average rate of all the housing mortgages that are currently in place.

house prices on affordability. Of course, as discussed in Chapter 5 lower interest rates may have also contributed to the increase in house prices.<sup>31</sup>

Figure 4.2 Effective mortgage interest rate, real and nominal



Source: Productivity Commission calculations using Reserve Bank of New Zealand and Statistics New Zealand data

Other measures of housing affordability that account for the impact of financing costs confirm that interest rate changes can mitigate the impact of rising house prices. Massey University's housing affordability index is calculated using data on median house prices, average earnings and interest rates, and thereby also incorporates financing costs (Figure 4.3).<sup>32</sup>

The significant cycles in this index appear to have had different underlying causes. In the late 1980s, interest rates were increasing markedly while house prices were relatively stable, and affordability deteriorated noticeably. More recently, deteriorating affordability over the 2000s was driven by rising house prices, rather than by higher interest rates. According to this measure, affordability has improved since 2008 and is now around its average long-run level, given lower interest rates and softening house prices. Indicative of the regional supply constraints, according to this measure, housing is always less affordable in Auckland.

Figure 4.3 Massey home affordability index



Source: Massey University Real Estate Analysis Unit

Notes:

1. A low index indicates improved affordability.

<sup>31</sup> Briggs & Ng (2009) conclude that the fall in interest rates and nominal inflation had an effect on house prices, although other factors (such as increases in section prices, construction costs, and access to credit) also contributed.

<sup>32</sup> For more details see: <http://economics-finance.massey.ac.nz/homeaffordability.php>.

Roost Mortgage Brokers also publish indicators of housing affordability that incorporate financing costs. These indicators are calculated as the proportion of weekly take-home pay that a 'typical' and 'first-home' buyer would need to spend to service their mortgages. A typical buyer is assumed to be purchasing at the median house price with a 20% deposit. The first-home buyer is assumed to be buying a house at the lower price quartile, with a deposit that is estimated as a function of savings.<sup>33</sup> The time path of these indices is similar to the Massey index.

- The proportion of median income of a person in the 30–34 age group required to service the mortgage on a median home rose from about 40% in 2002 to 83% in June 2008 and then fell to 52% by October 2011.<sup>34</sup>
- The proportion of median income of a person in the 25–29 age group required to service the mortgage on a house priced in the lower quartile increased from about 40% in 2004 to 73% in September 2007 and then fell to 44% by October 2011.<sup>35</sup>

## Disaggregated measures of housing affordability

The aggregate indices discussed above are useful for tracking changes in affordability over time. However, they are based on average measures of household income and house prices and do not necessarily indicate what is happening to affordability for different types of households. In contrast, disaggregated measures track affordability for a range of different household types, including by income, age, ethnic background or location in New Zealand.

### Differences between income levels

The affordability of housing for people on different incomes can be investigated with a model that uses data from the Survey of Family, Income and Employment (SoFIE).<sup>36</sup> This model examines affordability for those who are aged 25 years and over and do not currently own the house they live in. It takes account of factors such as the net assets available for a deposit, income and the prevailing interest rate. For each household the model asks: could they afford to purchase a lower-quartile priced house in their region without mortgage payments exceeding 30% of their gross income?<sup>37</sup>

The results of this model show that the proportion of individuals that could afford to buy a home is higher for couples – who often have higher (combined) incomes and wealth – than for individuals (Figure 4.4). According to this model, affordability fell between 2003/04 and 2007/08 for all except couples in the highest income quintile. However, as with the aggregate results discussed above, these trends may have reversed subsequently given that house prices and interest rates have fallen since 2008.

<sup>33</sup> The first-home buyer deposit savings is equal to 20% of weekly income saved for four years, plus interest earned at a 90 day deposit rate.

<sup>34</sup> Figures are from the Roost Home Loan Affordability Index: standard series.

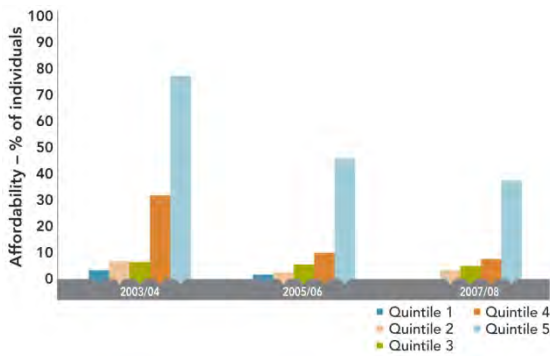
<sup>35</sup> Figures are from the Roost Home Loan Affordability Index: first-home buyer series.

<sup>36</sup> A full description of the model, along with a richer set of empirical results, can be found in Law & Meehan (2012).

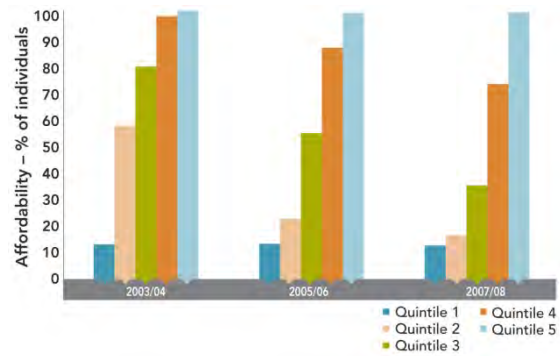
<sup>37</sup> The main disadvantage of SoFIE is that data on assets and liabilities is only available for three years - 2003/04, 2005/06 and 2007/08. The most recent data for 2009/10 will be available mid-2012.

Figure 4.4 Housing affordability by income

Singles<sup>1</sup>



Couples



Source: Productivity Commission and Treasury calculations using Statistics New Zealand Survey of Family, Income and Employment data

Notes:

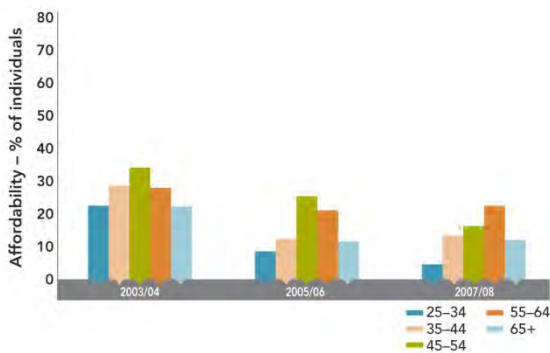
1. The figure for quintile 1 in 2007/08 is not presented for confidentiality reasons since the number of those who could afford was very small. Income quintiles are based on non-home owners and are calculated separately for singles and couples.

Differences between age levels

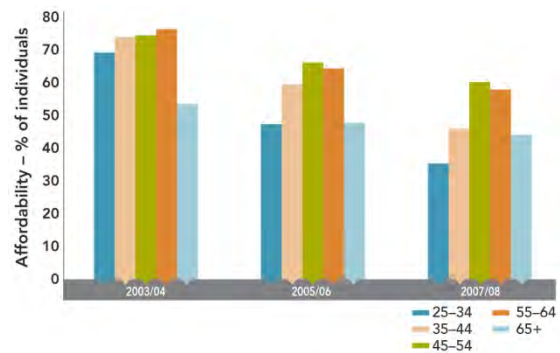
Affordability generally increases with age, in large part reflecting the higher incomes that come with greater work experience (Figure 4.5). However, the oldest age groups buck this trend, perhaps reflecting that while most older people already own their home, some, such as the lifetime poor, cannot afford to buy a house. It also reflects that incomes tend to be lower in this age group due to retirement. Some older people may also have experienced adverse shocks such as marriage dissolution or financial issues late in life, leaving them little time to recover financially.

Figure 4.5 Housing affordability by age

Singles



Couples

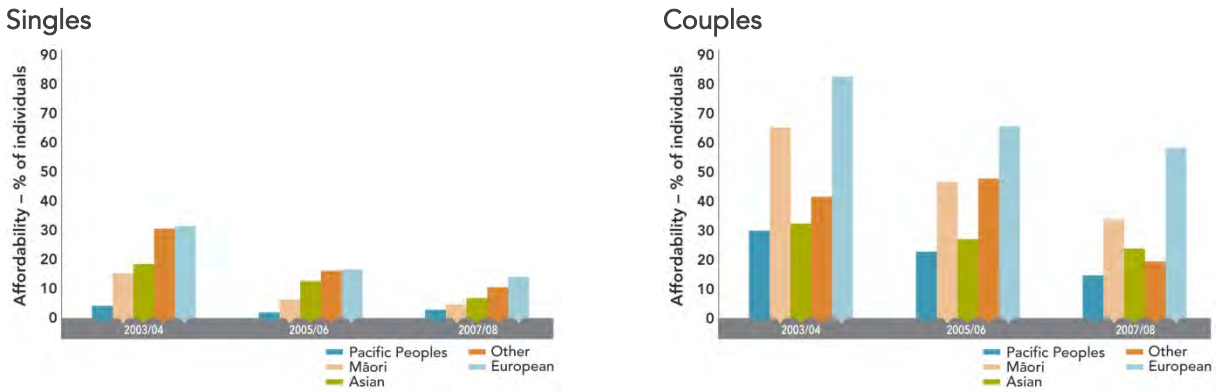


Source: Productivity Commission and Treasury calculations using Statistics New Zealand Survey of Family, Income and Employment data

Differences between ethnic groups

The capacity to buy a house varies across ethnic groups, and is highest for European New Zealanders and lowest for Pacific peoples (Figure 4.6). This may partly reflect location choices and disparities in average incomes and wealth, with some ethnic groups more likely to be concentrated in Auckland. Reflecting the aggregate results, affordability declined for all ethnic groups between 2003/04 and 2007/08.

Figure 4.6 Affordability by ethnicity



Source: Productivity Commission and Treasury calculations using Statistics New Zealand Survey of Family, Income and Employment data

Notes:

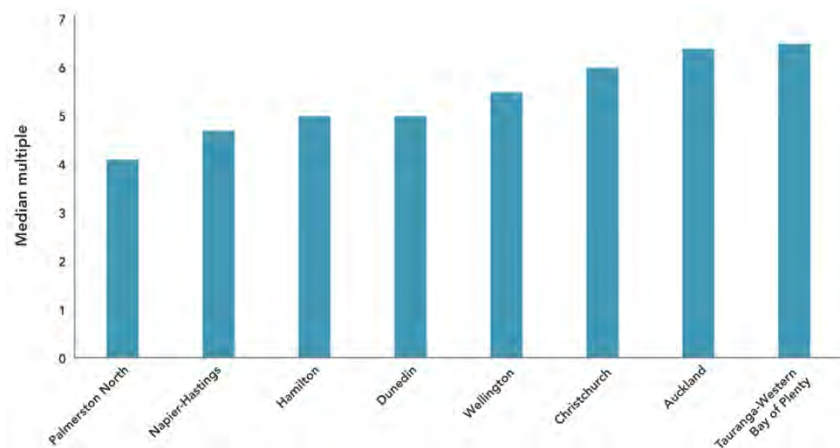
1. Ethnicity was prioritised using the old Statistics New Zealand hierarchy.

### Differences between regions

While house prices in different regions converged to some extent during the recent boom (see Chapter 2), variations in house prices and household composition mean that there are still significant inter-regional affordability differences. The Commission has identified three approaches to measure regional differences in housing affordability, all of which show that such differences do indeed exist. In addition, all of these regional measures highlight low levels of affordability in Auckland relative to the rest of the country.

First, Demographia (2011) has calculated the ratio of median house prices to gross annual median household income for eight New Zealand submarkets in 2010 (Figure 4.7). According to these estimates, housing in four regions is deemed to be 'severely unaffordable', with a ratio exceeding five (Tauranga-Western Bay of Plenty, Auckland, Christchurch and Wellington). Housing in four other areas was classified as 'seriously unaffordable', with a house price-to-income ratio exceeding four (Hamilton, Dunedin, Palmerston North, and Napier-Hastings).

Figure 4.7 Housing affordability median multiple ratings for New Zealand regions, 2010



Source: Demographia (2011)

Notes:

1. This affordability measure is calculated using a 'median multiple' measure that divides median house prices by gross annual median income. A value between four and five is considered to be 'seriously unaffordable' and a value greater than five is considered to be 'severely unaffordable' (Demographia, 2011).

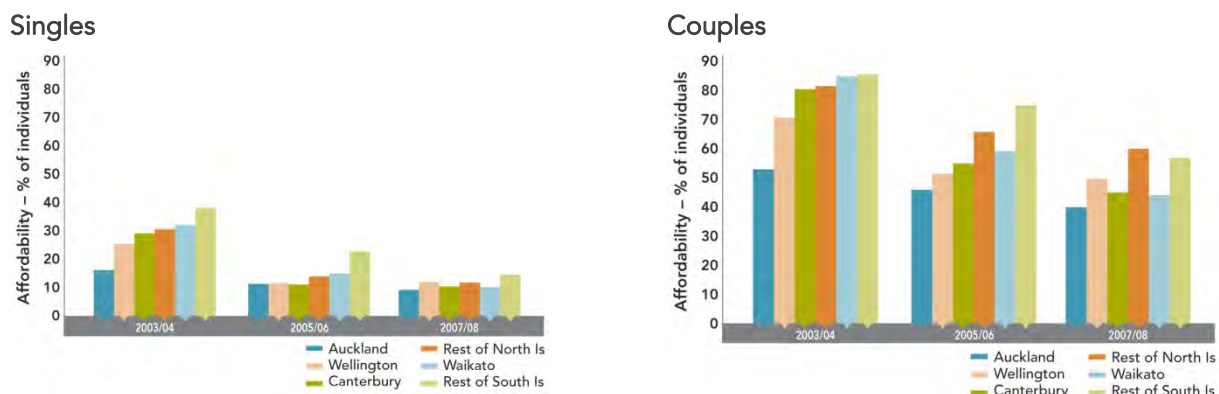
Second, as described above, Roost Mortgage Brokers publish indicators that measure the proportion of weekly take-home pay required to service a mortgage across 20 regions in the case of 'typical' home buyers



and 36 regions in the case of 'first home' buyers.<sup>38</sup> Both of these indicators exhibit large regional differences. For example, the most recent readings for the ratios range from 26% in Whanganui to 74% in Queenstown for the typical buyer in October 2011 and from 22% in Whanganui to 78% in Auckland's North Shore for first time buyers. Auckland areas are always among the most unaffordable – in October 2011, the typical buyer ratio was 71% for the North Shore, 67% for central Auckland, 65% for south Auckland and 58% for west Auckland.

Third, data from SoFIE indicate that housing affordability is lowest for people living in Auckland, followed by Wellington, Canterbury and Waikato (**Figure 4.8**).

Figure 4.8 Affordability by region



Source: Productivity Commission and Treasury calculations using Statistics New Zealand Survey of Family, Income and Employment data

### 4.3 Affordability for renters

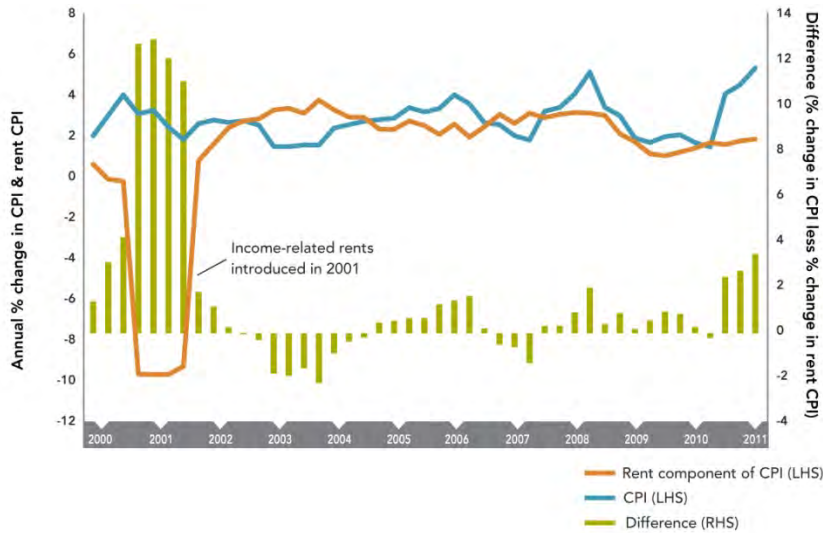
While aggregate measures indicate that home ownership affordability declined up until recently, rents have increased little in real terms (**Figure 4.9**) and far less rapidly than house prices (see Figure 2.9 in Chapter 2).<sup>39</sup> As a result, the rent-to-income ratio has fallen in most years since 1996 (**Figure 4.10**). This suggests that over the course of the last housing boom, home ownership affordability declined substantially relative to the cost of renting. As noted in Chapter 2, this allowed the rental market to act as a 'safety valve' in the face of rising house prices. However, recent data indicate that spending on rent increased faster than household incomes over the June 2011 year<sup>40</sup> and, as discussed in Chapter 2, the current disconnect between rents and house prices may not persist.

<sup>38</sup> See <http://www.interest.co.nz/property/home-loan-affordability> and <http://www.interest.co.nz/property/first-home-buyer>.

<sup>39</sup> The rent component of the Consumer Price Index (CPI) is the official measure of changes in rent prices and is designed to control for changes in the composition and quality of rental accommodation. The dip in the rent component of the CPI in the early 2000s, coincided with the introduction of income-related rents in 2001.

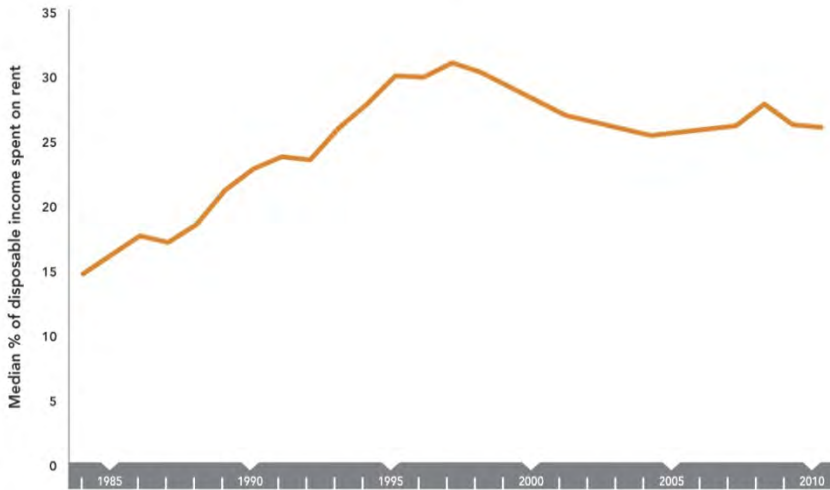
<sup>40</sup> See [http://www.stats.govt.nz/browse\\_for\\_stats/people\\_and\\_communities/Households/HouseholdEconomicSurvey\\_MRYeJun11.aspx](http://www.stats.govt.nz/browse_for_stats/people_and_communities/Households/HouseholdEconomicSurvey_MRYeJun11.aspx).

Figure 4.9 Rent price component of CPI and overall CPI



Source: Statistics New Zealand

Figure 4.10 Median rent-to-household disposable income ratio



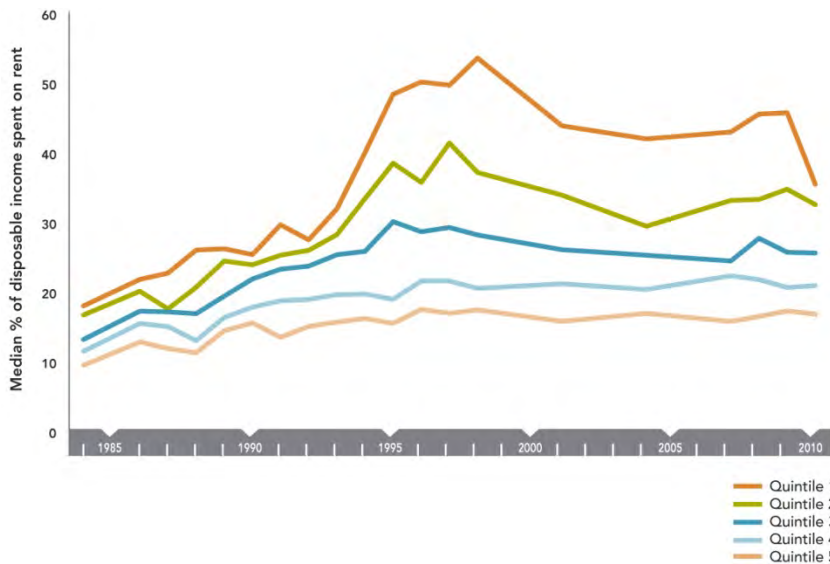
Source: Productivity Commission and Treasury calculations using Statistics New Zealand (HES) data

Notes:

1. HES was not conducted in 1999, 2000, 2002, 2003, 2005 and 2006. Data for these years was interpolated.

This apparently benign aggregate situation in the rental market disguises a more difficult situation for those on lower incomes. In particular, people in the lowest two income quintiles spend a much higher proportion of their income on rent than people on higher incomes (Figure 4.11). Even though the situation appears to have improved since the late 1990s, those in the two lower income quartiles still spend, on average, more than 30% of their disposable income on rent.

Figure 4.11 Median rent-to-household disposable income by disposable income quintile



Source: Productivity Commission and Treasury calculations using Statistics New Zealand (HES) data

Notes:

1. HES was not conducted in 1999, 2000, 2002, 2003, 2005 and 2006. Data for these years was interpolated.
2. Income quintiles are based on the entire HES sample.
3. There is some uncertainty about the reliability of the figures for 2010 for quintile 1 (Perry, 2011).

Of course, these measures do not tell us anything about the extent to which people resort to living in low quality houses, crowded conditions or in peripheral locations in order to obtain affordable housing. It appears that many renters, especially those earning low incomes, not only face affordability issues, but also live in unsatisfactory dwellings. For instance, in 2010, two-thirds of renters indicated that they had major problems with their house or neighbourhood, such as being damp, too cold, too far from their work or other amenities, or too small (see Table 2.2 in Chapter 2).

## 5 Population and demographic change

### Key points

- Over the last 30 years New Zealand has experienced: population growth well above the OECD mean; volatile immigration; an ageing population; cultural and ethnic diversification; and a radical transformation of family structure. All these changes have driven a large increase in underlying demand for housing.
- Since 1971, population growth has resulted in roughly 450,000 new households and the decrease in average household size has created an additional 350,000. Between 2001 and 2006, 22,000 additional households were being formed on average each year.
- Demand pressures have differed markedly by region. This is driven by cross-regional differences in external and internal net migration and age, family and ethnic structures. Auckland has accounted for roughly 40% of New Zealand's net household formation over the last 10 years.
- As well as influencing underlying demand for dwellings, population growth and demographic changes have also influenced tenure choice, with some groups in New Zealand more likely to rent than own their homes.
- Looking to the future, in nearly all parts of the country, the average household size is likely to continue falling, implying increased housing demand. New Zealand's population is also likely to continue growing strongly. Much of this growth will be focused on the Auckland region, putting pressure on the regional housing market. For example, the Department of Building and Housing currently projects a shortfall of 90,500 dwellings in Auckland alone over the next 20 years (although a surplus is projected in other regions).
- The impact of underlying demand on house prices ultimately depends on the responsiveness of housing supply in the context of other demand drivers, such as income growth.

### 5.1 Introduction

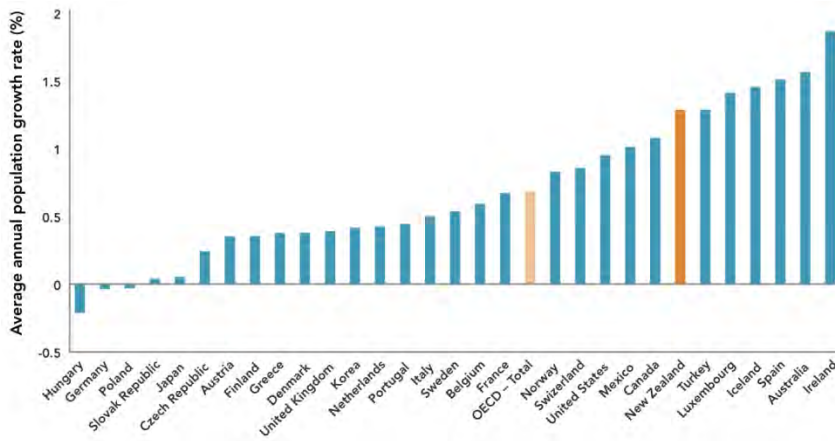
This chapter builds on the discussion in Chapter 2 on the extent of underlying demand for housing. It considers how national and regional trends in population growth and changes in the composition of the population affect household formation and the demand for housing. Projections suggest that ongoing population and demographic changes will continue to drive solid growth in underlying housing demand. As discussed in other chapters, the impact of these demand pressures on house prices will depend on the responsiveness of housing supply. As such, the demand pressures outlined in this chapter indicate ongoing challenges for the supply-side of the housing market.

### 5.2 Population growth

#### **New Zealand's population has been growing strongly**

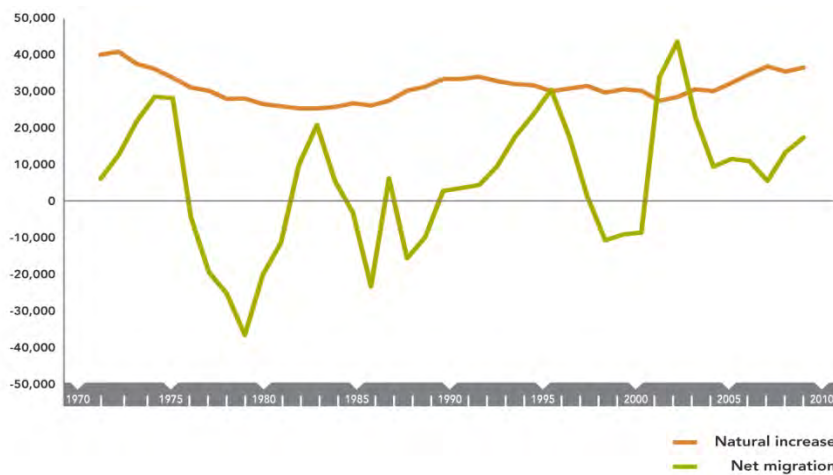
Over the last 40 years New Zealand has experienced a major increase in population that has driven a large expansion in net household formation. New Zealand's population increased from 2.9 million to 4.4 million people between 1971 and 2011 and has been among the fastest growing in the OECD since 2000 (Figure 5.1). The natural increase in population has steadily tracked within a range of about 30,000 to 40,000 people per year. In contrast, net permanent and long-term (PLT) migration has been highly volatile within a much broader range (although positive on average) (Figure 5.2).

Figure 5.1 Average annual population growth for OECD countries, 2000-2009



Source: OECD

Figure 5.2 Net migration and natural increase in New Zealand



Source: Statistics New Zealand

The 2003 peak in net migration – when just over (net) 40,000 people entered the country – is cited in a number of submissions as contributing to the 2000s house price boom. This peak reflected the lowest number of New Zealanders departing the country on a PLT basis since 1995 and the highest number of non-New Zealanders entering the country since citizenship began to be recorded in 1979. Many of these entrants were students or temporary workers.<sup>41</sup> Since 2004, net migration has fallen back to well below the rate of natural population growth.

## There are large regional differences in population growth

Population growth has been unequally distributed across the country, largely as a result of the regional preferences of international migrants and internal migration patterns. International migrants are generally attracted to urban areas (Maré et al., 2008). Auckland is the strong front runner and absorbed around 40 000 people over two years in the early-2000s migration peak (Figure 5.3). However, Canterbury and, more recently Wellington, also tend to attract international migrants. For the rest of the country, net international migration is typically negative.

For some regions, such as Bay of Plenty, Gisborne, and Tasman, internal migration has had a greater impact on population growth than external migration. Trends in internal migration differ noticeably by age groups. In general, 20–24 year olds are more likely to move between regions, presumably to pursue tertiary

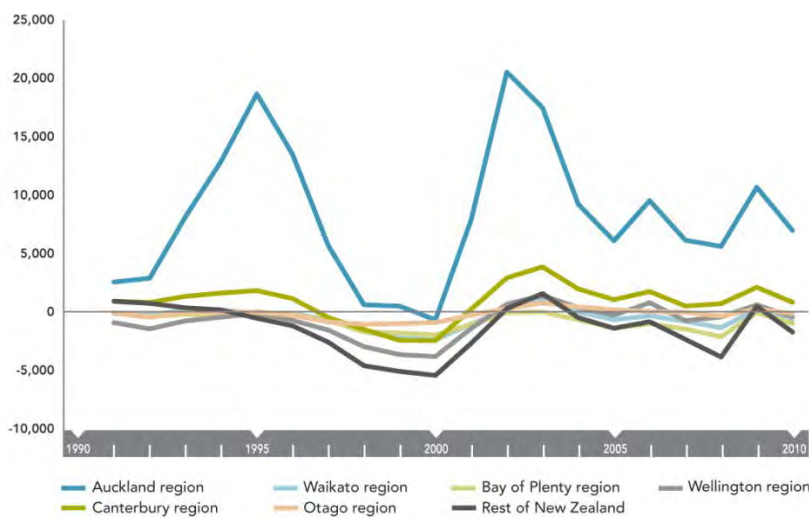
<sup>41</sup> As indicated in the Department of Labour's submission: "The peak in PLT arrivals coincided with the highest number of international student approvals in the 2002/2003 year of 87,000 and over 68,000 temporary workers. Many of these would have been recorded as PLT arrivals" (sub 14, p2-3).

education and job opportunities (Statistics New Zealand, 2011d). People in the mid-30s and 60+ age groups also tend to have high internal migration rates, most likely as a result of moving to family and retirement-friendly locations.

Reflecting these and other factors, some regions – such as the Bay of Plenty and Canterbury – have consistently experienced positive net internal migration, while others have generally experienced net outflows (Figure 5.4). Notably, Auckland moved from being a net recipient of internal migrants to a large negative outflow in the mid-2000s. Although little work has been done on understanding internal migration flows, this may, at least in part, reflect an exodus of households in search of more affordable housing.<sup>42</sup>

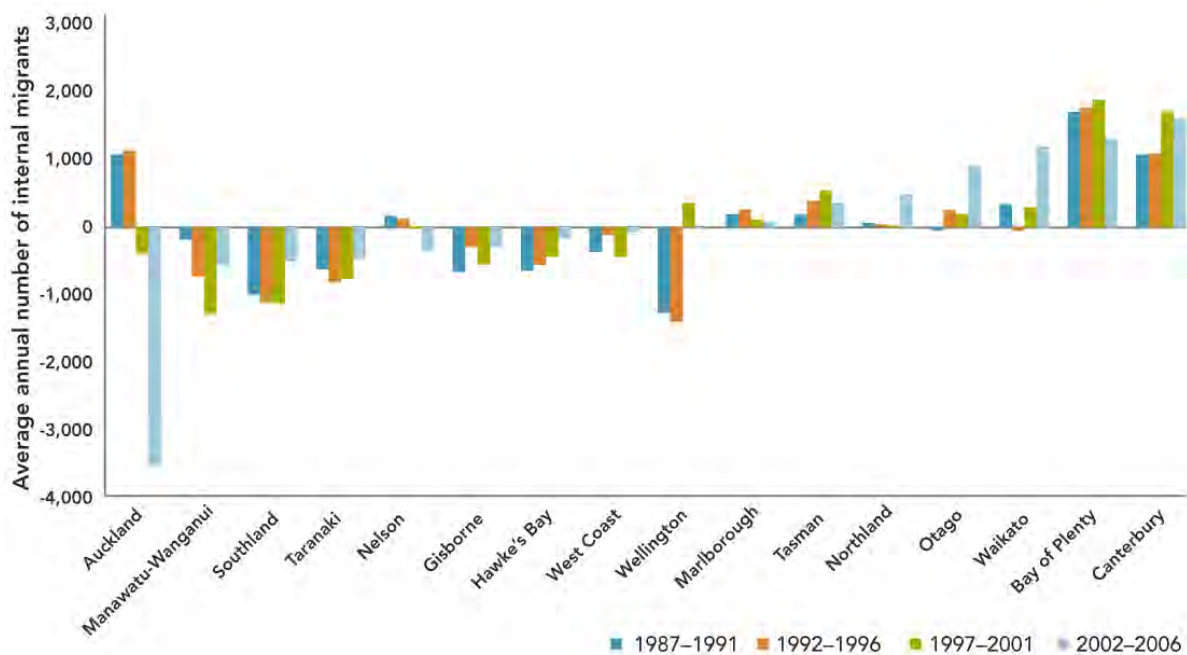
Despite this recent outflow of internal migrants, Auckland has still experienced the largest growth in population, in both absolute and percentage terms, across all regions of the country since 2000 (Figure 5.5). Indeed, the Auckland region accounted for 50% of the total increase in New Zealand’s population over the ten years to 2010. In contrast, population growth has been virtually zero over this period in some of New Zealand’s more rural regions, including Gisborne, Taranaki, Manawatu and Southland.

Figure 5.3 Net migration by selected regions



Source: Statistics New Zealand

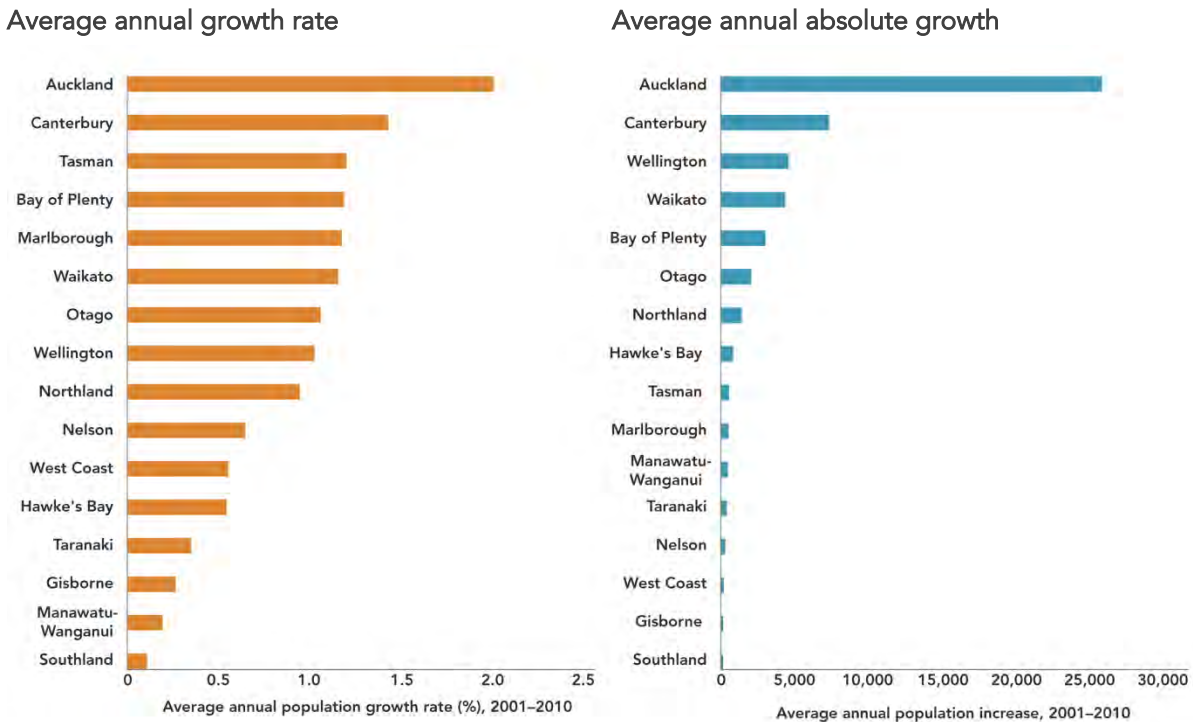
Figure 5.4 Average annual internal migration



Source: Statistics New Zealand, Census

<sup>42</sup> Other potential explanations could include leaving the city to retire or start a family.

Figure 5.5 Population growth by region, 2001–2010



Source: Statistics New Zealand

## 5.3 The impacts of demographic change on household formation

### Average household size is falling

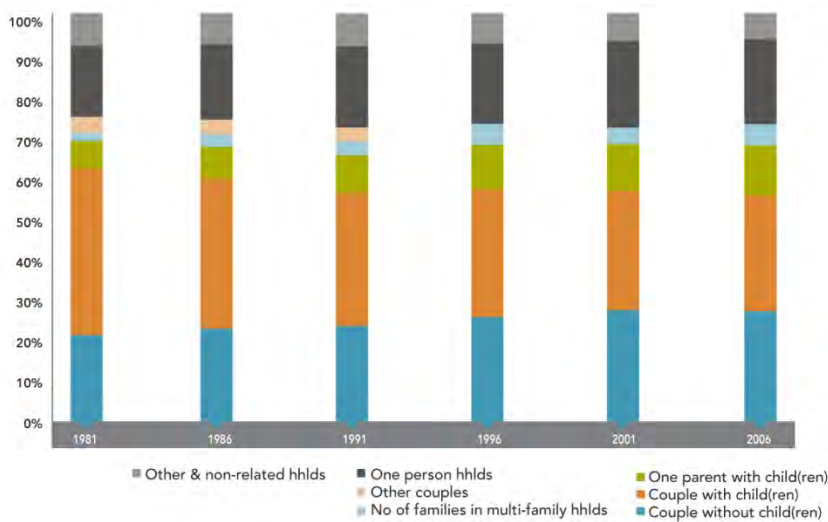
Between 1971 and 2001, underlying housing demand was boosted by a declining average household size from 3.38 to 2.67 people per dwelling.<sup>43</sup> From 2001, average household size broadly remained at this level until 2006, the last year in which it was formally measured. Trends in average household size have varied at the regional level: average household size declined in all regions from 1996 to 2001 but increased from 2001 to 2006 for some regions, including Auckland and Canterbury (Statistics New Zealand, 2008). At the territorial authority level, between 1996 and 2006 average household size was particularly high in Manukau City, and the lowest in the Thames-Coromandel and Buller districts.<sup>44</sup>

Significant changes in family structure explain much of the overall fall in average household size and the associated increase in household formation. Before the 1980s, the 'nuclear family' of a married couple with children was the norm. However, in the space of a generation, household composition has been transformed with 'singles', 'one-parent families', and 'couples without children', becoming much more common (Figure 5.6) (Statistics New Zealand, 2003). In large part, this has been driven by population ageing and changing ethnic structures (discussed below). Decisions on child bearing, relationships and when to leave home have also played important roles.

<sup>43</sup> Household size is the average number of people in a 'household' (a private dwelling that is usually occupied by a person or group of people). Households exclude non-private dwellings, unoccupied dwellings, and dwellings which are not the usual residence of people (e.g. holiday homes, second homes).

<sup>44</sup> Both Buller and Thames-Coromandel districts have relatively high proportions of one-person households and relatively low proportions of family households with children.

Figure 5.6 Family structure in New Zealand



Source: Statistics New Zealand, Census

Notes:

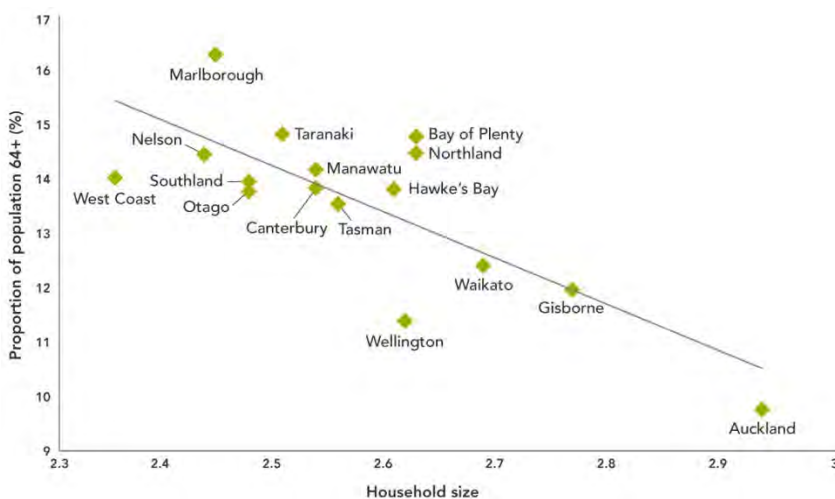
1. The category "Other couple" was not reported after 1991. It most likely consisted of multi-family households, with some couples with child(ren) and some couples without child(ren).

### Population ageing is reducing average household size

The ageing of New Zealand’s population is one important reason why couples without children now account for more than one in four households. The population share of people aged 65+ increased from 11.5% in 1996 to 12.2% in 2006. However, the extent of this increase differs across the country. For example, urban Auckland and Wellington tend to have lower proportions of people aged above 65, while Marlborough and other ‘sun belt’ regions have relatively higher shares of older people (Figure 5.7).

These differences in age structure explain some of the regional variation in household size, as illustrated by a negative cross-region correlation between the population share aged 65+ and average household size (Figure 5.7).

Figure 5.7 Household size and proportion of population 65+ in 2006



Source: Productivity Commission calculations based on Statistics New Zealand data

### Changes in ethnic structure are offsetting decreasing average household size

While household size has decreased on average, changes in New Zealand’s ethnic structure have partially offset this, as ethnic groups with larger average household size have become a larger share of the population. Pacific, Māori and Asian ethnic groups tend to have larger households than New Zealanders of

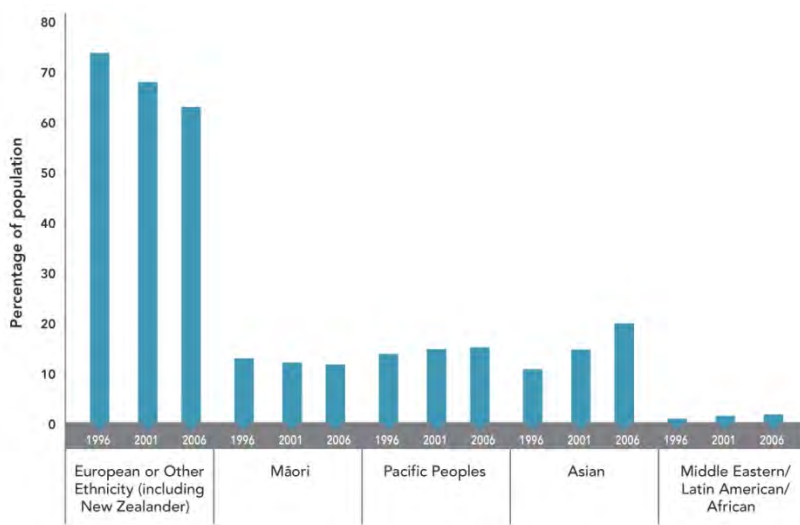


European extraction. In 2001, for example, the average household size of Pacific, Māori and Asian ethnic groups was 4.19, 3.36 and 3.45 respectively, compared with 2.57 for New Zealand-European households.

According to census data, the population shares of New Zealanders with European background and Māori have fallen, while the shares of Pacific Islanders and Asians have increased.<sup>45</sup> Not only do Pacific, Māori and Asian people have larger average households than New Zealand-Europeans, they also have higher rates of over-crowding (Box 5),<sup>46</sup> suggesting that income differentials may influence differences in household size across ethnic groups.

These demographic influences on household size have been particularly pronounced in Auckland. Pacific Islanders make up 13% of Auckland's population, compared to 1–3% for all other regions except Wellington. Auckland also has an Asian group that is a growing share of total population (Figure 5.8). These demographic influences work to reinforce the impact of Auckland's younger than average population on average household size.

Figure 5.8 Auckland Region's ethnic structure



Source: Statistics New Zealand, Census

### Box 5 Crowding by ethnic structure

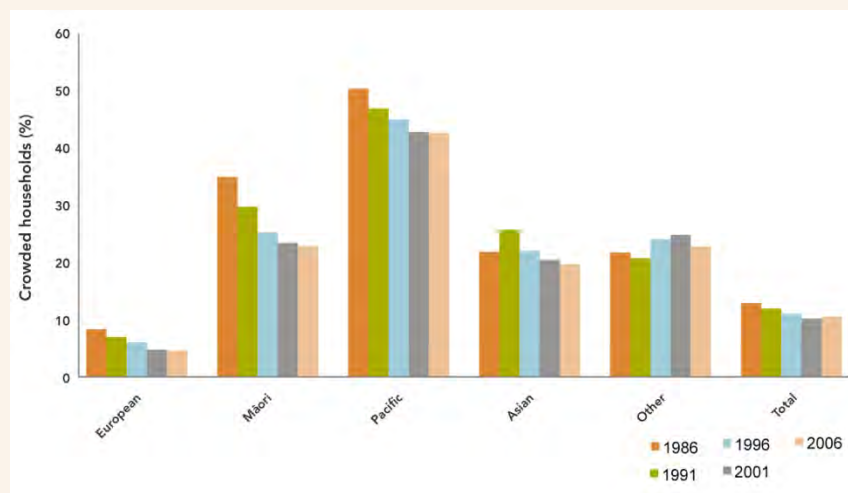
While the number of crowded houses has generally decreased over the last few decades, it remains a serious social issue, especially for minority ethnic groups. As shown in Figure 5.9, Pacific peoples have the highest rates of overcrowding, followed by Māori, Other, and Asian respectively (based on the Canadian National Occupancy Standard).<sup>47</sup>

<sup>45</sup> Note that these are relative shifts in population shares. In absolute terms, the number of people in all ethnic groups has been increasing over recent years.

<sup>46</sup> While European New Zealanders have lower rates of crowding, they still make up 50% of all crowded households.

<sup>47</sup> Under the Canadian National Occupancy Standard, for a dwelling not to be crowded, there should be no more than 2 people per bedroom, and the following should have one bedroom: Married/cohabitating couples; Single adults over 18; Pairs of children under 5; Pairs of same sex children aged 5-17. A household is crowded if one or more extra bedrooms are required. For New Zealand, there is no one 'perfect' crowding measure, especially given the country's cultural diversity. However, Statistics New Zealand considers the Canadian National Occupancy Standard to be the most appropriate.

Figure 5.9 Proportion of population living in households requiring at least one additional bedroom, by ethnic group



Source: Ministry of Social Development, The Social Report (2010) and Statistics New Zealand, Census of Population and Dwelling (2001)

Notes:

1. Ethnicity is an individual characteristic and therefore cannot be directly applied to a household. The data in this figure uses the individual ethnicity responses of household members to compile the ethnic data for a household with at least one usual resident of a particular ethnic group.

There is some correlation between lower incomes and crowding. Māori and Pacific people have noticeably lower median Jensen Equivalised Annual Household (JEAH) income than European people (Statistics New Zealand, 2003).<sup>48</sup> Asian and Other ethnic groups have slightly higher median JEAH income than Māori and Pacific but still noticeably lower than European. For all ethnic groups, median JEAH incomes are lower for crowded houses than non-crowded.

As discussed by the Families Commission, crowding is associated with many negative health and social issues:

Poor housing, where there is overcrowding, cold and dampness, is associated with a higher prevalence of infectious diseases, and is estimated to have an impact on health which is of a similar magnitude to smoking. Crowded housing is associated with higher rates of rheumatic heart disease, particularly among Māori and Pacific peoples, psychological distress, meningitis, asthma and other respiratory diseases. Lynch (1999) in her thesis, *Healthful Housing*, reviewed these associations, and stated that it is difficult to prove that housing is responsible for these problems. (sub. 9, p. 2)

The Families Commission also noted that appropriate housing can help crowding issues:

In 2009 the Families Commission reported on a Housing Corporation project which was designed to provide appropriate and affordable housing for Pacific families within the Corporations guidelines for capital expenditure. A house was built for a large, extended Tokelauan family, which satisfied their living requirements, provided a healthier environment, and resulted in better family wellbeing (Howard-Chapman et al, 2009) (sub 9, p. 7).

<sup>48</sup> JEAH income measure is an "equivalised" income index measures which allows the comparison of household incomes across households of different size and composition.

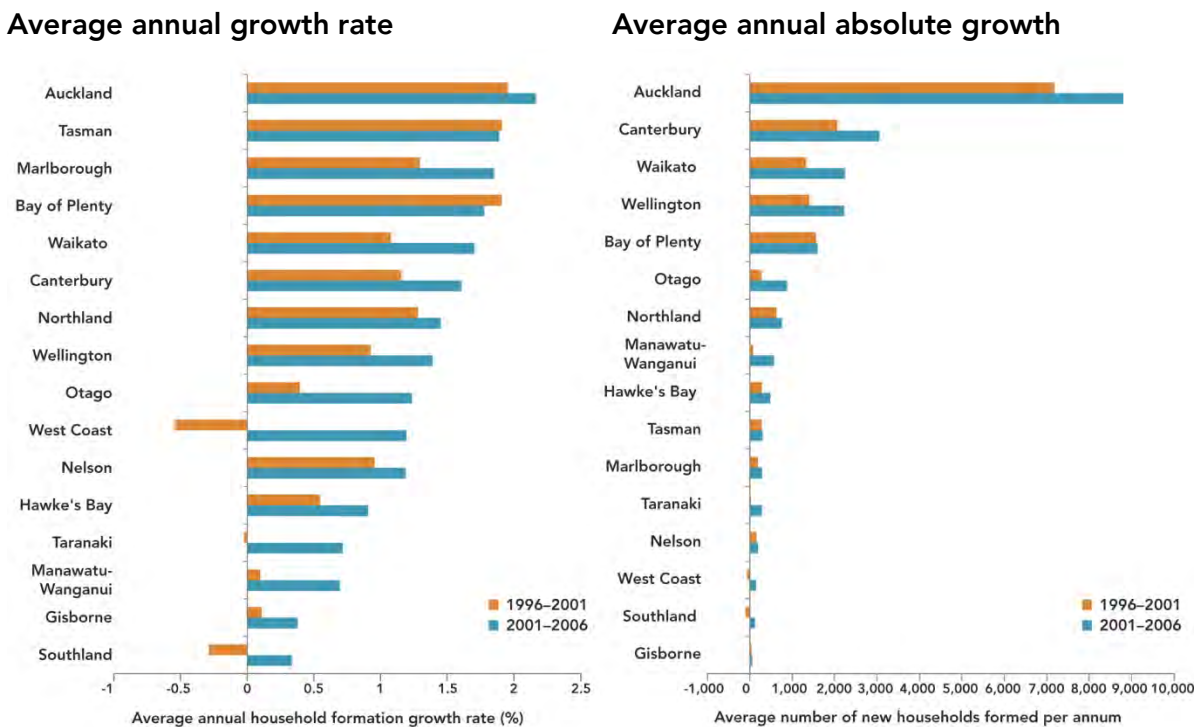
## 5.4 The aggregate impact of population growth and demographic change on underlying demand

### The history

Underlying demand for housing has increased by about 20,000 houses per year, or 800,000 in total, since 1971. Decomposing this, if average household size had remained constant at the 1971 level of 3.38 people, population growth alone would have resulted in roughly 450,000 new households, or approximately 10,500 houses per year, since 1971. Demographic changes, which on balance have reduced average household size, led to underlying demand for another 350,000 houses, or roughly 9,000 per year.

Growth in underlying demand has differed widely across regions. With strong population growth trumping demographic influences, Auckland has accounted for around 40% of new household formation in New Zealand between 2001 and 2006 (Figure 5.10). At the territorial level, other high growth areas include Queenstown Lakes District, which experienced the largest growth in households in the five years to 2006 (35%), followed by Selwyn District (25%), Rodney (17%) and Waimakariri (17%). In contrast, Ruapehu experienced a decrease in net household formation (minus 1.2%), while Wairoa and Clutha had virtually no growth.

Figure 5.10 Household formation by region



Source: Statistics New Zealand

### The future

Net household formation in New Zealand is likely to continue increasing as the population continues to grow and households become smaller. Statistics New Zealand's 'medium series' projection is that the number of households in New Zealand will increase by 536,000, from 1.55 million in 2006 to 2.09 million in 2031.<sup>49</sup>

This projection assumes that the population increases by 743,200 people between 2006 and 2031. The projected rate of population growth is lower than over recent history, as the birth rate falls relative to the death rate, and net migration inflows are projected to decrease relative to recent history (Statistics New Zealand, 2010a).

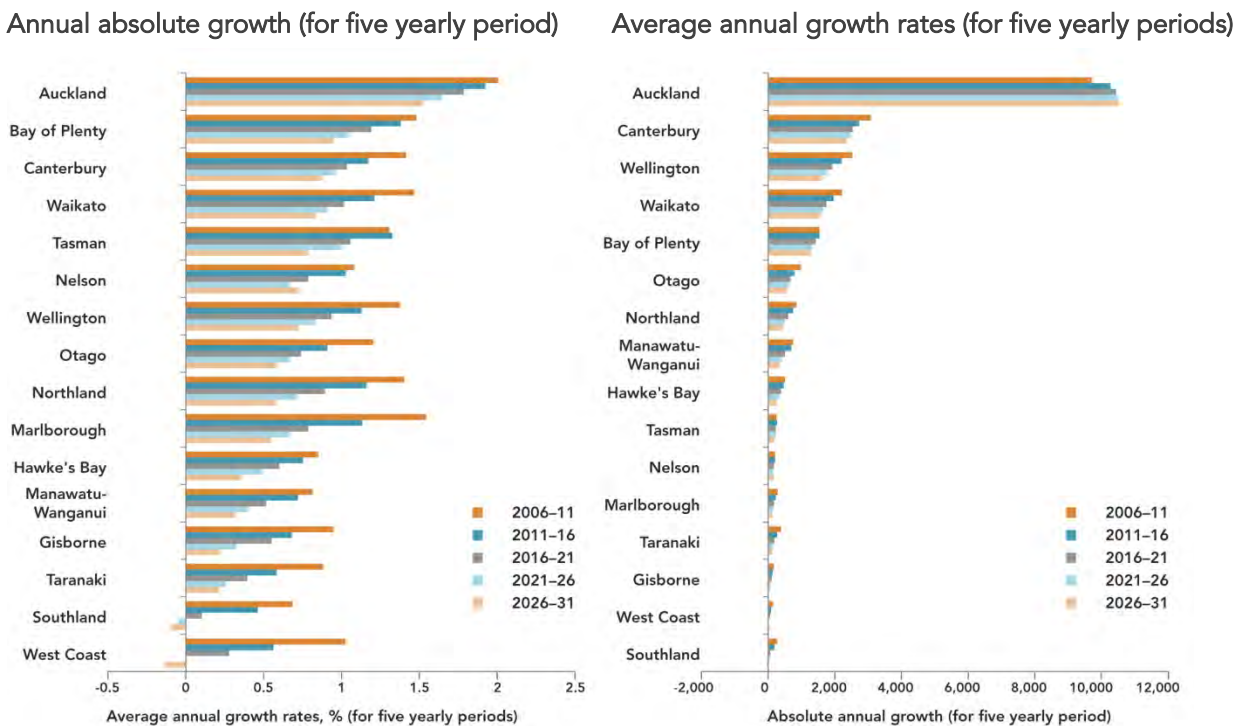
<sup>49</sup> Statistics New Zealand's produce three alternative household projection – designated low, medium, and high – using different combinations of assumptions on fertility, mortality, migration, and living arrangements.

Household size is expected to continue decreasing from 2.7 in 2006 to 2.4 in 2031, increasing the number of households (Statistics New Zealand, 2010a). This projection is driven by ongoing population ageing and changing family structures. The number of one person households is projected to increase at twice the rate of overall family formation, and the growth of couples without children is expected to outstrip the growth of couples with children. By 2031, it is projected that couples without children will be the most common family structure.

Statistics New Zealand’s projections differ noticeably between regions (Figure 5.11). Net household formation is expected to increase in all regions, with the exception of the West Coast in the period from 2026-2031. However, Auckland is projected to have the largest increase, accounting for 60% of New Zealand’s population growth over this period and for almost half the number of new households. Auckland is also expected to have the highest growth rate in household formation. Wellington and Canterbury are also projected to have relatively high rates (absolute) of household formation. These projections assume that the Canterbury earthquakes do not have a long-term impact on Canterbury’s population growth and household formation (Box 6).

These projections are in line with recent work emphasising that future population growth will be focused on the main urban centres and that non-urban areas can expect static to negative growth rates, given older population structures (Jackson, 2011). However, with average household size projected to fall across the country, all regions (except the West Coast) are still expected to experience some growth in household numbers.

Figure 5.11 Household formation projections by region



Source: Statistics New Zealand

Notes:

1. Figures are ranked from highest to lowest growth in 2026-31.

**Box 6 Impact of the Canterbury earthquakes on household projections**

In April 2011, Sapere Research Group (SRG) released a report concluding that the impact of the earthquake on Canterbury’s population is likely to be short term, and that population growth will eventually return to its pre-earthquake trajectory (Sapere Research Group, 2011). SRG’s research into the experience of other developed countries after natural disasters revealed that in areas that, like

Canterbury, were not already experiencing population decline, there was generally only a one-off impact on population.

SRG predicted that in one or two years the total population of Christchurch will be slightly smaller than it might have been if there had been no one-off out-migration to temporarily interrupt growth. But it is also likely that population growth will continue at, at least, the pre-existing trajectory. Growth may even be enhanced by in-migration of construction workers.

The New Zealand Treasury shares SRG's views, predicting in its August Monthly Economic Indicator that the impact from the Canterbury earthquake will be short term (Treasury, 2011).

## 5.5 Implications for tenure choice

As well as affecting underlying demand for housing, demographic changes also affect the composition of demand for rental and owner-occupied dwellings as some groups are more likely to rent than buy their own home, in particular Māori, Pacific Islanders and migrants.

### Pacific home ownership

Home ownership rates for Pacific Islanders are lower than the New Zealand average (Grimes and Young, 2010) and have been declining since 1996 (as is the case for all New Zealanders) (Ministry of Pacific Island Affairs, 2009). The percentage of New Zealand's Pacific population that owned or partly owned their dwelling was 27.5% in 2006, substantively down from 32.4% in 2001 (ibid).

There are several key factors that contribute to low home ownership rates amongst Pacific peoples including: lower incomes (related to age, qualifications and employment); higher unemployment rates; living in larger families; strong urbanised living in high cost areas; having fewer assets and higher debt; and family and cultural obligations (ibid).

### Māori home ownership

The Family Commission provides evidence of low home ownership among Māori even after income differentials are accounted for:

Māori are more likely than Europeans to rent rather than own their home regardless of their income. For example, 61% of Māori with incomes between \$20,001 and \$25,000 rented in 2006. For Europeans in the same income bracket the comparable figure was 26%. In the higher income bracket of \$70,000 to \$100,000, 36% of Māori rented compared with 20% of Europeans. (sub. 9, p. 5)

As well as relatively low incomes, Māori face a number of barriers to home ownership (especially for larger and younger Māori families) including: high debt levels; poor access to finance and lack of information about home ownership (discussed in Chapter 12) (CHRANZ, 2006). Despite these barriers, most Māori have a strong desire to own their own home (ibid).

### Migrants home ownership

Differences in tenure choice can also be observed for migrants. Longitudinal data from the Survey of Family, Income and Employment (SoFIE) indicates that migrants who have lived in New Zealand for less than ten years are much less likely to own their home than people born in New Zealand. However, after ten years, this gap effectively disappears.<sup>50</sup>

<sup>50</sup> Similar results to these have been found using census data (BERL, 2008).

Table 5.1 Proportion of home-owners by length of time in New Zealand

Status	Home ownership rate (%)		
	Total	Couple	Singles
Born in New Zealand	58	64	44
Lived in New Zealand 10+ years	60	67	41
Lived in New Zealand less than 10 years	39	44	17
Total	57	63	42

Source: Productivity Commission calculations using the SoFIE database

In part, these differences in tenure characteristics reflect the generally lower incomes of new migrants, whose mean income is 17% below the New Zealand average (Maré and Stillman 2008). However, even after controlling for lower income and different family and age structures, new immigrants are still 21% less likely to own their own home than the New Zealand-born population with the same characteristics and living in the same local area (ibid).

This suggests that immigration has most likely increased demand for rental properties relative to owner-occupied dwellings. Of course, rental properties and owner-occupied dwellings are close substitutes, implying that increased demand for rentals still influences the housing market more generally.<sup>51</sup>

## 5.6 Implications for house prices

As outlined above, demographics and population changes have driven large increases in underlying demand for housing (both owner-occupied and rental accommodation). As discussed in Chapter 2, the impact of this on house prices ultimately depends on the responsiveness of housing supply, in the context of other demand drivers such as income growth. However, given an inherent degree of 'stickiness' on the supply side of the New Zealand housing market, it is more than likely that increased underlying demand has invoked a price response.

Of course, quantifying that response is subject to significant uncertainty. Indeed, empirical evidence on the link between changes in migration, population growth and house prices in New Zealand is mixed:

- Coleman and Landon-Lane (2007) find that a migration inflow equal to 1% of the population is associated with an 8–12% increase in house prices after one year, and a slightly larger effect after three years. However, as noted by the authors, this correlation may not be causal in that migrant flows might occur at a time when locals are adjusting their expectations about future income growth; or migrants may have a 'destabilising' effect on people's expectations of house values.<sup>52</sup>
- In an analysis at the TA level, Maré and Stillman (2008) find that a 1% increase in an area's population is associated with a 0.2–0.5% increase in local house prices. However, these authors find no evidence of an inflow of foreign-born immigrants to an area impacting on house prices. They do, however, find a strong positive relationship between inflows of returning New Zealanders into an area and local house prices (with a 1% increase in population resulting from an inflow of returning Kiwis associated with a 6–9% increase in house prices).

The distinction between empirical results at the aggregate and regional levels has led to some debate as to the impact of population growth and migration flows on house prices. For instance, the Department of Labour refers to Maré and Stillman (2008) in its submission:

<sup>51</sup> As discussed in Chapters 2 and 3, indicators – such as house price-to-rent and rent-to-income ratios – do not suggest acute excess demand in the rental sector over recent decades. However, it is likely that demand pressure from tenants was a factor driving house prices higher. In this scenario, landlords were rewarded with the promise of capital gain, rather than an increased rental return.

<sup>52</sup> That is, a temporary increase in house prices stemming from an inflow of migrants may cause local buyers and sellers to have overly optimistic beliefs about the appropriate value of houses, for instance, leading to a prolonged period of high prices.

Given the lack of a relationship at the local level, these results raise doubts about whether the strong positive correlation that exists between migration and house prices at the national level is in fact causal. In other words, given the uneven distribution of immigrants across New Zealand, if immigration were the key driver of recent house price inflation, then it would be expected that areas with higher inflows of immigrants would have the highest levels of house price appreciation. This was not found to be the case and suggests that the relationship at the national level may be a consequence of omitted factors that raise both immigration and house prices. (sub. 14, p. 8)

While Maré and Stillman interpret their results as raising questions about the correlation between migration and house prices at the aggregate level, they emphasise that their “estimates could understate the impact of immigration on house prices if local house prices are affected by population changes in all areas” (p. 20).

This issue is essentially one of substitutability between regional housing markets. If households do move between areas in response to shifts in relative house prices, then the impact of migration on house prices at the regional level will be less evident than at the aggregate level. If this is the case, then there is not necessarily a contradiction between the aggregate and regional results. Indeed, significant internal migration in New Zealand suggests that houses in different parts of the country are highly substitutable. In addition, empirical work done by the Commission indicates that house prices in a given area are significantly influenced by house price developments in nearby areas, again indicative of significant spill-over effects.

High volatility in New Zealand’s population growth driven by migration swings may also impact on house prices.<sup>53</sup> For instance, the Reserve Bank considers the volatility of migration to be an issue.

When supply is relatively constrained in the short-term, swings in demand matter a lot for the determination of house prices. Lots of factors influence changes in the demand for housing but factors such as migration and demography appear to have been particularly important in New Zealand. (sub. 37, p. 4)

#### **Box 7 Participants’ views on the impact of population growth and immigration on house prices**

##### *Housing New Zealand Corporation*

A number of factors are thought to have increased the cost of housing over the last decade. In particular, the increasing population, driven by a surge in inward migration increasing demand for housing and put pressure on the housing markets in major centres, leading to generally higher housing prices. (sub. 34, p. 2)

##### *Whangarei District Council*

Whilst it is difficult to define with any form of precision, immigration has had some impact on local housing demand. As the WDC Demographic Background report notes, substantial numbers of international migrants aged 30-44 moved into our district. As these are often cashed up migrants rather than early starters, it probably led to higher prices. Anecdotal evidence suggests that local sellers were looking for international buyers who were prepared to pay a premium for amenity elements rather than paying prices based on local income. (sub. 32, p. 11)

##### *Reserve Bank*

The Reserve Bank has noted the impact of migration on, not just the previous housing cycle, but also those of the 1970s and the 1990s (see our submission to the Commerce select committee 2007, for example). Indeed, New Zealand has tended to have large swings in migration flows. Moreover, the response of house prices to migration appears large relative to international experience. Coleman and Landon-Lane (2007) estimate that house prices rise 10% in response to an increase in migration equivalent to 1% of the population. Of course, net migration flows are, at least in part, an endogenous response to changes in the underlying behaviour of the economy. But in spite of the difficulties in identifying the relative contribution of different factors, it is important that the implications of big swings in the population growth rate for house prices, and macro stability more generally, are recognised. (sub. 37, p. 4)

<sup>53</sup> This idea is also considered by Coleman and Landon-Lane (2007). However, they find little empirical evidence of this occurring in New Zealand.

*Registered Master Builders Federation*

It is difficult to say that immigration is a major source of increasing house prices. We suspect not, given net population is about 2/3rds births and 1/3rd immigration and the numbers are small in relation to all sales. (sub. 16, p. 15)

**How will underlying demand influence house prices in the future?**

As discussed in Chapter 2, the extent to which increased underlying demand for housing will push prices higher going forward cannot be considered in isolation but needs to be done in the context of other demand drivers, such as income growth. Within this context, the impact of changes in demand on house prices depends on the responsiveness of the supply side of the market. This will reflect factors such as council planning processes that influence the timing and location of land release for new housing and charges for land development (Chapters 7 and 8); the flexibility and efficiency of the building construction industry (Chapter 9); and the regulation of housing construction (Chapter 10).

Based on household formation projections and the assumption that construction volumes increase in line with future economic growth rates, the Department of Building and Housing (2010) predicts a shortfall of 15,000 dwellings between 2011–16, 11,000 dwellings between 2016–21, 14,000 between 2021–26 and then a housing surplus of 2000 dwellings between 2021-31. In total, this amounts to a net shortfall of roughly 38,000 dwellings in the 20 years to 2031.<sup>54</sup> Over this time period, the Auckland region is expected to experience a shortfall of 90,500 dwellings while a number of other regions are expected to experience housing surpluses. The extent to which internal migration will balance the Auckland shortage with surpluses elsewhere is uncertain.

A key focus of this Inquiry is policy changes aimed at improving the supply responsiveness of the housing sector, so that a supply shortfall of the magnitude predicted by the Department of Building and Housing does not occur.

---

<sup>54</sup> This is based on Statistics New Zealand household and family projections and Department of Building and Housings building forecasts.



## 6 The role of taxation

### Key points

- The Commission is not persuaded that taxation issues were a principal driver of the recent surge in house prices. The present tax position is long-standing and any tax benefit can be expected to have been capitalised into house prices long ago. Absent *change* to the tax regime, a tax bias that has already been factored in should not cause *movement* in prices.
- Housing is less tax-advantaged than is often suggested. This conclusion rests primarily on the following factors:
  - that part of the income provided by the house that is paid over to a lender as mortgage interest is taxed, in the hands of the lender, leaving untaxed only the imputed return on the owner's equity.
  - the application of GST to both rental and owner-occupied housing
  - the universal application of a property tax (local body rates) as the principal revenue source for local government
  - capital gains on housing are already taxed when those buying and selling houses are 'in trade'.
- The deductibility, and assessability, of the inflation component of interest is a tax distortion. The former favours borrowing to invest in real assets, including for investment in rental properties, and the latter encourages investment in these kinds of asset over financial assets. However, this is a general flaw in the income tax system and would be best addressed as such, rather than specifically in the context of housing.
- The Commission would not support taxing capital gains from housing alone:
  - taxation should be approached in a principled way across the economy – an ad hoc regime for housing would risk significant costs
  - designing a regime to bring capital gains and losses more generally within the tax system presents a number of difficult, conceptual and practical, challenges, such as how to define and keep track of capital gains and losses, including how to limit assessable capital gains to 'real' gains rather than merely 'inflation gains'.
- The government should monitor the impact of the removal of depreciation allowances on commercial properties – which includes rental housing – to check that the absence of depreciation deductions in a falling market (if or when that occurs) does not result in resources being diverted away from the rental sector in the same kind of way that depreciation deductions in a rising market drew resources into the sector.

### 6.1 Introduction

In New Zealand, as in many countries, there is a long-standing perception that housing is 'tax-favoured'. This perception took on even greater prominence during the recent upswing in the housing market. This issue has been the subject of previous analysis, most recently by the Tax Working Group (Victoria University of Wellington Tax Working Group, 2010). The Tax Working Group's recommendations included a range of measures relating to the taxation of housing, some of which have been adopted.

Although the housing market more recently has been subdued, significant questions remain regarding the taxation of housing. These include, for example, whether capital gains, and the benefit derived by owner-

occupiers from living in their own home, should be included as taxable income. However, the task that has been assigned to the Commission is to undertake an inquiry into housing affordability, including the impact of taxation, but not to undertake a tax inquiry.

Section 6.2 outlines how housing currently is taxed, and the issues addressed by previous tax inquiries, as they relate to housing. Section 6.3 considers what are commonly regarded as the income tax 'breaks' for housing. Section 6.4 discusses GST and territorial authority rates. Section 6.5 concludes with some broader observations.

## 6.2 How does the current tax system apply to housing?

Three categories of tax need to be considered in relation to housing: income tax, goods and services tax (GST), both of which are levied by central government, and rates, levied by local and regional government. This section briefly describes each of these taxes.

### Income tax and housing

Income tax applies to the housing sector in essentially the same way as to other sectors of the economy (Box 8).

#### Box 8 Overview of the income tax system

Taxable income comprises returns to both labour (salaries and wages) and capital (whether paid as interest or dividends, or retained profits). The net is cast wide to capture most 'market income', that is, the value that arises from economic exchange. In general, that income is taxed in the hands of those to whom it accrues. Therefore, that part of a firm's revenue (output) that is paid as salaries and wages generally is taxed in the hands of its employees, and that part that is paid to providers of loan capital, as interest, is taxed in the hands of the lender. The taxable income of the firm is the residual, or profit, remaining after these and other costs incurred in generating the firm's revenue have been deducted.

Two classes of economic income, however, generally fall outside the tax net.

First, the value that accrues to a taxpayer from their own use of their own capital or labour, often referred to as imputed income, is not taxable. For example, the benefit from painting one's own house (rather than employing a painter), or occupying one's own house (rather than renting it out), is not regarded as taxable income.

Second, tax law and practice is founded on a distinction between transactions on 'revenue account' and those on 'capital account', which, essentially is based on whether the transactions occur in the course of a trading activity. The former are tax assessable and the latter, generally, are not. This distinction can result in elements of economic value-add – economic income – not being subject to income tax. Examples include where a person builds their own house, where people 'build' a company, and where companies invest in creating a brand. Generally the value – or capital gain – created in these ways is not taxed, even if or when the resulting asset is sold. The proceeds of the sale are considered to be on capital account, rather than revenue proceeds from 'trading'. The capital/revenue boundary is not necessarily precise, although there is a body of rules and official interpretations that cover most situations – for example, for determining when someone is and is not in the business of building houses.

Essentially the same capital/revenue distinction carries over to the taxation of changes in the market value of already existing assets: transactions on revenue account (trading) are assessable, those on capital account are not. And what matters again is the trading/non-trading boundary, rather than whether or not the change in market value reflects an uplift in the asset's fundamental economic (output) potential, as distinct, for example, from inflation or an inflationary 'bubble' in asset prices. Therefore, taxable income and economic income do not always entirely correspond. Some economic income is not taxed; and in some situations 'capital gains' may be taxable even though they do not

add anything to real economic output.

Another important distinction relates to the time at which a tax obligation arises, as between when income is generated, or 'accrues', and when it is 'realised', that is, when it is converted into money. In general, salary and wage taxpayers are taxed on a realisation, or cash, basis. For example, holiday pay is taxed in the year in which it is received, not the year in which it accumulates. Businesses are taxed on an accruals basis which means income is recognised when it is entitled to be invoiced and expenditure is recognised when it is incurred. But there are exceptions. For example, in the case of forests, the income is taxed when the trees are milled, not as they grow and increase in value annually. Given the time value of money, income that is taxed long after it arises is taxed lightly compared with that which is taxed at the time.

Income from houses that are rented is taxed in essentially the same way as other sources of business income. Rents received are assessable income. But to the extent that the house is financed by borrowing, interest is deductible for the landlord and assessable for the lender. Similarly, expenses such as outlays on repairs and maintenance and for insurance are deductible for the landlord and assessable in the hands of the recipient, which leaves only the residual (profit) to be taxed in the hands of the landlord.<sup>55</sup> That is no different from how it is for any other business.

In the case of an owner-occupied house the income provided by the house – the benefit of occupancy for its owner – is not assessable and, correspondingly, the occupant is not able to deduct expenses. However, that part of the income provided by the house that is paid over to a lender as mortgage interest is taxed, in the hands of the lender, leaving untaxed only the imputed return on the owner's equity.

For the most part, the income (output) generated by those who build houses is taxed as income. Not many people build, extend, or renovate, their own home. Rather, home building and renovation, overwhelmingly, is carried out by people in a building trade business. Similarly, there is a specific set of rules that govern the taxation of income from the sub-division and development of land, which also result in business income from those activities being subject to income tax.

But what about changes in the market value of existing houses – so-called capital gains? The same general principles broadly apply to changes in the value of existing houses as for anything else.<sup>56</sup> If a taxpayer is deemed to have been 'trading' in houses, then gains/losses are tax assessable, but otherwise not.

From the above, it should be evident that while income tax applies to housing in broadly the same way as to other sectors of the economy, there is nonetheless, in practice, something of a patchwork. Aspects of that include:

- investment income generally is taxed, whereas the 'income' (imputed income) from an owner's equity in their own house is not taxed
- 'capital gains' are not taxed unless they arise in the context of 'trading'
- aspects of the tax deductions permitted for dwellings that are rented, specifically:
  - disallowance of depreciation deductions
  - the deductibility for a landlord of the full amount of nominal interest expense, not just real interest;
- the ability of landlords to offset losses – largely attributable to the preceding two deductions – against other assessable income.

Each of these is discussed in section 6.3 below.

<sup>55</sup> Up until 2010, the cost of the house itself also was deductible, as a depreciation charge spread over the life of the house, but those deductions are no longer permitted.

<sup>56</sup> Except for financial instruments (but excluding shares) which are covered by the "Financial Arrangements" tax rules, as referred to in footnote 4.

## The GST treatment of housing

GST, at a rate of 15%, is required to be paid by GST-registered businesses on their sales of new goods and services within NZ (registration is mandatory for those with a turnover exceeding \$60,000). This is invoiced to the buyer and, where the buyer itself is registered, the GST content of its own input costs can be claimed as a GST credit. The effect is a tax on the value added at each stage in the production chain, which is passed forward until it reaches the final 'consumer' (anyone who is not GST registered).

Housing is subject to GST in essentially the same way as for all other goods and services. Building firms and property developers are liable for GST when they sell a new house and/or section and can claim credits for the GST content of the inputs they use (for example, timber, cement, and services provided by land excavation contractors). In this way, GST is built into the price of new houses in the same way as it is built into the price of any other consumer good or service. The GST paid upon a new house coming to market is capitalised into the value of the house, and, as for any other long-lived item, can be thought of as 'going with the house'. In this way, the GST impost is spread over the house's economic life, and is borne by successive owners, not just the initial owner.

In one respect, however, the GST treatment of rental housing is unique. Generally, the renting, or hiring out, of goods is treated as a taxable supply. Hence, a hire firm is liable for GST on the rental it charges to its customer (which is passed on to the customer), and can claim GST credits for the GST content of its inputs. For example, a car rental company is required to charge GST on the rental it charges, and can claim a GST credit for the GST content of the price paid for the cars that make up its fleet.

If the same approach applied to rental housing, landlords would be required<sup>57</sup> to pay GST on the rents they charge to their tenants, and would be eligible for GST credits in respect of the GST content of their input costs, including of the house. For rental housing, however, landlords are treated as if they were the final consumer. This does not mean that residential rents are *exempt* from GST, as is sometimes incorrectly suggested. While GST is not applied directly to rents, indirectly it is, as rents ultimately need to incorporate allowance for the GST landlords absorb.<sup>58</sup>

It is also sometimes suggested that GST does not apply to the consumption of the accommodation services provided by owner-occupied houses to their owners. That too is incorrect. All houses used for residential purposes, whether rental or owner-occupied, are subject to GST at the time they are sold to the initial 'final consumer' (the owner-occupier or the landlord). There are no exemptions for housing.

## Local and regional government taxes (rates)

Rates are the principal source of revenue for territorial authorities. The Commission considers that rates, which are a compulsory levy against the landholder, can be regarded as a tax<sup>59</sup>.

Rates in most cases are based on the capital, or improved, value of real estate, on the value of the land, buildings and other improvements, although in some cases, rates are based on land value alone. They average about 0.65% of capital value of residential real estate, although this varies between local authorities.<sup>60</sup> If the real economic rate of return on a residential property – in other words the economic benefit of the accommodation provided – is, say, 3% per annum, then territorial authority rates can be viewed as the equivalent of a tax on residential property income at a rate of about 20% ( $(0.6/3.0) \times 100 = 20$ ).<sup>61</sup>

<sup>57</sup> If their rental income exceeded \$60,000; otherwise it would be open to the landlord to choose whether to be registered, or as is currently the case for all residential landlords, to be unregistered.

<sup>58</sup> To see the equivalence of the landlord or the tenant being regarded as the 'final consumer' in the case of residential rental dwellings, consider the following example, based on a house worth \$300,000 ex GST, a GST rate of 15%, and rent set to yield the landlord 5% pa. If the landlord is GST registered, then the cost to the landlord of the house is \$300,000, rent is \$15,000 pa, on which the GST would be \$2,250. If instead, the landlord is not GST registered (ie, is regarded as the final consumer) then the cost of the house is \$345,000, and to obtain a rental yield of 5%, the annual rent would need to be \$17,250, of which \$2,250 is attributable to the GST content of the house value.

<sup>59</sup> While there may be a closer connection between ratepayers and the services provided by territorial government than those provided by central government, the difference is only one of degree.

<sup>60</sup> Source: OECD (2011)

<sup>61</sup> If instead the income generated by the equity invested in an owner-occupied house is taken as the nominal return it could earn if invested instead in a bond yielding a nominal return of, say, 6%, then rates are equivalent to a tax on that income at a rate of about 10%.

Compared with income tax and GST, rates are a simple tax. Rates are applied at a prescribed rate determined annually by the territorial authority, on the basis of the assessed value of the real estate in question<sup>62</sup>. The administrative costs are low, particularly for ratepayers, who simply receive their rates assessments in the mail.

## Recent tax inquiries

### McLeod Committee

During the past decade there have been two comprehensive reviews of the tax system – the McLeod Committee (2001), and the Tax Working Group (TWG 2010), both of which addressed aspects of the taxation of housing. The most recent OECD review of New Zealand (OECD 2011) also included a chapter devoted to policies, including tax policies, relevant to housing. Further, in 2007 an Independent Local Government Rates Inquiry included a focus on the affordability of rates levied on residential property.

Both the McLeod Committee and the TWG reviews addressed whether housing should be taxed more than presently, either by taxing the imputed income from owner-occupied houses, or by taxing capital gains, or both. Both reviews were equivocal on these matters.

In its initial issues paper, the McLeod Review consulted on taxing the income generated from the equity invested in housing – both owner-occupied and rental housing – on the basis of a risk-free rate of return at a prescribed risk-free rate. This was floated as a simpler, more practicable, alternative to developing a more comprehensive measure of income from housing, covering imputed income and capital gains. In the case of rental housing, it would have been in place of taxing rent (net of expense deductions). For owner-occupied houses, it would have extended the income tax net to capture imputed income. The proposal faced strong public opposition and the Committee, taking the view that a tax system needs to enjoy a certain level of community support, did not recommend its adoption in their final report.

### Tax Working Group

The Tax Working Group gave the same risk-free rate of return approach further consideration, with its possible application confined to rental housing. Again, it was considered as an alternative to taxing rental income net of expense deductions, recognising that deductions had increased to a level where the rental housing sector was reporting aggregate tax losses, which was seen as problematic. Consideration was also given to taxing capital gains, and to introducing a land tax, or a 'capital charge', but without arriving at firm conclusions.

While the TWG saw the introduction of a comprehensive capital gains tax (CGT) as having merit in principle, it was concerned that if, owner-occupied property was to be excluded, which it saw as being likely, that would further bias the tax system in favour of owner-occupied housing. It was also concerned that people would defer sales if a CGT was applied on a realisation rather than accrual basis, and about boundary problems if some assets, or houses, were to be liable for CGT and others not. There was also the matter of how to take account of the general rate of inflation, so as to limit assessable capital gains to 'real' gains rather than merely 'inflation gains'.

One of the TWG's principal housing-related recommendations was to remove depreciation deductions for buildings if the evidence confirmed that buildings do not depreciate in value over time. That recommendation has been implemented. As discussed further below, however, the Commission considers that this change needs to be monitored, against the possibility that the absence of depreciation deductions in a falling market (if or when that occurs) could result in resources being diverted away from the rental sector in the same kind of way that depreciation deductions in a rising market drew resources into the sector. If that were to occur, it could risk under-investment in the housing stock — in short, a short term 'solution' that leads to a possible longer term problem.

The TWG also recommended a more general shift from income tax to GST, which has also been implemented by way of the October 2010 increase in GST from 12.5% to 15%, with offsetting reductions in

---

<sup>62</sup> The valuations are carried out periodically for the authority, in most cases by Quotable Value New Zealand, using recent sales data to estimate a value for each property.

income tax rates. This shift in the overall balance of the tax system is resulting in housing being brought more within the tax system than previously.<sup>63</sup>

## OECD

The 2011 OECD review of the New Zealand economy supported a comprehensive realisation-based tax on capital gains, but recognised that partial exemption or rollover relief for housing could be necessary to facilitate public acceptance. The OECD also recommended alternatives if housing capital gains were not to be taxed, including reducing the taxation of other forms of savings, to level the investment playing field, and further limiting the extent to which property investment losses can be deducted for tax purposes. The OECD also considered that such measures should be accompanied by higher property or land taxes that could be designed to achieve the same objectives as a tax on imputed rent (OECD 2011, p. 15).

## The Independent Local Government Rates Inquiry (2007)

This inquiry was commissioned in part because of concerns about how increases in local government rates above CPI inflation were impacting on affordability for those on low incomes. The inquiry saw rates as a revenue mechanism with advantages, including administrative efficiency, difficulty of evasion, low economic deadweight costs, and a reasonable relationship between property values and incomes, but with a tendency to have a regressive effect on those with lower incomes (see section 6.4). The recommendations, accordingly, were focused on a need for containment of spending by local government and/or finding additional sources of funding, to ease the need for rates increases. Improvements to the (government funded) rates rebate scheme and rates deferral arrangements provided by some local authorities were also supported, to ease affordability strains for those on low incomes.

## 6.3 Income tax influences on housing affordability

As already noted, housing is widely considered to be tax-favoured. This view was prominent during the recent housing boom, with the boom itself commonly attributed in significant part to tax provisions that were causing an upsurge in housing demand, and hence house price inflation. It is also reflected in submissions to the Commission, for example, by the Registered Master Builders Federation (sub. 16), which reflects a view that tax benefits induced increases in house prices greater than the value of those benefits, thus making housing less, not more affordable. However, submitters are by no means unanimous. ICON Concepts (sub. 6) provides an alternative perspective, that tax does not have much influence on house prices. The Business Roundtable points to a need for careful analysis of these issues, and considers that much of the “considerable comment on the taxation of housing in New Zealand [has been...] superficial at best” (sub. 20, p. 7).

This section considers the role that the income tax system may have played in driving house prices higher, focusing on those aspects of the income tax system that are generally regarded as causing, or symptomatic of, distortions that tilt investment toward housing.

### Box 9 How significant have the tax drivers been? A range of views

Some submitters see the tax system as one of the factors that have been driving house prices higher:

The Auckland Council and the Auckland District Council of Social Services note that a number of recent reports advocate for structural reform of the tax system because the current system gives favourable treatment to investment in housing and in other property over other forms of investment; for example, the recent OECD economic survey of New Zealand (2011) identified the tax system as exaggerating the surge in house prices (sub. 45, p. 14 and sub. 41, p. 5, respectively).

The Auckland Catholic Diocese Justice & Peace Commission “feels that (the) tax treatment of housing is unfair in relation to other income earning assets and that this has contributed to inflated demand and prices. Because there is no effective tax on the increase in (the) value of investment property, this

<sup>63</sup> In so far as income from the equity invested in owner-occupied houses is not subject to income tax, but the investment of equity by owner-occupiers in housing is subject to GST.

has become an enormously popular investment” (sub. 50, p. 3).

The Department of Building and Housing considers “current property tax arrangements favour property investment over other investment classes; favour rental investors over first home buyers; encourage rental investment for untaxed capital gain and reduce personal income tax revenue by allowing rental losses to be deducted against one’s personal income tax liability” (sub. 55, p. 40).

In the view of the Registered Master Builders’ Federation, “the tax treatment of residential properties ... has undoubtedly provided an incentive to acquire an investment property. Such properties tend to be toward the lower end, first home buyer market which has the effect of increased competition for these homes and higher prices than otherwise may have been the case” (sub. 16, p. 16).

Other submitters downplay the effect of tax distortions:

The Reserve Bank submits that “taxation regimes can affect house price movements and house prices cycles, but our judgement is that they have not been of decisive importance compared to supply factors, migration factors, or fiscal and monetary policy. At times, tax provisions, in conjunction with other shocks, may have served to amplify or extend a housing boom that had initially been triggered by quite unrelated factors”. Also, “countries with a variety of tax regimes experienced similar housing booms in the mid to late 2000s. Moreover, it is not clear that, in aggregate, housing is more tax-favoured in New Zealand than in other countries.” (sub. 37, p. 2 and p. 8).

ICON Concepts considers that “housing expectations are driven by deep social conditioning so the tax system does not have great influence” (sub. 6, p. 13).

Carrus Corporation Limited believes “taxations (income and GST) most significant influence is on the take-home pay which then flows through to what the potential purchaser can afford” (sub. 8, p. 15).

New Zealand Property Investors Federation is of “the view ...that the current tax settings seem to be efficient and are not overly lenient for residential rental property providers and (that) taxation policy instruments themselves will not of themselves significantly make much difference to the current cycle of housing and renting trends in New Zealand” (sub. 51, p. 9).

## Tax-preferred owner-occupied housing

Owner-occupied houses provide an economic benefit – income – to their owners in the form of an ‘implicit payment’ for the accommodation services that houses provide. That income is included in a country’s measure of aggregate income, or output, measured as the rental value of owner-occupied houses. Under a fully comprehensive system of income tax, it would also be subject to tax.

That already is the case to the extent that owner-occupied houses are financed by debt, that is, by a mortgage. As for any investment, the return to capital accrues to those who finance it, and it is no different for houses. Interest on a mortgage represents the return to the provider of the loan capital, and is taxed in the hands of the lender – ultimately, the depositors with the financial institutions that provide home loans.<sup>64</sup> However, to the extent that houses are funded by owners’ own equity, the associated income from the house – the benefit of occupancy – is not subject to income tax.

This different tax treatment as between returns to debt and returns to equity invested in owner-occupied housing is widely thought to:

- bias people toward investing their own savings (their equity) in their own home, rather than in other forms of saving;
- bias the housing market in favour of owner-occupancy and away from renting;

<sup>64</sup> And, to the extent that a portion of the interest paid by the homeowner is retained by the lending bank as its interest margin, in the hands of the bank. Also, to the extent that banks fund their lending from abroad, rather than from New Zealand depositors, the interest is taxed, or possibly not taxed, in accord with the tax treatment of interest in the source country.

- result in more resources, overall, being allocated to housing than is ideal.

Some countries address this issue by allowing mortgage interest paid by owner-occupiers to be deducted from assessable income, which results in the return to both debt and equity invested in owner-occupied housing not being taxed. This removes the tax discrepancy as between debt and equity financing of owner-occupied housing, but exacerbates the discrepancy as between owner-occupied and rental housing, and increases the tax bias in favour of housing overall.

#### Box 10 Owner-occupied housing – a tax-favoured investment?

Again there is a full range of views from submitters. On the one hand:

On the question, “does the New Zealand tax system influence tenure decisions towards or away from home ownership?” Carrus Corporation Limited says, “Away” (sub. 8, p. 15).

And the Department of Building and Housing notes that “current property tax arrangements favour ...rental investors over first home buyers” and that “New Zealand’s current tax rules as they relate to owner-occupied housing are broadly in line with other western nations (ie, there is no capital gains tax or ability to deduct interest/mortgage expenses), but [the] treatment of rental investment housing is markedly different (capital gains are not taxed, there are no transfer/sales taxes, and there are few restrictions on the ability to offset rental losses against other taxable income)” (sub. 55, p. 40).

The Business Roundtable considers that “owner-occupied housing is treated more favourably than most other classes of assets for income tax purposes [and that] rental housing is treated somewhat less favourably than many classes of assets.” But it also considers that “there is little reason to assume that such long-standing income tax arrangements played a major role in recent house price trends or that the distortion to resource allocation will have been significantly accentuated by tax treatment over the past few years”. It adds that “many countries exempt owner-occupied housing (or at least the principal residence) from income tax” and that “New Zealand’s tax treatment is broadly similar to that of Australia, Germany and the United Kingdom [although] it is less concessional than that of France, Ireland, Italy and Spain which provide a tax credit or deduction for at least some mortgage interest but, like New Zealand, do not tax imputed rents” (sub. 20, pp. 7 and 8).

The Reserve Bank also considers that “housing is a favoured investment from a tax treatment perspective, ... especially for unleveraged owner-occupiers ... since owner-occupiers do not pay tax on the imputed rental value of the equity in their houses (although they do pay rates)” (sub. 37, p. 8).

On the other hand, some do not see tax as having much of a bearing on the choice whether to own or to rent:

Affordable Housing New Zealand Limited considers “the tax system neither favours owners to non-owners of housing” (sub. 12, p. 11).

Habitat Auckland submits that for “a segment of the public, their decision as to whether to rent or buy will be based on economic reasons whether those relate to their ability to raise and service the loan needed to purchase or a conscious choice based on financial analysis of the options available. This first group is likely to be influenced by the taxation system. A much larger segment however still strives for home ownership based on other factors including security of tenure, wealth accumulation, desire for reduced housing costs during their retirement years, the ability to redecorate or remodel and more. This latter group is less likely to be influenced by the taxation system” (sub. 23, p. 6).

Another option is to tax the imputed return on the equity invested in owner-occupied houses. That has been proposed, or considered, by previous tax inquiries and also by the OECD (as above). However, it is something for which there has been little appetite to implement.

The Commission is not persuaded that the lack of movement on this matter contributed to the recent surge in house prices. The present tax position is very long-standing and, as noted by the Business Roundtable



(sub. 20), that tax benefit can be expected to have been capitalised into house prices long ago. Absent change to the tax regime, a tax bias that has already been factored in should not cause movement in prices.

This still leaves embedded in house prices any long-standing income tax advantage for owner-occupied housing. In other words, house prices not only today, but for a long time, will have been higher than if imputed income on owner-occupied houses was taxed.

But there are also some countervailing factors.

One is the tax applied by territorial authorities to real estate, which applies to all housing, both rental and owner-occupied. As noted above, rates on residential properties can be viewed as the equivalent of a tax on the (real) income from houses, at a rate of about 20%, which is not too different from the average rate of income tax for most taxpayers. The Reserve Bank notes that “relatively high local government rates in New Zealand compared to other countries act as a tax on property ownership” (sub. 37, p. 8).

That still leaves equity in owner-occupied houses relatively tax-advantaged in so far as it bears the tax of only one level of government, whereas houses financed by debt attract both income tax (on the interest) and rates (on the house). But it also means that the difference is one of degree rather than an absolute difference. Indeed, it might even be argued that, rather than equity in owner-occupied houses being tax advantaged, it is rental and debt financed housing that is tax disadvantaged, given that they are ‘double taxed’, that is, are subject to both central government income tax and territorial government rates.<sup>65</sup>

Second, any tax tilt in favour of equity invested in owner-occupied housing attributable to the non-taxation of imputed rent will have diminished, not increased, during the past decade or two. This is because of the shift that has occurred in the balance between income tax and GST. The latter, as explained above, applies equally to both the owner-occupied and rental segments of the housing market, and to investment in housing whether financed by debt or equity. Income tax rates have come down,<sup>66</sup> while GST, which was introduced in 1986 at a rate of 10%, was increased, to 12.5% in 1989 and to 15% in 2010. This shift in the balance between income tax and GST has gone some way to evening-up the housing taxation playing field.

Third, the taxation of the rental sector itself is widely regarded as having benefited from ‘tax breaks’; in other words, it is not just owner-occupied housing that has been ‘tax-favoured’. If that is right – the Commission itself is not sure that the ‘tax breaks’ for rental housing have been all they have seemed to be (see sections 3.2 and 3.3 below) – then they too will have worked to level up the relative taxation of rental and owner-occupied housing.

These assessments are supported by the way in which the pattern of ownership, as between rental and owner-occupied, and of financing, as between debt and equity, evolved during the recent housing boom. If a tax bias in favour of investing one’s own savings in a home had been a driving force behind that boom, we might have expected to see the home-ownership rate trending up, and equity flowing into the housing sector. However, on both counts, the trends ran in the opposite directions. The percentage of houses owner-occupied, if anything, trended down, and equity was being withdrawn from, not injected into the housing market. It was a debt financed housing boom.<sup>67</sup>

### F6.1

The tax bias in favour of equity invested in owner-occupied housing is not as large as is often suggested, once GST and territorial government rates are taken into account.

## Housing capital gains

Whether, or not, taxing capital gains on houses would help to contain house prices, and therefore contribute to achieving home affordability policy objectives, has been widely debated over a number of years. Previous tax reviews have been equivocal on the subject. While the introduction of a comprehensive

<sup>65</sup> Note also that in the case of houses that are rented, the rates charged by territorial government rates are deductible against the rental income, thus lessening income tax to some extent.

<sup>66</sup> Although from 2000 to 2010 the top marginal rate was increased somewhat, but remained well below the top marginal rates that prevailed before the 1990s.

<sup>67</sup> See Reserve Bank of New Zealand (2011), pages 16-17, for details on how equity was withdrawn from the housing sector between 2003 and 2008.

capital gains tax is something that has been seen as having 'in principle' merit, there have also been concerns that, as in other countries, a comprehensive approach would prove not to be feasible in practice, and that a partial approach could cause more problems than it would solve.

#### Box 11 Taxing housing capital gains – to tax or not to tax?

The main focus of the submissions supporting the taxation of capital gains on housing is on gains from 'speculation'.

The Auckland Catholic Diocese Justice & Peace Commission "strongly supports the idea of a capital gains tax, not only on grounds of fairness in taxation, but also because it would help to dampen down house price increases resulting from speculation" (sub. 50, p. 4).

Habitat Auckland considers "the current taxation regime ... to have encouraged small investors, prepared to take speculative risks, into the property market in order to make gains that until recently have seemed to be almost guaranteed. One of the effects of this has been to put upwards pressure on the values of properties reducing the affordability for first home buyers when attempting to make their purchase" (sub. 23, p. 6).

Brady Nixon comments that "housing affordability is the cumulative result of a number of different issues (one of which being) we have a lack of capital gains tax" (sub. 26, p. 5).

The New Zealand Council of Trade Unions submits that we should "assist those wishing to rent by (inter alia) enforcing current tax rules taxing capital gains made by property speculators to discourage housing price bubbles (and by introducing) capital gains or asset taxes" (sub. 15, p. 8).

Other submitters are sceptical about how much difference it would make if New Zealand were to extend taxation of capital gains.

The Business Roundtable points out that "contrary to much commentary in the media, capital gains on owner-occupied housing are not typically taxed in those countries where capital gains taxes are generally applied" (sub. 20, p. 8).

The Centre for Straight Thinking cites Sir Roger Douglas as follows: "If a Capital Gains Tax (CGT) were a serious driver of housing affordability, then Australia – which has had a CGT since 1985 – would not have the most unaffordable housing in the English speaking world... If we look further afield, the United States and Canada also have nation-wide capital gains taxes, yet both countries have experienced housing bubbles in which house prices soared. Clearly, a Capital Gains Tax is not a significant factor in the demand – and therefore price – of housing" (sub. 24, p. 65).

The Reserve Bank finds that "there is little evidence internationally that countries with capital gains taxes have experienced less marked cycles in house prices... we note that, in practice, capital gains taxes are only levied on realised gains (rather than accruals), which creates additional distortions and that capital gains taxes usually largely exclude owner-occupied houses, even though unleveraged owner-occupied housing is the most lightly taxed component of the housing stock....[and that] capital gains taxes are common internationally but are hard to design and implement in a way that works well. To avoid establishing new distortions, any capital gains tax should only tax real capital gains and needs to treat gains and losses relatively symmetrically" (sub. 37, p. 9).

The New Zealand Property Investors' Federation considers that "a simplistic CGT will not curtail real estate inflation, which is the result of many complex factors, and consequently make property affordable for first homebuyers" and that "the unintentional effect of the imposition of a wide-ranging CGT could be two-fold...:

- an investor exodus from the country's property market ... [creating] a housing slump that affects the existing ownership base

- sales could dry up ... worsening supply and affordability". (sub. 51, p. 6)

The Federation and its residential property investor members therefore join with successive governments, influential Parliamentarians, departmental officials, some members of the Tax Working Group and the 2001 McLeod tax review to strongly and collectively restate our concerns over the practical challenges arising from a CGT. (sub. 51, p. 6-7)

Income tax already applies to gains realised on property sold when the property was acquired with the purpose or intention of resale. (sub. 51, p. 6 & 7)

House prices over the past decade or two have increased by much more than consumer prices generally. That is widely considered to have delivered real capital gains – or real income – to home owners. It is tempting to think that the exclusion of those gains from tax-assessable income represents a major 'hole' in the income tax base,<sup>68</sup> and that applying tax to them may have had the additional benefit of moderating house prices. However, as commented by the Reserve Bank, design of a good capital gains tax is far from straightforward (sub. 37). Both theoretical and practical issues arise.

To begin with, it is sometimes suggested that lack of a capital gains tax favours investment in assets that are expected to appreciate, over assets that earn taxable income – primarily land and shares (Inland Revenue Department/Treasury (2009)). But if a capital gains tax were introduced on housing in isolation, this would favour assets elsewhere over housing.

As noted above, the OECD (2011) supported a comprehensive realisation-based tax on capital gains, but recognised that partial exemption or rollover relief for housing could be necessary to facilitate public acceptance. It lists (p. 77) some of the practical and political challenges with taxing capital gains on housing:

- A tax applied on an accruals basis would create liquidity problems for households whose property values had risen sharply, but with insufficient cash flow to cover the tax burden;
- The tax could be perceived as unfairly treating retired households who do not plan to move.
- A realisation based tax might address these problems but create other distortions such as lock-in effects: owners who might otherwise have considered selling could refrain from doing so in order to avoid, or defer, a tax liability<sup>69</sup>.
- Roll-over relief can address this but might create incentives to bring forward capital losses, which might then need to be reduced by ring fencing income against which the losses can be offset.
- Indexation would be needed to ensure the tax is imposed on a better approximation of real capital gains (netting out the effect of 'gains' that are the result of inflation), but this would need to be accompanied by indexation of interest income in order to avoid tax-planning incentives.

Incorporating such design features into a capital gains tax inevitably raises the complexity of the tax system. As a result of these challenges, as well as political considerations, most countries that tax capital gains exempt owner-occupied houses, apply the tax on a realisation rather than accruals basis, and tax gains but do not allow deduction of losses (or, at most allow losses only to be carried forward as a deduction against future capital gains). If circumscribed in these ways, taxation of capital gains from housing could lose much of its principle-based intent, given that about two thirds of houses are owner-occupied.<sup>70</sup>

Of these issues, the need for a treatment for capital losses might be seen as of 'second-order', if there is a view that houses can be relied on to appreciate, at least over time. However, international and indeed local experience suggests that capital gains cannot be guaranteed.

<sup>68</sup> As reflected, for example, by the Tax Working Group (2010), which considered that "a large component of economic income, capital gains, are not taxed, or are taxed in an 'ad hoc' fashion" (page 48).

<sup>69</sup> "Roll-over relief" – that is, allowing tax on a realised capital gain to be further deferred upon the proceeds being re-invested in another residence – would help to avoid this perverse outcome, but would also result in a CGT having less (stabilisation) policy 'bite'.

<sup>70</sup> As a matter of arithmetic, an instrument that applies half the time to one third of the market loses 5/6 of its effectiveness.

Another question concerns whether, if rising house prices signal excess demand for housing, a tax on that relative price increase would help to close, or widen, the supply-demand imbalance? How might any effect on investment demand in the short run play out in relation to supply responsiveness over the longer run? And how might the effect in the short run (the initial incidence of the tax) play out in the longer run, that is, after shift in the incidence of the tax has occurred – for example, if a capital gains tax on rental houses was to reduce rental supply, and raise rents?

All of which perhaps raises a question as to whether capital gains from housing are quite what they are made out to be. In that regard, issues have been raised in work undertaken for the Commission about the extent to which housing capital gains are 'really' real, as distinct from reflective of bouts of house price inflation, and about the sense in which they really constitute income, in the sense that income is a measure of economic output. These issues are summarised in Box 12. The Commission has not taken a view on the points raised, other than to note that they bring to the surface some underlying conundrums.

Unpicking all these issues concerning the taxation of capital gains, with a view to establishing whether and/or how capital gains from housing might appropriately be made subject to tax, is clearly far from easy. But it is something the Commission thinks would need to be done in designing a capital gains tax regime for New Zealand if unintended consequences were to be avoided.

#### Box 12 Housing capital gains – the long and the short of it

Changes in house prices feature prominently in individuals' perceptions of their wealth. Rising house prices tend to make home owners feel wealthier and the converse when house prices are falling.

But might this be a case where perceptions are *not* reality?

#### **In the short run and in the long run**

House prices in the early 2000s increased substantially in many countries, relative to consumer prices in general. On its face, that reflects a shift in the relative, or 'real' value people attach to housing, vis-à-vis other goods and services.

But another possibility is that in a period of loose financial conditions, house prices ran ahead of the rate of inflation overall. That might suggest that the surge in the relative price of housing in the 2000s was mostly a bout of house price *inflation*, and a re-anchoring can be expected to occur over the longer run. That could occur either as the result of house price deflation, or upward drift in the general level of prices, or some combination of the two.

The design issue this latter possibility raises for taxing capital gains concerns whether the real capital losses incurred over the longer run should be deductible in essentially the same way as the gains in the short run would be assessable? The normal principle is that gains and losses should be treated symmetrically. If that principle were applied to the taxation of changes in real house values, the net amount of tax raised in the long run might not be high.

#### **And in the short run, one person's capital gain is another's capital loss.**

What about in the short run – the period during which house prices remain elevated relative to incomes and relative to the general level of prices? Clearly those who buy a house before a spike up in prices enjoy a real advantage. They can then sell their house, or trade down, for a larger bundle of alternative goods and services. But often over-looked is that those who did not own a house before house prices surged will have incurred a corresponding 'real' capital loss. Unless or until house prices fall back into line with the general level of prices, their income, and savings, do not buy as much 'house' as previously. For them, that can be viewed as being as much an economic, or real, loss as the increase in house prices represents a real gain for those who bought before the boom. The Governor of the Bank of Canada has put the point as follows:

The value of residential real estate holdings ... has vastly outpaced increases in consumer prices and disposable income.... However, Canada is arguably no better off because of it. That's

because while homeowners may feel wealthier because of this rise in prices, [house prices increases are] not net national wealth. Some Canadians are long housing, others are short. Housing developments can have important implications for equality both across and between generations. Though some people in this room may have been enriched, their children and neighbours may have been relatively impoverished. (Carney, 2011)

On that view, a change in the relative price of housing does not result in more (or less) economic output, or real income, available for tax to take a share of. Rather, some people are made relatively wealthier and others are made relatively poorer.

From both angles – the long run versus the short run, and those who are ‘long’ housing versus those who are ‘short’ housing – there would seem to be issues for the design of a capital gains tax regime that are far more complicated than is generally perceived. From both angles – the long run versus the short run, and those who are ‘long’ housing versus those who are ‘short’ housing – there would seem to be issues for the design of a capital gains tax regime that go beyond what might immediately meet the eye.

## F6.2

A decision on whether to adopt a capital gains tax on housing should be based on a coherent set of principles that have general application, not just to housing – a wider matter that runs beyond the scope of this inquiry. There are a number of difficult issues associated with a capital gains tax that would also need to be further considered. This is a complex matter that is sometimes overly simplified by commentators. These questions suggest that the design of a regime for bringing capital gains and losses from changes in the relative price of assets – including houses – into the tax net would depend importantly on the policy objectives (revenue raising, stabilisation, equity and efficiency); and that there may be more to – and less in – it than initially meets the eye.

## Rental housing tax losses

The Tax Working Group highlighted how taxable income from the rental housing sector trended down during the housing boom in the 2000s, and that by 2007-8 the sector was reporting aggregate tax losses (Tax Working Group (2010), p. 25-26). This brought a spotlight to bear on whether allowable deductions – principally for interest and depreciation – were enabling landlords to ‘manufacture’ tax losses that did not reflect real economic losses. The ability to use these tax losses as offsets against other assessable income, particularly through the use of Loss Attributing Qualifying Companies (LAQCs), raised further questions about whether tax losses on rentals should be ‘ring-fenced’, so as to be available only as an offset against future rental income, not unrelated income, such as income from employment or unrelated business activity. Participants had a range of views about this issue (Box 13).

### Box 13 Rental housing – what to make of the upsurge in tax losses?

The New Zealand Property Investors Federation notes that “providing New Zealanders with good rental accommodation is a taxable income generating business – the landlord business. In doing so landlords incur revenue costs such as interest on borrowings, repairs, maintenance, insurance, council rates and so forth, which are deductible against other assessable income.”

Another huge misconception is that there is some sort of ‘favourable’ tax treatment going on with regard to depreciation allowances – and that this regime somehow encourages property investors. This is not so.

Disappointingly, from 1 April of this year, depreciation allowances on buildings have been abolished and landlords are no longer able to claim depreciation on their buildings... On balance, the Federation considers that the change to building depreciation looks likely to reduce the supply of rental property and further increase rental prices. In itself, the depreciation rule changes will not improve housing affordability.

The notion that residential property investors knowingly lose money to save tax is ludicrous and is not supported by hard facts. Good investors do not like losses. (sub. 51, pp. 8 & 9)

The Registered Master Builders' Federation considers that "there is little doubt that the tax treatment of investment property has (contributed) to the high level of investment in this sector relative to other forms of investment....However, the wider policy issue needs to be considered relating to what, if any, influence changing the tax regime will result in fewer private sector rental properties and a greater reliance on the State for housing" (sub. 16, p. 16).

Habitat Auckland cautions that "care is required if any efforts are made to correct this situation however. It is difficult to say whether the outcome of less favourable taxation regime for residential property investors would be a reduction in values (improving affordability) as current investors exit the market in volume or increased rentals (increasing unaffordability) as investors seek to recover a reasonable investment return. Either way, the market is going to be unattractive to institutional investors unless values drop significantly and stabilise at a level that allows satisfactory commercial returns. With a market unattractive to both mum and dad investors and institutional investors ... who is going to provide the required rental stock?" (sub. 23, p. 6).

The Business Roundtable considers that "rental housing is treated somewhat less favourably than many classes of assets. The 2010 Budget removed depreciation deductions for property with a life of 50 years or more, and denied investors the opportunity to offset rental property losses incurred through loss-attributing qualifying companies against their personal income."

The ability to offset tax losses against other income is not a tax preference.

So-called negative gearing is unlikely to be a significant concern from a tax perspective... Gearing distributes the return [from rental properties] among debt holders and equity investors. ... Restrictions on gearing are also unlikely to be effective because of the fungibility of money.

A concern that expenditure of a capital nature may have been treated as repairs and maintenance, and deducted from taxable income, may have encouraged the government to deny depreciation deductions. (sub. 20, p. 7-10).

The Reserve Bank comments that "the inadequate tax treatment of the inflation component of interest, whereby all interest received is taxed and all interest payments by investors are deductible, compounds [rental housing tax distortions]. With an inflation target centred on 2 per cent per annum, a significant chunk of any interest rate reflects simply the expected general rise in the price level (rather than a real income or real cost)... We also doubt that loss off-setting in and of itself was more than an amplifying factor... More generally, however, correcting the tax treatment of interest to assess or deduct only real interest would remove the distortion in this area" (sub. 37, pp. 8-9).

The Department of Building and Housing notes that "...the capacity for investors to deduct losses from rental properties against other sources of taxable income puts investors at a relative advantage to first home buyers (assuming they fund the property mainly through debt) ... estimates suggest that the ability to deduct losses from rental properties increases the value of a median priced house to the investor by \$25,000."

...current tax advantages (for rental investors) ... create inequities between 'ma and pa' and institutional investors as the latter cannot pass tax losses onto their investors. (sub. 55, p. 41).

## Depreciation deductions – too large or too small?

Establishing the appropriate basis for depreciation allowances is closely bound up with how appropriately to tax capital gains (and losses). Depreciation is the converse of appreciation: diminution in an asset's future income potential is reflected in depreciation, and vice versa.

Ideally, depreciation, and appreciation, would be determined by way of reference to changes in market value. However, for most assets objective market values are not available; hence the accounting practice of allocating depreciation year-by-year by apportioning the cost of an asset over its economic life (based on

estimates of the economic life of different classes of asset). The presumption is that most assets (land being an exception) deteriorate as the result of decay and obsolescence and eventually need to be 'written off'.

Arguably, the theoretically correct approach to account for asset appreciation is to write up the asset (with the capital gain taken to income if it is real (that is, above inflation), or to a revaluation reserve if it is attributable merely to inflation), with subsequent depreciation expense over the remainder of the asset's economic life determined on the basis of the written-up current replacement value.<sup>71</sup>

Until this year, a house that is rented could be depreciated for tax purposes as a percentage of the acquisition cost (either 3% per annum on a diminishing value basis, or 2% per annum on a straight line basis).<sup>72</sup> Appreciation, or inflation, in the value of the house (capital gain) was not taken into account. However, depreciation for buildings (with an economic life of more than 50 years) is now disallowed, on the basis that it does not make sense to allow depreciation for buildings that actually appreciate.

This change in policy appears to have been based on an assessment that for buildings, 'capital gains', which are not assessable, and outlays on repairs and maintenance, which are deductible, offset physical depreciation.<sup>73</sup> From this perspective, the recent elimination of depreciation deductions for buildings can be seen as a 'pragmatic' way to cut through a situation involving a number of moving parts – capital gains, inflation, rates of physical decay, and repairs and maintenance outlays. That suggests a need for something of a watching brief to check, going forward, whether those moving parts continue to more or less balance out. If, for example, in the next decade or so house prices fall in relative terms, then the tax policy settings for depreciation might require still further 'tweaking'. Being unable to claim neither depreciation nor capital losses could result in insufficient recognition of the economic cost of providing rental accommodation, and hence create a tax disincentive to invest in it, just as the combination of depreciation deductions and tax-free capital gains drew investment into the sector.

## Interest deductions for landlords

Interest paid on borrowings to finance a house that is rented is an expense that can be deducted from the tax assessable rent, consistent with normal tax policy and practice. It recognises that the income return to the capital invested in rental houses accrues to – and should be taxed in the hands of – those who provide the capital, that is, those who provide the debt, and equity, respectively.

Full deductibility of interest expense, however, does confer a tax advantage, for all taxpayers who incur interest expense in the course of generating tax assessable income. That advantage stems from a significant component of interest not being a 'real' expense, but rather compensation for the erosion, over time, of a debt expressed in money and hence which is debased by inflation. Even at low rates of inflation, money loses significant value over a run of years – nearly 30% over 10 years of inflation averaging 2.5% pa.

This tax advantage from borrowing provides an underlying incentive to invest in tangible assets. Housing is particularly amenable to investing in this way, given the relative ease with which borrowing against a house can be arranged. In the case of rental housing investments, deductibility of the full amount of interest, without being assessable for the inflation component of the increase in the value of the house, creates an opportunity to 'manufacture' tax losses that are not economic losses. While a combination of house price inflation expectations, and relative ease in arranging debt to finance residential rental investments, will have been the main driver of the upsurge in investor appetite for leveraged rental investments during the recent housing boom, full deductibility of the interest expense will have been an added factor.<sup>74</sup>

One result of that lift in the appetite for leveraged investments in rental housing will have been an increase in the share of rental housing income that accrues to lenders, and correspondingly less to the (equity)

<sup>71</sup> The theoretical underpinning for treating *economic* appreciation and depreciation symmetrically (appreciation as income and depreciation as expense) is provided by Samuelson (1964). For an exposition on how appropriately to take account of depreciation where changes in asset values are attributable to *inflation*, see Committee of Inquiry into Inflation Accounting (1976).

<sup>72</sup> Up until 2005, the rates had been 4% (DV) and 3% (SL).

<sup>73</sup> Also, as noted by the Business Roundtable, it is also possible that some outlays on buildings which are capital in nature are claimed as a deductible repairs and maintenance expense (sub. 20, p.7).

<sup>74</sup> As will have been the full assessability of nominal interest. Although the tax 'subsidy' for borrowing is balanced by over-taxation of nominal interest income, the bias created by both is in the same direction – to invest in real rather than financial assets.

owners. This accounts for at least part of the downtrend during the 2000s in rental income returned for income tax; a greater share of the rental revenue was being paid as (tax deductible) interest.<sup>75</sup> To the extent that this was the case, it is not as though the income was escaping tax, but rather was being taxed as interest income (including the 'unreal' inflation component) in the hands of the lenders.<sup>76</sup> This goes at least some way to explaining why New Zealanders have had a propensity to make leveraged investments in rental houses, rather than passively invest their savings for interest. Remedial measures to address these distortions, ideally, would apply to both sides of what is a general flaw in the income tax system.

## Ring-fencing rental losses

Sometimes suggested as a solution to the preceding issues is 'ring-fencing' of tax losses on rental investments, so that they can only be carried forward as an offset against future assessable rental income, and not against unrelated income, such as the landlord's salary or other business income. This would, however, respond to the symptoms rather than the source of an underlying problem. Experience indicates that usually results in less effective outcomes, and the creation of new distortions. The Commission notes that ring-fencing of rental losses was not recommended by the TWG and that the subsequent decision to amend and rename the LAQC regime, to the Look Through Company (LTC) regime, was to tidy up anomalies rather than to introduce a ring-fencing approach.

### F6.3

- The elimination of depreciation allowances for houses (and other buildings) can be seen as a pragmatic balancing of a number of considerations in the light of a particular set of circumstances – the housing market boom of the early 2000s. Its aptness going forward, in what could be different circumstances, should be monitored; ideally in the context of establishing an approach that is durable across a range of different circumstances.
- The full deductibility of interest expense for business borrowers (and assessability for savers), including of that component that is not 'real', is a tax distortion that favours borrowing to invest in real assets, including for investment in rental dwellings. However, it is a general flaw in the income tax system that best would be addressed as such, rather than specifically in the context of housing.
- No changes, to ring-fence losses on residential rental investments from other taxable income, are called for.

### R6.1

That the Government monitor the impact of the removal of the depreciation allowance on commercial properties, including rental properties, for evidence that expenditures relevant to the proper upkeep and safety of buildings are being sustained.

## 6.4 GST and territorial government rates – two good taxes?

### The Goods and Services Tax

GST is widely regarded to be an efficient tax in that:

- it does not distort decisions between consuming and saving, that is, the return to saving is the same pre- and post- GST;
- it is broad-based, so does not distort consumers' spending choices;

<sup>75</sup> Also, it was a period when mortgage interest rates were rising, which will have further shifted the allocation of rental revenues as between return to the landlord and transfer to the lender, in favour of the latter.

<sup>76</sup> The same phenomenon will have been occurring in the farm sector, where rapid growth in lending to agriculture was associated with rapidly inflating farm land prices, but relatively subdued (taxable) farm incomes, attributable at least in part to a greater share of gross revenues being paid over as interest expense.



- it is a tax with low compliance and administrative burdens.<sup>77</sup>

However, because GST is a flat rate tax<sup>78</sup> and, because those with lower incomes tend to spend a higher proportion of their income, it tends to be seen as a 'regressive' tax.

GST has not featured in policy discussion about the surge in demand for, and rise in the prices of, houses nearly as much as have aspects of the income tax. The design of GST is not identified in public discussion with 'tax breaks' that have driven up house prices,<sup>79</sup> or as a tax that has caused house prices to be higher than they would be otherwise. Comparatively few submitters addressed the effect of GST on housing affordability (Box 14).

#### Box 14 GST – up front but under the radar?

The main issue raised in submissions was whether 'front-loading' the payment of the tax, into the purchase price of new dwellings, creates a barrier to (first) home ownership.

Affordable Housing New Zealand Ltd submits that: "GST is the kicker in new home construction. Even on an affordable house being \$357,000 there is \$46,500 in GST that is generated directly from the catalyst activity of building. Australia has a first home owners grant but is general knowledge it is derived from the GST content of the new build. A portion is retained by the new homeowner, the residual is returned to the State" (sub. 12, p. 11).

Martin Brown notes that "...in the UK new build houses are not subject to VAT. Renovations and extensions are. ... I would estimate the average GST content of an average house here, costing perhaps \$300,000, at your 15% rate will be around \$39,000."

I would like to advocate a structure which is a combination of fixed rate long-term mortgages, and tax free returns for those who invest in mortgages over a long term... All mortgages granted on residential property shall be subject to GST on repayments. This will have the effect of reclaiming GST forgiven on the initial purchase, but replacing it with a staged repayment over the term of the mortgage. (sub. 52, pp. 8 & 9).

One reason why GST has not featured in public discussion of housing may be that it applies to housing only at the point new houses come to market. That means that, for the great majority of home owners, who purchase existing houses, no GST is visible. But as explained above (section 6.2), that does not mean that purchasers of existing houses do not bear GST; they do, just as do the purchasers of other consumer durables, such as a second-hand car. The GST that was capitalised into the price of the house (or a car) when new is, in effect, spread over its economic life, with the market determining how it is carried from one owner to the next. In addition GST is included in the cost of any additions or renovations, as well as of the repairs and maintenance that occur throughout the life of a house.

Another reason for the low profile of GST in relation to housing affordability is that on its introduction (and on subsequent increases), those already owning a house not only incurred no tax impost, but will have benefited from the uplift in the market value of existing homes resulting from the higher GST on new homes. That may have seemed something of a 'windfall' gain. While it will not have made existing home owners better off in any absolute sense, since the increased value of their houses could not be exchanged for more goods and services to which GST also applied, existing home owners will have enjoyed a step-up in *relative* position vis-à-vis those who did not (yet) own a house.

This brings to the fore the point raised in submissions from Affordable Housing New Zealand Ltd, and Martin Brown, that GST is 'front-loaded' into the purchase price of a house (new or existing). That is, the buyer of a house pays GST up front on the services to be provided by the house over the remainder of its

<sup>77</sup> The GST Act runs to 266 pages, while the Income Tax Act to 2855 pages. Many GST registered businesses complete their own GST returns, but most find it necessary to engage a tax accountant to prepare their income tax returns.

<sup>78</sup> GST is a flat rate tax in the sense that all taxpayers pay the same rate of GST irrespective of their means (income, wealth or total spending). Many countries, however, apply different rates of GST (or VAT) to different categories of product, or exempt some categories altogether.

<sup>79</sup> Although occasionally it is suggested that the 'exemption' of residential rents from GST constitutes a tax distortion in favour of renting, but that in fact is not the case, see section 6.2 above.

life. In contrast, the GST on one's groceries is payable week by week, not a life-time's worth in one upfront instalment. That has both time value of money and cash-flow implications. By way of example, the GST embodied in a house costing \$350,000 is nearly \$47,000. Interest on, or in other words the time value of \$47,000, at a real rate of, say, 3% per annum, is \$1,410 per annum. The front-loading of GST on houses also increases the deposit requirement for a house, in the case of a 20% deposit requirement for a \$350,000 house, by nearly \$10,000.

In some situations, the additional deposit requirements attributable to GST could represent a barrier to achieving first home ownership. However, assistance for first-home buyers is also available. Under the KiwiSaver scheme, first-home buyers can access their account balance,<sup>80</sup> plus a government grant of up to \$5,000 (each in the case of a couple), to buy a first-home. This provides meaningful and reasonably well targeted assistance for those for whom the normal deposit requirement would be a barrier. Also, a Welcome Home Loan support facility is available for first home buyers from Housing New Zealand, under which it provides a guarantee for no or low deposit loans advanced by participating lending institutions to qualifying borrowers (although the uptake has been low).

The Commission does not support shifting the application of GST on housing to mortgage servicing payments, to spread the burden of the tax over time. That would introduce distortions between debt and equity financing of houses. Those who finance their house from their own savings would pay no GST. But GST on housing, overall, could increase. Whereas the same house often is re-mortgaged and paid off by a succession of owners, under existing arrangements a house is subject to GST only once. Also, under existing arrangements, there is GST only on the house, not on the interest cost of borrowing. If the application of GST was shifted from the house to the mortgage, it may be possible to confine GST to principal payments only, but under the standard table mortgage structure, that would result in GST becoming very back-loaded rather than front-loaded, if not a shift to interest-only mortgages. The present approach, with targeted assistance for first homebuyers, avoids these problems whilst retaining the integrity, and simplicity, of the GST regime.

## Territorial government rates

The Independent Local Government Rates Inquiry (2007) summarised its views on rates as a tax to fund territorial government as follows:

As a tax rates have many advantages – efficiency, difficulty of evasion, and low economic deadweight costs – and there is a reasonable relationship between property values and incomes, even though overall rates tend to be somewhat regressive in their impact.<sup>81</sup>

The Commission broadly concurs with that assessment.

Although several submitters have commented on territorial government rates, most did not raise major concerns (Box 15).

### Box 15 Territorial government rates

The Registered Master Builders' Federation noted that "the level of rates is low compared to the acquisition price [of a house] and we do not believe is an influencing factor on overall housing demand." (sub. 16, p. 17).

Carrus Corporation Limited commented that "(rates were) not significant a few years ago, but as Councils rates have increased far in excess of the CPI, section purchasers are asking more about the level of rates" (sub. 8, p. 15).

The Centre for Straight Thinking considered that "...the direct impact of rates on housing demand is not highly significant in the scheme of things. However, those jurisdictions that have adopted Smart

<sup>80</sup> Including employer contributions but excluding government (starter and tax credit) contributions.

<sup>81</sup> From Executive Summary Report, para 7, available at [http://www.dia.govt.nz/diawebsite.nsf/wpg\\_URL/Agency-Independent-Inquiry-into-Local-Government-Rates-Funding-Local-Government-Executive-Summary?OpenDocument#summary](http://www.dia.govt.nz/diawebsite.nsf/wpg_URL/Agency-Independent-Inquiry-into-Local-Government-Rates-Funding-Local-Government-Executive-Summary?OpenDocument#summary)

Growth tend to have steadily increasing rates, especially where the Smart Growth package involves major investments in urban rail and other public transport projects.” (sub. 24, p. 66)

Habitat Auckland noted that “property taxes need to be paid by landlords (therefore indirectly by tenants) and home owners alike. We believe that recovery of levies, currently front-loaded at (the) time of development /construction of the house, has a bigger influence on housing affordability to home buyers than a progressive recovery of levies through increased property taxes.” (sub.23, p. 6)

The Society of Local Government Managers pointed out that “...local authorities in New Zealand raise an unusually high (by international standards) proportion of their revenue locally. Almost 85 percent of local authority funding comes from the local community as opposed to central government, of which about 60% comes from rates.”

The levels of local authority rates have been a matter of considerable political interest over recent years. This has been a response to the fact that since the late 1990s, the general level of increase in the levels of local authority rates has been greater than the rate of general price inflation as represented by the CPI.

The costs to local authorities (and hence to ratepayers) of providing local infrastructure have been rising over the past decade. On the face of it one would expect that this would impact negatively on the cost of housing, if not in terms of front-end cost of purchase, then at least in terms of the ongoing cost of being housed. (sub. 53, p. 5-7)

Rates, which are a tax on property, are a relatively efficient tax. They are simple and broad-based and, as a result, have not given rise to the kinds of distortions or skewed incentives that have been associated with the income tax treatment of housing. For example, as with the case of GST, rates apply equally to owner-occupied and rental housing. Rates also have also featured less prominently in concerns about housing affordability, although increases above the rate of CPI inflation have been attracting attention, for example, by way of the Independent Inquiry into Local Government Rates in 2007. At the same time, the fact that annual rates are low, and have been falling, relative to house prices may have helped to keep the spotlight off rates.

Concerns about rates in relation to housing affordability mostly involve the burden on low income households, including those who are housing ‘asset rich’ but ‘income poor’. (For example, those who acquired a home several decades ago in a location that, at the time, was ‘in the suburbs’ but is now closer to ‘inner city’, and has become relatively more expensive.) In this regard, housing affordability issues are concerned more with whether people can ‘afford’ not to sell their home, rather than with whether they can ‘afford’ to buy a (first) home.

As noted by the Local Government Rates Inquiry, mechanisms are available to help mitigate pressures on housing affordability for low income ratepayers. The main ones are the rates rebate scheme, under which central government part rebates the rates payable by qualifying low income households, and a rates postponement scheme operated by some councils. The latter is effectively a home equity release scheme, under which rates for qualifying ratepayers can be postponed until the house is sold, at which point the rates are recovered from the sale proceeds. The Independent Inquiry into Local Government Rates noted, however, that uptake of these facilities by those eligible, particularly of the rates postponement facility, and of home equity release arrangements more generally, is low.<sup>82</sup> There may be a growing need for such mechanisms as the community ages.

#### F6.4

The existing GST treatment of housing, which applies equally to rental and owner-occupied housing, is appropriate.

Territorial rates, which also apply equally to rental an owner-occupied housing, are also an efficient form of tax.

<sup>82</sup> Independent Inquiry into Local Government Rates (2007), pages 204-208.

**F6.5**

With respect to housing affordability:

- GST is front-loaded into the acquisition price of a house, which can raise the hurdle to first home ownership, offset at least in part by the availability of Kiwi Saver and Welcome Home assistance for first home buyers.
- Rates can cause strains for those who are 'housing rich but income poor'. The (government funded) rates rebate scheme, and rates postponement arrangements offered by local authorities, are available to ease these strains. There may be a growing need for these, particularly the latter, uptake of which has been low, as the community ages.

## 6.5 Concluding observations

This section draws together broader conclusions relating to the taxation of housing.

The Commission's general sense is that housing is not as tax favoured as is widely perceived. There is something of a tilt in favour of owner-occupied housing, but only to the extent that owner-occupied houses are financed by owner-equity. Even there, property taxes (rates) levied by territorial government, and GST act to level up the playing field. Also, to the extent that housing – owner-occupied as well as rental housing – is financed by debt, that debt is taxed quite heavily, given that tax is applied to the full amount of nominal, not just real, interest in the hands of savers.

On the other hand, capital gains on housing generally fall outside the tax net. Clearly these gains were substantial during the recent boom. However, there are questions about how 'real', and/or permanent, those gains 'really' are, and this raises questions about the nature and extent of any tilting of the tax system in favour of housing that stems from their exclusion from tax-assessable income.

In the case of rental housing, the high rate of house price inflation and leveraging up of rental investments that occurred during the early 2000s clearly created opportunities for rental investors to achieve positive economic returns, including capital gains, whilst reporting tax losses. A number of things will have been going on there. There likely will have been some downward pressure on the levels of rental income that could be achieved in a market in which there was an expanding supply of rental properties; as well as being sought by landlords given the perceived ability to benefit from capital gains and 'tax breaks'. In effect, investors appear to have traded away some portion of those gains by accepting lower rents. It is also possible that over the longer run, the capital gains and 'tax breaks', may come in below what was being anticipated (particularly now that depreciation deductions have been eliminated). If that proves to be the case, the economics of the rental market ahead could look quite different from in the 2000s, resulting in both less investment and higher rents than in the last decade.

Consistent with the views of others, such as the Reserve Bank of New Zealand (sub. 37, p. 8), the Commission does not consider that tax distortions per se were a main driver of the surge in house price inflation. What transpired will have been set under way by an initial disturbance – the immigration influx in the early 2000s being one prime suspect – but then sustained or fuelled by a combination of easy finance and elevated house price inflation expectations. But that dynamic appears to have run its course. The Global Financial Crisis has resulted in the easy access to credit which was fuelling the upswing in house prices – in New Zealand and elsewhere – having come to an end. And the macroeconomic policy focus now has shifted to, if anything, moderating the pace at which 'the tide goes out', to avoid recession, rising unemployment and house prices adjusting downwards too quickly.

Against this backdrop, the Commission does not see a pressing need for changes to the taxation of housing. The current taxation of housing is not ideal, but addressing particular anomalies in isolation would further complicate the system and could have unintended effects.

One fact that has become apparent to the Commission from considering the taxation of housing is that the definition and measurement of capital income, including from housing, becomes very difficult when asset

prices are unstable. In those circumstances, delineating real and nominal changes, and adjusting the measurement of accounting income for inflation, presents major conceptual and practical challenges. Working out how to capture the economic concepts of interest and depreciation in accounting measures, for example, and how to apply the capital/revenue boundary, becomes difficult. The accounting framework, and the income tax system on which it is based, is predicated essentially on a stable general level of prices, and on asset prices that reasonably reliably reflect economic value, or 'fundamentals' (the present value of their expected future income stream). The experience of the past decade or so with house prices has been anything but the latter.

In that regard, the Commission notes that the two most recent major tax reviews to report, the McLeod Committee in 2001 and the TWG in 2010, ventured beyond looking at how to 'adapt' the measurement of income to better cope with asset price inflation. They recognised that adjustments required to achieve that within the existing income tax framework are unavoidably complex, and saw merit in moving to taxing housing capital more directly, and more simply, in particular by applying a 'risk-free rate of return' to the assessed value of the housing investment. The 2010 TWG additionally explored the application of a 'capital charge' and of a land tax. These approaches would all involve a shift toward taxing property, including but not limited to housing, in a manner more similar to how local government rates are struck.

Potential advantages of these kinds of approach, over applying further patches to address anomalies and inconsistencies in the existing tax system, would appear to be their comparative simplicity, certainty, stability and neutrality in the face of inflation, whether in asset prices or more generally.<sup>83</sup> But they also involve much broader issues, including the appropriate balance overall amongst taxes on income, consumption (GST), and property, and as such, go well beyond the scope of the Commission's current Inquiry.

---

<sup>83</sup> As is also the case with GST, given that it is cash-flow based.

## 7 Urban planning and housing affordability

### Key points

- Urban planning today requires consideration of a wide range of objectives, including environmental management and economic development goals. Planning practices have not sufficiently adapted to be able to adequately manage and balance these multiple objectives.
- The prevailing approach to urban planning in New Zealand has a negative influence on housing affordability in our faster growing cities.
  - The widespread planning preference for increasing residential densities and limiting greenfield development to achieve this places upward pressure on house prices across the board.
  - Constraints on the release of new residential land creates scarcity, limits housing choice, and increases prices across the market.
  - These impacts may be disproportionately felt by particular submarkets. Supply constraints are also encouraging speculative property investment (land banking), which further fuels prices.
  - Prices are likely to be reflecting the significant transaction and compliance costs associated with housing development. These costs include those associated with delays encountered in releasing land and through the consenting process.
- An immediate release of land for residential development will ease supply constraints and reduce the pressure on prices. This should include a combination of significant tracts of both greenfield and brownfield land catering to a variety of submarkets, with an immediate focus on Auckland. The Commission considers that collaborative models for the process of identifying, assembling and releasing large scale tracts of land have merit.
- More generally, the Commission recommends that territorial authorities:
  - take a less constrained approach to the identification, consenting, release, and development of land for housing in the inner city, suburbs, and city edge
  - adopt a strategy that allows for both intensification within existing urban boundaries and orderly expansion beyond them
  - develop strategies that promote adequate competition between developers for the sale of construction-ready sections.
- In New Zealand, the task of planning is challenged by the complex array of planning-related legislation and the diverse nature of institutional responsibilities for land use and infrastructure planning.
- In the longer term, a more fundamental review of the related legislative frameworks may also be required, with a view to considering the long-term rationalisation of the local planning and policy environment.

### 7.1 Introduction

This chapter examines the impact of urban planning frameworks and processes on house prices. It begins by outlining the origins and scope of planning to provide an understanding of its role and the principal

methods it employs for urban development (Section 7.2). It also sets out the background and development of New Zealand's planning-related legislative frameworks.

Section 7.3 summarises the issues and concerns raised by submitters in relation to the impacts that the current approach has on housing affordability. It outlines views on both the means by which urban planning affects house prices and on the extent of these impacts. The Commission's assessment of these issues is set out in Section 7.4 and its response is outlined in Section 7.5.

## 7.2 The evolution of urban planning

### What is urban planning?

The traditional focus of urban planning has been to consider what arrangement of land uses will best enable a town or city to grow and operate effectively for its resident households and businesses. This means ensuring that land is available and serviced for expanding urban activity and shaping what activities might operate where in order to limit conflict among uses. It also influences how land will be occupied by way of bulk (eg, height) and location constraints placed on built structures. This traditional approach to "town planning" was inward-looking, promoting orderly spatial development in response to expected urban growth pressures.

This approach has evolved significantly over time, its mandate expanding to take on an increasing number of objectives. Over the past twenty years planning has been influenced by the call for sustainable resource management and concerns with environmental capacity such as the long term consequences of CO<sub>2</sub> emissions. Consequently, planning has broadened its mandate to address how best to manage resource use in the interests of long-term sustainability. Among other things, this explains a growing emphasis on the relationship between land use and transport plans.

Recently planning has also become more outward looking, prescribing how we might shape a city so that it can prosper in an increasingly connected world, where people, capital, goods, and services move more freely than ever. This economic development focus is particularly strong among the maturing cities of Europe, North America, and Australasia where urban form and urban design are seen to have a significant role to play in responding to the challenges of growth and diversity.

Urban planners are the people who address these challenges. Traditionally, their field of expertise was land use, understanding what activities were compatible with each other and what activities were in conflict. They addressed how cities could be expanded to accommodate increasing industry, commerce, and housing in a way which enabled complementary uses to interact most efficiently, even when it was not appropriate for them to co-locate (industry alongside housing, for example).

Today, planners deal with a much wider range of issues than in the past: how to manage land use conflict; promote sustainable resource management; create a buoyant local economy; ensure a good quality of life to retain and attract residents; and nurture strong communities. This multi-faceted mandate takes planning well beyond its early focus on land use and associated narrow range of disciplines.

### Origins

Planning was born out of upheaval – the transformation of the countryside, towns, and cities during the industrial revolution in Western Europe and North America. A convergence of interests – the concerns of civic authorities for public health, the needs of employers for an accessible, fit labour force, and the drive of urban reformers towards more humane living conditions – led to an acceptance in the 19<sup>th</sup> century of the need to regulate property rights and of the role of the state in influencing urban form to achieve socially desirable ends.

The 1909 House and Town Planning Act in Britain and establishment of the British Town Planning Institute in 1914 marked the emergence of a distinct profession committed to developing plans and regulations intended to manage urban expansion and living conditions. Mapping preferred land use allocations became the main tool of town planning, seeking to separate incompatible land uses by applying different rights allowed and restrictions to different zones. This approach to planning sought to apply common

principles, providing a systematic, incremental, and functional approach to regulating urban growth. This approach to urban planning remains highly influential throughout the world today.

## Growth management and smart growth

The challenge of reconciling multiple and increasingly diverse objectives to regulate urban development in an explicitly spatial framework was addressed through the *growth management* movement in the United States, which has consequently informed and influenced spatial planning in New Zealand (Auckland Regional Growth Forum, 1997). Growth management arose from recognition that established planning practice had led to extensive tracts of low density housing around American cities, often compounded by minimum lot size regulations. This was viewed by a new generation of urban planners and designers as “urban sprawl”, wasteful of land and transport resources, demanding of infrastructure, and contrary to good community development.

Growth management in turn became closely associated with Smart Growth, a set of principles developed for increasing the intensity of urban areas and intended to reduce their physical and environmental footprint.<sup>84</sup> Smart Growth emphasises urban containment based largely on existing boundaries and absorbing growth pressures by increasing the intensity of land occupation within those boundaries (measured by such things as households or employees per hectare). It encourages building upwards rather than outward, and redeveloping “brownfield” sites at medium-high densities (for employment and housing) especially around existing town centres, and encouraging mixed uses. Smart Growth plans have also been promoted as stimulating the economy on the grounds that a greater density of employment will generate agglomeration benefits and nurture innovation.

The Smart Growth movement encountered some early resistance based on factors such as “the lack of adoption across governments, market support for sprawl, the automobile’s clinging dominance, and a paucity of techniques” but has continued to be strongly promoted, particularly in the US (Burchell et al, 2000).

## New Zealand’s statutory heritage

### Dealing with diversity: The Town and Country Planning Act 1977

The British practice of mapping preferred land use patterns was a key influence on the emergence of planning in New Zealand, and was reflected in the Town and Country Planning Acts of 1923 and 1953. In the latter half of the twentieth century, global recognition of the growing diversity of communities and places within urban areas saw international debate about the nature and role of planning. This in turn saw some broadening of the foundations of New Zealand planning. Hence, the Town and Country Planning Act 1977 (TCPA 1977) placed new emphasis on providing for “economic, spiritual and recreational opportunities and for amenities appropriate to the needs of the present and future inhabitants of the district, including the interests of children and minority groups”.

Central government’s directive role within New Zealand planning was reduced by the 1977 Act, with local councils given responsibility for preparing plans, allowing for the most intractable disputes to be resolved by the judiciary through appeal to a Planning Tribunal. The TCPA 1977 also introduced regional planning to reflect the links between urban areas and their hinterlands, thereby promoting a new economic emphasis. In addition, it introduced a new found focus on “matters of national importance” that would be associated with the principle of environmental sustainability in its successor, the Resource Management Act 1991 (RMA).

The wider scope and increased flexibility of the TCPA (1977) led to more complex plans, sometimes prolonged appeals, and consequently more delays getting plans into place. Its greater demands on local capacity led to variable quality among districts, and raised issues of plan enforcement.

<sup>84</sup> Further information available at: <http://www.smartgrowth.org/>



## Elevating environmental values: The Resource Management Act 1991

Growing concerns with environmental sustainability, coupled with a desire to increase the role of the market in resource management, saw the TCPA 1977 replaced by the Resource Management Act 1991 (RMA). The RMA's purpose (Part II, Section 5) is:

7. to promote the sustainable management of natural and physical resources.
8. sustainable management<sup>85</sup> means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while -
  - a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
  - b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
  - c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

In theory, New Zealand planning was now able to accommodate more diverse land use as long as development and activities observed the environmental limits set in district and city plans and regional policy statements rather than simply prescribing prohibitions or constraints on particular activities in particular zones. It is in this sense enabling legislation: the RMA provided the flexibility for resource users to take steps to avoid, remedy or mitigate the environmental impacts of their actions.

In keeping with the enabling nature of the RMA, private interests (eg, the users of land for development or for infrastructure) are entitled to propose plan changes for councils to consider, provided they can show how they will manage the environmental effects of their activities at development and operational stages. The RMA provides for consideration of the merits of such changes by the Environment Court if councils reject them, subject to a willingness by promoters to proceed down a potentially costly and uncertain path. This has meant that councils, while responsible for developing plans, no longer have exclusive rights to propose changes to them.

Once plans are approved, the RMA provides for enforcement of conditions of resource use by enabling the Environment Court as the arbiter of disputes in the Act's application to impose penalties on parties that fail to abide by them.

The Local Government Act was reformed in 1989 and rewritten completely in 2002. The 1989 reforms were structural, reducing the number of councils and ad hoc statutory bodies and improving governance arrangements, managerial capacity, and accountability. Changes introduced by the Local Government Act 2002 (LGA) were more fundamental. It replaced the schedule of activities controlling what councils could do in the former Act, with wider powers of general competence.

Councils are now free to undertake whatever activities they want (within the constraints imposed by the laws of the land), subject to following broadly prescribed decision making procedures. Among other things, these require that councils undertake consultation to secure a public mandate for their significant decisions. Policy is directed towards a set of "community outcomes" to be written into a Long Term Plan (LTP), including an indicative ten year budget.

The LGA is not a planning statute, but rather one which prescribes procedures for how local government might go about preparing plans and policies. The procedures overlap with planning practice, although applying to wider social, economic and cultural domains. The freedoms the LGA confers on councils are conditioned on the appropriate use of these procedures in deciding how to align its own resource commitments to the needs and wishes of its constituencies. They focus on processes which in theory provide transparency, accountability, and thereby legitimacy around council investment and operational decisions. Plans prepared under the LGA need to be consistent with the provisions of the RMA. The LGA

---

<sup>85</sup> This definition was influenced by that put forward by the World Commission on Environment and Development (convened by the UN at Brundtland in 1983) as: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

informs a council's resource commitments while the RMA constrains what it may do as a resource user. Commitments under the LGA are still subject to rules for sustainable resource use under the RMA. Equally, rules and regulations made by a council under the RMA should be compatible with community outcomes and financial plans contained in its LTP.

### **Planning for transport and infrastructure**

Planning for public infrastructure (other than transport) is also provided for under the LGA. The LGA allows for considerable flexibility on how services are developed and delivered, including provision by the council itself, through Council Controlled Organisations (CCO), contracting services out, or joint ventures or partnerships.

Transport planning is more complicated – and adds to the complexities of local planning. The Ministry of Transport provides policy advice across all modes. Expenditure on land transport is administered by the New Zealand Transport Agency (NZTA). In turn, the NZTA is required to give effect to a three yearly Government Policy Statement (GPS) on Land Transport Funding and to implement the National Land Transport Programme (NLTP). The GPS provides a framework for making funding decisions in the NLTP and for targeting expenditure on transport activities. Much of that spending is directed towards councils to fund local transport, although the planning is done by regional councils because transport systems operate across local boundaries.

### **Integrated planning**

Given the diverse and complex institutional responsibilities for land use and infrastructure planning outlined above, increasing attention is being paid to integrated planning, if only to ensure efficient use of public funds. Integration may simply draw a range of plans together, driven perhaps by shared forecasts and assumptions about the future. But it may have institutional as well as technical implications. In this case, integration implies alignment of objectives and programmes among agencies through identifying and promoting common goals, collaborating on analysis, planning, and decision-making, and coordinating responsibilities for implementation (CityScope Consultants, 2009).

### **Spatial planning**

In a similar vein, spatial planning looks to coordinate and shape councils' activities at a strategic level. Spatial planning echoes the tradition of town and country planning, but with zone maps and the associated methods applied to a wider range of activities. It seeks to respond to the challenge of coordination posed by the LGA framework, by aligning responsibility for decisions about long-term land use plans and infrastructure investment, often across administrative boundaries.

The expectations for spatial plans can go beyond this, though, to managing the various social, economic, and environmental issues associated with city growth by providing for their future spatial arrangement (UCL and Deloitte, 2007). This is done in large part through identifying, setting, and mapping urban capacities (for housing, recreation, offices, retailing, and industry) and associated infrastructure requirements. Because the aim is coordination the question is raised as to whether spatial planning is sufficient to address the wide scope of objectives and associated expectations often placed on it. The Auckland Regional Growth Strategy (Auckland Regional Growth Forum, 1999) is the longest-established example of spatial planning in New Zealand. It set out multiple objectives to be achieved by pursuit of an integrative "concept plan" across seven districts. Implementation focused on containing urban development and intensifying housing around the CBD, sub-regional centres, and arterial roads. The necessary land use provisions were introduced into local plans as the means of pursuing ARG'S aims. This approach has been more or less emulated over the past decade by councils in Western Bay of Plenty, Greater Wellington, the northern Waikato (Hamilton, Waikato and Waipa), and Canterbury (Christchurch, Waimakariri and Selwyn).

Until recently, spatial plans have been non-statutory strategy documents, prepared to inform regional policy statements and district plans. However, spatial planning has been made a legal requirement for the new Auckland City in the Local Government (Auckland Council) Amendment Act 2009 where it is required (Part 6, Section 79) to contribute to Auckland's "social, economic, environmental, and cultural well-being through a comprehensive and effective long-term (20- to 30-year) strategy for Auckland's growth and development".

The key elements are the indicative and strategic nature of the plan (Section 79), a focus on multiple objectives and coordinated decision making, guidance for lower order plans, sensitivity to context, and the capacity to map future land use and infrastructure. As such the spatial plan is intended to provide the evidence and guidance for subsequent policy documents (such as the unitary plan in Auckland's case).

## Summing up

The history of urban planning has been one of evolution from a narrow focus on land use provisions to ensure orderly urban expansion while maintaining a pleasant residential environment, through a heightened concern with environmental matters, to today's more holistic consideration of multiple dimensions of urban development.

The introduction of growth management techniques has been one method through which planning has attempted to satisfy multiple economic, social, cultural and environmental objectives. One question that follows is how well equipped it might be to do so, and how effectively urban planning has been able to draw in other bodies of knowledge and professional disciplines to provide consistent and effective responses to the challenges of urbanisation.

While the direction of planning has shifted under the pressure of increased expectations, from separating uses and creating spacious residential areas, to mixing uses and intensifying land use, the methods used – defining and regulating zones for different uses and densities – remain much the same. The physical outcomes, though, are quite different, switching from extending urban areas and their infrastructure networks to accommodate expanding housing and business, to a focus on consolidating development in and around existing centres and on established infrastructure.

Moreover, the increasing reliance on the principles of Smart Growth as a means of managing urban development means that planning is closely implicated in the impact of intensifying urban areas on housing affordability. A further question arising is therefore whether an element of the traditional approach – continuing to allow for orderly urban expansion – might still be required alongside intensification to better meet society's housing aspirations, both maintaining choice and improving affordability.

## 7.3 Urban planning and affordability: what are the issues?

This section explores the ways in which the current framework and approach to urban planning is impacting on housing affordability. Firstly, it sets out an economic framework for considering these matters. It then presents the issues raised by submitters, grouping them into concerns with the current approach, and views on potential ways forward.

### Economic framework

Urban planning influences the supply of new housing in the following ways:

- The release of new residential land – location/type, quantity and timing
- The regulatory controls and conditions placed on new development
- The costs imposed on new development – including direct costs (such as processing fees and development charges), and the indirect and compliance costs of consenting processes such as requirements to provide information and the time taken.

Planning controls and processes can therefore impact the quantity, type, quality/amenity and prices of new housing.

On the demand side, the spatial factors influencing people's choices of residential housing can be characterised along the following dimensions, as put forward by CityScope Consultants (2011):

- Accessibility to activities at the city or sector-wide level
- Domain, which encompasses the area over which day-to-day social relations are formed and regular transactions take place

- Sanctuary, which refers to the dwelling and the relationship of the dwelling to the complex and the immediate neighbourhood.

The interplay of these dimensions is discussed in more detail in Box 16.

#### Box 16 Understanding housing preferences

Domain preferences are influenced by lifestage:

- Younger people (usually in non-family households) at the beginning of their working careers, housing ladder, and relationships tend to favour central city locations;
- Most groups, especially young families, tend to favour familiar neighbourhoods;
- Family households tend to favour suburbs and town centres (this covers a variety of environments and implies greater flexibility than in the central city);
- Older families and post-family households tend to remain in their established neighbourhood, suburb, or sector of the city.

The resolution of preferences around sanctuary and domain will influence where and what style of housing is generally favoured according to lifestage segment, with the actual choice conditioned by limits of affordability, usually confined to geographic submarkets. However, this association will not be consistent, as lifestyle preferences can cut across any orderly demographic or socio-economic segmentation of households. This is supported by the findings of a market-based study commissioned by the Council for Housing Research Aotearoa New Zealand, which highlighted the diversity of preference and needs across and within demographic categories.

Notwithstanding that qualification, it is significant that future demand for new housing will be driven increasingly by the preferences of empty nester and retirement households, many of which own their dwellings. This gives them the capacity to purchase well-appointed medium density housing that can satisfy their expectations for domain and sanctuary. They may be less likely to favour small, centralised apartments than younger households and are more likely to have a commitment to particular residential submarkets, built on a stronger sense of domain.

Consequently, residential intensification is more likely to be achieved with plans allowing for diversity of locality and form. This, in turn, means meeting supply challenges in suburban environments where land is more fragmented and there are fewer brownfield opportunities than associated with the centralised developments of the recent past. Intensification in suburban areas also raises a greater risk of resistance to spill-over effects from established households. It calls for a flexible approach to the location and form of medium density housing and a public commitment to maintaining the quality of the wider domain.

*Source:* CityScope Consultants (2011) and Council for Housing Research Aotearoa New Zealand

## The supply and cost of land

It is clear from submissions that there are immediate issues of affordability closely related to a chronic and potentially prolonged shortage of new (both greenfield and brownfield) dwellings particularly in Auckland. The Draft Auckland Plan for example acknowledges a shortfall of 10,000 homes currently and possible annual demand of 11,000 new homes a year over the thirty years to 2040. This compares with an average of 7,500 new dwellings actually consented in Auckland annually over the ten years to June 2011; and just 4,700 annually over the past five years.

However, the views on whether intensification or greenfields development is more cost effective appear evenly split.

An argument in favour of intensification is the capacity to save money on infrastructure because trunk and distributor services are already in place. Some submissions suggest it is also favoured by lower land requirements per dwelling (Saltburn Ltd, sub. 7, p. 2). Others cite lower transport demands and the ability to take advantage of existing community amenities when housing is focused on central sites (New Zealand Transport Agency, sub. 029, p.2).

The Draft Auckland Plan suggests that “compact urban form may help encourage more affordable housing outcomes through the provision of higher density living” (Auckland Council, 2011, para. 596, p. 141), building on a variety of housing types at different densities (p. 113-115).

There is also a suggestion that horizontal expansion – sprawl – reduces productivity and isolates households (Housing New Zealand, sub. 34, p. 3), coupled with the suggestion that brownfield development is “probably” environmentally advantageous. Consequently, there is an expectation among those favouring intensification that preferences for traditional modes of suburban living will – or have to – change.

On the other hand, an advantage of more expansive urban growth is the capacity to provide for larger scale and more cost competitive development. Three grounds are often cited for the economic efficiency of greenfield sites. First, development at scale (and consequently low cost) is necessary to substantively influence the market as a whole. Second, more builders and suppliers are geared up to build low density than high density housing (Affordable Housing New Zealand Ltd, sub. 12, p. 6). Third, the availability of larger parcels of land for development enables builders to reap economies of scale (Fletcher Building, sub. 21, p.11).

Our team suggests that roughly you should aim for land tracts that would support about 50 lots. 50 is about the level that the development of land becomes economic (sub divisions, roads services etc)

From a developers perspective 50 is a good number to target to build and sell in a single year. (Fletcher Building, correspondence)

In addition, larger areas for development offer the capacity to provide more diverse and more flexible housing stock, and greater flexibility for managing environmental effects (Whangarei District Council, sub. 32, p. 5).

While in theory brownfields should cost less than greenfields to develop, the fact that existing services may be close to capacity in older areas and require significant investment in expansion and upgrading reduces their apparent advantage. In any case, even if start-up costs are higher in greenfields, the advantage may not be enough to compensate for their lower land costs.

Amenities such as sewer and water demands may not have been engineered into the design of that specific location, Eg., an urban development block with 400 toilets that connects to an area of the city that the sewer network was designed and built in 1926.... Water services that were designed to supply 10,000 maximum in 1955 to support intensification now up to 100,000 (Affordable Housing New Zealand, sub. 12, p. 4).

In theory, brownfield development should cost less as it requires connection to existing services. However, in many New Zealand cities this is not the case as existing connections are sometimes almost at capacity ... To utilise these services a higher premium must be paid, increasing the cost of the development. (Housing New Zealand, sub. 34, p. 3)

In the experience of some developers, the emphasis on intensification increases both the price of land and the cost of building. The former is a disincentive to developers and the latter – higher construction costs per square metre – is a disincentive to buyers. These problems are compounded if developments are faced with onerous planning requirements for such things as roading, for example, which can reduce the efficiency of development, lower yields, and increase prices (Todd Property Group, engagement meeting, 12 October 2011).

Some submissions expressed the view that housing affordability is prejudiced by growth management policies constraining the release of new land in favour of intensifying occupancy of already developed land, and that intensification may be reducing housing opportunities. Disallowing subdivision of existing sections also reduces opportunities for increasing density through small scale intensification in the suburbs. The

resulting constraint on the land market is represented by some submitters (and the sources they draw on) as a flaw in growth management, with direct implications for housing affordability.

The overseas literature (and especially the recent surveys of US cities by the Newgeography team), find that cities that are lightly regulated and allow people to express their preferences as to where they live work and play, are the most liveable, and have the most rapid growth and development, the highest rate of job creation, the most affordable housing, and the highest rates of innovation. (Centre for Straight Thinking, sub. 24, p. 32)

The effect of a constrained land supply, it is suggested, is to reinforce some of the natural constraints on housing markets, particularly given that they are differentiated and vary geographically, consequently compounding the disparities associated with poor affordability.

A big breakthrough in our understanding of the housing affordability issue, comes from Paul Cheshire and various colleagues at the London School of Economics, pointing out that under conditions of restrained land supply, every attribute of housing becomes "rationed" by incomes (for example, space, location, age and quality of home, local amenities). The resulting social disparities are worse than the initial income disparities themselves. (Phil Hayward, sub. 31, p. 1)

The scarcity of land for new housing is seen in part to be a function of the restrictions on subdivision associated with metropolitan urban limits. But it is also seen to be influenced by such measures as height restrictions on apartments within the urban area, site coverage rules which limit the viability of multi-unit dwellings outside central areas, and constraints on the subdivision of large suburban sections for infill (Property Council, sub. 28, p. 9).

It would be nice to think that somehow we could get our planners and politicians to have an open mind on this subject. This would then allow intensification where it can occur, and well planned greenfield expansion in other areas. (Land Solutions, sub. 35, p. 7)

The evidence considered by the Commission supports that contention, at least to the extent that enforcing the Metropolitan Urban Limit appears to have constrained the supply of sections in Auckland and that this is reflected in escalating housing prices generally. The Auckland housing market experience is explored in more detail in Box 17. While Auckland Council recognises that there are issues associated with land supply constraints within the Metropolitan Urban Limit, it has nevertheless committed "to a 'quality, compact city', to achieve better environmental and economic outcomes". It will extend the MUL to do this (to create a new Rural Urban Boundary) "to provide greater certainty about when and where development will occur and make the development process more efficient" (Auckland Council, sub. 45, p. 8).

There were some more equivocal views expressed, however, recognising that there may be trade-offs involved in making a choice in favour of intensification over more extensive development. For example:

Work carried out by asset managers at Whangarei District Council suggest that there were more efficiencies (in terms of infrastructure supply and maintenance costs) to be found in increased intensification. ... however, increased intensification may reduce environmental values in central areas, whilst increased extensification can (crudely) improve green space outcomes. (Whangarei District Council, sub. 32, p. 5)

It was also suggested in one submission that the debate around intensification is only important in Auckland, Tauranga, Wellington and perhaps Hamilton (Society of Local Government Managers, sub. 53, p.3). The Commission notes that it is also a significant issue for Christchurch as it sets out to rebuild its city centre, but also provide for significant tracts of new suburban housing to replace existing earthquake damaged housing.

## **Time delays and uncertainty**

Quite apart from absolute quantitative constraints arising from regulation, the slow pace at which land for housing is planned, zoned, and released contributes to the high price of sections and thereby house prices.

There is also some concern that staging the release of land may distort the market. Owners who can afford to are encouraged to hold zoned vacant land back ("land banking") to take advantage of the price inflation associated with a controlled supply, further constraining the market by their actions. This suggests a need to

improve the market signals resulting from regulations influencing land availability (Reserve Bank, sub. 37, pp.1-2).

Long development lead times are also a problem, taking between two and ten years because of regulatory complexities. Holding costs incurred on land waiting for rezoning or consenting puts pressure on section prices on the one hand, while speed to the market also influences the viability of development. This is a critical issue for developers and their financiers, more so when upfront development costs and infrastructure charges are high.

Recently we had a subdivision that took 2 years of regulatory [processes] to begin and 14 weeks to construct. (Affordable Housing New Zealand Ltd, sub. 12, p. 5)

On the other hand, councils suggest that delays reflect a failure by developers to provide adequate documentation, although there is a feeling among the latter that the provision of additional information is not always warranted, and has not enhanced the consenting process or outcomes.

Significantly more information is now supplied to local authorities than was previously required. This adds administrative costs to the land development and residential construction process. This increased information does not appear to have had a corresponding improvement in the quality of housing stock and its environment. (Fletcher Building, sub. 21, p. 7)

The potential impact on affordability of drawn out planning processes and of negative attitudes to development are revealed, according to some commentators, by variability between different council areas. Such variability occurs even with the limited discretion granted to individual officers.

The consent process can hold up even desirable developments. One builder described the difficulty of progressing a six unit terrace development on a 1,000m<sup>2</sup> site in Wellington even though it complied with the Council’s objectives for medium density housing. The cost of the consent process added \$20,000 per unit. In his view, some of the most desirable medium density housing in Wellington, around Mt Victoria for example, was established long before planners were around.

[Councils] do create unnecessary costs, whether it be in fees but also it is the delays in getting the various Consents ... opportunity costs in some cases have been over \$1,000 per day. (Carrus Corporation, sub. 8, p. 9)

The submission from the Department of Building and Housing (sub. 55, p. 7) provides information on typical territorial authority plan change and planning consent timeframes (Table 7.1).

**Table 7.1 Typical plan change and planning consent timeframes**

Year	Year 1				Year 2				Year 3				Year 4				Year 5			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Quarter																				
1. Feasibility and setup	█																			
2. Structure plan			█		█															
3. Consultation	█				█				█				█							
4. Plan change/variation																				
i. Preparation						█														
ii. Pre-notification processing								█												
iii. Notification periods									█											
iv. Officers report										█										
v. Hearing and decision											█									
vi. Appeals												█	█							
5. Master plan													█							

6. Resource consents							
7. Construction (subdivision only)							

Source: Department of Building and Housing; (Sub 55)

## The efficiency of TAs can make a difference

The Commission has estimated a model of housing demand and supply at the level of the Territorial Authorities (TAs) to investigate supply responsiveness across New Zealand.<sup>86</sup> It appears that the construction and land development sectors are more responsive to changes in housing demand in some parts of the country compared to others. There is also tentative evidence that in areas of the country where housing supply is more responsive, an increase in housing demand also results in relatively more houses and smaller increases in real house prices, with potentially beneficial implications for housing affordability. Although difficult to show conclusively, differences in supply responsiveness at the TA level may, in part, reflect the efficiency with which local councils implement and enforce regulations governing the land development and building sectors.

The Commission is interested in ways in which territorial authorities can become more efficient in implementing plan changes through all the processes stages to final resource and construction consents. It appears, given the lengthy timeframes involved in this process, and the variability in responsiveness of TAs that there is scope for streamlining and reducing this process at each stage.

### Q7.1

How can territorial authorities streamline and speed up their planning and consenting processes to improve housing supply responsiveness?

## Legislative complexity

While councils were criticised for policies constraining supply and for their time consuming and costly planning and consenting processes, the regulatory system itself was seen as a problem – if not the problem. The RMA in particular is considered to be overly complex, giving rise to unnecessary costs, duplication, delays, and uncertainty (Business Roundtable, sub. 20, pp. 5 and 10). If this is the case, variability among councils may reflect a combination of complex issues to be dealt with and varying capacity to deal with them in a complicated policy environment.

The uncertainties as to timing and outcome invariably increases the risks of development projects. In order to retain investment within the sector this uncertainty and risk requires a commensurate return otherwise investment in other sectors becomes more attractive. A modestly costed generic apartment building housing say 50 apartments is likely to cost in the vicinity of \$22m (\$15m construction cost at \$2500 per metre for 50 x 120m<sup>2</sup> apartments, \$4m basement cost at \$1000 per metre and \$3.2m land cost at \$800 a metre). Even a reasonable return profile of 15% before tax requires an annual return of \$3.75m. Consenting delays of 6 months (a relatively short time frame) effectively adds over \$30,000 to the cost of each apartment. (Todd Property Group, sub. 25, p. 5)

Some submissions recognised the limited suitability of the RMA for dealing with urban planning issues, one view being that it is fundamentally an environmental statute being used erroneously for land use regulation. As a planning statute it is complex and fragmented, providing an uncertain regulatory framework that acts as a barrier to growth.

The problem of complexity is compounded by the number of statutes councils have to consider. This compounds issues arising from poor practice, and is complicated by the capacity of third parties to intervene in decisions (through objections and appeals). National policy statements can be seen to add another layer of complexity to obtaining consents for development.

Councils interpret requirements differently and set different timeframes and consent costs. Having an agreed interpretation of the requirements and a uniform process amongst all councils would be beneficial so that regardless of where a development is the process is the same and there are 'no

<sup>86</sup> This model is estimated across 72 of New Zealand's Territorial Authorities. The model will be outlined in an annex in the final Housing Affordability Report and a forthcoming Productivity Commission Working Paper.



surprises' when applications are lodged. Uncertainty, delays, and risks are costly to developers who already face high levels of market risk. Lengthy planning processes contributes to the cost of subdivisions significantly. (Housing New Zealand, sub. 34, p. 5)

In addition, there is seen to be a lack of alignment between higher level policies relating to intensification and the rules and processes that apply to development.

Planning policies are no-where near flexible enough to cater for higher density housing in Auckland. The majority of Auckland has a density requirement of 1 unit per 350sqm of land with the ability to build to two levels only. This is incredibly restrictive and new developments are not financially viable under this scenario. (Saltburn Ltd, sub. 7, p. 3)

## Flow-on effects

One argument in favour of intensification is that "sprawl delivers poorer health and well-being outcomes" (Auckland Regional Public Health Service, sub. 10, p.12). Traffic effects, respiratory disease, activity levels and obesity are implicated in low density living. These wider "environmental impacts" may need to be set against the social and health consequences of unsatisfactory housing identified in submissions by the Ministry of Social Development (sub. 5), the Families Commission (sub. 9), and the New Zealand Council of Trade Unions (sub. 15) if intensification does reduce affordability.

Conversely, there may be adverse social effects associated with intensification. It was suggested to the Commission that the implementation and supervision processes and criteria around medium density housing in Auckland have not kept pace with the policy ambitions:

Auckland Council has been calling for higher density for some time. But has consistently failed to make progress – much of the high density housing which is available is dreadful quality. (Community Housing Aotearoa, engagement meeting)

This raises a further issue, that local level planning decisions may have impacts that are felt at the national level. For example, detrimental flow-on impacts on health and social outcomes may lead to increased demand for welfare assistance, and therefore costs to central government and national wealth more generally.

Furthermore, while the shortage of new houses puts pressure on prices across the board, a less obvious but equally serious impact raised by submitters is the increasing long-term reliance among young working adults and their families on rental properties for their housing and the impact that this demand together with limited recent investment in rental property may have on the affordability of rental accommodation (DTZ New Zealand, 2008; Beacon Pathway, 2010).

## Matching supply with demand preferences

The advocates of higher residential densities acknowledge the likelihood of resistance from the market, but suggest that this will have to change:

New Zealanders who traditionally have preferred living in leafy suburbs need to prepare themselves for living in more dynamic areas with higher intensity. This is particularly true as the population ages. (Saltburn Ltd, sub. 7, p. 2)

A preference for suburban living and detached housing was noted in a number of submissions. Two main reasons were suggested. The first is the tradition of detached, suburban housing and the desirability of space for play, workshops, and garaging. The second is simply the unpopularity of apartment-living, especially in light of poor past development and building practices.

On the first count there is a cultural commitment to the sense of belonging associated with owning a property, and the capacity to use it for a variety of purposes, including home-based work, past-times, and play. This is related to a tendency for families to establish roots in a suburb and to resist moving away as the household ages (Auckland Council, sub. 45, p. 10).

Survey work by the Corporation indicates that New Zealanders still support the notion of owning and living on a 'quarter acre section'. They want a 'stand-alone house' with a yard or garden where the children can play, and have a garage and a workshop. (Housing New Zealand, sub. 34, p. 4)

People do generally prefer less dense suburbia. Reasons for this may include poor design of more intensive housing, as seen in the inner city of Christchurch under Living 3 zoning, which does not usually have good on-site open space or privacy. They are not creating the benefits of high density (a vibrant public environment framed and defined by high quality buildings). (David Hattam, sub. 11, p. 1)

On the second count, there is a feeling that poor planning, poor quality housing, and a lack of amenities mean that a majority preference for suburban living is reinforced by the inferior nature of the alternative, especially when the studio apartment or unit option may still be highly priced compared with a detached house. The implication is that there is likely to continue to be market resistance to higher density housing for some time.

Many of the higher density developments that have occurred in Auckland have been poorly designed and failed to become sell-out successes. The planners failed to incentivise such developments and in particular failed to provide for favourable neighbourhood environments. (Habitat Auckland, sub. 23, p. 3)

On these grounds, it is suggested that despite perceived advantages, policies promoting intensification may be counter-productive simply because they are resisted by the market:

In some cases significant areas have been zoned for intensification whereas the current market demand is just not there and these are slow to be developed or land taken up in housing. (Carrus Corporation Ltd, sub. 8, p. 7)

## Summing up

Overall, there is broad agreement among submitters that constraints on the supply of land have a significant impact on house prices. In Auckland, the Metropolitan Urban Limits coupled with population growth, land banking, high regulatory charges, and building code amendments are seen to have escalated housing prices. Intensification has not been able to influence this as it has a poor quality record and incurs relatively high costs. The slow pace at which residential land is planned, zoned and released is also regarded as contributing to high housing prices.

Underlying these issues is a concern about the complexity of the planning-related legislation. Together with differing levels of capacity to deal with it, the complex and fragmented legislative environment is seen as a key factor underlying the variability of councils' performance and contributing to uncertainty that can hamper development.

Some submitters raised concerns with more indirect impacts of intensification, such as the health and welfare consequences of poor quality higher-density housing developments, which can in turn have wider downstream impacts (including fiscal implications). A number of participants also suggested there is a lack of market demand for higher-density living, reflecting people's preferences as well as perceptions around quality.

## Striking a balance – a broad based and more flexible approach

The above discussion outlines the concerns raised by inquiry participants with current approaches to planning and its impact on housing affordability. Submitters also expressed views on ways in which these issues could be addressed.

While there were views for and against both greenfield expansion and intensification, inquiry participants generally accepted that there is a role for both forms of urban development. Ideally, the balance between them would be influenced by consideration of whole of life housing costs rather than just the capital or upfront costs of a new house (Housing New Zealand, sub. 34, p. 2). This includes development and construction, maintenance and operations of the resulting dwellings, and any impacts on infrastructure, including transport (Society of Local Government Managers, sub. 53, p. 4).

In addition, diverse approaches to increasing land supply are seen as consistent with the diversity of the housing market.

It is absurd to think we cannot accommodate expansion of our cities but we should also be able to accommodate greater urban intensification in those areas (mainly Auckland) where it is desirable. However, both require the necessary infrastructure to support them and both require other matters to

be addressed, such as planning controls and less regulatory intervention. (Registered Master Builders' Federation, sub. 16, p. 9)

The cost disadvantages cited for intensification led to the suggestion that it should be balanced by the concurrent release of greenfield land to improve affordability generally, to generate competition, and take some pressure off central areas (Property Council, sub. 28, p. 13). A balanced approach would therefore see more land available for both greenfield and infill development (Property Council New Zealand, sub. 28).

The zoning system itself is held by some submitters to naturally escalate land prices. This leads to the proposition that a shift in philosophy is called for, based perhaps on zoning areas from which development is to be excluded and then allowing market forces to determine appropriate land uses on the balance, subject to complying with environmental standards. Alternatively, zones could be defined very broadly, leaving it up to developers or owners to produce responsible designs that have no more than minor effects on neighbours and the environment. A variant on these is adoption of the 'no harm' principle, which may be interpreted as extending the principles behind the RMA.

Others suggested rezoning industrial land in favoured localities and a greater willingness to promote mixed use zones.

The Department is not convinced that a regulatory prohibition on urban expansion is the most effective mechanism to achieve higher density development and is concerned that it is a counter-productive mechanism if planning regulations and other delivery initiatives do not in reality unlock the capacity for higher density developments in existing suburbs. (DBH, sub. 55, p.26).

It has been suggested that creating joint ventures to develop and release additional residential land would ensure that prices can be contained or even reduced.

There is recognition that intensification cannot be brought about simply by mandating an urban limit and designating areas in which higher densities will be allowed. Tauranga City Council suggested that:

... while intensification is still an integral part of Tauranga's growth strategy there is a number of significant challenges that need to be resolved for it to occur on any real scale...

- The lack of any large scale redevelopment sites.
- The cost [of building upwards] compared with building single level dwellings is much higher
- The final cost of intensive housing ... often means it is only available to the upper/luxury end of the market
- Mortgage lending criteria [are] substantially tighter
- Significant community resistance. (sub. 19, p. 7)

As well, the point was made that brownfields development needs to be carefully planned; as it is not practical to "just to tack new developments onto existing infrastructure" (Community Housing Aotearoa interview, 27 September 2011).

## 7.4 Commission's assessment

In considering its response to submissions the Commission has in some instances sought additional information from submitters, as well as carrying out its own research, reviewing research from New Zealand and overseas, and considering the experience of other jurisdictions.

### The New Zealand evidence

The following case study (Box 17) examines the relationship between residential housing supply and prices, focusing on the Auckland housing market. Overall, the numbers suggest that constrained land supply, reflected in falling sales and increasing section prices, has been a significant contributor to high new home prices in Auckland. This in turn puts pressure on the wider real estate market.

These findings are consistent with those of Grimes et al (2007) who modelled the behaviour of the Auckland housing market and concluded that:

Moves to encourage building new housing need to ensure that regulatory and other costs are contained and opportunities to develop enhanced. Our research indicates that land costs and regulatory costs (especially financial costs of delay) are of most concerns.... If development costs keep rising housing investment will diminish and housing affordability will worsen. (p. vii)

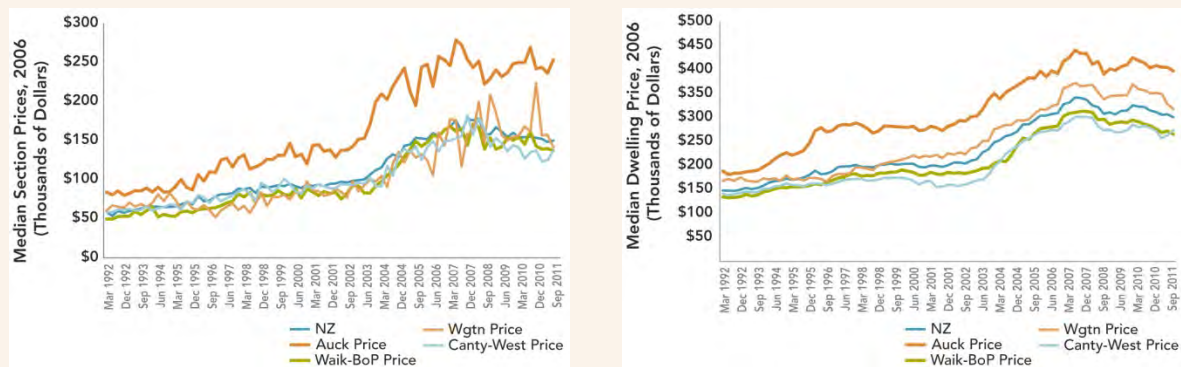
### Box 17 The Auckland Housing Market, 1992 - 2011

Housing demand is driven by household numbers and incomes. Housing supply is a function of the availability and price of land, and capacity and costs in the development and construction sectors. Affordability is influenced by how these drivers interact. To get an idea of the relationship between supply and price, we have plotted quarterly sales and price movements for several regions since 1992.

(All prices and values in this discussion are expressed in 2006 dollars. Figures are quarterly).

House prices grew steadily through the 1990s, although levelled off late in the decade (Figure 7.1). Auckland section prices led a price acceleration after 2000. Between the September quarters 2001 and 2011 average section prices increased by 86% in Auckland and 60% elsewhere.<sup>87</sup> The average price of residential land in Auckland is now close to double that of the rest of New Zealand: \$304,000 versus \$154,000.

Figure 7.1 Growth in section and dwelling prices in selected regions 1992-2011



Source: Real Estate Institute of New Zealand

(Averages have been used here to avoid double counting in the comparison because median property prices are not available for the rest of New Zealand category. Average prices can be distorted by a relatively small number of high priced properties. This is especially so in Auckland. However, a comparison with other regions confirms an Auckland price premium, with the median section there costing 84% more than in Waikato-Bay of Plenty and Canterbury-West Coast and 79% more than in Wellington in September 2011).

Focusing on the Auckland market, house and section prices responded to a spike in demand after 2000 (Figure 7.2). Even after sales faltered in late 2003 prices continued to rise, finally levelling off when the recession hit in 2007. Although they have eased recently, median house prices in September 2011 were still nearly 50% ahead of where they were ten years earlier, on similar sales volumes.

<sup>87</sup> With land prices constituting a large and increasing share of the value of a dwelling, particularly in Auckland, the incentive is to build high-spec houses so as not to under-capitalise the value of the land.

Figure 7.2 Sales and prices in the Auckland real estate market



Source: Real Estate Institute of New Zealand

The apparent uncoupling of price from demand is even more evident in the land market, with the number of sections sold in 2011 lower than any time in the previous 20 years. Compared with September quarter 2001, sales in 2011 were down 29% but median prices were up 86%. Taking the comparison back 15 years, to September quarter 1996, sales volumes in 2011 were down 49% but median prices were 130% higher. The equivalent figures for dwellings were less marked: sales were 9% lower compared with 15 years earlier, and prices 47% higher.

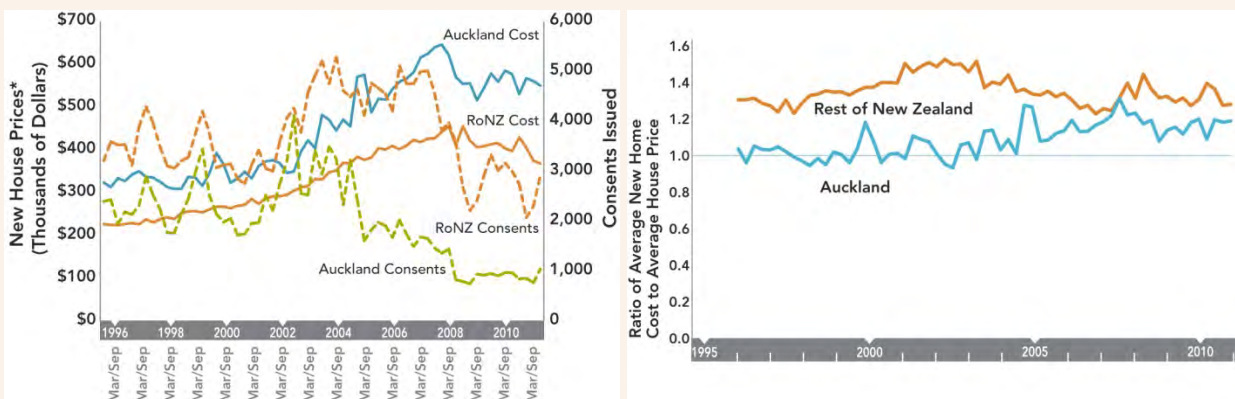
The implication is that a supply shortage rather than demand is holding prices up, especially for sections. Looked at another way, sticky prices imply that under conditions of constrained supply vendors are not necessarily inclined to chase sales by reducing prices.

So what is the role of new housing in this market? To address this question average consent values have been added to average (not median) section prices to indicate trends in new residential property costs since 1996.

The number of new dwellings built (using consents as an indicator) fell from 2002, sharply after 2004 (Figure 7.3), but the representative cost of new homes hardly faltered. Elsewhere in New Zealand sales declined later but unlike Auckland costs fell with them.

From 1996 to 2001 36 consents were issued for every 100 houses sold in Auckland. From 2000 to 2006 the figure was 29 per 100 sales, and then averaged 20 per 100 from 2006 to 2011. This also contrasts with the rest of New Zealand where 30 consents were issued for every 100 dwellings sold between 2006 and 2011. The earlier fall in building and continuing growth in costs in Auckland indicates greater supply constraints there.

Figure 7.3 House Sales and Building in Auckland, 1996-2011



Source: Real Estate Institute of New Zealand, Statistics New Zealand

One result is that the cost of a new home in Auckland (as estimated here) has consistently exceeded the mean value of all sales only since 2003. Across the rest of New Zealand, new houses have been

more expensive throughout the period (Figure 7.3). The reason for the upward Auckland trend is increasing section prices, up from 45% of the value of a new house in 1996 to 60% in 2006 (although back to 55% in September 2011).

Between 1996 and 2011 the price of a representative new residential property (average section price plus average consent value) increased by 65% in Auckland, from \$334,000 to \$550,000. Some 71% of this Auckland gain (\$154,000) is attributable to a doubling of section prices. A similar, but weaker, pattern was evident for the rest of New Zealand. Here new house prices have increased by 63% but with only 56% of this attributable to the increase in the cost of land.

While the September 2011 value of the average Auckland new dwelling consent was much higher than elsewhere (\$245,500 compared to \$213,500) they increased by similar amounts, \$62,000 in Auckland and \$63,000 in the rest of New Zealand.

Market performance figures should be viewed alongside Auckland's population growth. 22,170 dwelling consents issued over five years to June 2011 fall well short of around 39,000 additional households in Auckland in that period (Statistics NZ estimate of 113,000 people at the 2006 average of 2.9 persons/household).

In summary, the numbers indicate that constrained land supply, reflected in section sales falling even as prices increased or held firm, has been a significant contributor to high new house prices in Auckland. This in turn puts pressure on existing house prices. It appears that the industry has not been able to respond to the pressure of growing demand over the past decade by increasing supply, explaining why prices have increased, or held firm, even as sales have fallen dramatically.

Modelling across territorial local authorities by Grimes and Aitken (2006) using quarterly data from 1991 to 2004 further confirms the impact of land prices on housing costs and supply. A 1% increase in land costs gave rise to a statistically significant rise in development costs of 0.33% and suppressed housing supply by 0.37% (a result consistent with US studies), leading the authors to conclude that

...regulations, such as zoning restrictions, that impact on the availability of residential land (forcing up residential land prices) induce lower house supply and raise house prices in affected authorities (p. 18).

These findings have striking implications for urban planning. The current approach for estimating future housing and land supply is based on expected growth in household numbers. The evidence discussed above shows that growth in household numbers does not adequately explain house price movements. This is further supported by Mare and Stillman's 2008 study of the impact of migration on housing prices –which found that prices increase with greater numbers of New Zealanders returning from overseas but not with migration gains of foreign nationals, suggesting an income effect may also be at work.<sup>88</sup>

The preceding discussion of the nature of residential housing demand (Box 16) reinforces the message that the drivers of demand and the dynamics with supply are more complex than is accounted for in current planning approaches. Housing plans based on a gross balance between projections of future household numbers and estimates of sites available, or programmes for releasing them, without considering the impact of supply and price on demand is likely to result in the needs of submarkets being overlooked, and consequently an underestimation of the land required for housing markets to work efficiently. The result is likely to be continuing pressure on prices, especially during periods of income growth.

## What does international research tell us?

### The United Kingdom experience

The Barker Report (Barker, 2004) concluded that a persistently weak supply response to housing demand underlay a long-run house price increase of 2.4% a year in the UK (and 2.7% a year in the previous 20 years) compared with 1.1% in Europe. These figures put New Zealand price shifts into perspective. NZ Real Estate

<sup>88</sup> This would be consistent with the findings of Cheshire (2009) regarding the importance of income growth.

Institute figures put annual compound price growth for dwellings at 4.3% and 3.8% respectively in New Zealand and Auckland over the last ten years.

Barker acknowledged that new supply was only a small part of housing stock (1%), but argued that it plays a big part in shaping price expectations “if policy changes alter perceptions about the future course of prices, then the impact on today’s prices is potentially much larger”. She called for “a more flexible housing market, one in which supply responds more strongly to changes in price”, proposing an increase in the rate of house building as the way to reduce the rate of increase in prices (p. 5), while acknowledging a need to establish “the trade-off which is believed to be appropriate between improving market affordability, meeting housing need, and environmental considerations”. Her recommendations called for better local planning that allocated substantially more development land in response to a better understanding of information about prices and preferences (p. 6).

The Barker review was followed soon after by an independent report by the Urban Task Force (Rogers 2005) that reaffirmed a commitment to increased housing densities, emphasis on city centres, and higher building densities as the basis of an “urban renaissance”. However, the Task Force noted a range of challenges confronting this prescription, including:

- Middle class families moving out of towns and cities in a quest for better schools, less congestion and a safer environment.
- Only 28% of inner London residents aged over 45 compared with a national figure of 40%.
- Significant inequalities within cities.
- Too little social housing.
- Dealing with growing housing demand: in particular, how to build compact, well-designed, sustainable neighbourhoods that make good use of brownfield sites, and are well served by public transport, hospitals, schools and amenities.

The Task Force report emphasised the importance of good urban design and promoting mixed tenure through increasing affordable owner-occupied and rental housing within existing built-up areas.

Significantly, one member, Professor Sir Peter Hall, noted that he could not support the Task Force conclusions around a number of housing measures:

In summary: I believe there is no overriding need to save greenfield land, of which we have a surplus in south east England; the case on sustainability grounds for further raising minimum densities is non-proven; the requirements to first development brownfield land in the growth areas would in practice lead to inflexibility which would almost certainly slow their development; present policies are already inhibiting new housing completions and causing an unprecedented increase in apartment construction, unsuitable for families with children and undesired by potential residents. (Rogers, 2005, p. 19)

In a further UK study, Cheshire (2009) demonstrated that the supply-constrained markets in England have been much more volatile than the less constrained markets of the US or Europe. He cites the conclusion of Glaeser et al (2008) from a US study that where supply is elastic, “house prices seldom deviate significantly from the estimated minimal profitable production costs ... building costs, land and assembly costs and a normal profit”, with land costs invariant at 20% of the total.

Cheshire reported no systematic trend in real house prices in England between 1892 and 1955. Yet over the next 52 years, from 1955 to 2008 real land prices increased by a factor of 12.5 compared with 4.5 for real house prices, reflecting the impact of supply constraints (Cheshire, 2009, p.11).

Cheshire undertook a market simulation indicating that under conditions of constrained supply the major impact on prices comes from income growth rather than growth in demand (the number of new households). He concluded that projecting household numbers to estimate future housing demand is inappropriate under conditions of fixed supply in which the driver of prices will be income growth:

So long as we constrict the supply of land and the demand for space is as income elastic as it appears to be, projections of household numbers – even were they accurate – would be little help in guiding our system to improve housing affordability, maintain the quality of housing or dampen price volatility (p. 13).

### The Australian experience

The Australian Productivity Commission in 2004 found that:

Constraints on the supply of land at the urban fringe have contributed to housing price pressures, particularly in Sydney (p. 123).

The Commission acknowledged that price increases are also influenced by growth in demand in already developed areas. Consequently, it concluded, accelerating land release may not have greatly alleviated price pressure. However, the price premium associated with central and other established areas does not reduce the need for additional land to offset the impact of scarcity value on new house prices. The Commission noted that:

Land release requires long lead times and needs to be informed by strategic planning in all jurisdictions. Such planning should involve public scrutiny of key assumptions about costs and benefits of different options. The tradeoffs between greenfield development and urban consolidation should be a key focus of the strategic planning process (p. 123).

It also concluded that:

Urban consolidation policies that introduce constraints on fringe development, including through 'urban growth boundaries', are likely to increase the scarcity value of land. Their effects on housing affordability depend on the scope to increase housing densities. This may have been overestimated. (Australian Productivity Commission, 2004, p. 123)

This is consistent with submissions to the current inquiry suggesting that the potential for intensification would be enhanced by accelerating release of both greenfield and brownfield land.

A 2006 study by the Urban Development Institute of Australia reached a stronger conclusion, that the failure to match land supply and demand in the capital cities was behind an affordability crisis, and that the main problem has been "*inhibitive State legislation and regulatory frameworks*". The UDIA suggested that "*with land costs now assuming up to three quarters of the cost of a house and land package and land supply diminishing ... the linkage between land costs, supply and affordability is distinct.*" (p. 2)

The comparison of state policies and housing markets highlighted the impact on land and house prices of the New South Wales government's commitment to constraining greenfield land as a means of encouraging urban consolidation. While acknowledging that consolidation has been realised as a policy outcome, the authors conclude that:

Unfortunately, the unintended consequences of these policies continue to be felt through the ongoing drift of young people to other states ... and overseas as they seek more affordable housing options, and in the shift to rental housing at the expense of owner occupied housing (p.12):

The Australian Housing and Urban Research Institute (AHURI) has a long-standing focus on social housing, with one stream in its research programme addressing the issue of affordability. In a 2008 study (Gurran *et al*, 2008a) reviewed the international literature and reported a number of Australian case studies. It concluded that:

The land use planning system plays a crucial role in delivering new housing supply in preferred locations. When this system is not working efficiently, delays in the release of residential development land, issuing planning approvals or facilitating infrastructure provision can all result in an undersupply of new housing relative to demand. It is also argued that fundamental planning policies – such as decisions to contain urban growth by limiting the release of land for new development – are inherently inconsistent with overall affordability goals. Containment may affect affordability if sufficient alternative development opportunities are not provided, or because the amenity affect of consolidation is positive and so enhances house prices. (Gurran et al, 2008a, p.1)



The authors identify ways in which the planning system itself might address affordability, including remedying planning deficiencies “*which might include an insufficient supply of residential development opportunities, complexities or delays, excessive fees or charges.*” (ibid, p.3)

A parallel study (Gurran et al, 2008b) looked more closely at the impact of planning *per se* and associated charges on the costs of land and housing. While acknowledging the benefits of planning the authors identified four associated costs:

- Over or under-regulation can defer rather than support development by such things as constraining housing supply and raising prices. They acknowledge that other factors will also influence price, including improved amenity and trends in preferences.
- Procedural expenses and time delays associated with the planning system.
- The costs of compliance with design requirements which may preclude modest housing forms and structures.
- The fees and expenses associated with securing planning approvals, including developer contributions.

The second state of supply report by the National Housing Supply Council (Mailiza and Gallo, 2009) noted cost barriers to infill housing in particular:

In particular, housing is generally more expensive to build in infill developments than in greenfield ones. For example, in all major cities except Sydney, it costs more to build a two-bedroom unit in an infill development than a comparable three bedroom house with a backyard in a greenfield development. Planning approval and development assessment processes generally add time, uncertainty and costs to the development process regardless of location; there are particular challenges in many infill locations. It is one of the factors alongside higher construction and raw land costs that make it generally more expensive and commercially risky to build infill than greenfield dwellings (pp. xv-xvi).

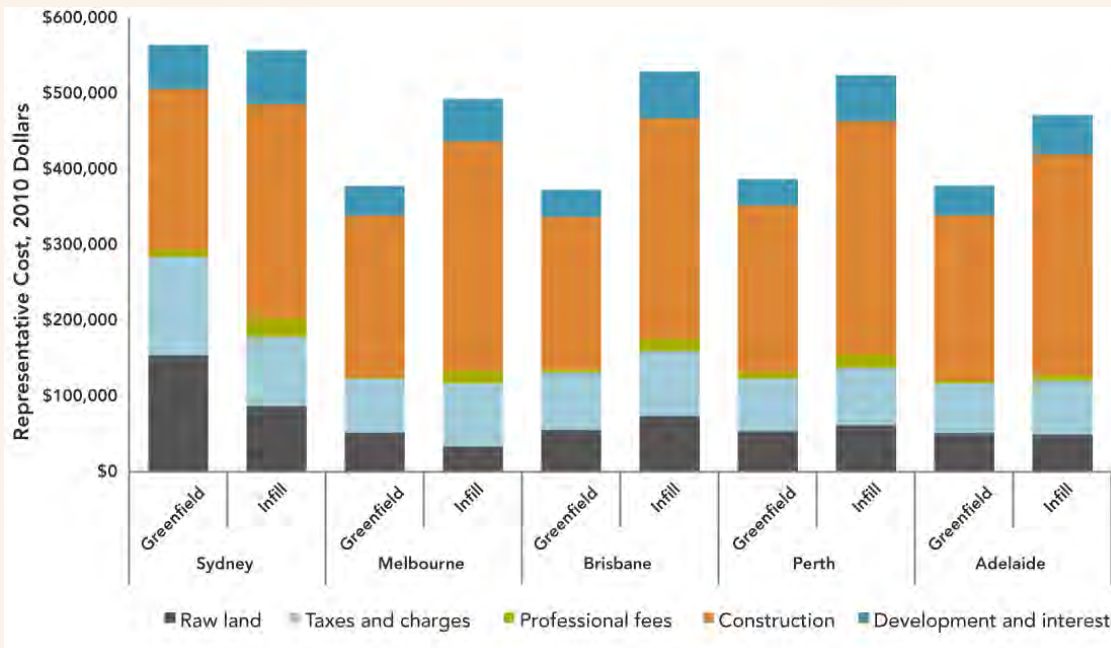
It also noted the differential between capital cities and suggested that the high costs in Sydney, in particular, are exacerbated by land constraints in the Sydney market (Box 18). The inference is that requiring a higher share of additional housing to be located in existing areas not only increases prices by creating a scarcity of greenfield land for expansion, but also shifts the market towards an intrinsically more costly form of housing development and construction.

This Australian evidence corresponds with submissions for New Zealand – it is more expensive to produce medium density housing compared with greenfields detached housing, but that the cost of new housing in greenfield fringe sites will also escalate if sections are scarce.

As in Australia, planning and development related charges are a substantial share of total costs, and are such that extended holding periods have the potential to further penalise development in areas where delays are likely either as a result of difficulty in obtaining consents or as a result of the need to consolidate (brownfield) sites.

#### Box 18 **Greenfield and Infill Housing Costs – The Australian Evidence**

In the absence of systematic New Zealand evidence, the Commission reviewed an Australian study of the costs of infill and greenfield housing in the five state capital cities. The National Housing Commission published representative costs of a three bedroom house with back yard on a greenfield site compared with a two bedroom infill unit based on a study by Urbis Pty Ltd using averages drawn from industry sources and independently verified published data, controlling for amenity factors.



Source: Mailiza & Gallo, 2010 State of supply report, National Housing Council, Canberra.

With the exception of Sydney, the cost of producing dwellings is significantly lower in greenfield than infill sites. Higher construction costs and fees account for the difference. The Sydney exception is attributable to the high cost of greenfield land. The tight supply results in a land price of A\$150,000, three times that for Melbourne.

Development and interest are around 10% of costs for greenfield and 12% for infill dwellings. Taxes and charges (stamp duty, council fees, infrastructure charges, land tax, GST and transfer fees) are much higher for greenfields, especially in Sydney (\$130,000/lot) almost as much as the price of land, and between A\$66,000 and A\$76,000 in the other cities. The difference reflects GST at 10% on higher priced Sydney properties and the higher infrastructure charges there.

Interestingly, Fletcher Building's submission to the Commission suggests that land accounts for a bigger share of house prices in New Zealand than in Australia, at 40% to 46% of the cost of an average 149m<sup>2</sup> home (a total of \$486,800). This easily exceeds the contribution of land, development and interest costs in Australia, which range from just 18% (Melbourne) to 37% (Sydney greenfield).

### The United States experience

In the US, the Smart Growth paradigm was systematically disseminated by a range of disciplinary and professional bodies (in part as a planning toolkit) through the 1990s (Goetz, 2004). It was implemented in a comprehensive top-down fashion through state legislature in places like Oregon, California, and Florida. These states have promoted the requirement that local jurisdictions ensure core infrastructure is in place at the commencement of development to prevent any deterioration in service levels.

However one of the key problems highlighted in the US literature has been the impact of Smart Growth plans on house prices. While acknowledging the difficulty of isolating the drivers of increased house prices, one of the early critics (Downs, 2005), concluded that:

There is little doubt that Smart Growth policies have caused housing prices to rise more than they otherwise would have at least in some communities where they have been applied. That is why some analysts have concluded that Smart Growth and affordable housing are inconsistent goals for a single community to pursue simultaneously (Downs, 2005, p. 371).

A widely cited study of the application of Florida's Growth Management Act (GMA) demonstrated that its early, state-wide introduction in 1985 had "a statistically significant and negative effect" on housing

affordability (Anthony, 2003). Its contribution to higher house prices raised serious questions over the legitimacy of GMA on both efficiency and equity grounds.

[By]...reducing housing affordability – and thereby reducing options about tenure, neighbourhood, employment, school districts, etc., of renters and low-income populations – it inflicts uncompensated welfare losses the GMA fails the efficiency test.

Given its impact on prices, Anthony concluded that the GMA also failed equity tests either by failing to maximise the utility of the most disadvantaged group (renters) or not acting to equalise the utility of all groups:

the GMA tends to reduce homeownership opportunities and locational choices even as it enhances the property values of homeowners [and] ... it tends to exacerbate the utility differences between the low-income and higher-income sections of society – the haves get more, the have-nots less. (Anthony, 2003, p. 290).

Despite these shortcomings Anthony did not reject growth management as a technique, but instead recommended amendments to the legislation and its enforcement, including a mandated inclusion of an affordable housing requirement for new developments.

A later study of Florida indicated that house prices increased by 182% between 1994 and 2006, compared with 99% nationally, while median household incomes rose by only 61%, and 55% nationally (Gilroy et al, 2007). And while the Housing Opportunity Index for Florida was ahead of the national index through to 2005, a sharp deterioration after 2004 saw it fall sharply below the national figure, indicative of a state-wide deterioration. Analysis of affordability at the county level indicated that those counties with a longer history of growth management experienced higher house prices, although this effect had naturally diminished over time relative to Anthony's findings (although remained significant). The authors of the later study concluded that;

[There was]...a disconnection between the goals of statewide growth management laws that seek to ensure affordable housing for their residents and the effects of these growth management policies when implemented. ... based on the new analysis provided in this report approximately one sixth of the increase in housing priced in Florida may be attributable to its statewide GMA. (Gilroy et al, 2007).

Measures designed to enhance affordability had, in their view, either not been implemented or were inadequate, adding further to the contradictory nature of growth management:

While explicitly including goals to promote housing diversity and affordability [the GMA] imposes planning mandates that are likely to increase housing costs ... By encouraging-higher-density development, urban planning is likely laying a foundation for increased housing prices unmatched by increases in incomes and other factors, resulting in deteriorating affordability. (Gilroy et al, 2007, p. 25).

Interestingly, the State of Florida in June 2011 repealed the GMA in the interests of giving greater flexibility to developers and promoting economic growth:

State lawmakers and Gov. Rick Scott want to make it easier and cheaper for developers to decide where and how much to build, with almost no state intervention. And they want to make it harder for citizens to challenge development proposals. (Anderson, 2011)

## Summing up

While this review of overseas research and experience is by no means exhaustive, it gives a strong impression through empirical and largely quantitative analysis that there is a relationship between the physical constraints on urban expansion associated with urban growth management (especially the precepts of intensification and consolidation associated with Smart Growth) and the affordability of housing. The impact is to reduce affordability by impacting on land availability. The evidence suggests that the cost impact of higher-priced sections on new dwellings is transmitted into the price of housing generally.

## 7.5 A way forward

The evidence considered by the Commission provides a strong prima facie case that the urban planning principles prevailing in New Zealand's growing urban areas, particularly in Auckland, have a significant

influence on the prices of both new and existing housing. The Commission is concerned about the negative impact of urban planning on affordability. A more balanced approach is required in the interests of housing affordability. The alternative would be to demonstrate that the efficiency and equity costs of diminished affordability are justified by the magnitude of gains to the physical environment from the continued implementation of Smart Growth principles.

## Constrained land release is impacting on affordability

The following have been identified as key influences:

1. Constraints imposed on the release of residential land, especially greenfield land, are increasing section prices as a result of scarcity, thereby influencing new home costs, and contributing to higher prices among existing homes. This effect is as significant when incomes are growing as when they are not.
2. The relatively high price of developing brownfield sites will lift the average cost of housing as their share of the new house market increases. An alternative to higher prices would be a reduction in amenity and standards, which could have undesirable social and other consequences.
3. The difficulty of increasing greenfield land supply outside carefully rationed and scheduled release programmes, and the practical difficulties of developing brownfield sites.
4. Significant transaction and compliance costs, including delay-related costs, are likely to be reflected in prices, and increase risk which may deter new development.

### F7.1

The prevailing principles and practice of urban planning have a negative influence on housing affordability in our faster-growing cities. Through their plans, councils may directly facilitate or impede residential development by constraining the amount of land they allow for the construction of new stock. Where and when land is provided influences the private and public costs of development and therefore directly influences housing prices. The widespread planning preference for increasing residential densities and limiting greenfield development to achieve this places upward pressure on house prices across the board.

In regard to Auckland, the Commission notes that the Council's submission identifies adequate affordable housing as fundamental to wellbeing and a good quality of life (sub. 45) and that this is a key element of Auckland's strategy (p. 3). However, the Commission considers that the proposed compact city planning approach that is based on containment and intensification undermines the aspiration of adequate affordable housing. The Council's spatial plan is intended to provide a stable and coherent planning framework for the efficient provision of infrastructure to serve existing communities and future growth. It should also provide a vehicle for reconciling competing priorities. The final plan will be adopted early in 2012. The Commission would like to see in the final Auckland Plan how the Council has reconciled affordable housing with other priorities.

### R7.1

Auckland Council should show in its final Auckland Plan how it has considered and reconciled affordable housing alongside its other priorities.

## Urgent need for additional residential land

The Commission believes that an immediate increase in land for development would help address affordability by redressing the current housing shortage. This could be achieved by a combination of bringing significant tracts of greenfield and brownfield land to the market in Auckland and Christchurch (where it is underway as part of the response to the earthquakes) and exploring the options for doing so in other high growth centres (for example, Tauranga and Hamilton).

Any such release should, of course, be contingent on meeting requisite geophysical and environmental standards, it should favour land that can be readily connected to existing urban areas and amenities and that can cater locally for employment needs, and that provides for a variety of housing markets (defined in terms of different demand segments or submarkets). The aim would be to identify, assemble, and develop

substantial parcels of land for housing and associated uses of such a scale that it leads to a rapid easing of current supply constraints and consequently a reduction in price pressures.

The Commission considers that such a move is likely to require a significant institutional response. It may require collaboration between central and local government, private sector and third sector. Models for such approaches exist, for example land development corporations in Australia. Looking at the Canterbury Earthquake Recovery Authority and its capacity to work with local government and the private sector may also be instructive.

In the case of Auckland, the task is to identify land that could be immediately released, then identify significant tracts of land with the potential for (say) 50 years development, with at least 20 years' worth under preparation for development. This should cover brownfield and greenfield sites in and around different sectors of Auckland to provide diversity, to ensure competition, and spread risk.

The distinction between the medium and long terms (20 and 50 years) is that the former would require a commitment to developing the major (offsite) infrastructure capacity; the latter would be reflected in the long-term infrastructure plans (and would be incorporated into the National Infrastructure Plan).

Delivery might be facilitated by parties working together in a collaborative project management and delivery structure. Individual large scale parcels/tracts could be delivered by Joint Ventures or by the establishment and operation of a development agency (along the lines of, say, The Queensland Land Development Agency or other overseas models).

**R7.2**

Bring significant tracts of greenfield and brownfield land to the market in Auckland – identify and assemble land that could be quickly released and identify significant tracts of land with the potential for (say) 50 years' development, with at least 20 years' worth under preparation for development.

**R7.3**

Auckland Council should look to collaborative models for the process of identifying, assembling and releasing large scale tracts of land.

## Potential for increasing flexibility

In addition, land made available for modest infill development could be widely distributed throughout urban areas to take advantage of existing suburban infrastructure and amenities, and help balance the interests of existing residents with the preferences of particular demand segments, such as baby-boomers seeking to downscale housing locally.<sup>89</sup> Allowing more low-level infill may also see the population distributed closer to employment opportunities, which are also tending more towards dispersal rather than concentration.

The costs of achieving substantial brownfield sites of a size and that would accommodate significant housing and upgrading of infrastructure, together with the higher building costs of multi-storey units, suggest that dwellings built under these circumstances will either be expensive – and appeal to a distinctive preference within the high end of the market – or of inferior quality. The processes for identifying, assembling and releasing brownfield land therefore need close scrutiny to ensure such sites can play an efficient role in accommodating growth without contributing to undesirable social consequences.

One effective method of easing the pressure on greenfield development is to ensure that the conditions exist for cost effective brownfield development. We note, however, the challenges of brownfield development especially in existing low density housing areas where displacement of low income households from existing ageing state housing is increased. Of course there is also substantial potential for brownfields development in areas transformed from industrial or commercial use.

<sup>89</sup> Infill is development within an urban area which intensifies existing use by taking up vacant sites or intensifying use of sites already occupied. This may be through further subdivision, extending existing buildings and uses (increasing site coverage), or by replacing detached dwellings on large sections with several terrace, semi-detached, or similar often smaller dwellings.

The long delays associated with bringing both brownfield and greenfield land to the market suggest that a fifteen or even twenty-year pipeline written into plans is likely to be inadequate in practice, particularly if subject to short-term constraints through plan-based staging of land release. When supply is over-regulated in this way land banking becomes a rational commercial response, further undermining the calculation of future capacity and promoting high land and housing prices.

Sufficient competition in the supply of land for development will assist in placing downward pressure on land prices. Therefore, developers are competing with each other with respect to the sale of construction-ready sections, thereby helping ensure that land is offered at affordable prices. Where competition amongst developers is limited by land availability constraints, this can lead to high land and house prices.

### F7.2

Promoting greater affordability of land and houses, providing for diverse demand, encouraging home ownership, and reducing the negative impact of land banking can be addressed by:

- An active approach to the identification, consenting, release, and development of land for housing in the inner city, suburbs, and city edge.
- Adopting a strategy that allows for both intensification within existing urban boundaries and orderly expansion beyond them to promote efficient urban development, offer a range of lifestyles, and avoid imposing unreasonable and costly constraints on individual segments within the housing market by recognising the benefits of advancing multiple forms of development.
- Identifying substantial areas of brownfield and greenfield land for development, with provision for more efficient use of existing suburban areas through infill where practical and acknowledging the likelihood that greenfield development also provides an opportunity to achieve medium density settlement.
- Promoting competition between developers for the sale of construction-ready sections.

The effect of adopting these policies will be to substantially reduce the opportunity for speculative investments by individual land owners and developers. While it may take some time to implement, commitment to a less constrained planning environment could have an early positive impact on housing in Auckland, for example, to the extent that it discourages land banking.

### R7.4

Territorial authorities:

- Take a less constrained approach to the identification, consenting, release, and development of land for housing in the inner city, suburbs, and city edge.
- Adopt a strategy that allows for both intensification within existing urban boundaries and orderly expansion beyond them.
- Develop strategies that promote adequate competition between developers for the right to develop land.

## A longer-term response: review planning-related legislation

The Commission's investigation has highlighted the social and economic risks associated with poor and unaffordable housing. This can have significant downstream effects, as planning which over-regulates the housing sector can result in a long-term fiscal liability for government.

A shortage of housing increases the requirement for state-sponsored or subsidised housing while high rentals and house prices increase the demand for welfare assistance by way of the Accommodation Supplement, while making low income families more dependent on welfare support and Working for Families to meet their housing costs. To the extent that poor housing impacts adversely on health,

education and community outcomes, as pointed out to us by a number of agencies, poor housing policies also stores up long-term fiscal liabilities and potentially undermines national wealth.

If the practice of planning and policy development is unduly constrained by legislative frameworks, there may be case to review the long-term rationalisation of the local planning and policy environment in a more fundamental way. The Resource Management Act and its process requirements are complicated, as is its relationship with the Local Government Act. Current legislation does not appear to provide a framework either within or between the Resource Management Act and Local Government Act whereby councils (and other government agencies) might test the trade-offs among objectives and outcomes associated with the four well-beings – environment, economic, social and cultural – to reach a position which clearly establishes defensible priorities. Additionally, there are questions about the skills and tools available to make such trade-offs, or appropriate evaluations of the trade-offs that have been made.

**F7.3**

Current legislation does not appear to provide a framework either within or between the Resource Management Act and Local Government Act whereby councils (and other government agencies) might test the trade-offs among objectives and outcomes associated with the four well-beings to reach a position which clearly establishes defensible priorities. The Acts both jointly and individually have purposes which may be difficult to fulfil without recourse to such frameworks.

## 8 Charging for infrastructure

### Key points

- Development and financial contributions for infrastructure are applied widely in New Zealand to recover some infrastructure costs. The level of charges varies considerably, but can be significant. They are not large enough to explain the surge in house prices in the early 2000s, but have impacted on affordability and led to many households taking out larger mortgages.
- Designing and implementing charges for infrastructure that accurately reflect costs is difficult, and there is considerable concern about the way these charges - particularly development contributions - are applied. These concerns relate to issues such as their efficiency, impacts on housing affordability, whether they should be levied up front or over time, the transparency of the processes through which they are determined, and the capabilities of councils to set charges.
- The user pays principle is an important mechanism for shaping the choices made by citizens and encouraging an environment in which private choices are compatible with the public interest. Linking the benefit received and the payment made for some types of additional infrastructure helps efficient resource allocation and to ensure that the level of investment in housing reflects its opportunity cost and that efficient locational choices are made.
- To help improve the calculation and application of infrastructure charges so that they are more efficient, equitable, transparent, and do not unduly penalise new development, the government should update the Best Practice Guidelines to Development Contributions, incorporating principles set out in this chapter.
  - The process for developing the Guidelines should be based on consultation with both councils and the industry, covering matters such as when the contributions should be applied, how they should be calculated and how costs should be recovered.
  - Consideration could be given to conferring legal status on the principles in the Guidelines.
- Conformity with the Guidelines would be encouraged by enhanced training and better reporting by councils of how they are complying with them. External auditing of these reports would help.
- Increasing the scope for merits-based challenges of development contributions is worth considering.

### 8.1 Introduction

The chapter first addresses the nature of infrastructure and different ways to fund it (section 8.2). Section 8.3 examines the background to infrastructure charges and the international experience, identifying the principles for infrastructure charging suggested by this experience. This is followed by an explanation of how these charges are used in New Zealand (section 8.4). The issues raised in submissions and elsewhere are described in section 8.5, followed by the Commission's assessment of the issues and a recommended way forward (section 8.6).

Since the 1970s, growing numbers of local governments internationally have been charging developers directly for the cost of additions to infrastructure needed by new residential, industrial, and commercial subdivisions. Charging for infrastructure can encourage efficient decisions:

In principle, efficient provision of infrastructure would be encouraged where its users pay for the construction of infrastructure that would be avoidable (that is, not needed) if the development did not proceed. By levying infrastructure charges that reflect these costs ... governments provide signals to



develop housing in ways and places of greatest value ... in the absence of pricing, developers build without regard to such costs, and governments are likely to rely on other policy instruments, such as planning regulations, to limit the costs of infrastructure associated with housing developments. The absence of effective infrastructure pricing increases the need for development regulations. (Australia's Future Tax System 2010, pp. 423-424)

Similarly, the Australian Productivity Commission argues that:

...linkage between the benefit received and the payment made is particularly important in helping to ensure that the level of investment in housing reflects its opportunity cost and that efficient locational choices are made. (Australian Productivity Commission 2004, p. 166)

In practice, however, it may be difficult to design and implement charges that accurately reflect costs. If charges exceed costs, or if the process of developing the charges is poorly implemented, they may discourage the supply of housing and diminish affordability. The Commission is aware of considerable concern about the way in which such charges are applied in New Zealand. This chapter examines these concerns and suggests a way forward.

## 8.2 The nature and role of infrastructure

The generic term infrastructure charges<sup>90</sup> refers to the different ways in which councils might seek to recover the costs of providing additional infrastructure associated with occupants of the new development. The charges may be levied as an upfront charge at the start of a development or spread over time.

### What is infrastructure?

Infrastructure services are services to property, businesses, households, and residents in a given area. The services include water supply, sewage collection, and stormwater drainage ('the three waters'), solid waste disposal, electricity and communications, and transport, all of which depend on the existence and operation of physical assets, often of a substantial scale, to facilitate delivery. Infrastructure assets provide these services, and can be classified in many ways, including according to whether they are economic or social, network or non-network, major or basic<sup>91</sup> (Box 19).

#### Box 19 Classifying infrastructure

Network assets include water and wastewater pipes, stormwater drains, roads and transmission lines. A network might be divided between distributor and trunk components. Network infrastructure includes the associated headworks, such as water catchment and treatment facilities, sewage treatment and disposal, electricity generation, and public transport depots. It may also include rolling stock, such as buses, trains, rubbish trucks, and fire fighting equipment. Non-network assets include parks and reserves, libraries, galleries, community and sports facilities.

Economic infrastructure traditional infrastructure such as water, sewerage, drainage, electricity, gas, telecommunications, public transport and roads.

- Major (shared) economic infrastructure - infrastructure that services a number of land subdivisions. Examples include trunk water, sewerage and drainage, gas, electricity and telecommunications, urban rail services, major roads and airports.

- Basic economic infrastructure - infrastructure within a subdivision, in most cases connecting each lot to major infrastructure (for example, roads, water, sewerage, gas and electricity connections). Basic infrastructure is sometimes referred to as private infrastructure, because the benefits accrue overwhelmingly to the residents of the particular subdivision.

<sup>90</sup> Such charges are variously referred to as impact fees, financial or development contributions, and financial charges.

<sup>91</sup> Another way of thinking about infrastructure is whether it is critical or non-critical, the former implying that the impact of a failure would be widespread, potentially disastrous, or impose significant economic and social costs on the community. Critical infrastructure tends to be networked, something that makes it vulnerable to disruption if there are capacity limitations. Examples include power and water supplies and major transport arteries, especially those at risk from geophysical events. Their vulnerability should be reflected in the level of resilience engineered into them, or perhaps in the provision of parallel or back up utilities (Crimp, 2008).

Social (or community) infrastructure is used in the provision of community services. It can primarily be for the use of residents within a subdivision (for example, parks), or it can service a whole range of subdivisions (for example, a library, community centre, sports ground).

*Source:* Australian Productivity Commission, 2004, p.168, New Zealand Productivity Commission

## Who is responsible for providing infrastructure?

The planning, placement, development, and operation of economic and social infrastructure influence significantly the evolution and efficiency of urban areas and the costs of living in them.

Infrastructure constructed on private land that is directly related to the provision of services to the owner (such as water pipes connecting a house to the feeder supply in the street) is generally privately owned and its upkeep and renewal is the responsibility of the landowner (Local Government Forum and Property Council New Zealand 2010, pp. 1-2).

In New Zealand, local government is associated with the provision of water supply, wastewater collection and treatment, stormwater management, solid waste disposal, the provision of parks and reserves, leisure facilities (stadia and sports grounds, recreation centres and swimming pools), and cultural facilities (performing arts centres, museums, and galleries). Not all councils provide all of these services and the mode of delivery and funding may vary from place to place.<sup>92</sup>

Local roads and corridors (including arterials other than state highways) are the responsibility of territorial authorities. The exceptions are in Auckland, where Auckland Transport (a council-controlled organisation of the Auckland Council) is responsible for both public transport and local roads; and in some centres such as Invercargill, where the regional council has transferred its public transport responsibilities to the territorial authority. Unitary authorities (for example, Nelson) also have responsibility for both public transport and local roads.

There does not seem to be disagreement with the proposition that the costs of infrastructure constructed on private land should be borne by the households concerned<sup>93</sup>. There is much less agreement about infrastructure provided by local government.

Neutze (1997) identified four broad categories of charges for such infrastructure, which would be borne by different groups of people.

- **Taxes**, including property taxes, which he characterised as financially efficient (easy to levy and collect) but of “zero value in achieving efficient resource allocation.” (Neutze 1997, p. 125)
- **User charges**, usually based on the volume of capacity consumed (water, drainage), perhaps on a sliding scale to penalise higher consumption and to reflect the marginal cost of providing additional capacity.
- **Access charges** are a variant of user charges, which might be a combination of fixed access and variable capacity charges, with the fixed component levied on such factors as property value or the number of toilet pans in the case of water/wastewater charges, and the variable component based on volume consumed or generated.
- **Development contributions**, which cover direct funding or supply of on-site public amenities (parks, reserves) and hard infrastructure (such as roads, water reticulation) and usually a cash contribution to off-site capacity increments required in, for example, trunk or distributor networks or head works such as sewage treatment or water supply works.

<sup>92</sup> Private development agreements are also becoming more common, and often allow developers to provide off-site infrastructure in lieu of paying a Development Contribution. Conflicts may arise where the developer wants to install cheap infrastructure with high maintenance costs, and council wants the opposite. This is an example of the principal-agent problem.

<sup>93</sup> Although there can be issues with larger developments, which are required to fund works deemed internal to their subdivision, but which would have been considered external if the subdivision had been owned by several parties. This is particularly the case for projects related to roads and reserves.

## The challenges of infrastructure charging

If charges exceed the costs of providing infrastructure, they can discourage development. Or, if the revenue raised is used to provide other infrastructure at less than it costs, the pattern of charging may distort choices between different forms of infrastructure. Over- or under-charging undermines the benefits for efficiency which were the reason for introducing charges in the first place. The challenge, therefore, is to charge for infrastructure in a way that is consistent with the theoretical ideal.

There are difficult issues to be faced when applying these charges. For example, there are questions over who benefits if the new investment raises the level of service generally. For the purpose of equity as well as efficiency, revenue from infrastructure charges needs to be spent in a way that responds directly to the impacts of the development from which it is raised. It is often difficult, though, to exclude others from the benefits of such spending (raising their service levels) and it is debatable whether it is practical or even desirable to do so. These issues are considered further in section 8.5.

Importantly for housing affordability, there are also issues over the incidence of the charges. Are they borne by the original land owner by way of a reduced price for the land; by the developer by way of reduced margins; or by the buyer by way of increased section and house costs? The incidence of developer charges will depend on the relative elasticities of supply and demand, but in cases where they are borne entirely by land owners or developers and not passed forward to some extent seem likely to be rare.

## 8.3 Charging for infrastructure: International experience

Key themes to emerge from the experience with infrastructure charging in the United States, the United Kingdom, and Australia (described in Appendix B -) are that there is:

- considerable debate about how to implement infrastructure charges and recognition in some cases that implementation has been poor.
- increasing use of infrastructure charging.
- support for the test of rational nexus to ensure that such charges are fit for purpose: fees should be based on the actual costs incurred as a result of development and the revenue generated should be directed at the capital expenditure incurred, the benefits of which should accrue primarily if not wholly to the occupiers (residents, businesses) of that development.
- considerable variability in approach between and within countries. In the United Kingdom there has been a tendency to use charges as a form of betterment tax, with less emphasis on the rigour with which impacts and spending are aligned. In the United States the issue is one of how to charge, with the debate polarised between flat and graduate charges. In Australia, the practice and coverage of infrastructure charges varies between states.
- use in some countries at least of principles to guide implementation.
- agreement that in all areas the impact of different approaches to charging on housing affordability remains a major issue.

## 8.4 Infrastructure charges in New Zealand

### The statutory setting

There are two forms of infrastructure charge against new developments in New Zealand: financial contributions under the Resource Management Act 1991(RMA) and development contributions under the Local Government Act 2002 (LGA).

**Financial contributions** must be justified in terms of promoting the sustainable management of natural and physical resources under the RMA. If a council provides for financial contributions in a plan prepared under the RMA, it may impose them on developments subject to resource consent, provided that the contributions are directed at the purpose specified and determined in a manner set out in the plan

(S108(2)(a) and (S111). In this way, financial contributions are subject to a prescribed, targeted and transparent process. Under the provisions of the RMA they may be challenged in the course of plan preparation through submissions, objections, and appeals. In short, they are levied to offset an effect of the activity in question and funds raised have to be applied accordingly.

Where a council does not provide for financial contributions in its plan, it may levy a **development contribution** under the LGA to offset the environmental effects of development (AS409).

Financial Contributions tend to focus on the direct, marginal impact of the environmental effects of particular developments, without considering the wider cumulative impact of multiple developments on the infrastructure and community facilities of a district. These impacts are the main reason for councils levying **development contributions**, which are subject to Subpart 5 of the LGA. They are intended to compensate councils for capital expenditure associated with development of such facilities as reserves, network and community infrastructure. They may include recovery of spending incurred in anticipation of development (S199) and be levied at the time of resource consent, building consent, or authorisation for connection to services.

Councils must develop a policy on both financial and development contributions as a component of the Financial Strategy prepared as part of their Long Term Plan (S102), which outlines their wider funding mix (S106). Under the LGA, councils are not allowed to double dip by making two charges for the same asset; for example, requiring land for reserve purposes as a condition of development under the RMA and extracting development contributions for the same purpose.

The methodology used to calculate development contributions must be publicly available, while the funding sought is to be specified against the activities to which it will be applied.

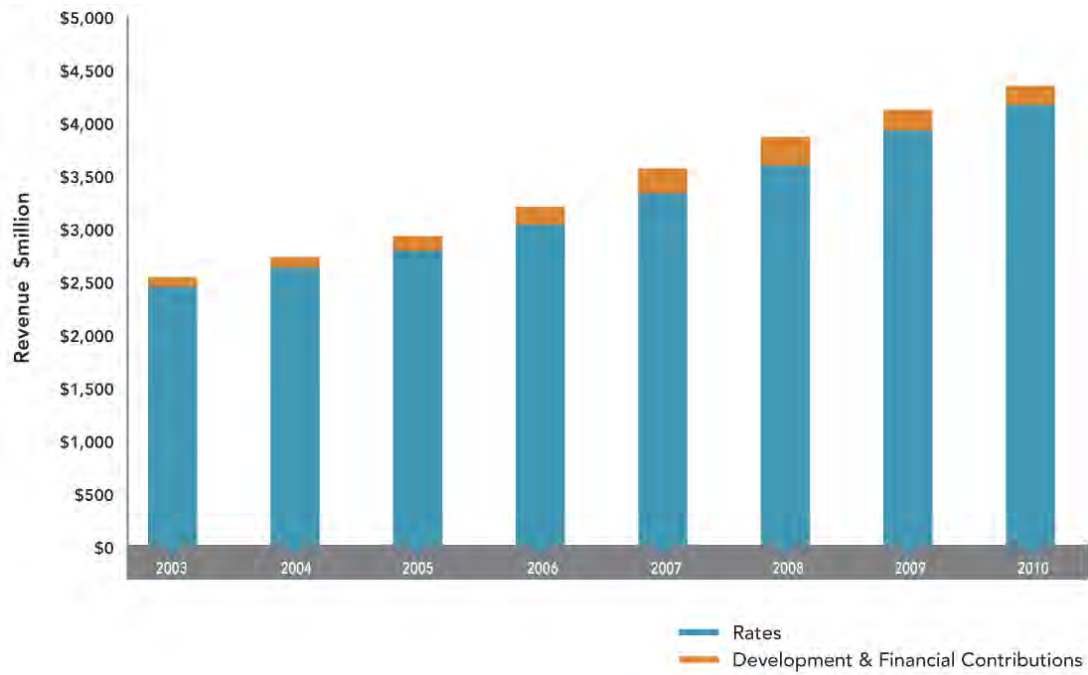
## Uptake and experience

The use of financial and development contributions is widespread. A summary of existing surveys, prepared for the Commission by Dwyer and Wilkinson (2011) suggested that about 62 territorial authorities collected development and financial contributions in 2009/10, and 10 out of 12 regional councils required financial contributions as a condition of resource consents. A closer review of the policies of 43 councils indicated that 32 (74%) had "active" development *and* financial contributions, while 11 had development contribution policies only.

Revenue raised by development and financial contributions increased from \$88m in 2003 to \$267m in 2008 (June years), when it made up 4.5% of total income (equivalent to 7.5% of rates income) (**Figure 8.1**). Revenue from financial contributions reached 4.6% of the total value of permits issued for new dwellings in 2009 (March year).<sup>94</sup>

<sup>94</sup> Dwelling consents are used as an indicator of development activity; any income for processing consents is identified separately in local government accounts, and not as a development or financial charge.

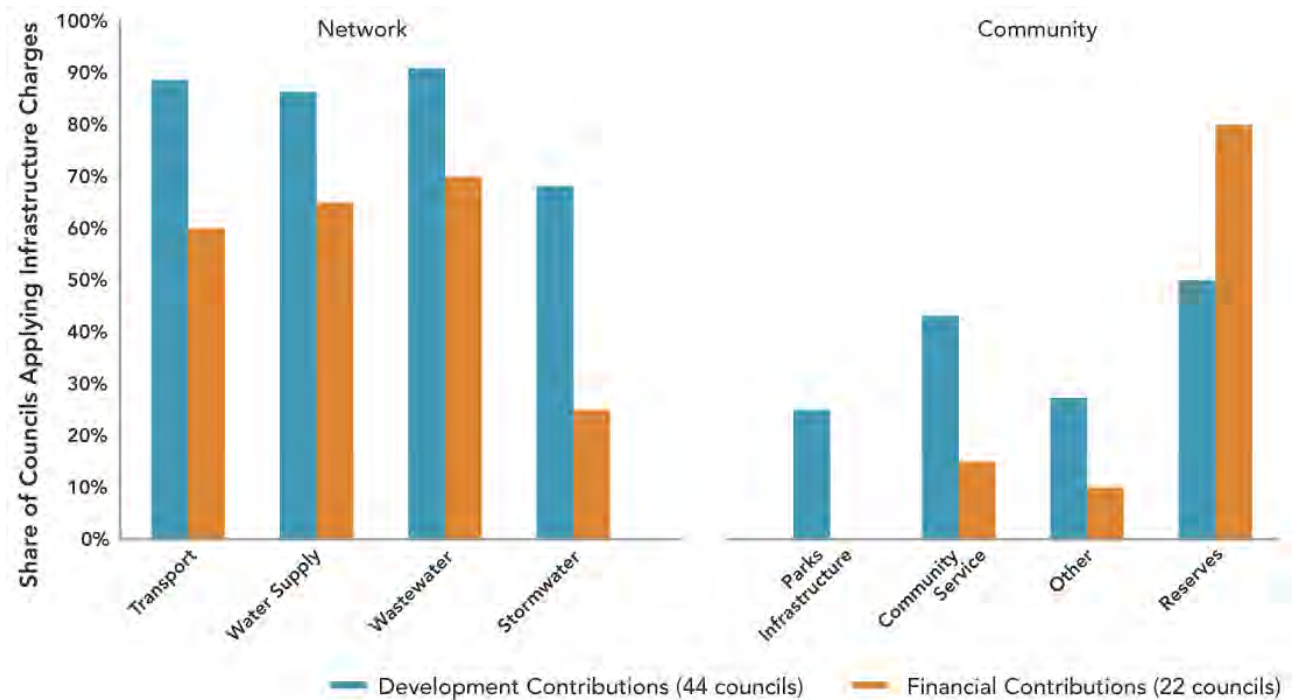
Figure 8.1 Revenue raised from development and financial contributions



Source: Statistics New Zealand

Figure 8.2 shows the proportion of surveyed councils that are funding different types of infrastructure through development and financial contributions.<sup>95</sup> The majority of development contributions are directed towards network infrastructure, with wastewater, transport and stormwater the most common (Figure 8.2). Despite more limited statutory grounds, a majority of the 20 councils analysed with financial contributions policies under the RMA applied them to network infrastructure also, although not surprisingly funding of reserves remains the main category.<sup>96</sup>

Figure 8.2 The application of development and financial contributions (2009/10)



Source: Dwyer and Wilkinson (2011)

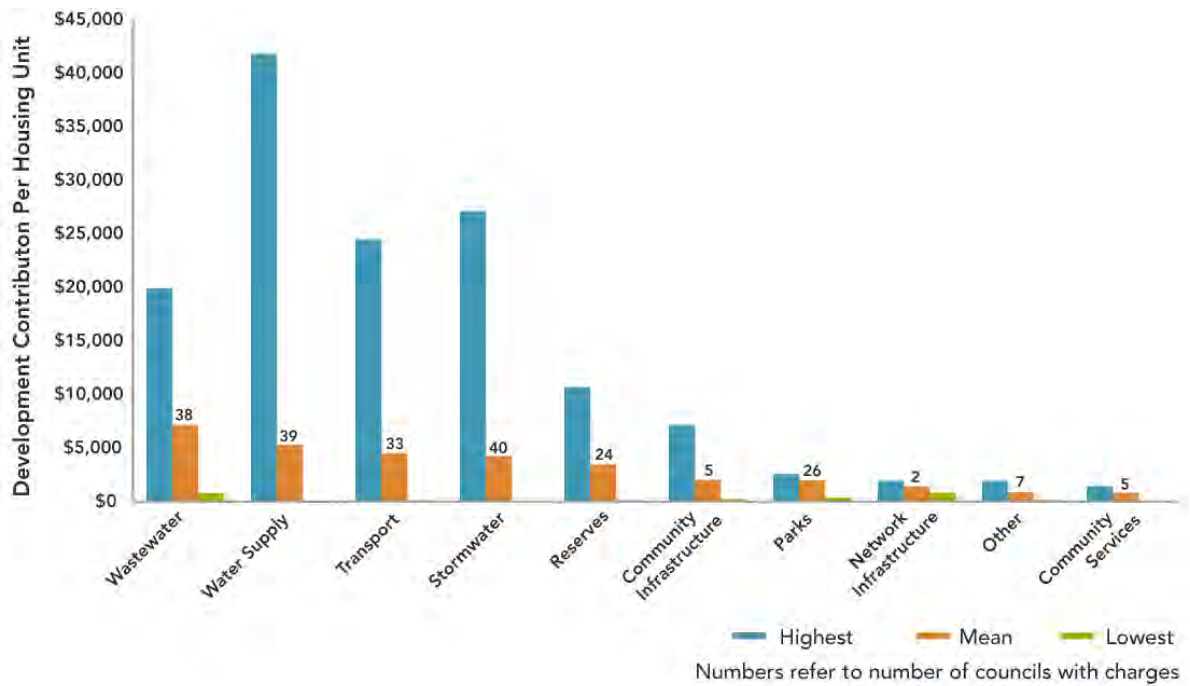
<sup>95</sup> Dwyer and Wilkinson surveyed the development contributions policies of 42 territorial authorities and the financial contributions policies of 20 territorial authorities.

<sup>96</sup> The analyses exclude contributions in kind which tend to favour land for reserves, so this result may well under-represent the role of reserve as a form of mitigation for the environmental effects of development.

Figure 8.3 shows that the overall level of development contributions (summing the charge identified against each service category) varies widely across infrastructure categories<sup>97</sup>, and that between councils there is a wide spread of charges from lowest to highest within each infrastructure category. Water supply and waste water services are funded through development contributions by more councils than any others, and tend to attract the highest charges.

Another way of assessing the significance of development contributions is to relate them to land prices. The analysis in Box 20 suggests that development contributions are only a modest share of section prices in some places, but represent a significant share in others.

Figure 8.3 The range of development contributions in New Zealand (43 councils)



Source: Dwyer and Wilkinson (2011)

**Box 20 Development contributions and section prices**

The table below compares contributions for eleven council areas with median section prices for three regions. It omits financial contributions under the RMA 1991, so underestimates the impact of combined infrastructure charges.

The generalised nature of real estate sales data also blurs the results. For example, a single median section price is a weak indicator of land prices given variability across Auckland. Sections are more expensive in the former Auckland City and North Shore, for example, than in Papakura, Manukau or Franklin. The same development contribution will be a lower share of the cost because of higher prices in the former and a higher share in the latter. The figures for Christchurch, Hamilton and Tauranga include rural areas and small towns in the REINZ catchments. Consequently, median section prices may be low relative to city-only sections. It follows that the share of contributions may be over-estimated.

Subject to these qualifications, the fifth column in the table below illustrates considerable variability in the impact of development contributions on section prices in the sample regions.

<sup>97</sup> The authors also analysed the magnitude of development contributions across infrastructure categories for 42 local authorities, using data assembled by the Department of Internal Affairs. The analysis is complicated by the range of charges that might apply to any single activity within a council. It is also partial to the extent that councils that charge low development contributions may charge high financial contributions, which were not analysed, and vice versa.

**Table 8.1** Development contributions as a share of section prices

REINZ Region	2010 Median Section Price	City / District	Contributions (GST Incl.)	
			Mean	% Price
Auckland	\$465,000	Auckland City	\$17,225	3.7%
Auckland	\$465,000	Rodney	\$23,260	5.0%
Auckland	\$465,000	North Shore	\$25,097	5.4%
Auckland	\$465,000	Waitakere	\$23,681	5.1%
Auckland	\$465,000	Manukau	\$5,956	1.3%
Auckland	\$465,000	Papakura	\$26,406	5.7%
Auckland	\$465,000	Franklin	\$14,619	3.1%
Canterbury/West Coast	\$312,000	Christchurch	\$10,888	3.5%
Waikato-Bay of Plenty	\$322,750	Hamilton	\$21,124	6.5%
Waikato-Bay of Plenty	\$322,750	Tauranga	\$31,229	9.7%

*Source:* Dwyer and Wilkinson (2011)

## 8.5 Issues raised in the debate about infrastructure charges

There has been considerable debate about the merits of different approaches to charging for infrastructure. This section brings out some of the key features of this debate, drawing primarily on submissions but also on published material. Submissions to the inquiry featured many of the arguments that have also been evident in the public debate. Issues covered include:

- their efficiency
- their impacts on housing affordability
- whether they should be levied up front or over time
- the transparency of the processes through which they are determined
- the capability of councils to set charges.

### Efficiency

The Development Contributions Working Group, representing local government practitioners, argues that contributions are economically efficient and equitable in purpose and effect, ensuring that the decision to develop and the cost of doing so are linked (sub. 22). It believes that none of its members have over-charged for development, although the opposite has been the case on occasion. Under-recovery occurs when land use planning, infrastructure planning, and financial planning are not adequately synchronised (sub. 22).

Other submissions disputed the efficiency advantages of contributions on three main grounds. First, there is a concern that the wider benefits to the community of investment in incremental infrastructure to cater for growth are overlooked.

The whole community uses that infrastructure so the cost should be spread over the whole community. Infrastructure charges work on the assumption that any new development is a cost to the community whereas the reality is the opposite. (Icon Concepts, sub. 6, p. 7)

Similarly, the Property Council argues that councils have “failed to adhere to fundamental rules about causal nexus and the need to limit the application of contributions to the marginal cost of growth” (sub. 28, p. 13).

The second concern is that charges are being used to raise revenue rather than as an efficient charge. This would reduce pressure on rates used for “essential” infrastructure and enable increased discretionary spending.

New projects should only provide financial contributions where there is a true measurable upgrade required for local authority infrastructure before the project can proceed. ... Contributing towards the cost of the local library or school is arbitrary as whether or not any additional demand will be placed on these services directly from the new development (Saltburn, sub. 7, p. 4)

This leads to the third concern: that as development slows down charges may be raised to offset the loss in volume of transactions:

Councils are increasingly putting up the costs for (development and financial contributions) to reduce the cost on the ratepayer. A \$10,000 fee is \$25,000 once margin, holding costs, and GST are added. (Brady Nixon, sub. 26, p. 4)

Many territorial authorities elevated development contributions to be an alternative to property rates ... and have consequently realised significant shortfalls in revenue following the impact of the Global Financial Crisis. (Property Council of New Zealand, sub. 28, p. 10)

The Commission notes that efficiency has not been prominent in the supporting documentation for development and financial contributions. For example, the best practice guide published by Local Government New Zealand (2003) does not include efficiency as a criterion, emphasising instead a fiscal rationale – raising funds to enable councils to respond to growth pressures. However, the original explanatory note attached to the 2001 Bill indicated that efficiency was one rationale, along with ensuring that costs fall on the consumers of services, and the risks of provision are more fully borne by developers.

The Local Government Forum and Property Council New Zealand (LGFPCNZ) jointly published a critical review of development and financial contributions in 2010, which raised some of the same issues as submissions, as well as further points. In particular, the LGFPCNZ pointed out that development contributions are often applied to fund capital spending in situations where councils could charge for supplying the related goods or services but do not do so. They note, for example, that councils could meter for the use of water but either do not do so or, if they do, charge prices that do not approximate the marginal cost of supply. Pricing could also be applied in the case of libraries, museums and art galleries. They also argue that where there are externalities associated with infrastructure, taxes or subsidies could be used to address them (LGFPCNZ 2010, p. 49).

The LGFPCNZ suggests that the cost of supplying genuine public goods, such as neighbourhood parks, reserves, outdoor recreation facilities and stormwater systems that exclusively or predominantly service a development and are located within it may be appropriately imposed on relevant households or businesses by requiring the developer to undertake the necessary works, make a monetary contribution or grant land. This would apply in situations where there is a close connection between the subdivision or development and the relevant infrastructure facilities (LGFPCNZ 2010, pp. 50-51).

Other concerns that relate to efficiency raised by the LGFPCNZ include:

- Development and financial contributions often do not confront new and existing users with the marginal cost of supply, because of their failure to deal with marginal costs due to the limitation of long-term capital planning to the ten years of the LTCCP, failure to use direct estimates of resource consumption, and the omission of operating costs when setting charges.
- The level of spending on infrastructure is often determined politically or administratively, with little regard for the willingness of users to pay.
- The likelihood that market disciplines are not applied to specification of services, leading to a tendency to gold or green plate investment. Access to development contributions may encourage councils to



choose a higher level of capital expenditure initially, rather than later when development contributions cannot be charged. (LGFPCNZ 2010, pp. 5–6)

## Impacts on affordability

Most submissions accept that development contributions will be largely passed on, and so will affect affordability, but there is disagreement about the materiality of the impact on affordability.

Amongst those who argued there is little effect, Auckland Council argues that contributions are a relatively low addition to the cost of housing currently being met by the buyer.

Development contributions are considered to be one of the mechanisms by which Council will be able to provide affordable housing ... they have only been identified as generating approximately 3%–5% of housing cost. (Auckland Council, sub. 45, p. 10)

The submission also suggests that there is a risk that prices would not be reduced by developers if contributions were removed, and that mechanisms are required to ensure that savings are passed on (sub. 45).

The submission from Palmerston North City Council similarly suggests that infrastructure charges add little to the price of a house and should be met by the developers that profit from development.

Private housing developments are undertaken for economic benefit. Infrastructure costs should, therefore, be recovered at appropriate levels ... the examples given may only account for only 5% of the overall purchase price [of a home]. There are many other factors that will have a greater impact on the final purchase price. (sub. 46, p. 5)

Whangarei District (sub. 32) also argues that contributions are a relatively minor contributor to house prices and likely to be passed through to buyers in “good times” but may have to be absorbed by developers in the form of lower profits in “bad times”.

Tauranga City Council acknowledges that development contributions can have a significant impact on affordability:

These fees have a significant impact on the cost of new houses and if they were reduced the affordability of housing in Wairakei could be improved. As an extreme example if these fees would be removed entirely then the cost of a house in Wairakei could be reduced by over \$40,000+GST. (Tauranga City Council, sub. 19, p. 5)

The Council has explored alternatives such as a targeted rate over properties, but these would have to be significant to have a material impact on development contributions (sub. 19, p. 5)

The LGFPCNZ (2010, p. vi) points out that development contributions of around \$30,000 are common in certain districts and can generally be expected to be passed forward to home owners and consumers, or backward to the owners of undeveloped land and suppliers of other inputs, including employees.

## Up front or over time?

Small (2007) argues for debt to finance long-lived investments on the grounds that it “spreads the capital costs more equitably across the generations that benefit from that service. Moreover, governments are generally, low risk debtors so they enjoy low interest rates ...” (pp. 7–8). The implication is that contributions are not being applied to debt servicing, although the Commission’s understanding is that they are in practice. In some cases, the debt-servicing may be internal, where reserves used to fund capital projects are gradually repaid over time. Either way, the use of development contributions to service debt appears increasingly common.

Habitat Auckland argued that:

... [it] would be more affordable for such costs to be recovered progressively as a rates surcharge for newly developed sites over a pre-determined period. This would make the funds available as required. It would also simultaneously make the councils more directly accountable to the ratepayers. (sub. 23, p. 4)

Auckland Council (sub. 45) suggests that there is tension between development contributions and debt funding, recognising that this reflects the competing interests of current and future generations. Demand projections can be seen as a means of reconciling this tension, but the submission also acknowledges a greater need to differentiate between housing types and submarkets.

## Transparency

There are different perspectives on the transparency of the processes used for setting financial and development contributions.

Tauranga City Council views its development contributions policy as “completely transparent” given that it comprises “approximately 300 pages [containing] a full explanation of the methodology, assumptions, growth funded projects, cost allocations and cost estimates... Others, however, questioned whether the process for setting development contributions is transparent.” (sub. 19, p. 23)

For example, the Development Contributions Group pointed to the difficulty of achieving transparency in what is a complex area, one that is “difficult for lay-people to comprehend without assistance” (sub. 22, p. 3). In such a situation it may be that accountability lies with defending the rationale for contributions to the most knowledgeable parties. This is reflected in the “willingness of some developers to litigate”, which the group suggests has led to “a climate of risk aversion that is now beginning to moderate” (Development Contributions Working Group, sub. 22, p. 4). The Registered Master Builders Federation (sub. 16) called for greater transparency with respect to where the funds raised are allocated and suggested that as they stand they are a hurdle to development (sub. 22, pp. 3–4). The LGFPCNZ argues that development and financial contributions lack transparency and that this weakens the accountability of elected representatives (LGFPCNZ 2010, p. vii).

While acknowledging the need for transparency, there is also a view that councils need to exercise discretion over appropriate levels of service in defining capital works requirements. According to Auckland Council this can be based on local consultation and “a growing body” of national and international evidence to support growth projections (sub. 45, p.11).

Justice Potter (in *Neil Construction Limited and Orrs v North Shore City Council*) also noted the importance of transparency given the absence of rights of appeal on merit against development contributions in the Act:

[293] The enactment in the Act of Subpart 5 of Part 8, relating to Development Contributions provided councils with a valuable and economically efficient funding tool in addition to the traditional funding sources such as general rates. There is no right of appeal from councils’ determinations in relation to development contributions and the review process is limited (refer [95]). Any challenge by developers has to be mounted by way of judicial review. In exercise of their discretions, given the greater flexibility in decision-making conferred on councils by the Act, it is therefore necessary and important that councils carefully observe the purpose and principles of the Act and the role of local authorities, that they ensure both openness in their decision-making processes, and the ability of sectors of the community affected by their decisions, to participate in those processes.

## Process for setting charges

The provisions around development contributions in the LGA are complicated and one consequence is that the formula for calculating them can become complicated. This has led to concerns about opaqueness, the time that it can take for issues to be settled, and the difficulty and cost of challenging charges.

The Registered Master Builders Federation (sub. 16) generally accepts that *financial* contributions have a place, especially as they are limited by statute to responding to the environmental impacts of development and are subject to challenge. However, they point out that *development* contributions lack the same rigour and tests and there is a suspicion that they are abused by the council as a means of increasing general revenue. And under the provisions of the Local Government Act they are generally too expensive to challenge, as the only avenue for legal recourse is via a High Court judicial review. This represents a much more expensive legal hurdle than Environment Court appeals available for financial contributions.

The slow progress in getting infrastructure charges in place reported by some councils is reflected in strong reservations among developers and producers in the housing sector, although none of them appear to dismiss infrastructure charges out of hand. Rather, they call for greater transparency and simplification. Affordable Housing New Zealand (sub. 12), for example, suggests that there may be grounds for a generic fee across New Zealand, substituting flexibility and complexity (the cost of achieving economic efficiency) with simplicity and predictability (and fiscal efficiency).

## Resourcing and capabilities

There seems to be agreement that financial and particularly development contributions are complicated and therefore difficult to administer. This can test councils' resources and capabilities.

The Development Contributions Group submission acknowledged concerns over administrative efficiency, but attributed them to inadequate resourcing among some local authorities "together with constant to occasional threats of litigation [having] increased costs from the legal and consulting professions." (sub. 22, p. 4). This submission points out that a simpler regime would lower complexity and costs.

Small (2007) analysed the alternatives to rates funding for the Local Government Rates Inquiry. While acknowledging that development contributions have a sound rationale on equity and efficiency grounds, he points to the practical difficulty councils have in developing formulae and executing implementation in a way that adheres to the underlying criteria. Small suggests that these are temporary difficulties caused by the limited understanding councils have of how they might operate, and can be redressed as experience accumulates. He argues that notwithstanding current implementation difficulties, the overall merits of development contributions suggest that councils should persist with them. He suggests that councils need additional support to ensure that their policies best serve the needs of their communities, and it would be cost effective for this support to be provided centrally, through the Department of Internal Affairs or the Society of Local Government Managers (Small 2007, p. 18).

However, he also points out that there is a limit to the "legitimate contribution" that can be levied, particularly if the effect of the expenditure is to increase standards (and choice) for existing communities. He also suggests that distortions in investment might arise if developers avoid areas with heavy contributions. While acknowledging a role for funding local growth, Small concludes that development contributions "should not be seen as a large scale source of non-rate funding" (p. 6).

## 8.6 Assessment

The rapid and relatively widespread adoption of infrastructure charging overseas and in New Zealand, combined with the underpinning rationale of linking costs and prices, suggests that it has merit as a means of funding development. On the other hand, the less connected are the facilities that charges fund to the actual impacts and benefits, and the less that the calculation of development (or financial) contributions adheres to the tests for rational nexus, the more these charges resemble a de facto instrument for regulating growth by taxing it. The Commission is therefore particularly interested in the integrity of the underlying calculations and the exactitude of their application.

The public debate about these charges indicates underlying concerns about the types of infrastructure to which they are applied, as well as the way in which they are applied. This section considers the merits of infrastructure charges given their contested nature and the difficulty of ensuring that they 'fit the purpose'.

### Efficiency

When they relied on rates, councils could determine investment priorities among infrastructure services largely independently of the source of funds (with the exception of roads). This meant that they could moderate over time and among places the costs of providing the often capital-intensive infrastructure required by growing urban areas. Some alignment of spending with demand was achieved by basing expenditure on income at the level of wards. In the case of special projects, such as town centre improvements, special rates could be levied over the 'area of benefit'.

The disadvantages of expenditure based on a general tax included limited transparency and consequently the limited accountability of decision-makers, while citizens were left with only limited influence on outcomes. This can undermine the quality of decisions, because spending priorities could be decided with little or no reference to where the costs and benefits might lie and projects could proceed that offered little benefit or did not enjoy wide community support. The funders were not necessarily the beneficiaries of expenditure, while incentives on suppliers to provide the most cost effective asset or service were weak, so there was little guarantee that expenditure, once committed, would be efficient.

However, problems of lack of efficient and transparent decision-making may remain. For example, the Commission has received anecdotal evidence that projects with weak efficiency or equity merits may still be pursued and that councils seldom compare projects on a lifecycle cost basis. As such, the focus may be on options that are more expensive up front (at the expense of developers and purchasers) but cheaper to maintain. This suggests that the shift to development contributions has not by itself resolved principal-agent problems in the design and supply of infrastructure. This is not surprising, given that these issues are tied in with the broad governance arrangements within which councils manage infrastructure requirements. Development and financial contributions should in principle encourage more transparency and accountability, but they are but one component within a much broader governance framework. The Commission outlines below some proposals that would enhance transparency and accountability of infrastructure charging and so improve governance, but they are a small part of the broader governance framework. Analysis of this broader framework would include issues such as:

- the appropriate role for councils in planning and providing infrastructure such as the three waters (which in some jurisdictions are not provided by councils)
- the appropriate corporate form for the entities that provide infrastructure when this remains within councils
- reporting and accountability arrangements.

The efficiency argument for infrastructure charges is based on the presumption that they will internalise the additional costs imposed by development and thereby influence the underlying investment decisions: whether and where to develop, at what scale, and over what period. Much of the debate concerns how effectively they do impact on development decisions in this way. A landmark legal case was the challenge mounted in the High Court by Neil Construction Ltd and others against the North Shore City Council policy on development contributions promulgated in the LTCP for 2004–2014. This reaffirmed the importance of demonstrating the connection between the development (defined relative to the demand it creates for reserves and infrastructure), the direct impact on a council's capital expenditure requirements, and the consideration of alternative funding sources.

Efficiency will be served if charges are aligned with the additional costs to which a development gives rise. There are, however, technical difficulties in setting charges at the right level, and the potential for distorting the market price of housing as a result. Economic efficiency is most likely to be served if development contributions (i) reflect the long run incremental costs of additional capacity, and (ii) do not impose undue transaction costs on either councils or the developer. A failure on either count could mean a loss of economic efficiency and provide grounds for intervention by (say) simplifying the process. The aims of such intervention might be to minimise the prospect of mispricing and provide greater certainty to all parties.

Developers suggest that distortions in the calculation of infrastructure charges have been in the direction of overcharging. This may simply be a result of the way in which charges are calculated with respect to the relationship between the development, the assets funded, and the distribution of benefits.

Even with good analytical discipline there is a challenge in getting charges right for capital works that may be developed up to 10 years ahead of initial demand and for which the timing and quantum of ultimate demand is unknown. This inherent uncertainty is reflected in the way that 10-year plans themselves are prepared, with detailed financial analysis only provided for the first three years and summary analyses largely inserted for the latter part. In most instances there will be ongoing changes in the specification and

cost of proposed plant. In any case, even handedness is difficult to achieve when technology advances lead inevitably to new assets delivering higher than prevailing service levels based on legacy assets.

Over-charging may also be caused by so-called gold or green-plating, which may become an issue if councils have weaker incentives than do developers and homebuilders to select the option that is most cost effective over the life of the infrastructure. As noted earlier, councils may have an incentive to choose options that build in capital expenditure up front rather than over time, or that favour capital costs over maintenance expenditure, if they expect that it will be more difficult to recover costs later on. This problem is not, however, caused by infrastructure charging itself, and seems to be best addressed by options such as removing any bias in the way that charges are calculated or levied, and looking for ways to increase transparency and so increase the accountability of councils.

Closely related to this issue is whether councils have strong enough incentives to seek out infrastructure options that meet the needs of ratepayers in the least costly way.

The Commission also notes comments that development and environmental contributions are being levied in situations where it would be feasible to charge for the infrastructure in a different way, through a combination of access fees and user charges. Such charges are used in other jurisdictions to recover the costs of providing water and wastewater services, where service delivery is assigned to private or state owned enterprises rather than councils. As water and wastewater services are more frequently funded through development contributions than other infrastructure services, the issue of how to charge for and deliver water and wastewater services, and the type of corporate form through which it is delivered, is clearly important for a review of development contributions. However, the issues of water service delivery and charging extend well beyond development contributions and cannot be resolved in this inquiry.

## Equity

Horizontal equity provides for people in similar (financial) situations to be charged more or less the same amount for a service, while vertical equity presumes that people in different situations will be charged differently. Discussions of vertical equity (the more commonly-cited of the two) usually centre around three related definitions:

- regressive taxes, where the proportion of income paid as tax decreases as income increases,
- flat taxes, where the proportion of income paid in tax is constant as income increases, and
- progressive taxes, where the proportion of income paid in tax increases as income increases.

A related equity argument with respect to new development is that the benefits of expenditure on new or expanded infrastructure assets should be largely confined to those paying for them. This is easier said than done for most public services. It requires application of the rational nexus test, which may require arbitrary and contestable assumptions about demand and the capacity to exclude others from the benefits of investment. In reality public facilities experience significant, and probably beneficial, benefit leakage. Indeed, many are characterised by implicit or explicit exchange between beneficiaries (for example, visiting teams to recreational facilities). In addition benefits associated with a given amenity are usually used by some groups more than others. For example, sports grounds may be used more by young people.

Cost allocations can be adjusted to allow for the spill-over benefits to the community from growth-related infrastructure, just as there may be spill-over benefits to newcomers from works designed for the existing population. Different patterns of usage within a community will usually be met with partial user charges to at least cover operating costs.

One question that arises with physical infrastructure, given its generally long-standing nature, is that of inter-generational equity. A problem with financing development prior to reforms to the Local Government Act in 1989 and 1996 was a tendency to fund capital works out of current income, which loads costs against the current generation. Funding by way of borrowing and subsequent repayments over the life of an asset either by generalised taxes (rates) or by cost recovery from users are means of avoiding these inequities, subject to reasonable fiscal prudence. In practice, development tends to recover costs over relatively short

timeframes, so that the period of funding falls short of the period of benefit, leading to current users paying more than later ones. One option for addressing this is to require costs to be recovered over the capacity period of assets – this is the period of time over which they have additional capacity to accommodate new users.<sup>98</sup>

## The impact on housing affordability

While there is debate about the impacts of financial and development contributions on house prices and affordability, a number of broad conclusions seem to emerge.

First, there is broad consensus that these contributions will be passed on to consumers in the long run. The international literature largely confirms that impact fees increase the cost of housing (Box 21).

Second, up front charges should not have a substantial effect on housing affordability compared with charges that are spread over time, given that the increase in the cost of serviced land to reflect a prepayment should be matched by a reduction in ongoing rates and service costs (Australian Productivity Commission 2004, p. 165). However, up front charges will increase mortgage size and make it more difficult for some potential homebuyers to bridge the deposit gap.

Third, while the implementation of development contributions in 2002 contributed to the increase in house prices, the increase in development charges is not large enough to explain the surge in house prices in the early 2000s. For example, the sample of 10 regions in Box 20 showed that in these cases development contributions made up between about 1% and 10% of median section prices, whereas house prices doubled during the boom.

### Box 21 International evidence on the impact of infrastructure charges on house prices

Skidmore and Peddle (1998) reviewed 15 years of data for 29 municipalities in Illinois, comparing rates of development before and after the adoption of fees, finding that fees in the sample reduced the rate of residential development by more than 25%, and that they are an effective regulatory tool if the objective is constraining growth.

Ihlanfeldt and Shaughnessy (2004) reviewed nine prior papers relating to the application of impact fees in Florida, and undertook their own original analysis for Dade County. They cite papers by Delaney and Smith (1989a and b), in particular, as suggesting that impact fees increased the price of new and existing homes, although with a larger effect on new housing. The question addressed by Ihlanfeldt and Shaughnessy was whether this increase in values was based on expectation that future property tax savings arising from the new infrastructure were being perceived as sufficient to justify increased prices for homes.

Their analysis suggested that “impact fees should have uniform effects on new and existing housing and allows for the fee-induced increase in the price of housing to exceed the amount of the fee” (p.665), meaning that “developers are fully compensated for the fees they pay by increases in the prices they can charge for new homes” (p.658). At the same time, the higher prices paid by purchasers could be justified as a reflection of expectations for future savings in property taxes. The latter suggestion is qualified by the prospect that slow growth would reduce the savings, meaning that higher fees would unduly increase house prices under such circumstances.

In addition, the time delays associated with releasing, planning and developing land means that “developers’ uncertainty over impact fees causes them to lower the price they are willing to pay for land” (p. 659).

A review of a wide range of US literature by Evans-Cowley and Lawhon (2003) concluded that impact fees increase housing prices where there are no reasonable substitutes. In terms of land, though, the research indicated that “the cost of the impact fee is pushed backwards to the sellers of land where

<sup>98</sup> This is different from the asset’s useful life, which is the period over which it remains in service.

reasonable housing substitutes exist” (p. 358).

A Guide for Practitioners (Newport Partners et al., 2008) issued by the US Department of Housing and Urban Development in 2008 accepts the proposition that impact fees have a negative impact on housing, although construes this as a necessary evil in the face of the fiscal constraints faced by local government. It suggests that if taxes cannot be increased to finance public facilities, impact fees are a “pragmatic solution”, but one requiring a greater degree of flexibility in their application than had been the case in the past:

... the impact fees of the 1970s bear little resemblance to those of the 2000s. One significant area of evolution is in calculating the fees. ..., much can be achieved to soften the potentially adverse effect of impact fees on housing affordability. (Newport Partners et al., 2008, p. 93)

The guide proposes designing fees with greater attention to equity as a means of reducing their negative impact on house affordability. The easiest way of achieving this, according to the authors, is to calculate fees on the basis of house size.

A recent study in Australia by Gurran et al (2010) showed that development contributions for infrastructure are the largest element of planning costs, reaching as much as \$100,000 a lot in designated metropolitan growth areas. Such charges together with non-financial barriers to development, including the complexity of planning systems and the delays they create, were seen as undermining the viability of smaller developers.

This may lead developers to seek opportunities elsewhere. In other cases, high charges may simply lead to a reduction in the quality of construction to reflect the capacity of the market to pay. The implication is that lower housing quality may be a manifestation of excessive fees that represents a loss of utility to residents by way of housing choice and standards and consequently a reduction in general welfare.

## 8.7 A way forward

The debate over infrastructure charging has a number of related strands, including whether the infrastructure is necessary and is being provided efficiently and without gold-plating; whether costs are being recovered from those who have caused them; and whether the charges are structured appropriately. The pathway to undue cost is either that the infrastructure is ‘gold-plated’ or otherwise inefficient, or if the timing of the charges discourages marginal home buyers who might otherwise be able to purchase a house if the cost of the infrastructure was distributed over the life of the asset.

While financial and development contributions are likely to have diminished housing affordability, infrastructure has to be paid for. If implemented well, infrastructure charges have the potential to contribute to efficient location decisions. But there are considerable technical challenges in implementing these charges and possibly large transaction costs for both councils and developers, leading to risks that the charges will not deliver the intended efficiency benefits.

While they generally view infrastructure charges as adversely affecting affordability, developers, construction companies, and other providers nevertheless see a place for them, provided they are reasonable and can be justified. There is also a general acceptance that some degree of proportionality is desirable, either by way of graduated fees to reflect the level of demand of individual households and avoid the regressive impact of a flat fee or to provide for the wider community to assume some of the costs of development.

### F8.1

Infrastructure charges, especially development contributions, can be difficult and costly to implement. While housing affordability may be diminished, infrastructure has to be paid for. If implemented well, the charges will reflect the incremental costs of necessary infrastructure, and can encourage more efficient investment and location decisions.

## A best practice guide to development contributions

The question then becomes how the calculation and application of infrastructure charges can be improved so that they are more efficient, equitable, transparent, and do not unduly penalise new development. If infrastructure charges are to remain a significant means of funding growth-related infrastructure, the process should be simplified and subject to guidelines to improve the clarity and transparency of the underlying decision making. In addition, there may be merit in capping fees to provide at least a degree of certainty to the development community. To assist with the implementation of the Local Government Act 2002, the Government established a collaborative initiative between Local Government New Zealand, SOLGM and the Department of Internal Affairs to assist councils to implement the new legislative framework. A Best Practice Guide to Development Contributions was developed under the auspices of this group and published in 2003. The authors intended to produce a second edition in 2004, but the Commission understands that this did not happen. Given that there has now been an additional seven years of experience since the guidelines were published; that there are clear concerns about the ways in which development contributions are being implemented; that these contributions are important for funding infrastructure, and signalling its cost; and that they affect housing affordability, the Commission considers that it would be timely to update these guidelines.

### R8.1

That the Government update the Best Practice Guidelines to Development Contributions, based on a process that takes account of the experience of both councils and the industry. The principles in the guidelines might be given statutory status by being incorporated into Schedule 13 of the LGA.

The Commission outlines below its view on some matters that should be covered in these guidelines relating to:

- when development contribution can be used
- how to calculate contributions
- how to recover costs
- how to increase transparency.

## When should development contributions be used?

Infrastructure charges are likely to be most beneficial when treated as part of a rational and comprehensive funding model, and this underlines the approach suggested. The following questions indicate threshold tests that might help councils to determine when they should use development contributions.

- Is the investment (i) of a sufficient scale to justify separate funding, and (ii) required predominantly to meet the needs of new development? (The risk and cost of excessive complexity and high transaction costs are greatest from pursuing independent funding options for the many small projects councils typically undertake. Ideally, only major economic projects, such as physical network infrastructure should be considered for charges.)
- Is the council (or a council agency) the appropriate supplier? (This can be resolved through reference to whether or not the supply of the infrastructure would otherwise be prejudiced by market failure, including a lack of capability in the corporate or third sectors.)
- Is the infrastructure investment required as a condition of consent under the RMA? (If so, RMA processes for setting and exacting financial contributions should be followed.)
- Are there alternative methods of infrastructure funding that may be preferable, taking into account factors such as administrative ease, community acceptability, continuity, likely yield, and transaction costs of the funding alternatives?

### F8.2

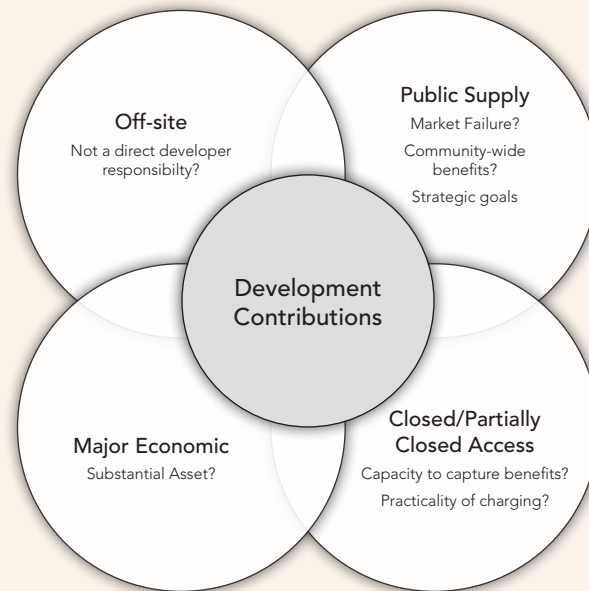
Development contributions are most likely to be justified only for major items of infrastructure, especially network infrastructure, where closed or partially-closed access



enhances the ability to charge the beneficiaries, and which justify public supply (Box 22). Observing these criteria mean that offsite water, wastewater, stormwater, and roads are the categories best suited for funding through development contributions.

Adopting this approach, the use of infrastructure charges for other categories should be treated as exceptions subject to substantive justification.

#### Box 22 Eligibility for development contributions



### How should contributions be calculated?

The Local Government Act 2002 (as amended in 2010) requires development contributions to be based on proof of rational nexus: that is, subject to tests of need, proportionality, and benefits.

Having established the grounds for charging contributions, a council might be required to:

- identify the total cost of the capital expenditure that the local authority expects to incur in respect of the community facility, or activity or groups of activities, to meet increased demand resulting from growth within district, or part of the district, as the case may be
- identify the share of that demand, using the units of demand for the community facility or for separate activities or groups of activities, as the case may be, by which the impact of growth has been assessed. (LGA 2002, Schedule 13, 1)
- Assess proportionality, by making provision for a share of identified costs to be funded from general rates to allow for benefit leakage, adjustments to service levels, contribution to community-wide objectives in the Long Term Plan, and to share risk where the development is consistent with such objectives.

### How should costs be recovered?

Some of the variability observed in infrastructure charges will arise from the preferred mechanism for exacting them. Several conventions might be proposed in guidelines, along with the requirement of councils to explain their choice from among them. These might include:

- calculating over the projected capacity life of the asset (years to 100% uptake), subject to sensitivity testing and some provision for under- or over-shooting. The basis for calculation of incidence of charges might include an average per dwelling charge across all development; variations by dwelling type; variation by location; or more complicated formulae.

- the minimum time period for setting fees (ideally a minimum of three years to align with triennial reviews and provide for some predictability) and any provisions for indexing.

## Encouraging conformity with the Guidelines

While revising the Best Practice Guidelines would be helpful, on its own it may have limited impact. The Commission considers that a range of measures would both help councils to implement the Guidelines and strengthen their incentives to do so. These include training, reporting and auditing.

### Training

While councils now have considerable experience in implementing development contributions, the information received from participants to the inquiry suggests that there is room to enhance skills. Moreover, training would be required in relation to any new processes or approaches that emerge from the development of a new set of Best Practice Guidelines. The Commission expects that such training would require leadership from the central government.

**R8.2**

That the Government leads training to enable councils to enhance their skills in implementing the proposed Best Practice Guidelines for Development Contributions.

### Reporting and auditing

Some form of monitoring of the performance of councils in implementing the Guidelines, combined with public reporting of the outcomes, would provide incentives for the system to lead to improved outcomes, while also providing information about how well the new Guidelines are operating and whether they need to be amended. The incentives would be further strengthened if there was some external auditing of councils' compliance with the Guidelines. The particular issues on which reporting is required, and the best approach for auditing compliance with them, could be determined as part of the process for developing the new Guidelines.

**R8.3**

That as part of the process of updating the Best Practice Guidelines to Development Contributions, the Government:

- identify information that councils would need to provide in regular reports to demonstrate compliance with the Guidelines
- develop a process for regular auditing of councils to assess their adherence to the Guidelines.

## Should there be enhanced opportunities for legal challenge?

The recommendations in this chapter are aimed at increasing councils' capabilities and incentives to improve the implementation of development contributions. Incentives could be strengthened further by increasing the scope for legal challenge.

One reason for the greater acceptability of financial contributions appears to be the capacity to challenge council decisions in the courts on their merits. While challenges involve time and cost, they increase transparency on at least three grounds. The first is the ability to overturn erroneous, mis-informed, or misleading decisions in the Environment Court. The second is the increased incentive for councils to achieve a satisfactory outcome in the first place. The third is that it enhances learning over time and the transfer of experience and knowledge among councils and developers.

On these grounds, consideration should be given to making decisions about development contributions contestable through changes to the LGA that would enable a merit-based test covering:

- Is the project proposed justified either under the provisions of the RMA or by matters of substance and role?
- Has consideration been given to alternative funding methods and are there better options available?

- Do the charges pass the rational nexus tests, including reasonable provision for shares allocated to general rates (a rough proportionality test should be sufficient)?
- Are estimate of costs of supply and capacity life of asset reasonable (this is essentially an engineering assessment that might be satisfied by a commitment to competitive tender)?
- Does the calculation method have integrity?
- What are the implications of the fees and the way in which they are exacted for other community (and national) objectives and policies?

These considerations imply a high degree of alignment between policy-making, planning, operational management and financial management within councils, and a requirement for strong cross-departmental collaboration to achieve this.

In practice, a degree of simplification will be called for, and some degree of consolidation of funding and charging for disparate services. Any legislative changes required to achieve this streamlining could perhaps be written in such a way as to encourage transparency, but discourage frivolous litigation by limiting the categories and scale of infrastructure subject to infrastructure charging, spelling out a clear path to be followed in calculating charges, and specifying (and limiting) the grounds for appeal. The effect would still be greater consistency in councils' attitudes to the costs and benefits of growth and a move away from politically expedient charges.

The Commission is inclined to recommend in its final report that a merits-based test be introduced. It seeks information about the costs and benefits of this proposal to enable it to finalise its position.

**Q8.1**

What would be the advantages of making decisions about development contributions contestable through changes to the Local Government Act that would enable a merits-based test?

**Q8.2**

What mechanisms could be used to discourage frivolous litigation?

## Other matters

In terms of improving housing affordability it is anticipated that cost reductions from improving the processes around development contribution are more likely to be passed through to buyers if sufficient land is released to increase competition among producers and offer greater choice for consumers of housing. The Commission therefore sees the advantages of the approach outlined here as part of a wider revision of planning in the interests of more affordable housing (Chapter 7).

## Summing up

The Commission believes that if infrastructure charges are to be retained as a means of funding new infrastructure resulting from development, they should be subject to simplification, greater transparency, and judicious use.

The primary objective of these proposals is to reduce the burden of upfront charging for infrastructure on the cost of new residential development, while retaining the advantages of efficient infrastructure charges. The Commission also anticipates that an important outcome (subject to further refinement and assessment) could be a general increase in the quality of decision-making around the funding of infrastructure.

## 9 Building regulations and affordability

### Key points

- The regulatory framework can affect the cost of building or renovating a house by imposing standards that exceed what home owners would otherwise choose. The process through which the regulations are set is extremely important in ensuring that standards do not require more expenditure than is justified by the benefits.
- The costs of administering the regulatory framework are to a large extent passed onto home buyers. The Commission is interested in further information on the potential for more contestability in the market for consenting and inspection services.
- The costs arising from slow and uncertain administration of building regulations and inspection services can be substantial and deserve greater attention from building regulatory authorities.
- Local authorities administering building regulation face challenges in acquiring, retaining and supporting the necessary technology, skills and judgements to perform these tasks to a high standard.
- Concerns regarding the quality, timeliness, cost and consistency of building regulatory functions were common in submissions and consultations during the course of this inquiry. Also evident was the poor state of relationships between building practitioners and building consent authorities in some areas. These tensions are likely to impede the success of an effective performance-based building regulatory system.
- Building consent authorities face strong incentives to regulate in a risk averse manner, especially given the liabilities they have incurred in the wake of the leaky homes experience. Reforms designed to reallocate risk among the parties to building work should be evaluated to assess their effectiveness.
- There is a need for central and local regulators, in concert with representatives of the residential construction industry, to devise new fit-for-purpose processes to reduce compliance costs and facilitate innovation, while improving the performance of inspection services with respect to cost, timeliness and capacity to deal with building innovations.
- Achieving greater scale and better use of available technology, to ensure faster dissemination of information, greater consistency and quality, and faster processing of residential building consenting and inspection services, is both feasible and desirable.
- The development of rapid and effective feedback mechanisms which enable emerging deficiencies in building practice to be identified, diagnosed and remedied promptly is required to improve the performance-based regulatory system.
- There is little quantitative or qualitative information on the quality of the New Zealand housing stock. Such information could be included as a component in Statistics New Zealand surveys and would provide a source of data for policy development and monitoring purposes which is currently missing.

This chapter considers the regulatory framework for ensuring building quality and performance in New Zealand. While this framework performs an important role in improving safety standards and building quality, the inquiry heard concerns that regulation may discourage innovation and impose unnecessary costs, partly because it is applied in an excessively risk averse way by regulators who are fragmented and small in scale. This chapter considers whether the regulatory framework is delivering desired outcomes at least cost and how it might be improved.

## 9.1 Why have building regulation?

Most home owners engage with builders infrequently, when they are building or renovating their home, and are not well informed about how to assess a builder, the quality of the work, and how building design and construction may reduce the impacts of hazards such as earthquakes, fires or water ingress. They typically have little knowledge of the construction process, or of how to assess the quality of workmanship, particularly since faults are often hidden in the building and may not become evident for some years. The bespoke nature of much home building in New Zealand makes it more difficult for consumers to compare the building work being done for them, with the work done for other consumers. Some may not have the skills required to assess the financial strength of builders, and whether they will still exist some years in the future, in order to remedy any faults. This is particularly so given that building involves extensive sub-contracting arrangements, so there is no direct relationship with the sub-contractor undertaking the work, and it is difficult and costly for home owners to hold building practitioners to account as they have little leverage once building work is paid for.

If builders, architects, engineers and sub-contractors do not bear the risks associated with their work, they have weak incentives to produce good quality work and to avoid defects and the need for rework. Yet it is these parties who have the greatest control over the risk and can take steps to militate against things going wrong.

Market institutions have developed to reduce these problems: for example, architects can be the agents of consumers; industry associations can provide advice about the quality of builders; companies or industry associations can provide warranties;<sup>99</sup> insurance can limit consumers' exposure; and there are dispute resolution processes. But consumers may find it prohibitively expensive to rely on architects or dispute resolution processes, or to enforce implicit or explicit warranties, and insurance is not always available. The case for regulation is based on an assessment that these market institutions are not fully developed and that regulation can improve on market outcomes.

What is noticeable in the residential construction industry is the comparative absence of 'brand risk'. Large companies in other industries are very protective of their brand, which provides a strong incentive for quality control. They will also take rapid steps to recall a product or correct a problem for fear of damaging their brand reputation. For example, motor vehicle manufacturers move swiftly to recall vehicles with defects because of the risk to brand. Unlike the motor vehicle industry, though, New Zealand has only a few residential construction firms of any scale with a recognisable brand and house construction is much more bespoke than standardised, so the discipline imposed by brand risk is very weak. Indeed, the submission from the Department of Building and Housing points to some developers, designers and builders actively managing or mitigating (and in some cases avoiding) their risks, for example through the use of 'development-specific' and 'limited life' company structures (sub. 55. p. 32).

Regulatory frameworks need to be continually adjusted and refined as markets develop. The approach to building regulation has evolved since it was introduced following the 1931 Napier earthquake; it was overhauled in 1992 to encourage the use of new innovations in building design, materials and methods of construction; and this inquiry is being conducted at a time when further changes to the Building Act 2004 are being contemplated to improve the quality of building work. Concerns over the quality of residential building have led to suggested reforms to improve the skill of building practitioners, clarify accountability for poor building work, and ensure that consumers know what backing the builder has to meet the warranties implicit in the building regulations (Box 23). These reforms are intended to provide more information to consumers and reallocate risks towards the building industry. In the context of the reforms already underway, this chapter focuses on whether there is further scope to improve the effectiveness and efficiency of the current approach beyond the reforms already envisaged.

---

<sup>99</sup> Two builders associations (Registered Master Builders Federation of New Zealand (RMBF); and Certified Builders Association of New Zealand (CBANZ)) offer financial guarantees of building work. Both provide cover for non-completion of work and for latent defects (with some limitations and exclusions, including time limits). For both associations, the building contractor has the primary obligation for repairing any damage, and the guarantor has a secondary obligation.

**Box 23 Proposed reforms of building construction regulation**

The Government is currently considering a package of reforms to building regulation, including:

- Changes to the Building Act to signal roles and accountabilities for building work and Building Code compliance between designers, builders, building owners and Building Consent Authorities.
- New legislative provisions to enable residential consumers to better hold building contractors to account.
- The introduction of a Licensed Building Practitioner scheme (from 1 March 2012), to improve skills in the industry.
- A requirement for written contracts for work over a prescribed minimum price and which identifies the lead building contractor and makes clear the work contracted for.
- A requirement for disclosure about what surety backing the building practitioner has available to meet the implicit warranties in the Building Act.
- Provision of more information and guidance to home owners to help them understand and manage the risks associated with building work and the guarantee products and services available in the building sector.

Sources: <http://www.dbh.govt.nz/building-act-review-discussion-document-6>

Department of Building and Housing, sub. 55, p. 31

Office of the Minister of Building and Construction, Building Act Review: Regulation of guarantee products and services Cabinet paper.

## 9.2 Key features of the regulatory framework

### The Building Act 2004

In New Zealand, residential building is controlled by the Building Act 2004. The Act (section 3) provides for the setting of performance standards for buildings, to ensure that:

- People who use buildings can do so safely and without endangering their health.
- Buildings have attributes that contribute to the health, physical independence, and well-being of the people who use them.
- People who use a building can escape from the building if it is on fire.
- Buildings are designed, constructed, and able to be used in ways that promote sustainable development.

### The regulations, the Building Code, Building Consent Authorities and building consents

Section 40 of the Building Act requires that buildings cannot be constructed, altered, demolished, or removed without a building consent from a Building Consent Authority (BCA), and section 17 requires that all building work must comply with the Building Code. The Building Code is a schedule to the Building Regulations<sup>100</sup> and prescribes the functional requirements for buildings and the performance criteria with which they must comply.

The Building Act 2004 provides for BCAs to be accredited and registered to provide services for processing/granting building consents, inspecting building work and issuing code compliance certificates (section 12 (1)). Currently, all territorial authorities are accredited and registered BCAs. Private organisations

<sup>100</sup> The Building Code is a schedule to the old Building Regulations 1992. The only part of the 1992 regulations continuing in force is Schedule 1 which contains the Building Code.

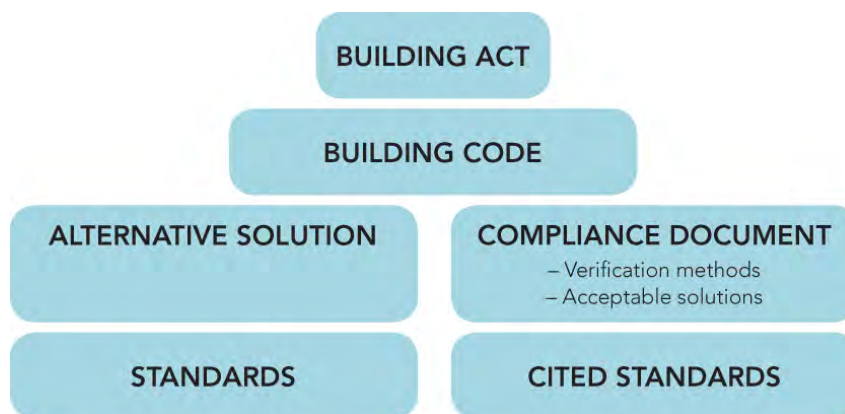
can apply to be accredited/registered, but the requirements for registration are quite difficult for private organisations to meet, so none are. There are some council-owned organisations that have been accredited as BCAs and they carry out some of the tasks of a BCA under contract to the relevant territorial authority, but only the territorial authority BCA can issue building consents and code compliance certificates.

In theory, a home owner wanting to have building work done can apply to any registered BCA for a building consent, but in practice BCAs currently only operate within their territorial boundaries.

## Complying with the Building Code

The Building Code sets a default minimum standard for buildings, which can be exceeded. Builders can comply with the Building Code in either of two ways – prescribed ‘acceptable’ solutions or innovative ‘alternative’ solutions – as illustrated in Figure 9.1. Box 24 describes how the system operates.

Figure 9.1 Key building blocks of the regulatory framework



Source: Standards New Zealand

### Box 24 How the system works

- The Building Code comprises 32 clauses, which cover key factors such as structure, durability, energy efficiency and fire-proofing. To comply with the Building Code, builders must meet all relevant clauses (some, such as mechanical access/lifts, may not be applicable for residential housing).
- Compliance documents detail the requirements necessary to meet the clauses in the Building Code. They specify what needs to be achieved. For example, with respect to durability the requirements specify how long things should last. In the case of weatherboards, the standard is 15 years.
- Acceptable Solutions are prescriptive guidelines outlining what works for what purpose, whereas Verification Methods outline the testing necessary to meet the Building Code.
- If builders comply with a compliance document (verification methods or acceptable solutions) then the building must be approved by the BCA.
- If builders do not want to use a compliance document, then the onus is on them to prove that their ‘Alternative Solution’ meets the Building Code and to prove to the BCA that their approach is satisfactory. For example, one method might be to get the approach tested by BRANZ.
- Standards (from Standards New Zealand and occasionally from other sources such as EECA) are cited or referred to in the compliance documents. A citation holds greater weight than a reference. 650 standards directly or indirectly support the Building Code.

- There is a product certification scheme run by the Department of Building and Housing – if a product has a certificate it is deemed to comply if it is used under the right conditions.

*Source:* Standards New Zealand

### 9.3 In what ways can building construction regulations increase the cost of housing?

The regulatory framework can affect the cost of building or renovating a house in six main ways.

1. Imposing standards that buildings must meet with respect, for example, to durability and safety, which exceed levels that consumers would otherwise choose. The Building and Research Association of New Zealand (BRANZ) has estimated that increases in changes related to the Building Code, together with new occupational health and safety requirements, accounted for almost 30% of the increase in the nominal costs of building a 'modal' house between 2002 and 2011 (sub. 40, p. 4).

Material and labour cost increases included building code changes related to clause B1, B2 and E2 changes affecting foundations, framing and wraps/seals. (sub. 40, p. 4)

BRANZ estimates, for example, that window costs were increased by around \$3000 by the introduction of double glazing as a means to meet new thermal efficiency standards (BRANZ, sub. 40, p. 4), although it is not clear to what extent home buyers might have chosen double glazing in the absence of regulation. Additional costs were also generated by the regulatory response to leaky homes, which included requirements for drainage cavities, treated timber and waterproofing at openings (Page, 2008, p. 16). A study of building regulations in Victoria, Australia, suggested that meeting standards adds at least 4% to the cost of an 'average house' in that state (Victorian Competition and Efficiency Commission 2005a, pp. 21–24).

2. There are additional costs in administering the regulatory framework, some of which are passed on to home buyers. BCAs process around 80,000 building consents each year, with most processed by the larger metropolitan authorities. Table 9.1 provides the Commission's estimates of the building consent charges of five territorial authorities. The variability in these figures is partly due to local conditions and different charging methods – for example, the adoption of a single consent fee by some BCAs. A survey of 55 territorial authorities reported by the Department of Building and Housing in 2008 shows that the consent process has become more costly over time. Between 2000/01 and 2006/07, consent fees for a small house increased from \$920 to \$1759, while fees for a larger house increased from \$1005 to \$1760 (Department of Building and Housing, 2008, p. 9).
3. Inconsistent or slow enforcement of regulatory requirements can delay project completion or otherwise increase project costs. The Registered Master Builders Federation commented that: "Not only are regulatory costs greater but the amount of time now required to meet these controls has increased markedly. Far more detailed plans, delays with inspections and longer from concept to consent approval." (sub. 16, p. 12)
4. Regulation can affect the incentives to innovate with new materials or processes. In 1991 New Zealand introduced a performance-based approach to building regulation, after years of largely prescriptive controls. Performance-based standards provide more opportunities for innovation whilst prescriptive standards can stifle innovation. The issue is whether the acceptable solution/alternative solution approach for meeting the Building Code, in its conception and implementation, encourages successful innovations that reduce costs and/or improve quality.
5. Regulation can influence how risks are shared between different parties – home owners, architects and engineers, builders and subcontractors, material suppliers and building consent authorities. Risks are best managed by those who have the ability to control them, have the right incentives to make the best



decisions, or take steps to prevent problems. When risks are not allocated by those who are best placed to deal with them, quality is compromised and costs increase.

- The structure of the building consenting and inspection service can influence costs. Small BCAs may suffer from diseconomies of scale or be unable to take advantage of efficiency-enhancing technology, adding to the costs of administering building regulations. Costs cannot be challenged if there is limited contestability in the market for consenting and inspection services, for example if it is too difficult for private organisations to become registered BCAs, or if home owners are unable or discouraged from using the services of a registered BCA outside their local area.

Table 9.1 Breakdown of 2011/12 building consent charges by selected territorial authorities

	Auckland	Tauranga	Hamilton	Wellington	Dunedin
Consent lodgement and processing	\$1,234.00	\$1,119.70	NA	\$995.00	NA
Inspections and CCC	\$1,190.00	\$1,554.60	NA	\$1,482.50	NA
Single consent fee	NA	NA	\$3,568.00	NA	\$4,610.00
PIM	\$190.00	\$401.00	\$200.00	NA	\$816.00
Levies	\$831.76	\$800.83	\$772.08	\$780.81	\$769.02
Total	\$3,445.76	\$3,876.13	\$4,540.08	\$3,258.31	\$6,195.02

Source: Productivity Commission analysis of selected territorial authority fee schedules

Notes:

- Data assumes a single 'small' (<145m<sup>2</sup>) house, and uses average \$/m<sup>2</sup> by region to estimate dwelling value, in determining which charges apply.
- 'Levies' refers to the BRANZ and the Department of Building and Housing levies applied to all building works above \$20,000, and collected by councils on their behalf. They are not strictly a building consent charge.
- CCC stands for Certificate of Code Compliance.
- PIM stands for Project Information Memorandum. A PIM report provides information known to the territorial authority which is relevant to the building proposal, particularly about the site.

Overall, the process of approving and inspecting construction is an important one for the residential building industry, representing a significant cost, both directly (in terms of fees levied) and also in terms of time taken and compliance costs to the extent that these exceed those necessary to meet reasonable performance, durability and safety standards. Regulatory processes can also impede innovation and misallocate risk. The rest of this chapter considers the scope for reducing the cost of regulation<sup>101</sup> in the six areas outlined above.

## 9.4 Are housing standards set at the right level?

Given that the Building Code imposes obligations, the process through which these obligations are set matters. For example, a process that did not require transparent consideration of benefits and costs could generate standards that require more expenditure than is justified by its benefits.

As noted in Box 24, 650 standards support the Building Code, so it is through these that many of the costs of regulation are imposed and benefits achieved. Changes to the Building Code go through a regulatory review process, which is intended to ensure they are providing the desired benefits without excessive cost. Building Code updates require a Regulatory Impact Statement (RIS) and statutory regulations are tabled with the Regulations Review Committee.

The Commission notes that the RIS process plays a particularly important role in ensuring that building regulation is set at the right level.

<sup>101</sup> In addition to the building regulations covered in this chapter, there are also territorial authority regulations covering the management of building sites, such as builders refuse, noise and hours of operation, site fencing and protection of local laws. These regulations also add to building costs, but are not considered here.

## 9.5 Is there scope to reduce costs associated with slow enforcement of the consent process?

While around 83% of building consents are issued within statutory timeframes, the Department of Building and Housing submission notes “a widespread perception among builders and developers that timeframes are not always met” ... and time is ... wasted in arranging inspections and waiting for building officials to complete inspections before work can proceed.” (sub. 55, p. 34)

BCAs must process applications for a building consent within 20 working days of being lodged. They can, however, request further information, which effectively ‘stops the clock’ until the information is received. There have been suggestions that BCAs request extra information not because they need it to assess the application, but to give them more time to process the information they already have. Not everyone shares this view, however. Saltburn Limited reported that:

We have not experienced significant delays through the building consent stage but we do manage it carefully every step of the way. (Saltburn Limited, sub. 7, p. 5)

While the evidence about unnecessary costs caused by stop the clock arrangements is patchy, the Commission considers that it is worth exploring options to improve the situation. There are several options.

- The ‘stop the clock’ provision could be abolished.
- ‘Stop the clock’ opportunities, seeking additional information, could be limited.<sup>102</sup>
- BCAs could be required to collect data on the number of occasions on which they ‘stop the clock’, along with their reasons for doing so, perhaps with the addition of random audit by the Department of Building and Housing.
- The Department of Building and Housing could publish the total time taken between receiving applications and finally granting consents for each BCA, and the number of occasions where each BCA has used the ‘stop the clock’ provision.<sup>103</sup>

The inquiry has not generated enough evidence to justify abolishing or curtailing the opportunities for BCAs to ‘stop the clock’. BCAs may have good reasons for requesting more information and time. The Commission does consider, however, that BCAs should report on the number of occasions that they use the ‘stop the clock’ provision and their reasons for doing so and the total time taken between receiving applications and granting consents. This should not involve significant cost, but would provide additional transparency and enable comparisons between BCAs. External auditing of a sample of BCAs would help to reveal whether there is excessive use of the ‘stop the clock’ provision and, in so doing, provide an incentive, through the possibility of random audit, for performance to be improved.

### R9.1

- The Department of Building and Housing publish for each BCA, the total time taken between receiving applications and finally granting consents and the number of occasions where each BCA has used the ‘stop the clock’ provision.
- The Department of Building and Housing audit the ‘stop the clock’ information from a sample of BCAs.

## 9.6 Is there scope to improve the allocation of risk under the Building Act?

The Department of Building and Housing considers that risk allocation is not allocated efficiently in the building sector:

<sup>102</sup> The Resource Management Act 1991 (RMA) limits the times the processing ‘clock’ can be stopped for further information requests and when s37A can be used to extend time frames.

<sup>103</sup> Under the Accreditation of Building Consent Authorities Regulations 2006.

Residential consumers and building consent authorities bear the brunt of the risk associated with building work that fails to perform, despite having the least control over the quality of that work. Building practitioners on the other hand are able to manage and mitigate risks through the quality of their work ... and... while building consent authorities face high risk they do not realise any benefits from risk-taking within the context of a building project, thus creating incentives for building consent authorities to be risk averse. (sub. 55, p. 32)

Building Consent Authorities issue compliance certificates, which verify that the building work complies with the Building Code. If the building is subsequently found to be defective, the homeowner can take a civil action against parties for damages. Under tort law, a party can be held liable if there is a duty of care to the claimant, that the failure to take care caused the damage, the damage caused the loss to the client and that the loss was foreseeable. All of these links need to be established for a claim to be upheld. Such a claim was upheld in a case against Invercargill City Council (Invercargill City Council v Hamlin 1994), which established the precedent for claims against BCAs.

The risk faced by BCAs is compounded by the rule of joint and several liability, which potentially exposes them to the full costs of remediation where building work is subsequently found to be defective. Under joint and several liability, the plaintiff may collect from all or any one of the liable parties until the judgment is paid in full. If any of the liable parties do not have enough money or assets to pay an equal share of the award, the others must make up the difference – the BCAs become, in effect, ‘the last man standing’. The issue for territorial authority BCAs is that because they have the power to levy rates, they have ‘deep pockets’ to meet claims for defective buildings, while the typically small firms in the building industry do not.

To manage or mitigate their exposures, BCAs may become risk averse in their treatment of building consents:

- Inquiry participants commented that BCAs may require more information, take more time in their deliberations and increase the number of inspections, all of which increase costs.

It is apparent to us that the regulators of building consents in local authorities have become very risk adverse [sic] in the wake of the leaky buildings fiasco and that they pay little regard to the costs of compliance and delay which they impose on builders and consumers. (The Salvation Army, sub. 59, p. 4)

Building consent authorities take an unduly risk-averse approach in regulatory decision making, which has resulted in an increase in compliance costs (e.g. documentation requirements, number of inspections etc.) and over-regulation of low-risk building work. (Department of Building and Housing, sub. 55, p. 33)

- In addition, inspection processes have become more rigorous, with the average number of house inspections increasing from seven in 2000/01 to eleven in 2006/07 (Department of Building and Housing, 2008, p. 29). These additional inspections add costs not just in terms of the fees charged<sup>104</sup> but also in terms of time costs and additional staff to facilitate the inspection process.
- Estimates from the Registered Master Builders Federation suggest that costs such as the need for more drawing details (typically from 10 pages in 2002 to 30 pages in 2007), more office and on-site staff to facilitate the consenting process and additional inspections, and a higher risk margin to allow for building consent time delays have increased total construction costs by approximately 10% (Registered Master Builders, cited in Page, 2008, p. 16).

While these submissions highlight the increased costs associated with present risk allocation, the Society of Local Government Managers (SOLGM) supports the conservative approach of territorial authority BCAs.

We are puzzled by the implication that it is somehow inappropriate for local authorities to be risk averse. Local authorities owe a fiduciary obligation to their residents and ratepayers. Surely anything other than a risk averse approach would be open to the accusation of irresponsibility, especially when the local authority has often been left as ‘the last man standing’ for civil claims. (sub. 53, p. 5)

<sup>104</sup> For example, Christchurch City Council charges a minimum fixed fee of \$122 per building inspection, while Wellington City Council charges an hourly rate of \$150 (Christchurch City Council, 2011; Wellington City Council, 2011).

It could be expected that following the Canterbury earthquakes, BCAs will become even more cautious. The issue is how risk averse or cautious should BCAs be? Judgements need to be made by each party that weigh up the benefits and risks and costs of decisions made. The Department of Building and Housing notes in its submission that “while building consent authorities face high risk they do not realise any benefits from risk-taking within the context of a building project” (sub. 55, p. 32), and “current regulatory settings are based on a low tolerance for risk and a strong emphasis on the role of government in protecting home owners from risks of building defects and failures” (sub. 55, p. 33).

As noted in Box 23, the Government is planning changes that will reallocate risks between industry participants. From mid-2012, a risk-based approach to building consents will be introduced to ensure that the amount of checking and inspection required is matched to the complexity of the work, and the skills and the capabilities of the people doing the work (Department of Building and Housing, 2011a). The Commission considers that, if successfully implemented, stepped consenting could simplify the consent process and help to reduce costs and improve affordability. However, while BCAs have a duty of care in respect of residential home owners for building defects and the rule of joint and several liability remains,<sup>105</sup> they have strong incentives to be risk averse in their approach to building consents, especially given the liabilities they have faced in the wake of the leaky homes experience. Such risk aversion imposes costs on the purchasers of new homes in terms of compliance costs and barriers to innovation in design, materials and construction techniques.

The Productivity Commission notes that the Law Commission has been asked to undertake a more general review of joint and several liability following a review of the application of joint and several liability to the building and construction sector by Buddle Findlay and Sapere Research Group, 2011. The Productivity Commission recommends that in undertaking its review, the Law Commission give regard to the impact of joint and several liability on the incentives faced by regulators.

### R9.2

The Law Commission give regard in its review of the application of joint and several liability on the incentives faced by regulators.

As noted in Box 23, another important component of the package is the introduction of mandatory written contracts for all residential building work and a requirement for builders to disclose information about their skills, qualifications, licensing status, track record, financial back-up or insurance and dispute history. An update from the Department of Building and Housing in July indicated that the threshold for contracts would be set at \$20,000 (Department of Building and Housing 2011b). While an amendment to the Building Act provides for contracts, it does not specify the threshold above which they will be required. This will be specified in the relevant regulations. While the threshold should be based on analysis of factors such as the transaction costs involved in writing contracts and their benefits in enhanced consumer protection and the clarification of responsibilities, the \$20,000 threshold originally considered is a significant outlay for consumers and seems a sensible option for the analysis to consider.

It is difficult to know the extent to which the proposed reforms will affect the behaviour of BCAs, building practitioners and consumers. Moreover, behavioural changes, for example home owners using the information available to them to understand and manage the risks associated with building work, can take some time to become established. The Department of Building and Housing’s monitoring and evaluation programme is establishing baselines against which the impacts of the reforms can be assessed.

Notwithstanding the difficulties in measuring the extent of behavioural changes as a result of the reforms and the time it takes for behaviour changes to become fully embedded, the Commission recommends that the Department of Building and Housing report on its ongoing evaluation of the reforms on the allocation of risks between parties to building work five years after introduction.

### R9.3

The Department of Building and Housing report on its ongoing evaluation of the reforms on the allocation of risks between parties to building work five years after introduction.

<sup>105</sup> Even with the introduction of mandatory contracts for work over a specified sum, civil claims can still be made. As before, a BCA can be held liable in a civil claim if there is a duty of care to the client, that the failure to take care caused the damage, the damage caused the loss to the client and that the loss was foreseeable.

## 9.7 Is there scope to improve the impact of regulation on innovation?

### Establishing an alternative solution

The Building Code can affect incentives to innovate in building design, materials and construction methods.

Offering either an acceptable solution or an alternative solution route for compliance with the Building Code appears, conceptually, to suit the nature of the building industry in New Zealand. From an efficiency perspective, firms with a *high capacity to innovate* (because they are able to experiment with different approaches, to appropriate the profits, and can quickly assess success or failure) will choose the alternative solution route. This is more likely to be the case for larger firms. The regulations tell them what standard they need to comply with and they have incentives to find a least cost way of meeting the standard. However, there are benefits for the many small firms in the industry in simply 'following the rules' by using a prescribed acceptable solution, as long as the Building Code is clear.

The question is whether, in its implementation, the dual approach unnecessarily impedes innovation and whether there are ways to reduce these effects. Participants' comments suggest there may be some problems (Box 25):

- The process through which alternative solutions are deemed to meet the Building Code is more costly and complicated than the acceptable solutions approach and may be more costly and complicated than it needs to be.
- BCAs provide insufficient guidance about what it takes for an alternative solution to comply with the Building Code.
- BCAs are inconsistent in interpreting the Building Code and it takes too much time.

#### Box 25 Participants' views about the impact of regulation on innovation

Innovation is hampered because there are lower compliance costs associated with low-risk building designs and building systems that comply with Compliance Documents (acceptable 'stock' solutions rather than alternative 'design-led' solutions). There are also productive-efficiency enhancing innovations, in the form of standardisation and mass production, which can be hampered by inconsistent interpretations across local authorities. (sub. 55, p. 33)

Many designers and builders are reluctant to go beyond the current code [acceptable solution] for fear of extra upfront costs and compliance complications involved with different innovative designs. The fears can significantly impact the achievement of better performing homes which in turn impacts the running costs and therefore the affordability of housing. (New Zealand Green Building Council, sub 60, p. 5)

Unnecessary costs and uncertainty generated by local authorities' interpretation of the design principals [sic] is a major contributing factor to time over runs and budget increases. On an AHNZ subdivision the town engineer wanted us to investigate the use of a gravity fed sewer to a different connection point. This took one month and cost over \$5000 with consultants plus holding costs to only find the original approved sewer was the best design. (Affordable Housing New Zealand, sub.12, p. 7)

... any variation from NZS standards sends the project costs and timeframes spiralling upward, so many developers just stick to the book. (Affordable Housing New Zealand, sub.12, p. 7)

Given that the alternative solution approach is designed to encourage innovation, it is important that this process works smoothly. The Department of Building and Housing has issued guidance both to those applying for approval of an alternative solution, and to BCAs assessing and approving those applications. It is up to the applicant to establish that the product or method they wish to use is compliant with the Building Code, either by:

- providing expert opinion (based on testing and analysis) that the product is compliant;

- explaining that the proposed method or material is relevantly similar to current means of complying with the Code, appealing to precedent; or
- demonstrating that the product performs well where it is already in use, and would perform similarly in the conditions specific to the proposed project.

In turn, the BCA must assess whether the applicant has identified all relevant parts of the Building Code, and has demonstrated that the product will meet the requirements of the Building Code. The DBH guidance includes notes on things to look for (such as whether the results of tests performed in other countries would be relevant in New Zealand conditions). The guidance is silent, though, on what sufficient proof would be. Although tests and expert opinions are an obvious way of demonstrating compliance, how a BCA decides how relevant and reliable that information is causes significant uncertainty and cost for applicants.

An alternative to taking a case-by-case approach to assessing compliance of alternative solutions is to have new materials or methods pre-certified for use by a central authority or system. This enables applicants and BCAs to have confidence in those products, without needing to seek further testing or expert opinions. The CodeMark programme (and former product accreditation programme) does just this.

Under the CodeMark programme, a producer of a new building material can apply to an accredited assessor to have their product certified as Building Code compliant (if the product is used properly). Under the Building (Product Certification) Regulations 2008, the product must then be treated by BCAs as Code compliant, and consented for as such. The same is true for product certificates of accreditation issued under the Building Act 1991.

Few products have been certified under both regimes. As well, all the incentives are for product manufacturers, rather than applicants through the building consent process, to seek prior accreditation. It is not efficient for a developer or building company to seek certification for someone else's product each time they wish to undertake an alternative method of building. In a practical sense, the time it would take and information requirements would not necessarily be less than going through the consent process without certification. Product accreditation has not provided a timely and cost-effective means for builders and developers to pursue alternative means of complying with the Building Code.

Outside these systems, the BRANZ website contains a range of information about research on building materials and methods, and other matters relevant to the building industry.

It appears that building and design professionals are largely reliant on their own experience and the experience of their peers for learning about and determining how best to move to a new or non-standard technique through the building consent process. While this is to an extent inevitable, the costs of using this process would be lower if there was more detailed guidance about what is required for an alternative solution to comply with the Building Code. Accordingly, the Commission considers that it would be worthwhile for the Department of Building and Housing to develop such guidance.

#### R9.4

The Department of Building and Housing should provide more specific guidance for Building Consent Authorities about what is required for an alternative solution to comply with the Building Code.

## Site specificity and the Building Code

Achieving approval for an alternative solution is further complicated by the site-specific requirements of the Building Code. This has contributed to the low uptake of the 'Multi-proof Building Consent' – a scheme introduced in 2010 to produce time and cost savings for volume builders by removing the need for the same or similar building designs to be repeatedly assessed for compliance by individual BCAs (Department of Building and Housing, 2011c). However, while inquiry participants supported the principles behind the Multi-proof consent, none had been able to make use of it. Builders reported that Multi-proof consents were not flexible enough to accommodate site-specific requirements and minor design changes sought by

consumers. One group builder also noted that the cost of obtaining a Multi-proof consent for all of their standard plans was prohibitive.

To explore this issue further, the Commission investigated the process a developer would have to follow, to secure approval to import entire houses 'flat-packed', to be assembled on-site. In this case the innovation is not a product, but a building system that has the potential to take advantage of scale economies in another country, lowering cost, and potentially also improving quality in that the components are built in factory-controlled conditions.

The developer would have to seek an alternative solution and the houses would have to comply with the Building Code for the site. Because the Building Code is site specific, there would be very different requirements depending on the topography – for example, wind and seismic variations which impact on the amount of bracing required. A solution would be to 'spec up' each house to the maximum possible requirements to suit every site, but this would be expensive and may negate many of the advantages in the economies of scale from flat-packed houses.

The question is whether it is possible to devise approaches that allow site-specific requirements to be met without sacrificing economies of scale. The Multi-proof building consent process was intended to help with this problem, but on the evidence available to the Commission has not been effective. It is possible that this reflects the short time that this process has been available, and that some 'success stories' would encourage more take-up. There is a requirement for the Department of Building and Housing to review aspects of the Multi-proof process in 2012. The Commission recommends that given the need to devise approaches that allow site-specific requirements to be met without sacrificing economies of scale, the review of the Multi-proof approach identify the barriers to its application, and suggest ways to overcome these barriers.

**R9.5**

The Department of Building and Housing should review the Multi-proof building consent process with a focus on identifying barriers to its application, and suggesting ways to overcome these barriers.

## Improving feedback loops

Efficient feedback loops are vital for the fast dissemination of productivity-enhancing innovations, but it is even more important that they allow for fast dissemination of *failure*. The experience with leaky building syndrome is illustrative.

It is estimated that between 22,000 and 89,000 homes built between 1992 and 2005 are affected by leaky building syndrome, although a consensus view puts the likely figure at 42,000 homes. The cost of repairing these homes is estimated at \$11.3 billion (PricewaterhouseCoopers, 2009). In this case the innovation was unsuccessful and the feedback loop which could have alerted the building industry to concerns was too slow and too weak to change building practices. This point was made strongly in the Commission's meeting with HOBANZ, who argued that if part of an aeroplane failed that information would be circulated around the world in a matter of hours. There seems to be no such mechanism to report defective materials or building processes. The leaky building issue emerged in the US, Germany, Japan and Canada as early as 1975.

## Could a similar situation happen again?

Research on New Zealand's performance-based building control system by Mumford (2011) describes the move from prescriptive to performance-based building regulation in 1991. In the traditional standards-based regulatory regime:

Standards bodies produced standards; designers designed to standards; builders built to standards; regulators checked against standards; and consumers relied on all these participants to produce a building that was fit for purpose. (Mumford, 2011, p. 185)

Mumford argues that the introduction of the performance-based regulatory regime redefined roles without changing the embedded expectations, and hence behaviours, of participants. What are the expectations of a performance-based regime?

There was an assumption that the various participants ... in particular front-line regulators, designers, builders and consumers, had the necessary knowledge ... to make judgements that standards committees, in the past, had made on their behalf. (Mumford, 2011, p. 184)

Mumford also reinforces the point about knowledge diffusion:

The problem of dispersed knowledge could be described as an institutional problem: existing institutions for aggregated, evaluating, codifying, and diffusing knowledge had been sidelined and no substitute had been put in place. (Mumford 2011, p. 185)

The Commission believes that while the leaky building episode occurred at a time when participants were adjusting to new roles, responsibilities and new skills, it is also evident from submissions and engagement meetings that the building sector continues to grapple with the issues of knowledge diffusion and capability. This reduces the risks that can reasonably be taken in the adoption of innovations. A key performance element in a future successful residential building consent and inspection process must relate to the development of rapid and effective 'feedback' mechanisms which enable emerging deficiencies in building standards to be identified, diagnosed and remedied promptly.

The feedback loops for diffusing knowledge about innovation are complicated and heavily affected by features of the building industry that are beyond the government's influence. However, the government could consider ways of improving the spread of information through the consenting and inspection process.

**Q9.1**

How can we get fast diffusion of knowledge about what works and what doesn't? Are there ways of improving feedback loops about building innovations?

## 9.8 Is there scope to reduce the diseconomies of many small BCAs?

Currently, 69 local authorities process around 80,000 building consents each year, but with most processed by larger metropolitan local authorities. Almost all BCAs separately establish and manage their own systems and processes, and they compete in the labour market to maintain sufficient capacity and capability to carry out their functions. Small BCAs may:

- Face challenges in acquiring, retaining and supporting the necessary skills, experience and technology to perform these tasks to a high standard. "A number of councils face difficulty in attracting and retaining staff with the appropriate level of skill and experience, and in maintaining effective systems" (Department of Building and Housing, sub.55, p. 9).
- Be unable to take advantage of economies of scale. "Given the low volume of consents processed in some centres, and the application of national building standards, the Department considers that there may be significant economies of scale in a more consolidated approach and has undertaken work to investigate the potential for investing in productivity-enhancing technologies, systems and processes. These potential efficiencies are being foregone [sic] under the status quo" (Department of Building and Housing, sub. 55, p. 9).
- Be more prone to inconsistent interpretations of the Building Code.

Some submissions (for example Carrus Corporation Ltd, sub. 8, p. 12) and engagement meetings pointed to an adversarial relationship between architects/developers/builders and BCAs. While this is not necessarily a consequence of the small scale of regulators, it may be a contributing factor if it is adding to difficulties in retaining staff and to inconsistencies in interpretation of the Building Code. It is almost certainly likely to hinder diffusion of knowledge, which has been identified as critical for the success of performance-based building regulation.

The Department of Building and Housing is exploring opportunities to drive greater national consistency and efficiency in the building regulatory system. It notes that while efforts have been made to consolidate building consent functions, the pace of consolidation has been slow (sub. 55, p. 34). The Commission considers that there could be large benefits from a faster pace of consolidation. The slow progress so far



could indicate either institutional barriers to consolidation or that the gains are not as large as may first appear. The Commission would welcome more information about the advantages and disadvantages of consolidation.

The Commission is also interested in the potential for a contestable market for building consenting and inspection services, either from private building certifiers or from home owners being able to access services from any registered BCA, not just the BCA associated with the local territorial authority.

**Q9.2**

What are the potential advantages and disadvantages (and current barriers) to the consolidation of BCAs?

**Q9.3**

What are the potential advantages and disadvantages from a contestable market for building consenting and inspection services, either publicly or privately provided?

## 9.9 Measuring the outcomes of regulation

There is surprisingly little information available about the quality of New Zealand's housing stock. In previous chapters, the Commission has referred to the information about quality prepared by BRANZ and to Statistics New Zealand's general social survey information on attitude towards homes and neighbourhoods. It has not, however, found other information about either the quality of housing or of consumer satisfaction with the quality of the built product or of builders' project management. This information gap compromises efforts to assess whether building outcomes are improving, owing to the efforts of the building industry and its interactions with the regulatory framework.

The Commission considers that increased effort on data collection about the quality of the housing stock and consumers' experience of the building industry would generate information that would inform policy making and assist assessment of the performance of the industry and of the regulatory framework. Statistics New Zealand is the most obvious agency to collect this information, and is also well placed to compare the costs and benefits of improving the data in this area with other priorities.

**R9.6**

Statistics New Zealand consider collecting more information about the quality of New Zealand's housing stock and consumer satisfaction with the residential construction industry.

## 9.10 Overall assessment

The Commission has considered building regulation from the perspective of how much it is adding to the cost of housing, but also the whole-of-life benefits that it generates. The standards of safety, durability and amenity expected of housing will reflect the value society places on those attributes. What is important is that the costs as well as the benefits are fully considered in updating the Building Code, because the costs of housing regulation add materially to the cost of housing.

An important consideration is how much the regulatory environment encourages cost-lowering or quality-enhancing innovation. The Commission's analysis suggests that while the dual approach to complying with the Building Code is a good one, the 'alternative solution' route is complex and may be a barrier to some innovators. More generally, the Commission notes that the conditions for innovation – scope for experimentation with a diversity of approaches and appropriable profits – may be significantly impaired, if not absent, in New Zealand due to issues of scale, but this finding should spur the industry and the regulator to find ways in which this problem can be overcome.

The move to a performance-based regulatory regime has highlighted the importance of mechanisms for the dissemination of knowledge and, more importantly, high levels of expertise and judgement. Submissions and the Commission's engagement meetings point to continuing capability issues in the New Zealand

building sector and among those administering and enforcing building regulations, and in some cases poor relationships between the parties, leading to inefficiencies.

These inefficiencies, combined with an unbalanced allocation of risk in residential building, have led to higher costs. The Government is in the process of introducing a number of reforms to the regulatory environment to address these issues. However, once embedded, these will need to be evaluated for their efficacy and impact on cost.

The Commission has considered whether there is scope to reduce the costs of administering and enforcing regulation. The scope for efficiencies in the building consent process, including better systems and processes and up-skilling of the work force, may be inhibited by a lack of scale in many areas of the country. Finding ways of more effectively administering New Zealand's performance-based building regulations is worth considering to enable desired regulatory outcomes to be achieved with lower costs.

# 10 The performance of the building industry

## Key points

- The performance of the building and construction industry plays an important role in the supply, quality and cost of new housing. Industry performance is also important for the improvement, alteration and maintenance of existing rental, social and owner-occupied housing.
- Industry productivity performance is flat-lining, and this is reflected in growing building costs, and evidence of poor building quality. During the recent housing boom building costs increased above the general rate of inflation, and residential building costs are higher than in Australia.
- Building materials are more expensive in New Zealand than they are in Australia.
  - In part, this can be explained by the small size of the New Zealand market and the small scale of major material manufacturers.
  - It is unclear whether additional competition in the materials industry would reduce the costs. The Commerce Commission investigates concerns about the behaviour of material suppliers and has found no breaches of the Commerce Act.
- The trend in New Zealand toward larger and higher specification housing increases building costs.
- The small scale and fragmented nature of the New Zealand building industry contributes to high costs.
  - The industry is dominated by small firms which build one house at a time, are unable to generate economies of scale, and often lack management capability.
  - The industry is fragmented vertically which presents difficulties in the management of the supply chain.
  - New houses tend to be bespoke one-off designs. Building costs can be reduced through greater uptake of standardised designs and building techniques.
- The industry is subject to significant demand cycles, making investment in firm expansion and the recruitment and retention of skilled staff difficult.
- The industry suffers from a number of skill issues, particularly at the management level. The misalignment between industry business cycles and industry training can result in skill shortages during booms and excess staff during periods of downturn.
- The construction industry and government have identified productivity growth as a priority and have established the Building and Construction Sector Productivity Partnership to develop practical proposals to address productivity issues.

## 10.1 Introduction

This chapter examines one part of the housing supply chain: the building and construction industry, and the role that it plays in the housing market. More specifically, the chapter seeks to identify mechanisms to improve the productivity of the building industry. Better productivity can increase affordability by improving the quality of building work, and by reducing residential construction costs. When referring to residential construction costs, this chapter is primarily concerned with the major inputs to residential building work, which are materials, labour, sub-contracted work and other costs such as overheads and profit margins. These costs account for roughly 55% of a typical house and land package, with land, development levies and consent fees comprising the major components of the remaining 45% (Page, 2008).

Reducing the construction costs of new housing is not a simple or straightforward task. A high proportion of building costs are fixed, and there was agreement among inquiry participants that any efforts to reduce costs should not come at the expense of building quality. But the Commission believes that there is scope to improve the productivity of the residential building sector and reduce construction costs without compromising building quality. While the extent to which construction costs can be reduced is difficult to quantify, improvements in this area alone are unlikely to provide a complete solution to affordability issues. Rather, measures designed to improve industry productivity and reduce construction costs should be seen as just one part of improving housing supply.

The chapter begins by outlining how industry performance influences housing affordability. Section 10.2 examines trends in both the cost of building a standard home, and individual building cost inputs. Section 10.3 examines the performance of the building industry and the extent to which there may be scope for improved productivity. Major barriers to improved productivity are identified in section 10.4 and initiatives to address these barriers are presented.

### How industry performance influences housing affordability

Improved industry productivity has potential to influence housing affordability in two main ways. First, it removes a potential 'blockage' from the supply of new housing. If building costs are too high, existing home owners may choose not to upgrade to newly built housing, thereby increasing demand for existing stock. In essence, the construction of new housing frees up older more affordable housing for traditional first-home buyers.

Improved productivity may also increase the ability of the residential construction industry to respond to middle-low income households which aspire to home ownership. As discussed earlier (Chapter 1, Box 2) over 80% of new dwellings are valued in the upper two quartiles of the total housing market, meaning that new housing is generally well beyond the reach of middle-lower income households. While a number of changes will be required to address this missing rung on the housing ladder, improved industry productivity and reduced construction costs are an important part of the equation.

### The wider role of the industry

In addition to building new houses, the residential construction industry also plays an important role in the improvement, renovation and maintenance of existing housing. Inquiry participants noted that these whole-of-life housing costs are an important component of housing affordability:

The Commission should also not restrict their interpretation of affordable housing to first up costs ... Ongoing operational ... and maintenance costs must fall within any definition of affordable housing. (Cement and Concrete Association of New Zealand, sub. 27, p. 3)

As discussed earlier (Chapter 2), many New Zealand houses are old, cold and poorly maintained, meaning that maintenance costs are particularly relevant for some home owners. Likewise, changing preferences and changes to household composition mean that existing housing is increasingly out of sync with New Zealand's demographic profile (Chapter 4). As such, retro-fitting existing housing to meet changing demand is likely to be a key role for the construction industry in the coming years.

The productivity performance of the residential construction sector also matters to New Zealand's wider economy. The construction industry as a whole employs 8% of New Zealand's workforce and accounts for 4% of GDP (PWC, 2011). In a typical year, the residential construction sector will usually build around 24,000 new homes, renovate approximately 32,000 existing homes, and engage in around \$6 billion worth of building work (BCSPP, 2009; Statistics New Zealand, 2011a). In addition to regular demand for new buildings and other renovation work, there will be significant challenges for the residential building sector over the next five to ten years (Box 26).

#### Box 26 **Big issues for the residential building sector**

##### *Increasing demand*

Consents for new housing have dropped to very low levels over the past five years. As a result, industry representatives have suggested that pent-up demand will result in building work increasing sharply over the next five years.

##### *Leaky buildings*

Estimates suggest that approximately 42,000 houses built between 1995 and 2005 have weathertightness issues and require repair (Chapter 9). The Government's Weathertight Homes Financial Assistance Package has been available since mid-2011, and this is expected to generate significant demand for repair work, particularly in Auckland.

##### *Canterbury rebuild*

The Canterbury earthquakes caused significant damage, with the Earthquake Commission receiving 366,000 claims for damage to residential buildings. The Canterbury rebuild is expected to drive a significant upswing in building and construction activity in Canterbury over the next five years. In addition, it is likely that other New Zealand towns and cities will also review the seismic risk of their buildings, which might place additional pressure on the capacity of the residential building sector.

*Source:* Productivity Partnership Draft Research Action Plan, 2011; Earthquake Commission; Registered Master Builders Federation, sub. 16

## 10.2 Are building costs increasing?

Inquiry participants presented a range of views regarding residential construction costs, but most noted that building costs have increased:

Construction costs increase on an incremental scale they constantly ratchet upward, there are never any decreases. (Affordable Housing New Zealand, sub. 12, p. 8)

The cost of residential construction is now much higher than it was in the past. (Tauranga City Council, sub. 19, p. 7)

The Registered Master Builders Federation also notes that building costs have increased, but not unreasonably:

Construction had to expand rapidly in the early-mid 2000s to meet increasing demand. At its peak there was pressure on resources and costs increased as a result. However, we do not think the cost increases were excessive or highly out of kilter with other sectors of the economy at that time. (sub. 16, p. 13)

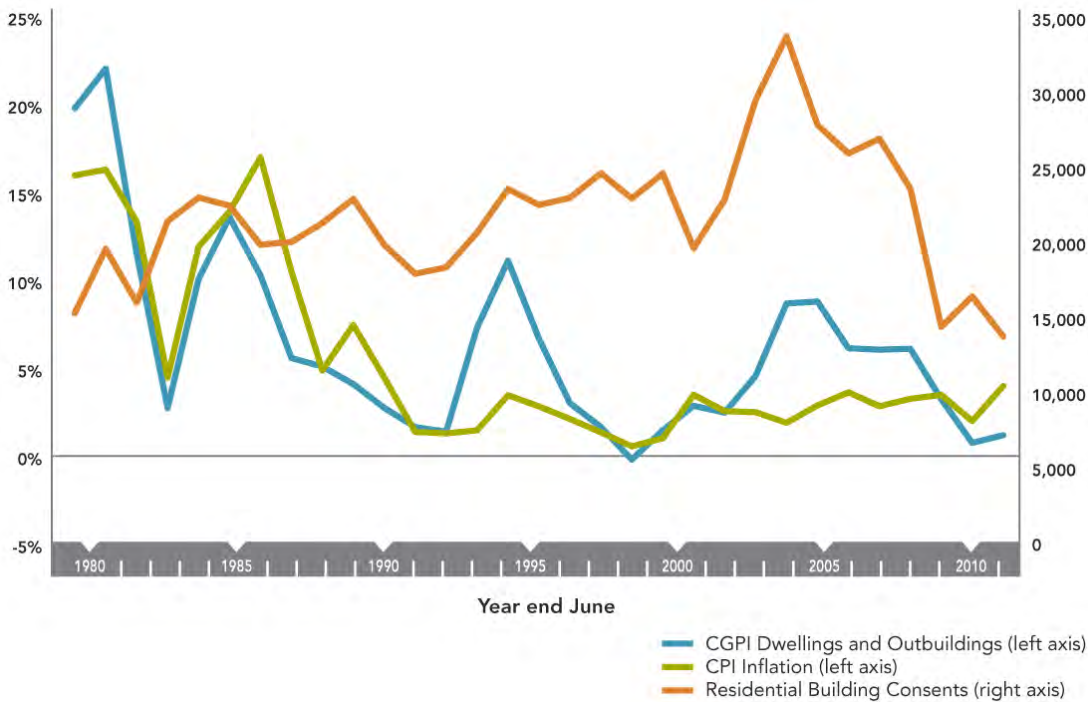
The following section examines residential building costs by:

- Examining how the cost of building a standard home has changed over time.
- Examining changes in the individual cost components of the residential construction process.
- Comparing New Zealand's building costs with those in Australia.
- Considering other factors which influence construction costs.

## The cost of building a standard home has increased

Figure 10.1 (left axis) shows the nominal trend for Statistics New Zealand's Capital Goods Price Index (CGPI) – dwellings and outbuildings measure<sup>106</sup> since 1980 relative to the overall Consumer Price Index (CPI). During the past 25 years, growth in residential construction costs has averaged 4.33% per year, which is higher than CPI growth which averaged 3.52% per year. Figure 10.1 shows two distinct periods where growth in construction costs out-paced CPI growth. Between 1993 and 1998, construction costs grew at an average annual rate of 5.76% compared with CPI growth of 2.09% per year. During the recent housing boom (2003–2008) construction costs grew at an average annual rate of 6.95% while CPI growth was 2.73% per year.

Figure 10.1 Construction costs, building consents and inflation



Source: Statistics New Zealand

Included in Figure 10.1 (right axis) is the number of building consents granted each year. Building consents peaked in 2004 and this demand correlates with the growth in construction costs seen between 2003 and 2008. The period of strong cost growth during the mid-1990s was also preceded by an increase in demand, with consents increasing from 17,650 to 23,250 between 1992 and 1995.

## All of the major building cost inputs have increased

The Commission has assessed a breakdown of cost inputs into the construction of a new house since 2002 (Figure 10.2). This was provided by a group house builder for a standard 190m<sup>2</sup> house which has changed very little over the time period. The four cost components are:

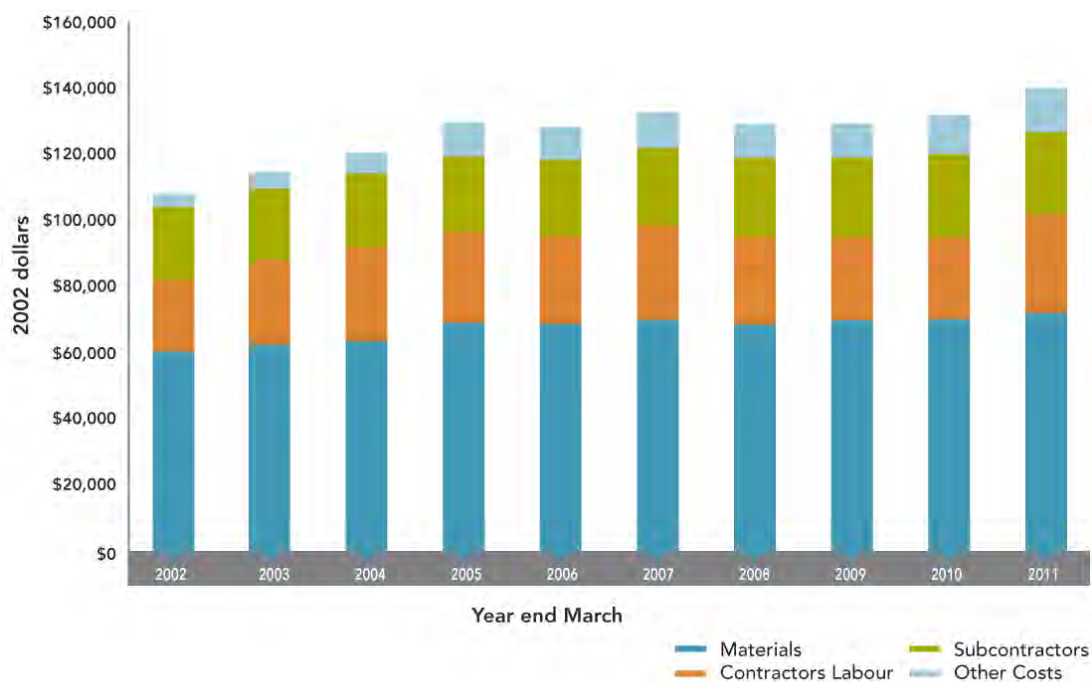
- Materials installed by the builder
- Contractors' labour
- Subcontractors and the materials they install

<sup>106</sup> The CGPI – dwellings and outbuildings measure represents the output price of a standard house including construction components, defined fittings, labour costs, sub-contractor charges, consent fees and other local authority charges, other administrative costs and profit margins. The index is based on a quarterly survey of approximately 140 builders from across the country who are asked to provide a quote for a standard-plan house that they build regularly. When the price for the quote provided changes, respondents are asked to indicate the reason for the change which enables Statistics New Zealand to remove any price changes that can be attributed to a change in quality (CHRANZ, 2011).

- 'Other costs' which include consent fees, building levies, drawings, and occupational health and safety requirements (BRANZ, sub. 40).<sup>107</sup>

As shown in Figure 10.2, total construction costs have increased by 30% in real terms during the past nine years. Consistent with the CGPI shown in Figure 10.1, there was a sharp increase in costs during the period from 2002–2005, while prices remained relatively constant from 2006–2010. While all of the cost inputs have increased in real terms, increases in contractors' labour (37%), materials (19%) and subcontractors (13%) are relatively modest. 'Other costs' have increased significantly (241%); however, these costs remain a relatively small proportion of total building costs.

Figure 10.2 Cost components of a standard new house, 2002–2011 (in 2002 \$)



Source: BRANZ, sub. 40

BRANZ suggests that around one third of cost input growth is due to compliance costs brought about primarily by amendments to the building code and new occupational health and safety requirements. There is a range of evidence which does suggest that regulatory changes have increased the cost of building. In particular, additional compliance costs such as consent fees, inspections and drawing documentation account for a significant proportion of the growth seen in 'other costs' (Chapter 9). However, these factors only account for part of the cost increases seen in recent years. The other drivers of residential building costs are now examined further.

### Building materials

Materials account for around half of all residential construction costs. Figure 10.2 shows that material costs for a standard home (excluding those installed by sub-contractors) have increased by a total of 19% in real terms between 2002 and 2011. However, around one third of this increase is due to changes in the nature of materials used (for example, the introduction of double glazing to meet revised thermal efficiency guidelines in the building code) rather than the cost of specific materials. As such, real price increases for individual materials appear to have been relatively modest.

In their un-published research paper on residential construction costs, CHRANZ (2011) sourced information about the change in price of essential building materials from two periodicals, the New Zealand Building Economist (NZBE) and Rawlinsons. The results are shown in Table 10.1 and indicate that any increase in the cost of materials is likely to have been relatively minor. The NZBE data suggests that material prices have

<sup>107</sup> These costs exclude marketing, sales and management expenses, infrastructure fees and administration overheads, as such they are significantly lower than the total price that a consumer will pay. The costs presented here are broadly consistent with a similar analysis of building costs from 2002 – 2007 carried out by the Registered Master Builders Federation (see DBH, 2008, p. 18).

increased, with five materials increasing in price in real terms and minor price reductions for two materials. However, there is no clear trend in the data gathered by Rawlinsons, with some material prices increasing and others decreasing.

Table 10.1 Percentage change in key material costs, 1995–2010

Material	NZBE		Rawlinsons	
	Average Annual Compound (Nominal)	Average Annual Compound (Real)	Average Annual Compound (Nominal)	Average Annual Compound (Real)
Concrete	2.10%	-0.10%	2.10%	0.00%
Brickwork	na	na	2.60%	0.40%
Framing Timber	2.40%	0.30%	1.00%	-1.20%
Interior Wall Linings	4.50%	2.30%	1.50%	-0.70%
Wooden Windows	3.30%	1.10%	6.60%	4.30%
Aluminium Windows	5.10%	2.80%	2.80%	0.60%
Roofing Tiles	2.00%	-0.20%	na	na
Iron Roof	3.70%	1.50%	1.10%	-1.00%
CPI	2.20%	0%	2.20%	0%

Source: CHRANZ, 2011

Page (2008) investigated the price trends in building materials over five years from 2003–2008. The most significant nominal increases (greater than 3% per annum) were electrical items, PVC spouting, plumbing items, metal roof cladding and ready-mix concrete. Page suggests that the price trend for some of these materials is likely to be heavily influenced by worldwide demand for these materials. It was also found that the price of some materials is heavily influenced by the price of oil and other forms of energy which increased significantly between 1996 and 2007 (Page, 2008).

While the overall trend in the cost of building materials is for fairly modest increases in real terms, concerns raised by submitters tended to focus on the price of materials in New Zealand relative to Australia:

Building material prices are significantly lower in real terms in both Australia and USA than in New Zealand. (Habitat Auckland, sub. 23, p. 5)

Some material suppliers in New Zealand are selling materials for significantly higher costs than [they] are sold for in Australia (Brady Nixon, sub. 26, p. 2).

The evidence available to the Commission supports suggestions that materials are significantly more expensive in New Zealand. In 2007, Fletcher Building carried out a comparison for a range of common building materials in New Zealand and Australia. Material prices were recorded in large retail hardware stores in Victoria, Queensland and two stores in Auckland (these prices will differ from those used in the industry, as builders will generally source materials below their retail price). When the best Australian price was compared with the best New Zealand price, just six of 34 comparable materials were cheaper in New Zealand. A selection of the findings from the Fletchers price comparison is included in Table 10.2. These findings are broadly consistent with an earlier comparison (Kenley, 2003) which found that after adjusting for the exchange rate, a selection of ten common building materials cost 55% more in New Zealand than they did in Australia.



Table 10.2 Building materials in New Zealand and Australia

Material	Best Australian Price (PPP adjusted to \$NZ)	Best New Zealand Price (\$NZ)	Best NZ price as a % of best Australian price
Pine Framing 6m	\$2.31	\$5.48	237%
Fibreglass Ceiling Batts 8m <sup>2</sup>	\$5.77	\$9.00	156%
Plasterboard (2.7m x 1.2m)	\$14.37	\$25.97	181%
Hardiplank smooth (4200x230x7.5mm)	\$15.90	\$27.72	174%
Plywood (2440x1220x12mm)	\$134.90	\$111.23	82%
5kg Nails	\$34.32	\$18.89	55%
Paint (Interior 4L)	\$63.99	\$94.53	148%

Source: Fletcher Building, 2007.

The New Zealand market has a number of different characteristics compared with Australia which will impact on the price of materials. One factor is New Zealand's small and dispersed population with relatively low demand for construction services and building materials making it harder to generate economies of scale. As a result, local manufacturers are usually unable to produce materials at a scale similar to that of other major manufacturers around the world. For example, the output of New Zealand's two cement plants is well below that of newer plants in a number of other countries (Page, 2008). Although the New Zealand market is generally open to imported substitutes from other countries which can produce materials on a more economic scale, the size and isolation of New Zealand's market presents a number of practical barriers which make this difficult.

Inquiry participants also suggested that despite considerable transport distances, Australian manufacturers are also able to generate cost savings through volume transport using the rail network. In contrast, New Zealand's transport costs are increased due to a lack of transport infrastructure, mountainous terrain and the need to ship materials between the two islands (New Zealand Building Industry Federation, sub. 47; Fletcher Building, sub. 21). Transport costs assume particular significance given the heavy and bulky nature of many building materials.

In addition to the scale of the industry a number inquiry participants raised concerns about the level of competition of the building materials industry (Box 27).

#### Box 27 Competition in the supply of building materials

There are only two major manufacturers of building materials in New Zealand. Taken in combination with the relatively high price of New Zealand building materials, this has resulted in claims that the materials market suffers from a lack of competition. This issue was raised by a number of submitters, most of whom suggested that there is a lack of competition in the materials market that is detrimental to affordability:

##### *Auckland Council*

Having only a duopoly of companies providing construction materials ... has been identified [by some developers] as driving up costs. (sub. 45, p. 12)

##### *Habitat Auckland*

There appears to be adequate competition in the retail/wholesale end of the market but insufficient competition in the manufacturing end and insufficient market size to enable globally competitive pricing. (sub. 23, p. 5)

*Land Solutions Limited*

Costs are high, there is a lack of competition in building materials supply. (sub. 35, p. 10)

However, some submissions suggested that a lack of competition was less of an issue:

*New Zealand Building Industry Federation*

There is a high level of competition ... among building material manufacturers. The market is fully open to overseas competition. (sub. 47, p. 2)

*Fletcher Building*

Fletcher Building manufactures a range of building materials... Most of these products are internationally-available commodities and all of these products are subject to some level of competition or competitive threat from local manufacturers and/or importers... Most of these products also exist in broad market categories where they compete with a range of substitutable products. (sub. 21, p. 11)

Clearly, the optimal level of competition in the supply of building materials is a subject of debate. But the fact that the market for some materials is dominated by one or two suppliers is not in itself, evidence of monopolistic behaviour. Enforcement of legislation (the Commerce Act) that promotes competition in New Zealand's markets is the responsibility of the Commerce Commission. The Productivity Commission understands that although the Commerce Commission has investigated material suppliers on occasion,<sup>108</sup> no breaches of the Commerce Act have been found.

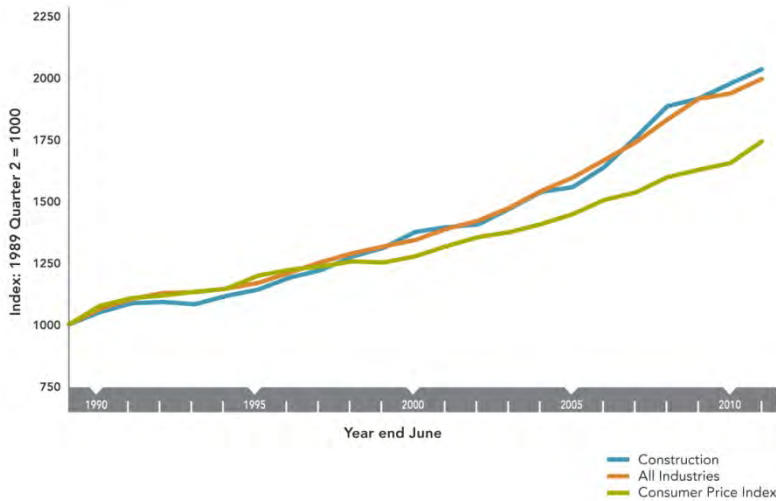
Moreover, the building materials market is 'contestable' in the sense that it is open to new competitors to establish themselves and for imported products and building systems. However, the process for gaining approval (from building consent authorities) for products or systems through an 'alternative solution' can be time-consuming and uncertain (Chapter 9).

## Labour costs

Residential construction is labour-intensive, with labour costs contributing around 20% to the total cost of building a typical house. Figure 10.3 presents the annual change in salary and wages in the construction industry since March 1989 relative to the consumer price index (CPI) and labour costs in all industries. Between 1989 and 2010 construction sector wages increased at an average annual rate of 4.7% which was significantly faster than the CPI, which increased at an average rate of 3.4% per year. But in the long-run, the relative growth of labour costs in the construction industry has been very similar to that of other industries. The periods of strongest wage growth in the construction sector coincide with the mid to later phase of the upswing of the residential property cycle.

<sup>108</sup> The most noteworthy example dates back to a case in 2001 where Carter Holt Harvey was found guilty in the High Court and the Court of Appeal of using their dominant market position to prevent or deter competition in the supply of insulation. But this decision was ultimately overturned by the Privy Council in 2004 (OECD, 2004, p. 9). The Commerce Commission also issued a warning to Fletcher Concrete and Infrastructure Limited in response to allegations of excessive price-cutting in 1998 and 1999 following the introduction of imported cement to New Zealand (Commerce Commission, 2011a).

Figure 10.3 Labour costs



Source: Statistics New Zealand

### Profit margins are also relevant

Although not included in the price breakdown shown in Figure 10.2, it is also important to consider the role of profit margins and how these have changed during the recent housing cycle. As shown in Figure 10.1, the recent housing cycle was characterised by a 30-year peak in dwelling consents. Given the highly cyclical nature of the New Zealand construction industry, it is generally accepted that profit margins will increase during periods of high demand (CHRANZ, 2011).

While there is limited data available on profit margins in the residential building industry, the available evidence does suggest that profit margins were higher during the recent housing boom. Unpublished estimates from Rawlinsons suggest profit margins of 4%–5% between 1999 and 2004, with margins dropping to 3.8% between 2008 and 2010 (cited in CHRANZ, 2011). Page (2008) has estimated construction sector profitability using national accounts data from Statistics New Zealand. This analysis shows construction sector profitability of 10–14% between 1987 and 1995 and 14–16% between 1996 and 2005. Putting aside the significant difference between the two sources, both show higher profit margins during periods of stronger demand, supporting the notion that profit margins were likely to have been higher during the recent housing boom.

### How do building costs compare with Australia?

Another way to consider residential construction costs is to compare the total cost of building a similar dwelling in New Zealand and Australia. **Table 10.3** shows the results of a 2007 study which compares the cost of building a house in Auckland, Melbourne and the Gold Coast (exclusive of GST and builders' profit margins). The findings show that the cost of building a new house in Auckland is around 26% higher than in Melbourne and around 24% higher than on the Australian Gold Coast. These findings date back to 2007 and the intervening four years may have altered the differential slightly, either up or down. But the Commission considers that the differential will not have been removed.

Table 10.3 Cost to build a standard home

Location	Price (Local Currency)	Price converted to \$NZ (PPP adjusted)	% of New Zealand Price
Auckland	\$167,271	\$167,271	100%
Melbourne	\$118,107	\$123,888	74%
Gold Coast	\$121,873	\$127,839	76%

Source: Fletcher Building, 2007

The figures shown above assume that the house is being built according to the local building code. Although there are differences between the New Zealand and Australian building codes, inquiry participants noted that the overall difference in building cost generated by different code requirements is quite marginal. Indeed, the study above also provided estimates for total building costs if the Australian houses were built to the New Zealand building code. In this scenario, the price difference between the two countries increased slightly, which indicates that higher building costs in New Zealand are unlikely to be a result of stricter building code requirements. However, this does not consider the wider administrative and inspection costs associated with the consent process (these costs are considered in Chapter 9).

### Are consumer preferences driving price increases?

Consumer preferences regarding the size and specification of new housing also has an important bearing on construction costs. A number of submissions noted that preferences and expectations about housing have continued to change over recent years; in particular, house size is continuing to grow (ICON Concepts, sub. 6, p. 12). As noted earlier (Chapter 2) the average floor area for new residential housing has increased rapidly, particularly since the early 1990s.

Although larger houses generally cost slightly less to build on a per square metre basis, the additional floor space of new houses does significantly increase construction costs. While building costs will vary on a house-by-house basis, the following example<sup>109</sup> provides an indication of the additional cost of building a 200m<sup>2</sup> home (which is typical of current new builds) relative to a 140m<sup>2</sup> home (typical in the early 1990s):

- A 140m<sup>2</sup> house will cost \$197,680 at a cost of \$1,412 per square metre.
- A 200m<sup>2</sup> house will cost \$257,000 at a slightly lower per square metre cost of \$1,285.
- The cost for an additional 60m<sup>2</sup> of floor space is \$59,320.

In addition to greater floor space, inquiry participants noted that consumers increasingly seek higher-quality and more expensive fit-outs:

We expect 250 sqm, three bathrooms, a media room, two car garages and a pool. Expectations like this are increasing costs. (Brady Nixon, sub. 26, p. 4)

This sentiment is supported by a 2007 survey of new home owners which shows that quality kitchen and bathroom fittings along with total house size and a double garage are the most sought-after house features (Page, 2007).

Although the trend toward larger and higher specification housing can partly be explained by changing consumer preferences, inquiry participants noted that building a relatively inexpensive house can be seen as under-capitalisation given (currently) high section prices (land prices are examined in Chapter 7). Inquiry participants also suggested that the trend toward larger houses may have been exacerbated by developers who increasingly impose covenants relating to house size and quality:

...almost all subdivision in Rolleston requires that houses of 180m<sup>2</sup> or larger be built, regardless of buyer preference. This may inflate the price of houses built or prevent the erection of smaller cheaper homes that would be suitable for some parts of the market. (David Hattam, sub. 11, p. 1)

### Construction costs overall assessment

During the first half of the 2000s, the cost of building a standard house increased at a faster rate than generalised inflation. Increasing costs were generated by growth across all of the major inputs to the building process. There are a number of underlying factors that contribute to the current cost of building, for example:

- Material costs can partly be explained by scale issues, international demand, and the increased cost of natural resources on which the production and transport of materials is dependent.
- Labour costs have increased significantly across all New Zealand industries and this is reflected in higher labour costs in the construction sector (Figure 10.3).

<sup>109</sup> These costs are based on the Department of Building and Housing's building cost estimates for a group home builder in Auckland (DBH, 2011).

- Total building costs are influenced by consumer preferences for increased floor space and higher specifications.

Inquiry participants did voice concerns about the rate at which construction costs are increasing; however, costs relative to Australia were a more prominent source of discontent. Both building materials and aggregated building costs are significantly higher in New Zealand.

#### F10.1

- During the recent housing boom, the cost of building a standard house has increased at a greater rate than inflation.
- The cost of both building materials and building a standard house is substantially higher than in Australia.
- A trend toward larger and higher specification houses is also contributing to increased costs. Factors driving this trend include changing consumer preferences, the use of covenants, and a desire to avoid under-capitalising given current section prices.

### 10.3 There is evidence of poor productivity

Along with concerns about the cost of building, inquiry participants also raised a number of issues relating to the performance of the building industry including:

- Projects exceeding the original budget
- Failure to meet agreed timeframes
- Non-compliant or defective work
- Poor design and layout
- Reliance on lower quality materials which have a shorter life-span and require higher levels of maintenance.

A study conducted in 2010 surveyed 752 home owners who had obtained consents for residential building projects in 2005. 19% of the sample group reported having a 'major dispute' during or after their building project, while 12% stated they had experienced a 'minor dispute' (DBH, 2010). The most common reasons for disputes were non-compliant or defective work, poor workmanship, obligations not being met, and 'unprofessional behaviour'. In the same survey, 49% of respondents reported that the final cost of their project was more expensive than at its commencement (DBH, 2010).

Re-work also appears to be a common problem for new home owners. A survey of 268 new home owners found that 61% required a call-back to address one or more aspects of the building (Page, 2011). The most common issues related to the quality of finishing such as paint defects or problems with fittings. Several industry representatives pointed out that these problems are relatively minor and are unlikely to create health and safety issues. But other inquiry participants suggested that "re-work is re-work," and that the high incidence of call-backs is indicative of poor performance in the industry.

#### Industry productivity is flat-lining

In the case of the building and construction industry, improved productivity can generate greater housing affordability for consumers in the form of lower construction costs, better quality without additional expense, or a combination of both (Davis, 2007). The information presented in the preceding sections suggests that the building industry could perform better on both these counts. Building costs are higher than they were a decade ago, with price increases visible across all of the major cost components of building. There is also evidence of building quality issues with frequent disputes between clients and builders and a high incidence of call-backs to address defective work.

Low productivity in the residential building sector was also raised by many inquiry participants and in a number of submissions:

Productivity is very low and the rework rate high. (Registered Master Builders Federation, sub. 16, p. 13)

The CPI sub-index for construction has risen by much more than the index for all consumer products, while the increase in hourly wages for construction workers since 2000 has been only slightly higher than for the full workforce. This is suggestive of low labour productivity growth in construction relative to the rest of the economy. (The Reserve Bank of New Zealand, sub. 37, p. 7)

Statistics New Zealand has gathered a range of productivity data for New Zealand industries which adds further weight to these findings. Two measures of productivity recorded by Statistics New Zealand (2010) are:

- Labour productivity – which shows the change in the amount of output per hour paid.
- Multi-factor productivity – which shows the contribution of changing management processes and technology towards output growth. It represents the growth in output that cannot be attributed to either labour or capital input.

The New Zealand construction industry has had the second lowest growth rate in labour and multifactor productivity growth rates of all New Zealand's 'measured sector'<sup>110</sup> industries over the last 30 years. Labour productivity has grown at an average annual rate of 0.4% per annum; however, this is offset by a small decrease in multi-factor productivity (Figure 10.4).

Figure 10.4 **New Zealand construction industry productivity growth compared to measured sector (1978=1000)**



Source: Statistics New Zealand

Furthermore, a number of sources suggest that the productivity of New Zealand's construction industry is low relative to other countries. For example, New Zealand Institute of Economic Research (NZIER) estimates that the labour productivity of New Zealand's construction industry was 72% of Australia's construction industry for the period 2001–2006. NZIER measurements also show that the relative productivity performance of the New Zealand construction industry is declining, with labour productivity measured at 95% and 87% of Australia's labour productivity for the periods 1989–1994 and 1995–2000 (NZIER, 2011). Mason and Osborne (2007), measured multifactor productivity levels and growth rates in 21 specific industry sectors and compared them with corresponding sectors in the UK. The productivity of New Zealand's construction industry was found to be between 55% and 60% of the equivalent industry in the UK for the period 1995–2003.

<sup>110</sup> The measured sector includes industries such as transport and storage, manufacturing and agriculture, and covers 80% of the economy. It excludes certain industries due to measurement difficulties, primarily government services.

It is important to note that the information collected by Statistics New Zealand, NZIER and Mason and Osborne shows the productivity of the construction industry as a whole; as such, it does not account for variations in the productivity performance of different construction sub-industries. Similarly, the data does not account for variations in the productivity of different firms within industries. However, evidence from inquiry participants, including representatives from the residential construction industry, suggests that the productivity of the construction industry as a whole is indicative of productivity performance in the residential construction sub-industries. This finding is also supported by Page and Curtis (2011), who examined the labour productivity of 24 construction sub-industries by measuring value-added per person. Their findings show that the productivity of sub-industries involved in residential construction tend to be level with, or slightly below, the average of the industry as a whole.

Hence, although there is potential for further research to uncover the variations in productivity performance between different construction sub-industries, the available evidence suggests that there is considerable scope for productivity improvements in the residential construction industry.

### F10.2

Industry productivity performance is flat-lining, and this is reflected in growing building costs and evidence of poor building quality. Evidence suggests that the productivity performance of the construction industry over the past thirty years has been poor relative to other New Zealand industries, and relative to other jurisdictions.

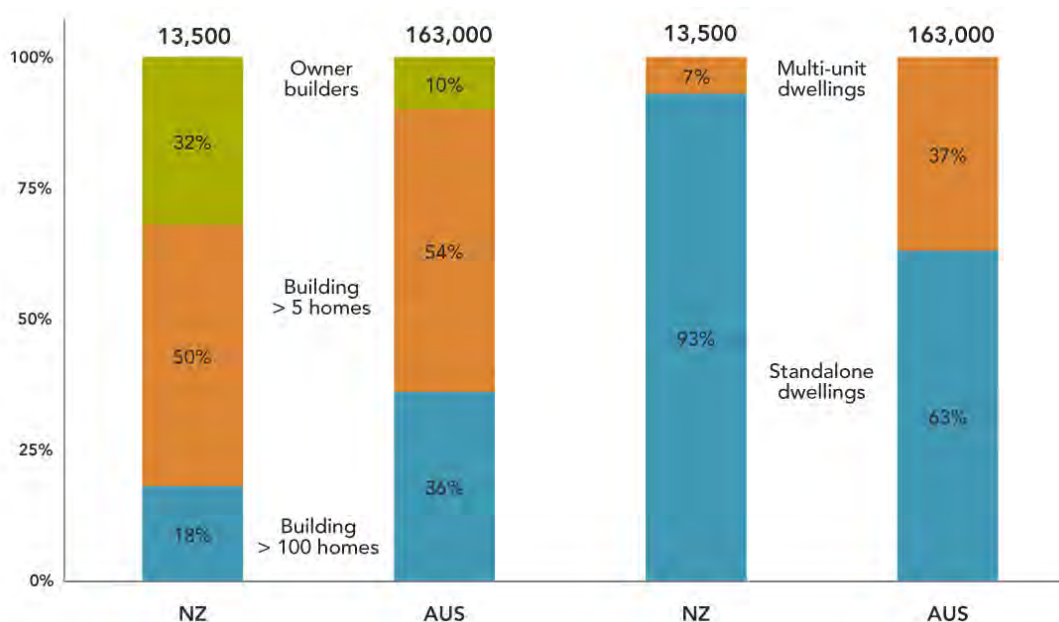
## 10.4 What are the barriers to improved productivity?

As established in the preceding section, a range of evidence suggests that the building and construction industry is not performing as well as it might. The Commission considers that improvements in industry productivity can reduce construction costs and improve building quality. Improved productivity growth is likely to come from three sources, increased industry scale, greater levels of innovation, and an increase in the level and diversity of skills.

### Scale problems of a cottage industry

The New Zealand building industry is dominated by small firms and has been characterised as a “cottage industry” (Fletcher Building, sub. 21, p. 4). Sole traders (with zero employees) are by far the most common firm size in the residential building sector. Conversely, businesses employing more than twenty employees constitute only 9% of total employment (Statistics New Zealand, 2011b). Compared with Australia there is a much smaller proportion of group home builders and multi-unit home designs (Figure 10.5).

Figure 10.5 Estimated size of builders in NZ and Australia and nature of dwellings built



Source: Fletcher Building, sub. 21

As a result of the industry's small scale, most New Zealand building firms are building just one house at a time. In the year to May 2010, 4,604 firms built just one house during the year. In contrast, just thirty firms built more than thirty homes, while only five firms built more than 100 houses (Page and Fung, 2011). The fragmented nature of the building industry can be explained in part by the small and dispersed nature of the market. However, inquiry participants noted that there is scope for group-home builders to gain a greater share of the residential construction market in New Zealand, particularly in the main centres. Indeed, a slight increase in the proportion of the house construction workforce employed by larger firms over the past ten years suggests that larger firms may be starting to gain a greater share of the market (Page and Fung, 2011).

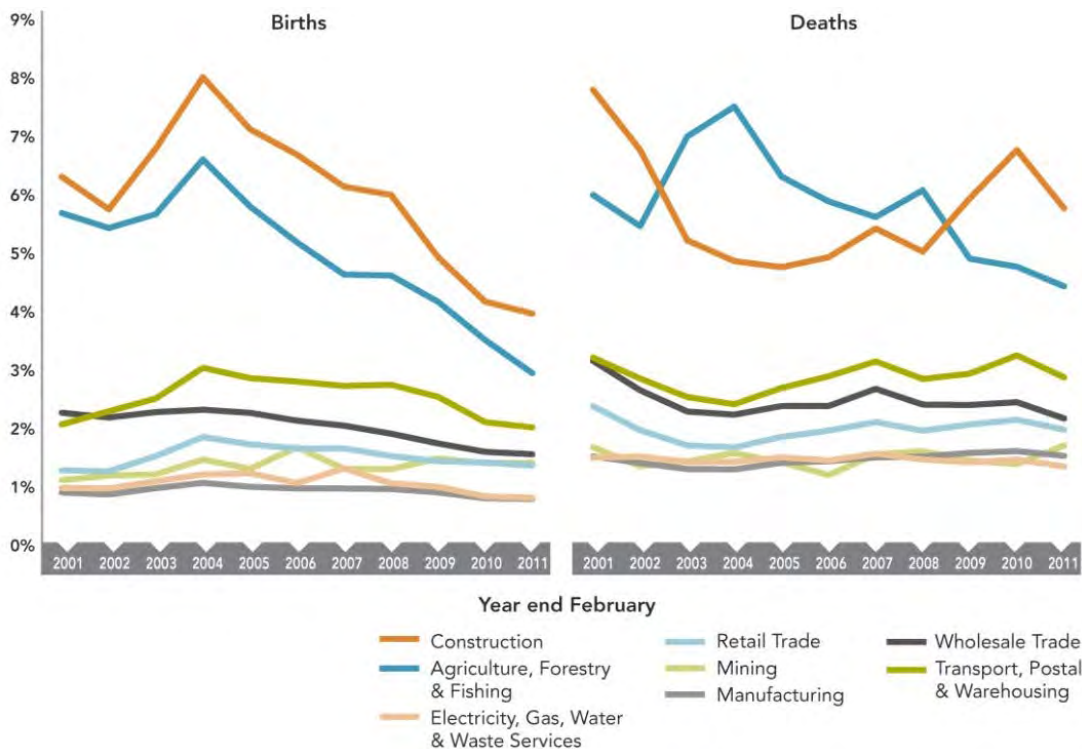
Larger firms are able to generate cost reductions through more efficient organisation of sub-contractors, and working on several houses sequentially which results in less downtime (Page and Fung, 2011). Conversely, many smaller firms "do not have the capability or capacity to implement good management and quality control systems" (Registered Master Builders Federation, sub. 16, p. 13). Inquiry participants also noted that larger firms have the ability to purchase at a greater scale, particularly materials, with one large building firm estimating that they are able to reduce material costs by 10–15% through "smart buying".

Larger building firms are also able to generate scale efficiencies from building large numbers of houses on the same site. This creates efficiencies from repeating building processes, and also allows the different parts of the supply chain to work sequentially on different projects, resulting in fewer time delays. In order to achieve this, builders require "sufficient developed land to be available to leverage their model across multiple build sites" (Fletcher Building, sub. 21, p. 3). Inquiry participants noted that it is rare for land areas of this size to be available (Saltburn Limited, sub. 7; Fletcher Building, sub. 21).

Another issue associated with the small scale of the residential building sector is a high level of 'employee job churn' with staff turnover rates particularly high in smaller firms (BCSPT, 2009). Inquiry participants noted that the industry's low entry and exit costs allow small operators to enter and exit the industry without incentives to establish a good reputation through quality work. While data specific to residential building is not available, evidence from Statistics New Zealand's business demographics dataset about the construction industry as a whole does support suggestions of high firm turnover. Figure 10.6 shows the number of firm births and deaths as a proportion of total employees in the industry. Alongside agriculture, forestry and fishing, the construction industry has the highest proportion of firm births and deaths.



Figure 10.6 Firm births and deaths as a proportion of total employees in New Zealand industries



Source: Statistics New Zealand

### Customised house design

A number of inquiry participants noted that one of the major factors contributing to high New Zealand construction costs is the tendency to build houses according to one-off bespoke designs:

We build too few buildings of standard type design to encourage the capital investment in large scale prefabrication or standardisation. (Registered Master Builders Federation, sub. 16, p. 13)

Home designs are much more customized than in Australia. This appears to be driven by the significant role played by small developers and owner builders, as well as scale home builders responding to consumer preferences. (Fletcher Building, sub. 21, p. 4)

Approximately 45% of new detached houses are one-off designs built by small-scale builders. The remaining 55% are built by builders erecting more than one house per year, most of which include at least some measure of repetition (Page and Fung, 2011). While there was agreement among inquiry participants as to the prevalence of custom-designed housing, participants were divided as to what was driving this behaviour. Some inquiry participants noted that consumers have a preference for individuality in home design and construction, and although standard designs are available, consumers will prefer to make their own changes to these designs. On the other hand, others suggested that builders offer little price premium for standard designs as they are able to achieve better profit margins on custom-designed builds. It is likely that a combination of these factors contributes to the dominance of bespoke housing in New Zealand.

Although uptake of standard house designs has been minimal, it is generally understood that standard designs can generate significant cost savings. Page (2008) argues that major builders are able to construct standard houses, on average, 15% cheaper than one-off designs typically provided by small-scale builders. Other sources suggest that group builders can generate savings of up to 25% (Maltbys, 2010).

Page and Fung (2011) examined the relationship between per square metre building costs and the number of houses that a firm builds each year. They found the one-off designs were around 8% more expensive than houses built by medium-sized firms (8–30 houses per year). Interestingly, larger group builders (building more than 30 houses per year) were more expensive than medium-sized builders; however, they were still around 5% cheaper than one-off builders. The price premium achieved by group builders offering standardised house designs is partially reduced by the fact that only 11% of such houses are built without changes to the plans. The average cost increase associated with plan changes is just over 4% (Page and Fung, 2011).

Inquiry participants also noted that the cost of standard house designs could be further reduced if the building consent process was streamlined for standard pre-approved designs (Chapter 9).

### F10.3

The lack of scale in the New Zealand residential construction industry presents a significant barrier to productivity growth.

- Small builders are less able to generate economies of scale.
- Scale home builders can reduce construction costs through the delivery of standardised housing, but scale building firms occupy a comparatively small share of New Zealand's building market.
- A lack of available land can present a barrier to productivity through inhibiting the development of group home builders and scale developments.

## Innovation in building systems and techniques is required

Innovation in construction firms is relatively low (Page, 2010) and a number of inquiry participants suggested that greater innovation is required to improve industry productivity:

...increasing creative, robust innovation is essential to improving the market. (Tim Robinson, sub. 56, p. 3)

Two areas with particular scope for productivity-enhancing innovation are management of building processes, and building materials and techniques.

### Innovative approaches to supply chain management

The industry is fragmented vertically with a reliance on an increasing number of different sub-trades. Sub-contracting, or outsourcing services, is a practice that has increased in popularity over the last thirty to forty years. This is partly due to the increasingly technical and bespoke nature of today's buildings, which prohibits many firms from supporting the broad range of technical skills required to complete a project within one company. Surveys of New Zealand's residential builders show that almost all firms will employ one or more subcontractors to complete plumbing, electrical, painting, kitchen installation, and roofing. Sub-contractors are also commonly used in a range of other sub-trades (Page and Fung, 2011). The introduction and integration of specialist sub-contractors into an ever increasing and complex supply chain does present benefits in that it allows the industry to organise itself flexibly to respond to variable demand (Davis, 2010). However, inquiry participants noted that industry fragmentation increases the potential for coordination problems, the development of adversarial relationships, time delays and rework.

The management of sub-contracted work can present problems due to a tendency for various sub-trades to focus solely on the work that they are doing rather than thinking about the wider context (BCSPP, 2011). Inquiry participants reported that houses are often built using a staged step-by-step approach, with individual trades working sequentially in isolation to each other. This can result in time delays and associated holding expenses caused by sub-contractors not being on-site when required. It can also result in the need for re-work due to different tasks being completed in isolation meaning that work is incompatible with the overall design. For example, the Commission was referred to an example where the wall cavities in a house that was being constructed were too small for the specified insulation.

Poor management and integration of sub-contracted building work can also lead to the development of adversarial relationships between different parts of the supply chain (Beach et al, 2005; Eom, Yun and Paek, 2008; Hartmann and Caerteling, 2010; Shapiro, 2005). This issue was raised by Department of Building and Housing:

[Construction is] labour intensive with upwards of 40 different disciplines needed in the design and production system process, with individual professional goals as well as project goals potentially leading to conflict. (sub. 55, p. 28)

To an extent, this stems from the different objectives of sub-contractors as opposed to main contractors (Love et al, 2004). Main contractors will generally measure their success on the level of client satisfaction

and strive to enhance their brand and reputation. Conversely, sub-contractors are often held at arm's length from the client and generally perceive profitability as the first criterion for success (Duren and Dorée, 2008). These contrasting objectives are thought to be a common source of adversarial relationships, the consequence of which is ultimately transferred to the consumer in the form of additional costs (Hinton, 2011).

A number of inquiry participants noted that supply-chain issues could be minimised through better upfront planning and greater collaboration between clients, designers, builders and sub-trades. Integrated Project Delivery (Table 10.4) is suggested by the American Institute of Architects as one approach to facilitate better management of the building supply chain. It has been estimated that the adoption of collaborative practices and early involvement of the supply team within the design process can reduce initial construction costs by up to 30%. Furthermore, collaboration between supply chain members is also shown to generate completed projects with greater operational efficiency and ongoing savings throughout the life of the building (Bourn, 2001).

Inquiry participants noted that although residential building practices in New Zealand are varied, projects have a tendency to resemble the Traditional Project Delivery model. As such, greater uptake and implementation of collaborative working principles could help to improve industry productivity.

Table 10.4 Traditional versus integrated project delivery

Traditional Project Delivery		Integrated Project Delivery
Fragmented, assembled on "just-as-needed" or "minimum-necessary" basis, strongly hierarchical, controlled.	<b>Teams</b>	An integrated team entity composed of key project stakeholders, assembled early in the process, open, collaborative
Linear, distinct, segregated; knowledge gathered "just-as-needed"; information hoarded; silos of knowledge and expertise	<b>Process</b>	Concurrent and multi-level; early contributions of knowledge and expertise; information openly shared; stakeholder trust and respect
Individually managed, transferred to the greatest possible extent	<b>Risk</b>	Collectively managed, appropriately shared
Individually pursued; minimum effort for maximum return; (usually) first-cost based	<b>Compensation and reward</b>	Team success tied to project success; value based
Encourage unilateral effort; allocate and transfer risk; no sharing	<b>Agreements</b>	Encourage, foster, promote and support multi-lateral open sharing and collaboration; risk sharing

Source: AIA, 2007

## Procurement

A related supply-chain management issue, is the tendency for industry procurement practices to exacerbate the disconnect between main contractors and sub-contractors. While some firms have established relationships with trusted sub-contractors, it is common practice in the industry to request tenders from sub-contractors for the various components of building projects. This traditional tender approach is often based on the assumption that market forces will generate the best value project at the lowest fixed cost (BCSPT, 2009). But in reality, this approach can generate a number of problems, which drive up costs while reducing quality.

One major problem with the traditional tender approach is that it involves significant transaction costs. The success rate for tenders is usually around 15%, meaning that sub-contractors spend a significant amount on unsuccessful tenders – the cost of which is ultimately incorporated into the projects that they do complete (Hinton, 2011). Because tenders are often evaluated based predominantly on the price, some inquiry participants noted that contractors will often place tenders at below the market rate, and look to re-coup this through add-ons and variations to the original contract, substituting the use of cheaper materials, and

taking short-cuts where possible. The consequence is that costs increase during the project, and will often exceed the original tender, whilst the quality of the finished project deteriorates, and projects routinely run over time (Riazi, Skitmore and Cheung, 2011).

In addition, Commerce Commission research has found evidence of anti-competitive behaviour in tendering processes in the construction sector. In particular, firms will submit a tender which is not intended to win, but is meant to look like a legitimate bid. This is known as 'cover pricing' and occurs when firms submit a tender at a price that they know is higher than that of a 'friendly competitor' – either for the purposes of making their competitor look good, or more commonly, because they do not want to win the job, but believe that they will not be considered for future work if they do not submit a tender. Based on this research, the Commerce Commission is developing communications to educate the construction sector about what activities might breach the Commerce Act, and how to avoid being either a party to, or the victim of, anti-competitive behaviour (Commerce Commission, 2011b).

Following the recommendations of a UK government report (Latham, 1994), the UK Construction Industry Board published a code of practice for the selection of subcontractors which includes guidelines that main contractors and subcontractors should follow during any selection process (Construction Industry Board, 1997). The primary purpose of the code of practice is to increase the efficiency and associated productivity of the industry through the use of best practice principles that minimise waste in the supply chain and reduce the potential for duplication (Hinton, 2011). Although this Code of Practice is now somewhat dated, the core guidelines remain relevant (Box 28).

#### Box 28 Code of practice for the selection of sub-contractors

- Clear procedures that ensure fair and transparent competition in a single round of tendering consisting of one or more stages should be followed
- Tender lists should be as short as possible
- Conditions for all tenderers should be the same
- Confidentiality should be respected by all parties
- Tenders should be assessed and accepted having regards to quality as well as price
- Practices that avoid or discourage collusion should be followed
- Tender prices should not change on an unaltered scope of works
- Proposed contracts should be compatible and consistent with the main contract
- Suites of contracts and standard unamended forms from recognised bodies should be used where they are available
- There should be a commitment to teamwork from all parties

*Source:* UK Construction Industry Board, 1997

The Commission considers that the establishment of updated best practice guidelines, appropriate to the New Zealand context, would be beneficial. As discussed in Box 29 the Building and Construction Sector Productivity Partnership would be well equipped to undertake this work.

#### Box 29 The Building and Construction Sector Productivity Partnership

The Building and Construction Sector Productivity Partnership (the Partnership) is a partnership between industry and government that was established in 2010 to address the issue of low productivity in the sector. The Partnership was formed following a recommendation in the Report of the Productivity Taskforce Report (BCSPT, 2009) and has a membership drawn from the industry (including representatives from residential construction firms), industry bodies, research organisations, education agencies and government departments. The Partnership aims to raise construction sector

productivity by 20% by 2020 and is working in four key areas:

- Developing a skills strategy with the aim of generating a greater return on current investment, identifying skill shortages and reducing entry barriers to the industry.
- Examining how government procurement can be used to create value for both customers and providers, and how other areas of procurement can be improved. It will also assess where further improvement is required, particularly to smooth boom/bust cycles and to meet customer and provider needs.
- Identifying areas where change can be applied across the sector to improve productivity, including increased innovation and better uptake of technology.
- Gaining a better understanding of the drivers of productivity, developing productivity measurements that are meaningful for the sector, and identifying areas of research where better knowledge can contribute to higher productivity.

*Source:* Productivity Partnership Draft Research Action Plan

## Building materials and techniques

Increased use of prefabrication or modular components is also suggested as an effective mechanism to lift building productivity and reduce costs:

While most innovations in materials are likely to be received from overseas, examination of the processes for adoption of innovations and their use in novel ways are areas where significant gains might be made. In particular the development of modular or prefabricated systems to maximise off-site controlled production are likely to reduce waste, the level of rework required, and construction time. (Department of Building and Housing, sub. 55, p. 30)

Prefabrication is a form of off-site construction and can range from prefabrication of specific components (such as pre-nailed framing) through to prefabrication of complete buildings which are then transported to a site and attached to foundations (Bell, 2010). While there were mixed views about the ability to reduce construction costs through fully prefabricated buildings, there was agreement regarding the ability to improve productivity through the use of pre-fabricated components. Key advantages were seen in greater product certainty and quality control, time reduction, and lower rates of re-work due to offsite assembly. Inquiry participants noted a lack of scale and negative consumer perceptions as key impediments to growth in the use of prefabrication in residential construction. As discussed in Chapter 9, the time and expense barriers associated with developing innovative alternative building solutions are particularly acute for small firms.

### F10.4

The fragmented nature of the residential construction industry supply chain presents a number of management difficulties which can result in lower building quality and higher construction costs.

### R10.1

Given that the Productivity Partnership has a number of relevant workstreams in progress, and has an established membership of relevant representatives, the Commission considers that it is well placed to develop practical initiatives to improve industry productivity. In particular, the Partnership should develop, in consultation with the sector, practical responses to the supply chain issues outlined in section 10.4.

## Skill levels are a problem

Inquiry participants raised a number of issues relating to low skill levels in the industry.

The provision of sufficient skills to the industry (and their leakage to Australia and elsewhere) is a significant productivity issue. (Council of Trade Unions, sub. 15, p. 5)

An additional issue identified by the industry is the lack of qualified trades' people coming through the system. Construction occupations are listed on the long-term skill shortage list. (Auckland Council, sub. 45, p. 12)

Table 10.5 shows the spread of different qualifications held by individuals working in various construction industry occupations. In all occupations there is a relatively large proportion of employees without any form of post-secondary school training.<sup>111</sup>

**Table 10.5 Highest qualifications held by individuals in construction industry occupations (2006)**

Occupation	No qualification	School qualification	Vocational qualification	Bachelor Degree or higher
Construction Manager	7%	20%	51%	21%
Carpenter and/or joiner	18%	25%	55%	2%
Builder	19%	32%	46%	3%
Builder's labourer	33%	34%	29%	4%
General labourer	44%	37%	16%	4%
All Occupations	19%	35%	27%	19%

Source: BCSPT, 2009

Inquiry participants noted that the pathways both into, and within, the industry are unclear. The ability of young people to successfully transition from secondary school into tertiary training, and then into employment is a common issue (Quintini, Martin and Martin, 2007). This has been identified as a particular problem in the construction industry with a need to develop appropriate and clearly understood career pathways across key sub-groups within the sector (BCSPP, 2011). Inquiry participants noted that it is difficult for young people to source good-quality information about training and career options.

There is also an absence of a clear career path within the industry, meaning that very few people progress beyond owner-operator status. Importantly, inquiry participants noted that the industry suffers from a shortage of management skill: "A related matter is productivity in the workplace, including improving management skills and involvement of employees in improving work practices" (New Zealand Council of Trade Unions, sub. 15, p. 5). There appears to be a presumption within the industry that the development of management expertise is best gained through "entering at the bottom and working your way up" (BCSPT, 2009). This is reflected in the very low number of people completing Bachelors level qualifications in Building and Construction Management, with just 20 people completing this qualification in 2010 (Education Counts, 2011). The shortage of management skills at the upper levels of the industry results in a number of problems such as the inability of firms to manage business cycle fluctuations, limited firm expansion, and little large-scale innovation in supply-chain management (Davis, 2010).

The cyclical nature of the building and construction industry also has a negative impact on skill levels in the industry, with periods of downturn generating difficulty in the recruitment and retention of industry employees. A related issue raised by inquiry participants is that training for building and building-related trades (which generally takes between three and four years) is poorly aligned with the construction industry demand cycle. During periods of downturn, people are reluctant to begin training due to a perceived lack of employment prospects. Likewise, a requirement of the Industry Training and the Modern Apprenticeship systems is that trainees are already employed in the relevant industry. During downturns, many firms have insufficient resources to provide these opportunities. As a consequence, when the industry enters a period of growth there is often a shortage of skilled workers. Conversely, during growth periods, people will begin training, only to find that by the time they have completed their training, the demand no longer exists. Skill

<sup>111</sup> This information was collected in the 2006 census during the peak of a construction boom. More recently, the industry has entered a strong downturn. Participants suggest that the industry tends to lose its lowest skilled workers during downturns; as such it is likely that current figures would show a proportionately higher skilled industry.

shortages experienced during the recent housing boom have been attributed to the sharp downturn in the building and construction industry during the early 1990s. This resulted in a period of reduced investment in industry training and the loss of a large cohort of experienced construction practitioners and managers (Davis, 2010).

Inquiry participants anticipated very strong growth in the residential construction sector over the next two to three years which will see the industry going from a situation of relative over-supply of skills, to a period of acute skills shortages:

Skills shortages of a large scale are predicted going forward ... 3 years of very low activity has resulted in the sector losing a high number of skilled trades people. (Registered Master Builders, sub. 16, p. 13)

Demand is expected to eventually return to the longer term average, with additional demand generated from the Canterbury rebuild and the financial assistance package to fund the repair of leaky buildings:

Coming off such a low base and if these demands eventuate in 2012–2013 it is highly unlikely NZ has sufficient skills going forward. (Registered Master Builders, sub. 16, p. 13)

There was agreement among inquiry participants that the existing skill levels in New Zealand will not be sufficient to meet this demand, and that some of the shortfall will need to be taken up from abroad. A number of measures are in place to address the predicted skills shortage including an additional funding of \$42 million for trades training in the Canterbury region and a special immigration skill shortage list to allow employers to import high-skilled workers that can't be trained in time. (Joyce, 2011)

The Building and Construction Sector Productivity Partnership is focussing on skills issues in the industry. Following a process of consultation with the sector, the Partnership has just completed a skills strategy document for the industry. Although aimed at the construction industry as a whole rather than specifically focussing on the residential construction industry, the key areas for action identified in their strategy (Figure 10.7) match closely with the issues raised by participants in this inquiry. The Commission supports the findings of the Partnership and their strategy for addressing skills issues in the industry.

Figure 10.7 Productivity Partnership skills strategy for the construction sector

Areas for Action			
Short-term skills challenge	Firms	Culture	Education and training
Responses to short-term skills shortages are required to ensure that the industry is equipped to respond to a significant increase in demand over the next five years.	<p>Firm-level skill issues are identified which can help increase sector productivity:</p> <ul style="list-style-type: none"> <li>Firms need to be better equipped to respond to fluctuations in demand.</li> <li>Improving management skills to ensure that workers are productive and being used efficiently.</li> <li>Management and responsiveness to demand cycles are especially important for small firms (which are particularly prevalent in the residential building sector).</li> </ul>	<p>A number of cultural barriers present impediments to productivity growth:</p> <ul style="list-style-type: none"> <li>Fragmentation and a lack of collaboration.</li> <li>The industry's ability to attract and retain skilled staff.</li> <li>Negative perceptions stemming from delays, variable quality and a lack of customer focus.</li> <li>Ensuring that the importance of education and training is embedded across all firms.</li> </ul>	<p>Education and training is a fundamental lever to address the skills of workers. Particular areas for improvement are:</p> <ul style="list-style-type: none"> <li>Improving pathways into the sector, between different parts of the sector and to higher skilled parts of the sector.</li> <li>Greater collaboration between different tertiary education providers.</li> <li>Continuing work to improve industry health and safety, and reduce work-related fatalities and injuries.</li> </ul>

Source: Adapted from the Built Environment Skills Strategy (BCSPP, 2011)

## Boom/bust cycles can hamper industry productivity

Many inquiry participants voiced concerns about the cyclical nature of the building and construction industry, and the negative impacts this has on productivity:

The existing construction industry has almost unique characteristics which work against productivity compared to other project-based industries. Those characteristics include ... volatile boom/bust demand cycles. (Department of Building and Housing, sub. 55, p. 8)

The boom bust nature of the sector makes it particularly difficult to manage and the industry tends to lurch from cycle to cycle. (Registered Master Builders Federation, sub. 16, p. 3)

Growth in the industry tends to mirror that of the wider economy; however, the swings are far more pronounced, with significant “booms” and “busts” (Allan, Yin and Scheepbouwer, 2008). In 2001, when growth in New Zealand’s overall GDP had slowed to around 2%, growth in construction GDP fell to -8.6%. During the period of strong economic growth between 2003 and 2006, GDP growth in the construction sector peaked at 15% while overall GDP growth was around 5%. Likewise, during the recent downturn, construction growth has fallen well below that of the total economy (PWC, 2011). While these figures relate to the construction industry as a whole, inquiry participants were of the opinion that the residential building industry is subject to similar swings in demand.

The cyclical nature of the construction industry presents a number of barriers to productivity. For firms, the pace of growth or decline presents particular challenges to management. Uncertainty makes planning, investment and human resources difficult, which can generate waste and additional costs (Allan, Yin and Scheepbouwer, 2008). Inquiry participants from the building industry noted that during the recent housing boom, high levels of demand resulted in lower levels of competition and inflated profit margins. In more recent years, as residential demand has dropped away, the industry has become ruthlessly competitive with some builders reporting lower levels of quality as a result of cost-cutting measures.

Fluctuating demand for construction work can also create difficulty in the recruitment of young people, with lay-offs and other negative publicity during the downturn leaving an impression that the industry does not offer stable career opportunities (Karaitiana, 2010). Inquiry participants also noted that demand cycles create difficulties in retaining skilled staff and that better management is required during periods of downturn to prevent good staff from leaving the industry or the country:

Due to the lack of residential building work many New Zealand builders have left New Zealand for more constant work opportunities ... Many of these builders did not leave for better pay rates, they left because the level of house building in New Zealand halved. (Affordable Housing New Zealand, sub. 12, p. 9)

The impact of industry cycles on skills and productivity growth was identified by the Building and Construction Sector Productivity Taskforce<sup>112</sup> (the Taskforce) who note that: “Better management of the cycle will help skill development and retention and will reduce waste, by giving greater confidence to industry participants that the skill investments they are making will actually be useful” (BCSPT, 2009). Subsequently, the Productivity Partnership has established a workstream which is examining how government procurement can be used to smooth industry boom/bust cycles (Box 30).

### Box 30 Productivity Partnership procurement workstream

The Partnership has recently commissioned a report which examines the value of the construction industry and the extent to which it is vulnerable to business cycles. This report presents a number of recommendations as to how government can work with the industry to develop forward visibility of future construction that is required, allowing the sector to maintain and develop skills and boost labour productivity. The report also suggests that as a buyer of construction services, government can help to smooth industry cycles through counter-cyclical investment (PWC, 2011).

The Commission is supportive of initiatives geared towards improving the forward visibility of

<sup>112</sup> The Taskforce was established in 2008 to develop approaches to address productivity issues in the building and construction industry. The Taskforce released their findings and recommendations in 2009.



government investment. But given the limited success of previous attempts by government to smooth industry cycles, the Commission does not endorse suggestions that aim to actively manage demand cycles through counter-cyclical investment. Instead, the Commission considers that the Partnership's work to determine ways that the building industry can better equip itself to respond to boom-bust cycles is a more appropriate response to this issue. In particular, innovative approaches to management and building processes might enable firms to better manage resources during periods of fluctuating demand. The Partnership's skills workstream is currently examining these issues (**Figure 10.7**).

The Taskforce identified central and local government as a significant contributor to activity in New Zealand's building and construction industry, and noted that greater levels of forward planning and visibility could help the industry to better manage the business cycle (BCSPT, 2009). In response, the National Infrastructure Unit has been established and is responsible for formulating, and monitoring progress on, a 20-year National Infrastructure Plan which will be updated every three years (National Infrastructure Unit, 2011). The current National Infrastructure Plan provides a strong indication of where government infrastructure funding is likely to be directed in the coming years and may go some way to helping the industry plan for future demand. The plan also commits to a number of actions which are likely to provide further clarity and visibility around future demand (Box 31).

**Box 31 Three-year commitments included in the National Infrastructure Plan**

- Central government will commit to developing and publishing a ten-year Capital Intentions Plan for infrastructure development to match the planning timeframe required of local government.
- Improve access to information on current infrastructure performance to create certainty about when, where and how infrastructure development is occurring, including consideration of whole-of-life costs.
- Develop performance indicators for each sector on the stock, state, and performance of central and local government infrastructure assets as well as for those managed by the private sector.
- Work with regions to develop more strategic infrastructure planning at a macro-regional level. Consider where adoption of spatial planning would produce optimum outcomes, particularly in metropolitan areas.
- Improve scenario modelling to more accurately project likely infrastructure investment requirements from the short to very long term.

*Source:* National Infrastructure Plan, 2011

Although the National Infrastructure Plan makes some reference to housing within the context of "social infrastructure," the focus of the plan is much more relevant to commercial and civil construction sectors than the residential building industry. Given that future versions of the National Infrastructure Plan will contain greater detail about when, where and how infrastructure development will occur, there is potential for the plan to include more information that is relevant to the residential building sector. While the majority of investment in residential housing is from private individuals, Table 10.6 presents a range of government investment in residential housing, along with other ways in which government might influence demand for new housing. More certainty about this investment may help residential construction firms to ensure that they are well equipped to respond to emerging and future demands.

Table 10.6 Government investment in the residential building sector

Activity	Impact
Regular maintenance of state housing stock	During 2009/10, HNZN spent \$219 million on responsive and planned maintenance of state housing. In addition, HNZN has spent approximately \$50 million over the past five years on healthy housing upgrades.
Expansion of the community housing sector	The Social Housing Unit has \$37.35 million available to allocate to social and affordable housing providers during 2011/12 (Social Housing Unit, 2011).
Government initiatives to improve the quality of privately owned housing	Government has committed to spending \$347 million over three years on the Warm Up New Zealand scheme (EECA, 2011). Because the government subsidy for this scheme only covers one third of total costs, investment is compounded by private funding.
Regeneration programmes	For example, \$5 million has been put aside for the Tamaki regeneration project in Auckland, much of which will be put towards expanding housing stock (Heatley, 2011).
Improvements to social housing stock	While not currently budgeted for, HNZN estimates that the cost upgrading their current housing portfolio at \$2 billion (HNZN, 2010).
Major release or re-zoning of land for residential use	Local or central government initiatives to release or re-zone large tracts of land for residential use would likely stimulate significant demand in the residential building sector.
Construction of new state housing stock	While construction of new state housing is not currently planned, policy changes with regard to state housing could have a significant impact on the level of demand in the residential building sector.

**F10.5**

The National Infrastructure Plan represents a good mechanism for providing, where possible, forward visibility of government investment which is reliant on the residential construction sector.

**F10.6**

Skills issues, particularly at the management level, require attention in order for the residential construction industry to better respond to industry cycles and to improve productivity performance. The Productivity Partnership Skills Strategy is focussing on a number of skill issues, which, if addressed, would enable better industry productivity growth.

## Summing up

The Commission considers that there is scope to lift productivity in the residential construction sector. Productivity improvement is particularly important because construction costs (including renovation and maintenance work) are a significant component of housing affordability, and given the upsurge in demand for residential building work which is anticipated in the coming years. Key barriers to productivity growth are seen in the industry's small scale, low levels of innovation, and skill issues.

The industry is characterised by small firms which build just one or two houses each year. This pushes up new house prices because the small firms are unable to generate economies of scale. New Zealanders' preference for bespoke houses also adds to building costs as standard designs can yield significant savings. There is little that we can do about those market characteristics which reflect consumer preferences and New Zealand's smallness. As such, the Commission is advocating a multi-faceted approach which includes greater innovation and measures to raise skills levels.

New approaches to management of the building processes and greater innovation in the materials and building techniques have potential to improve productivity. The residential construction process involves an increasing range of different sub-trades along with designers and builders. Without good management and

procurement practices, this fragmentation in the supply chain can generate inefficiencies, time delays and re-work which drive up cost and reduce quality. The adoption of collaborative working practices has been shown to address many of these issues and reduce costs. Likewise, best practice guidelines to cover the engagement of sub-contractors are also likely to improve coordination within the building process. In addition, greater use of prefabricated or modular building components is also presents a number of benefits including greater product certainty and quality control, time reduction, and lower rates of re-work due to offsite assembly.

Increasing the breadth and depth of skills in the industry is also an important pre-requisite for improved productivity performance. Firms in the residential construction industry suffer from a number of skills issues, particularly at the management level. Addressing a shortage of management skills is particularly important as firms seek to up-scale and make use of new building techniques and materials. In addition, better management is required in order for residential construction firms to better respond to the highly cyclical nature of the industry. It is also important that the construction industry has appropriate pathways available for entrants to the industry, as well as sufficient upward progression within the industry.

The institutional apparatus is already in place to implement change in the form of the Building and Construction Sector Productivity Partnership, established in 2010 as a joint industry/government initiative. The Partnership has a number of projects underway and will be well placed to implement initiatives to improve skill and innovation rates in the industry. Additionally, the newly established National Infrastructure Plan also presents a good platform by which government can provide forward visibility of future investment in residential building work, allowing the industry to plan accordingly.

# 11 Where housing affordability bites

## Key points

- Government provides a range of housing assistance programmes, from providing a state house through to home ownership schemes. The total cost of these programmes is about \$3 billion, and has grown substantially over recent years.
  - There are a number of known issues relating to the suitability, performance and use of many of New Zealand's 69,000 state houses.
  - Expenditure on Accommodation Supplement has increased significantly since 2004. Although the supplement has helped make housing more affordable for many households, inquiry participants questioned its effectiveness. With the exception of KiwiSaver, inquiry participants also questioned the effectiveness of current home ownership assistance programmes.
- Community housing has made an important contribution to affordable housing, but increasing the scale of the sector faces a number of challenges:
  - Because much state housing is obsolete, 'stock transfers' will need to be judiciously managed to avoid setting back the development of the community housing sector.
  - Given that private landlords already accept relatively low yields, community housing providers may struggle to cover their costs through reduced rents, without additional financial support.
  - Because the Social Housing Fund is only a moderate amount, it is unlikely by itself to deliver significant increases in the amount of affordable housing.
- The Social Housing Unit (SHU) is a Semi-Autonomous Body operating in the Department of Building and Housing. In the Commission's view the SHU needs to be either wholly separate, or fully integrated with another relevant social service agency.
- The Commission supports local service delivery through community housing organisations but seeks further suggestions about how to increase the capacity of the sector.
- During the recent housing cycle, the private rental market expanded rapidly to provide housing for an increasing number of households that were unable to keep pace with increasing house prices.
- Despite rents increasing at only a modest rate during the recent housing boom, rental affordability remains an acute issue for lower-income households. Any future decline in rental affordability is likely to place additional pressure on low-income households and generate further growth in Accommodation Supplement expenditure.
- The Commission projects that increasing numbers of households will rely on the private rental market for long-term housing. The traditional first step into home ownership – lower-priced homes – is closing, with high land prices and new building concentrated on higher-priced homes.
- The rental market is well equipped to respond to those who value flexibility or require transitional housing, but the current market provides limited options for those who seek secure long-term rental accommodation.
- Rental markets internationally have a number of features that raise the quality of accommodation and tenure security. Most of these do not appear to be present in New Zealand. The Commission seeks further suggestions about how to generate better outcomes for those who rely on the private rental market to meet their long-term housing needs.

## 11.1 Introduction

Housing affordability issues tend to be most acute for low-income households. While preceding chapters in this inquiry have focussed on the housing market as a whole, many inquiry participants noted that affordability for low-income households should be a particular focus:

... the Productivity Commission should consider the housing market for families as a whole, but have particular regard for the impacts of the housing market on low-income families and whānau. (Families Commission, sub. 9, p. 2)

... the focus must be on lower income households. However answers also lie in the broader market. If the funding basis is changed for middle income earners, the links in the chain are improved. (Land Solutions, sub. 35, p. 2)

The Commission should focus its work on lower to middle income households. (Saltburn Limited, sub. 7, p. 1)

For some groups in society, the steep increase in real house prices over the 2000s has significantly decreased the likelihood of them being able to purchase their own home. This is the case for younger people and others on lower incomes, especially those living in Auckland where the issue of housing affordability is particularly acute. For these households, there are limited options. Eligibility criteria for state housing has narrowed and there is only limited housing provided by the community sector. Most rely on the private rental market, with assistance from the Accommodation Supplement. There are few long-term secure options for those people on low incomes who face a lifetime of renting.

This chapter examines housing affordability for lower-income households. Section 1.2 provides an outline of the major forms of housing assistance that are available in New Zealand. Section 1.3 examines current reforms in housing assistance and the role of community housing. Section 1.4 examines the changing role of the private rental market and the mechanisms by which this market might deliver better outcomes for middle-low income households.

## 11.2 Current government housing assistance

Table 11.1 presents a range of current government expenditure which is directed toward housing. The current annual cost of this support is estimated at a total of about \$3 billion – this includes an estimated ‘opportunity cost’ (calculated at the same rate of other government capital charges) of \$883 million on HNZC’s state housing portfolio (Housing Shareholders Advisory Group, 2010). Over the past nine years, government housing expenditure (excluding the opportunity cost) has grown at an annual rate of around 7% per year.

Housing assistance falls into four broad categories:

- **State housing:** The government owns 69,000 houses with a total value of around \$15 billion. Most are occupied by tenants who pay rent which is capped at a certain proportion of their income (income-related rent). The difference between market rents and income-related rents (the income-related rent subsidy) cost a total of \$564 million in 2010/11. Additionally, government invests significant amounts in maintaining, upgrading and managing state housing. HNZC forecasts a \$64 million dividend in 2011/12.
- **Accommodation Supplement (AS) and other support:** AS is a weekly payment to 320,000 individuals who struggle to meet accommodation costs, most of whom are in the private rental sector (around half of all renters receive AS). AS expenditure for the 2010/11 year was \$1.2 billion. In addition, it is estimated that half of the expenditure on Temporary Additional Support is used to meet housing costs.
- **Home ownership assistance schemes:** There is a range of initiatives aimed to reduce the barriers to home ownership. Expenditure on these schemes is relatively small compared with AS and state housing.
- **Community housing:** Community housing is the provision of affordable housing to lower and moderate income groups by non-government, not-for-profit organisations. Government has provided funding to community housing organisations through a range of mechanisms since 2003, with \$35.35 million budgeted for the 2011/12 year.

Table 11.1 Current government expenditure on housing assistance

Programme	Description	Dates and expenditure
State housing	69,000 state houses are owned by HNZC.	Valued at \$15b. Forecast dividend to the Crown of \$64m in 2011/12.
Accommodation Supplement	Weekly payment to assist an individual with their rent, board or the cost of owning a home.	\$1.2b in the year to June 2011.
Income Related Rent Subsidy (IRRS)	Most state housing tenants pay income-related rent which is lower than the market rate.	\$564m in the year to June 2011.
State Housing Maintenance	HNZC manages responsive and planned maintenance on social housing stock.	\$180m in 2010/11.
Temporary Additional Support	Weekly payment which helps for those unable to meet their essential living costs from earnings or other sources. The Commission estimates that half of these payments are used for housing costs.	\$182m in 2009/10 (it is estimated that half of this is used for housing).
Healthy Housing Programme	Aims to reduce the risk of housing-related health problems, and reduce overcrowding.	2001 to present. \$50m over the last 5 years.
Rural Housing Programme	Aims to improve sub-standard rural housing primarily in Northland, East Coast, and the Bay of Plenty.	2001 to present. Total expenditure of \$139.5m.
Housing Innovation Fund	The fund assists local government, third sector and community organisations to improve rental and home ownership opportunities for low-income households and people with special needs.	Commenced in 2003 with a final funding round in 2010/11. Average annual expenditure of \$16.5m.
Welcome Home Loans	Welcome Home Loans require no deposit for a loan of up to \$200,000 and then a 15% deposit on the amount above that, for first home buyers who meet the eligibility criteria. HNZC insures the loans, which are made by private lenders.	Commenced in 2003. \$37m non-current liability in 2011/12.
KiwiSaver Deposit Subsidy	Householders can apply for a KiwiSaver deposit subsidy if they have belonged to a KiwiSaver scheme, complying fund, or exempt employer scheme for at least three years.	Available from July 2010. Cost to date of \$3.7m.
Māori Demonstration Partnerships	Programme to encourage sector growth and deliver affordable rental housing and home ownership opportunities to Māori.	Commenced in 2009/10. Cost to date of \$9.5m.
Kāinga Whenua Loans	Extension of the Welcome Home Loan programme which is designed to assist individuals to build on multiply owned Māori land.	Commenced 2009/10. Expenditure of > 0.5m.
Gateway Housing Scheme	Gateway enables first home buyers, or community housing organisations, to defer payment for Crown and HNZC land for up to ten years, whilst they build and begin to pay for their house.	Commenced in October 2010.
Special Housing Action Zones	Funding was used for a range of purposes such as home maintenance programmes.	2000 to present. Expenditure of \$0.46m in 2010/2011.
The Social Housing Unit has four funds available to develop community housing provision	Growth fund – Pūtea Whakatipu (\$22.35m): For providers that can deliver affordable housing at scale in the long term. Niche fund – Pūtea Kaupapa Motuhake (\$3m): For providers working at a small, local scale, or with a specific client group. Māori fund – Pūtea Māori (\$5m): To promote sustainable Māori communities, and the use of Māori land for housing. Rural fund – Pūtea Taiwhenua (\$5m): Seeks to promote sustainable rural communities, and the use of Māori land for housing.	Total funding of \$35.35m available for building homes in 2011/12. This is split across four funds.

Source: Compiled from various sources

Notes:

1. All figures are estimates.
2. A more comprehensive assessment of government housing expenditure is appended.

## State housing

State houses comprise 4% of New Zealand's total housing. Historically, state housing has provided good outcomes for many New Zealanders; however, in more recent years it has not performed as well as it might. Many state houses need significant upgrading over and above their existing maintenance to achieve a modest but reasonably current standard. Over half of current social housing was constructed in the 1940s, 1950s or 1960s, with only 11% built in the past 20 years (HSAG, 2010). The cost of upgrading the state housing portfolio is estimated at \$2 billion (HNZC Statement of Intent 2009/10). HNZC upgraded 9,025 houses in 2010/11 (HNZC Annual Report, 2010/11).

Increasingly, state housing does not match the needs of its target group. There is an under-supply of at least 5,000 properties in Auckland, while other areas such as the Waikato region have excess supply. There is more demand for smaller homes for single people and couples, and larger homes for quota refugees and other larger families (HNZC Statement of Intent 2009/2010). Changing household composition has resulted in an oversupply of three-bedroom houses and an undersupply of houses for single people and large families. The resulting mismatch has seen a number of properties where two or more bedrooms are not used, and a similar number of properties where there is overcrowding. This issue was noted in the submission of the Palmerston North City Council:

There are currently some unmet needs, including for one and two bedroom accommodation for people on low incomes, and accommodation for single men with mental health and addiction issues. (sub. 46, p. 10).

Overall 27,000 properties need upgrading or are mismatched to demand. Over the next ten years, the Corporation plans to reduce its ownership in areas of low demand. It also plans to build, acquire and/or reconfigure properties in high-demand areas with the number of bedrooms most commonly needed.

State housing is not always delivered to those in the greatest need. Currently there are 3,500 high-need applicants (10,000 people when family members are included) on the waiting list for a state house.<sup>113</sup> Waiting lists could be reduced with more appropriate allocation of existing stock. Around 5,000 state houses are currently occupied by tenants who already pay a market rent and are likely to be able to manage in the private rental sector (HSAG, 2010). This stems from a historical policy whereby tenants in good standing have been able to remain in their houses for as long as they desired. The 'house for life' expectation has meant that generally all tenants within the state housing portfolio can choose to remain in their existing house regardless of their changing financial circumstances. HNZC has acknowledged that there is an opportunity to work more actively with tenants to explore suitable alternative housing options, appropriate to their social and financial circumstances (HNZC, Statement of Intent, 2010/13).

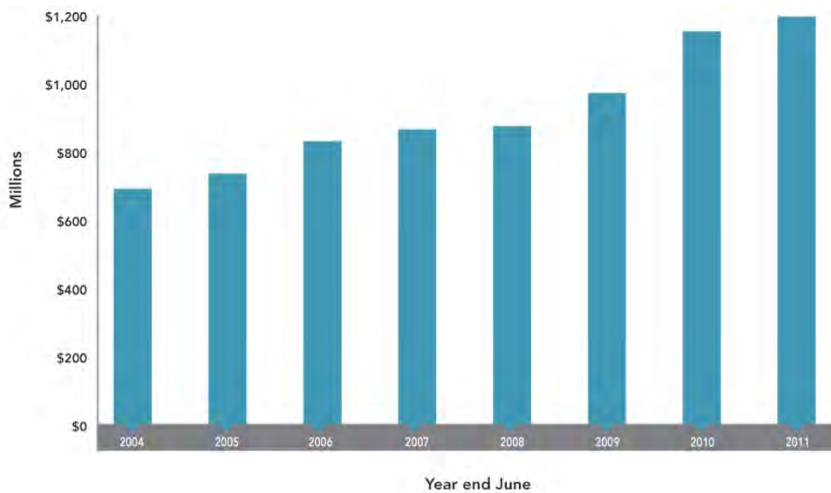
## The Accommodation Supplement

The Accommodation Supplement (AS) is a weekly payment to an individual, administered by the Ministry of Social Development, which helps people with their rent, board or the cost of owning a home. Eligibility for the supplement depends on income, assets, accommodation costs, family circumstances and where an individual lives. Around 317,000 individuals receive AS: 83% are renters in the private sector or boarding, 14.5% own their own home, and 2.5% are renting from non-private organisations such as a community housing organisation. Growth in AS payments has climbed rapidly in the latter half of the 2000s, increasing from \$691 million in 2004, to \$1.2 billion in 2011 (Figure 11.1). Because there is no fixed cap on the AS, annual payments are projected to grow to between \$1.7 and \$2.2 billion by the year 2015 (HSAG, 2010).

---

<sup>113</sup> This figure may underestimate total need, with suggestions that many households will not apply, or will not stay on the waiting list because they believe that they won't get a house (HSAG, 2010).

Figure 11.1 Accommodation Supplement expenditure



Source: Productivity Commission estimates

To a degree, the AS does moderate affordability issues in the private rental market, but inquiry participants suggest, not surprisingly, that some of the supplement is captured by private landlords. A number of submissions make reference to a 'landlord subsidy' and question whether the AS could be used more efficiently:

Government spending on the Accommodation Supplement is approximately \$1.2b per year. This is, in effect a subsidy to private landlords. (Auckland Council, sub. 45, p. 14 –15)

Regrettably the availability of the Accommodation Supplement has enabled private land owners to charge higher rents and consequently benefit from them. (Catholic Diocese of Auckland, sub. 50, p. 4)

While econometric analysis has failed to find any measurable effect of 'landlord capture' (Stroombergen, 2004), economic reasoning implies that an increase in the AS subsidy will be absorbed by higher rents. A further criticism is that the AS is a rather blunt instrument in so far as other important housing outcomes are concerned. In noting that "the AS for non-beneficiaries has risen by 350% in the past 7 years," Queenstown Lakes Community Housing Trust concludes:

Clearly this is unsustainable and it masks the extent of the problem. Some of this appropriation we believe could be diverted to putting in place a structural solution to produce better outcomes than a straight subsidy that AS represents. (sub. 42, p. 17)

Accordingly, Auckland Council suggests a need for "work on identifying more efficient and effective ways this money would better assist home ownership and secure renting." (sub. 45, p. 15)

## Ownership assistance programmes

The government has a range of programmes to assist low-medium income households to purchase their first home (Box 32).

### Box 32 Government assistance with home ownership

- The Welcome Home Loan programme enables borrowers with a maximum yearly income of \$85,000 (or three or more borrowers with a maximum gross income of \$120,000) to borrow up to \$200,000 without a deposit, and a maximum of \$280,000 (or \$350,000 for those living in certain high-priced areas).<sup>114</sup> 7851 loans have been approved between 2003/04 and 2010/11 inclusive.
- The Kāinga Whenua programme began in February 2010 and enables those with a licence to occupy Māori land to obtain a loan of up to \$200,000 to build, purchase or relocate a house there. Eligibility is based on the same income criteria as for Welcome Home Loans. Just three loans have

<sup>114</sup> A 15% deposit is required for the value of any borrowing between \$280,000 and \$350,000.



been settled to date.

- The KiwiSaver First Home Deposit Subsidy programme allows individuals and couples (within an income threshold) a subsidy of \$3,000 to \$5,000 depending on the duration of their contribution to the scheme. The programme started in July 2010 and 929 subsidies were approved in its first year at a cost of around \$3.7 million. Additionally, all KiwiSaver members may withdraw all personal and employer contributions and returns to purchase a first home.
- Gateway Housing makes Crown land available to first-time buyers with payment for the land deferred and capped for 10 years. Gateway Housing opportunities are available primarily through partnerships with community housing organisations and HNZA. Seven organisations have completed registrations of interest and have been found eligible for Gateway land. To date 17 properties have been confirmed in Hobsonville and a further 15 sites have been identified through the country as available for the Gateway Housing programme.

*Source:* HSAG, 2010; OECD, 2011

With the exception of the KiwiSaver programme, inquiry participants questioned the effectiveness of ownership assistance programmes:

The Government schemes to assist home ownership set out in the Paper are of limited value in Auckland...The Kiwisaver programme appears to have had the most potential to assist first time buyers. (Auckland Council, sub. 45, p. 14)

...neglect of any meaningful housing policy is well illustrated by the somewhat ad hoc and often ineffective set of housing assistance programmes currently being operated by Government... The availability of Kiwi Saver deposits for purchase of a first home is a welcome innovation that may expand the availability of homeownership to more households. (The Salvation Army, sub. 59, p. 3)

Existing Government programmes have only scratched the surface of the problem. Welcome Home loans are targeted at a segment of the market that is too narrowly focussed and has met with only limited success. Kāinga Whenua loans have been spectacularly unsuccessful despite many Māori having access to land at no cost. (Habitat Auckland, sub. 23, p. 2–3)

The Housing Shareholders Advisory Group (HSAG, 2010) notes that current programmes have low uptake and reach only a small proportion of people. In commenting on the Welcome Home Loan scheme, the HSAG (2010) notes that in all but three areas of New Zealand, \$200,000 is not enough to purchase an average lower quartile house. Further, the amount actually available to a potential purchaser is likely to be lower than the maximum. For example, a couple with two children, earning \$45,000 per year and owing less than \$50 a week in debt, would be eligible for only \$120,000. This would not buy an average lower quartile house in any area. Alternatively, if the same couple had an annual income of \$60,000, they would be eligible to borrow \$220,000. This would be easily enough to purchase a lower quartile priced house in Invercargill (\$148,000), but would be well short of the median lower quartile price in Manukau (\$302,000).

### 11.3 Community housing

The community housing sector is being called upon to deliver an increased supply of affordable housing. In particular, the Social Housing Reform Programme expects the sector to provide “opportunity for those who are ready to move on [from state housing]” (HSAG, 2010, p. 4). There is a wide range of other objectives being sought through this change as well. For the purposes of this inquiry, the Commission has chosen to focus on its likely impact on increasing affordable and social housing.

Growing the community housing sector faces significant challenges. While the Commission sees value in greater development of the community housing sector, we are not convinced that this sector alone will generate an effective response to a shortage of affordable housing in the short or medium term. Without a more significant response to the shortage in affordable housing in the general housing market, the benefits of increasing community housing provision are likely to be “of limited effectiveness” (HSAG, 2010, p. 44). We discuss the challenges the community housing sector faces below.

## Social Housing Reform Programme (SHRP)

Housing assistance in New Zealand has been based around state housing delivered by HNZC, and the availability of the AS primarily for lower-income households in the private rental sector. However, in more recent times this model has faced scrutiny. The Housing Shareholders Advisory Group (HSAG) was established in February 2010. The HSAG's objectives were to provide advice and transparent measures on: the most effective and efficient delivery model for state housing services to those most in need; and, more productive and innovative ways to use current social housing assets to better support the objectives of government (HSAG, 2010).

HNZC's role has been refocused to providing accommodation "for those who need it for the duration of that need" (HSAG, 2010, p. 5). As noted earlier, HNZC has previously been guided by a 'house for life' philosophy. Revising this focus was suggested as a way to free up assets for reinvestment either in HNZC's portfolio or in the community housing sector. In addition, the HSAG recommended greater involvement of community housing organisations (known as the 'third sector') in the provision of affordable housing (HSAG, 2010). The community housing sector is made up of a wide range of not-for-profit groups and organisations that seek to provide affordable housing for low- and modest-income New Zealanders. These groups include iwi and hapū organisations, social service agencies, community development groups, housing trusts, housing cooperatives, and housing associations, amongst others (Community Housing Aotearoa, 2011a).

### Box 33 Comparative advantage for community housing organisations

In the view of Community Housing Aotearoa,<sup>115</sup> community housing providers have a comparative advantage through their:

- Ability to leverage charitable sources of funding and voluntary effort from communities
- Not-for-profit nature and the ability to work off smaller margins
- Ability to provide security of tenure to tenants which often results in lower tenancy turnover and hence lower costs.

*Source:* Community Housing Aotearoa

Although there will be an ongoing role for HNZC in providing housing for those with the highest needs, it is envisaged that it will become part of a pool of providers. Indeed it is tasked with helping the sector to grow, partly through the transfer of housing stock (HSAG, 2010) and partly through releasing funds (Minister of Housing, 2011a).

## The transition to the Social Housing Unit

The Social Housing Unit (SHU) has been established as a semi-autonomous body operating within the Department of Building and Housing (DBH). It is an interim measure to fund the expansion of social housing providers for 2011/12, whilst options for the final institutional arrangement are considered. The advice of the Minister of Housing to Cabinet was that:

Establishing a Unit within DBH will create a funder/provider split, consistent with our long-term intentions, and will provide for accountability to Ministers for the progress being made. (Minister of Housing, 2011a, p. 7)

Responsibility for housing policy and non-state housing programmes has been transferred from HNZC to DBH and the SHU respectively. \$35.35m has been allocated to the Social Housing Fund for building houses. The assistance will be in the form of grants up to 50% of the capital costs of a development to qualifying organisations.

<sup>115</sup> Community Housing Aotearoa is a national organisation, which was established in 2004/5 as the representative group for the community housing sector.

**Box 34 Objectives of the Social Housing Unit**

The Unit is expected to provide advice that enables the government to grow the total amount of social housing and “maximise the effectiveness and efficiency of supply-side provision through increased diversity and scale.” In the long term, the Unit’s specific objectives are to achieve:

Improved effectiveness of social housing provision, by:

- facilitating/encouraging increased scale in the provision of social housing
- creating the conditions to enable innovation in social housing provision to occur
- creating the conditions to enable specialist provision that will better meet the needs of particular tenant groups
- ensuring that social housing provision is of an adequate standard to support positive outcomes, and that provision for households with high needs is a priority.

Improved efficiency of social housing provision, so that:

- more individuals and households in need are housed for each dollar spent by government
- to the greatest extent possible, the government’s investments in the sector are funded through improved financial performance of the current investment.

A market that is able to respond effectively and efficiently to changes in demand to the greatest extent possible, that is:

- expected increases in demand can be met without significant additional investment from government
- the sector becomes self-sustaining over time, through the emergence of viable economic models for the provision of social and affordable housing.

*Source:* Social Housing Unit, 2011

In the Commission’s view, semi-autonomous bodies are a severely compromised governance model. Being accountable to a departmental Chief Executive and being required to act autonomously leads to muddled responsibilities that can hinder performance. To be effective, the SHU will need clearer accountabilities, and a clearer mandate.

However, the obvious and important connections with other social service Crown agencies cannot be overlooked. Any final institutional arrangements need to balance autonomy to innovate with integration in broader social service provision. The Commission considers that the current placement of the SHU within an organisation whose predominant function is building regulation does not optimise this integration. The SHU needs to be either wholly separate, or fully integrated with another relevant social service agency.

**R11.1**

The final structure of the Social Housing Unit should be a Crown Entity with an arm’s-length relationship to the Minister of Housing.

## **New Zealand’s community housing sector**

Community housing organisations in other countries have shown that they can deliver better outcomes to tenants than government, council housing departments, or private landlords (Cowan and Maclennan, 2008). In many countries this has been achieved through the large-scale transfer of council or state housing to housing associations. With a strong equity base and the safeguard of rigorous public audit, housing associations are able to attract loan and equity capital.

Currently, community housing comprises 1.2% of the total housing stock in New Zealand (Minister of Housing, 2011a). The community sector is small and fragmented. Community housing organisations operate with a range of different philosophies, from those whose mission is helping people into home ownership through to those who provide emergency shelter. Many concentrate their efforts on particular groups – for example, the Salvation Army has developed rental accommodation to meet the needs of the elderly. However, Community Housing Aotearoa advised us that, in many cases, providers had not made a deliberate decision to focus only on a specific group of people and had some enthusiasm to expand the range of groups they deliver services to.

#### Box 35 The community housing sector at a glance

In 2007 the Centre for Housing Research Aotearoa New Zealand (CHRANZ) conducted a survey of the community housing sector. At the time of the survey:

- There were an estimated 160 non-profit community housing organisations
- The median number of units owned by each organisation was nine
- 58% of organisations did not own any units
- Three respondents owned more than 100 units

A more recent review of the sector conducted by HNZN counted a total of 5,076 community housing units.

*Source:* CHRANZ, 2007; HNZN, 2010

Councils throughout New Zealand also provide social housing at their discretion. Often this is in the form of housing specifically for the elderly. Although not strictly community housing, councils are providers of social housing locally. Often their contribution is significant. Both Wellington City Council and Christchurch City Council have large portfolios, at around 2,300 units and 2,640 units respectively. In Wellington City Council's case, it has needed assistance from central government to modernise and keep its portfolio (\$220 million over 20 years).

### Capacity of the community sector to grow

Growing the capability of the community sector in New Zealand will be a big challenge. Inquiry participants from the community sector noted that all community groups experienced difficulty putting housing on a strong business footing. One larger provider stated that it would need access to capital and a reliable income stream to ensure that its housing activities were on a sound business footing.

### Increasing portfolios and access to capital through state housing stock transfers

There are likely to be some benefits from stock transfers from HNZN to community housing organisations. It has been easier for housing trusts in the UK and Australia to access finance from banks once they had a sufficient portfolio of houses. Caution should be applied in assuming that the same will readily occur here. Community housing organisations were bigger in the UK than those in New Zealand at the time that their stock transfers occurred, as was social housing as a whole (30% of households were in social housing in the UK, compared to around 4% in state housing in New Zealand currently).

Which parts of the stock are transferred is also important if transfers are to lead to the intended benefits. The Commission was advised that HNZN should refrain from transferring stock in need of major upgrade or in areas of low demand. HNZN has 42,000 properties which it describes as being "of the right bedroom configuration, in the right place and in the right condition" (HNZN, Statement of Intent 2011–14, p. 19). These are homes that it will need to retain to carry out its core business. The remaining 27,000 properties are described as either needing an upgrade or as mismatched to demand. Transferring the problems of modernisation and low demand to the third sector will not readily lead to growth in third sector portfolios.

State housing stock transfers may transfer some of the risk that as demand changes stock becomes obsolete, from government to the community sector. This is problematic for two reasons. First, where government remains a residual provider (as it does, through state housing provision by HNZA at the least), it also retains a residual risk when it transfers stock. However, it only has limited control over how those risks are managed. Should things go wrong, government as residual provider 'picks up the tab.' Secondly, a fragmented community sector with a smaller asset base may face greater difficulties in managing the risks of obsolescence. Potentially, smaller organisations may prove to be more nimble in responding to demand, but this does not sit easily with the intention to build community housing providers-at-scale. Transfers need to be designed and managed with some consideration to the amount of risk a community housing provider is taking on, so that it will remain viable in the long term.

It is our understanding that to date there have been no transfers of state housing stock to the community sector. The Cabinet paper for establishing the SHU noted that "In future years, we intend to potentially draw on a broader range of funding mechanisms, including stock transfers" (Minister of Housing, 2011a, p. 9). However, it appears that the housing stock available to be transferred is not so much surplus, as obsolete. DBH has acknowledged this, and noted that only a limited increase in housing supply is likely to be possible by transferring state housing stock to community housing providers (Minister of Housing, 2011a). Because the community housing sector is relatively underdeveloped, 'stock transfers' will need to be judiciously managed to avoid setting back the development of the community housing sector.

### F11.1

The state housing stock available to be transferred is not so much surplus, as obsolete. Transferring the problem of modernisation and low demand to the community housing sector will hold back growth in this sector.

## Providing homes for less than the rental market

Overseas experience indicates that "rapid growth of community housing in New Zealand is ... likely to require supplementary sources of funding over and above capital investment by Central Government" (CHRANZ, 2007, p. v). As well:

Private sector investment in affordable housing is relatively rare in OECD countries without significant subsidies... This overseas experience suggests that without significant incentive or subsidy, private sector providers are not likely to grow the level of investment in affordable housing. (Department of Building and Housing, sub. 55, p. 37)

Many community housing organisations were involved in providing affordable rental housing aimed at charging rents of 75–80% of equivalent market rents. In some cases it will be difficult for community providers to achieve much of a price premium over private landlords, where those landlords are absorbing some operating costs in the expectation of future income from the investment. Where this is the case landlords are often paying rates, maintenance and similar costs out of income streams other than rent. Without a comparable alternative income community housing providers may struggle to cover their costs through market rents, let alone through reduced rents.

Community housing providers may be able to achieve cost reductions through larger-scale developments. New Zealand has almost no institutional/corporate investment in the private rental market, in part because the yields are too low for them to invest (section 11.4). A not-for-profit though will not be concerned by this, and the cost reductions from scale may make it financially viable. However, much of the management of the rental stock is done by small-scale landlords who carry out tenancy management and maintenance personally, at no labour cost. Community organisations reliant on economies-of-scale will struggle to achieve lower than market rents through cost reductions, where the costs of the private rental market are already heavily discounted.

Community housing providers may be able to use volunteer assistance and philanthropic donations to reduce their costs. While this will be true in some cases, at the very least it limits the scale of the community housing stock to an amount that providers can be confident future donations and volunteer assistance will cover the costs of. It is generally acknowledged as well that providers-at-scale will need to have highly developed professional skills to manage their community housing portfolios. Inquiry participants noted that

successful community housing projects need expertise and experience – they can't just rely on goodwill and dedication.

### **Market segmentation and Income Related Rents**

HSAG advised that the Income Related Rent Subsidy (IRRS) be extended to community housing providers. One inquiry participant went so far as to say that the community sector will never be able to compete without income-related rents. There appears to be some truth to this assertion. The income-related rent subsidy is significantly greater than the Accommodation Supplement (HSAG, 2010, pp. 41-42). Income Related Rents are a targeted response to a particular level of need for housing assistance. As the social housing reform programme stands, it appears the intention is that need will be accommodated by state housing, rather than through the community housing sector.

Only providing IRRS to state housing is a way of rationing it. However, this doesn't mean that all those with the level of need to warrant the IRRS receive it – that is determined by the supply of state housing in the area, not the number of people in need. Although the vision of the HSAG was that the third sector would provide "opportunity for those who are ready to move on" from state housing (HSAG, 2010, p. 4), the focus of the third sector understandably appears to be on providing housing solutions to those who meet the criteria for a state home, but cannot access one because none are available.

This suggests that either the community housing sector will need to grow to accommodate both needs, or that, until HNZC can completely adjust the client group it works with, the sector will be stretched to provide "opportunity for those who are ready to move on" (HSAG, 2010, p. 4). Because no current tenants will be removed from state houses (Heatley H. P., 2010), this adjustment period is likely to take years. As well, it is unclear where the capacity for those tenants to be moved on to will come from, if the third sector continues to struggle to meet just the needs of HNZC's 'core' client group that it currently isn't servicing.

The Commission acknowledges that there will be some overflow, particularly whilst HNZC refocuses the client group it works with. We note that there is also a Temporary Additional Support benefit that can be, and is being, used in part for accommodation costs. The Commission estimates are that around half of the \$142 million that was spent on the Temporary Additional Support benefit in 2010/11 went to accommodation costs.

### **Increasing community housing through the Social Housing Fund**

For the 2010/11 financial year the new Social Housing Fund was budgeted to be \$35.35m for building homes. The fund is divided into four components, but the majority of the money is for growing social housing providers-at-scale. All components prioritise increasing the stock of housing through new builds. The Social Housing Fund represents a moderate increase over the amount of funding available through the Housing Innovation Fund, particularly when one considers that the Rural Housing Programme (RHP), which had an average annual expenditure of \$13.5 million, ended at the same time. The Housing Innovation Fund (HIF) and its subset, Māori Demonstration Partnerships, were both used to test innovations and demonstrate what might be achieved (see Appendix C).

Pursuing innovation during a time of fiscal restraint is essential. However, this needs to be tempered with some realism about the level of scale that can be achieved through only a moderate extension of funding. If reliance on stock transfers and philanthropic donations prove insufficient to increase the scale of community housing, the Social Housing Fund will need to be increased for the reform programme to succeed.

**Box 36 Housing Innovation Fund – the previous community housing funding mechanism**

In 2003 the government decided to establish a Housing Innovation Fund (HIF), initially for four years, in order to support small community housing organisation 'start-ups'. Applicants were required to contribute 15% of the project costs in the form of land or in-kind support. A best estimate suggests that over the lifetime of the programme (2004/05 to 2010/11), 505 CHO and local government housing units were built with total HIF funds of \$140m. Eventually, the applicants' capital contribution was increased to 50%, and 'leverage' averaged two community housing dollars for every one public dollar (HNZC annual reports).

A mid-term evaluation concluded that more affordable houses were built to meet 'niche' housing needs, often in communities where HNZC lacks an operational presence. For example, in the 2009/10 financial year the government set aside one quarter of the HIF allocation for four Māori Demonstration Partnerships. 2010/11 was the last year of funding for HIF. While the projects did help to broaden local social housing options, the degree of asset and capacity building was never enough for many of those community housing organisations to become self-sufficient.

**R11.2**

We recommend that the Social Housing Fund be increased to better meet the expectations of future social housing provision through the community housing sector.

**Integrating social housing and other social service provision through community housing**

A significant number of organisations seeking a greater role in community housing have a strong background in social service provision, such as health or youth and family services (Community Housing Aotearoa, 2011, p. 2). This reflects the devolution and contracting approaches taken by government in those sectors over the past two decades. The relatively limited amount of funding that has been available for community housing means that as a sector it is comparatively underdeveloped.

Providing capital to allow these providers to expand or move into community housing provision enables them to join together the full range of services needed to help struggling families succeed. The effect that stable, quality housing has on health and educational outcomes is well established. Community housing providers are likely to provide and maintain a better standard of accommodation, and provide more secure tenure.

Drawing together social service provision by having the whole suite of services available from one community organisation has the potential to overcome the common government challenge of poor coordination. Organisations that deliver social and housing services are well placed to improve a family's ability to engage with the housing market.

Table 11.2 Example of social service and housing provision

Trust	Summary of the project
Ngati Hine Health Trust	Eight rental houses for kuia/koroua houses, and two transitional home ownership houses. The transitional home ownership houses will be used for whānau whose home-ownership aspirations are out of their reach. Whānau would stay in the houses for up to two years, during this time receiving social service support and home-ownership education, so that they are ready and can achieve home ownership. Ngati Hine Health Trust refers to this as a "landlord plus" approach.

Source: Office of the Auditor-General, 2011

The Commission supports local service delivery through organisations that are close to their communities, know their clients well, and are therefore best placed and best motivated to find affordable housing

solutions. There appears to be some need for caution though, in the likelihood of the third sector to provide lower-cost rental accommodation at scale. The Commission welcomes further submissions on this matter.

## Conclusion on the likely contribution of the community housing sector to increasing affordable housing

In its engagement meetings the Commission heard different examples of good practice or critical success factors for expanding community housing provision. Box 37 outlines an example. We encourage the Social Housing Unit and other relevant government agencies to take account of these as principles that will help manage the risks we have identified.

### Box 37 **Determinants of successful community housing involvement in stock renewal and regeneration projects**

The Council for Infrastructure Development submitted to the Commission a report it had written, based on a visit to see three models of mixed tenure state housing redevelopment projects in Australia. The themes arising from this report included the importance of:

- a community housing organisation leading the development and providing ongoing, on-site management, and performing strongly in this role;
- balance between commercial realism and social vision;
- compromise, communication, trust, and clarity of objectives;
- the public sector being willing to commit resources; and
- a strong culture of community engagement, public consultation, and use of affected community knowledge.

As well, the Council identified that:

- stock replacement is insufficient to overcome social challenges;
- because New Zealand has not pursued large scale housing redevelopments like Australia, sufficient human resources may be as scarce as financial ones. In particular “there is no experience in the combined delivery of development, community support, and facilities maintenance”; and
- success depends on the performance of the community housing organisation and its leadership. The model is vulnerable to changes in funding that the community housing organisation relies on for social services.

*Source:* New Zealand Council of Infrastructure Development, sub. 30

When the home ownership market and social housing sector have not met increasing demand in the past, those people have been channelled into the private rental market. The private rental market in New Zealand is best suited to providing transitional rather than long-term accommodation. Nevertheless, for the foreseeable future the burden of addressing increasing housing demand will largely fall on the private rental sector. We discuss the challenges this poses further below.

#### Q11.1

Has the Commission understood all the issues for the sustainability and scalability of community housing provision? What else should we consider?

#### Q11.2

How else might scale in the third sector be achieved, other than through stock transfers, extending income-related rents to the community housing providers, or through the Social Housing Fund?



## 11.4 The private rental market

Currently, around 408,000 households are estimated to live in private residential rental accommodation. As noted in Chapter 2, rents increased at around the same rate as generalised inflation during the housing boom in the 2000s. This resulted in a significant increase in the house price-to-rent ratio (Figure 11.2). This was unusual, as historically rents moved broadly in line with house prices. As such, the insensitivity of rents to rising house prices over the 2000s boom appears to have acted as a 'safety valve'. The rental market expanded to accommodate an increasing number of households living in the private rental market, given its affordability relative to house prices.

### Future challenges for the rental market

Although the private rental market has 'come to the rescue' of those who could not afford to meet rising house prices during the boom, the changing profile of the private rental market presents two key longer-term issues:

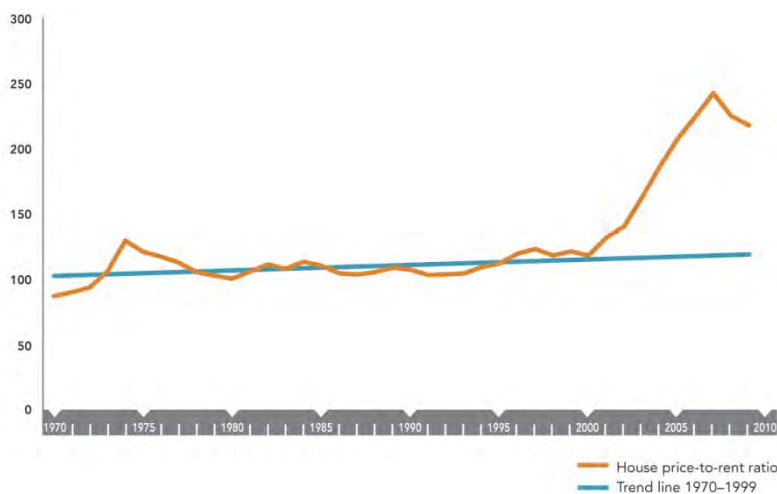
- A return to the pre-boom house price-to-rent ratio could further exacerbate existing affordability issues for lower-income households in the private rental sector.
- The relative affordability of private rental housing may lead to a permanent trend of longer-term renters, which the sector is not currently equipped to effectively respond to.

### Rental affordability

It is important to note that rental accommodation is only inexpensive relative to house prices. Relative to income, housing affordability remains an acute issue for many households in the private rental sector. As discussed in Chapter 3, when private renter households are classified according to income, the lower two quintiles both spend, on average, more than 30% of their disposable income on rent.

Figure 11.2 shows the house price-to-rent ratio from 1970–2010. The graph also shows the trend line from 1970–1999. The gap between the two lines that emerges from the start of the housing boom demonstrates the extent to which house prices and rent have diverged from the long-run norm. There is currently an 83% difference between current rent and the long-run house price-to-rent ratio. While the behaviour of the housing market is inherently difficult to predict, there is a risk that the house price-to-rent ratio will return to the long-run norm by way of an increase in rents. An increase of this magnitude is unlikely, but average household expenditure on rent has increased by 7.4% in the year to June 2011 (Statistics New Zealand, 2011c).

Figure 11.2 House price-to-rent ratio and long-term trends



Source: Productivity Commission

Increasing rental costs presents a significant fiscal risk for government. Currently, approximately half of all renter households receive the Accommodation Supplement (AS). Although the value of AS payments that a

household can receive is capped, an increase in rental prices is likely to generate additional demand for AS and other housing support:

If the housing shortage in Auckland is not addressed, inevitably rents will rise in real terms ... perhaps causing more widespread claims for the assistance from struggling households and certainly increasing the average payments being made. (The Salvation Army, sub. 59, p. 3)

However, because AS payments are capped (for any individual), rising rental costs are likely to exacerbate existing affordability issues for a number of households in the private rental sector. The problems associated with poor rental affordability are well documented:

...families in unaffordable housing often do not have money for food, especially nutritious food, or health services. When rents for appropriate accommodation are beyond a family's means, they are forced by circumstances into substandard, overcrowded or unhealthy housing. They may not be able to afford adequate heating in winter. (Families Commission, sub. 9, p. 4)

An increase in rents would likely be felt most acutely in Auckland, where 42% of households are rented as opposed to 32% for the rest of New Zealand. In addition, rental prices in Auckland are among the highest in the country.

## A greater dependency on the private rental market

One of the outcomes of the recent price dynamic between ownership and rental housing is changes to the composition of the population in rental accommodation. Table 11.3 identifies three key groups of households in the private rental market: 'Not in paid work' renters, 'Intermediate' renters, 'Relatively well-off' renters. They are categorised according to their economic participation and earnings. This internal segmentation of the private rental market is indicative of the transformation taking place in the market.

Table 11.3 Changes in the composition of the private rental market

	Not in paid work		Intermediate renters		Relatively well-off renters	
	Households	Change	Households	Change	Households	Change
1996	49,200		70,300		87,100	
2001	66,700	17,500	72,300	2,00	139,800	52,700
2006	59,500	-7,300	187,400	115,000	75,300	-64,500
2011	71,800	12,300	157,700	-29,700	144,800	69,500
2016	85,000	13,200	224,800	67,100	118,000	-26,800
2021	98,600	13,600	275,900	51,100	106,400	-11,600

Source: Productivity Commission modelling

Notes:

1. The years 1996–2006 show actual figures for each group in the private rental market based on census data.
2. Figures for the years 2011–2021 are projected based on the following assumptions: a 4.8% decline in the rate of home ownership; household growth of 1.2% per annum; interest rates increasing from 6% in 2011 to 7.5% in 2021; household income increasing 3% per annum; and house price growth of 5% per annum.

The first group in Table 11.3 comprises 'not in paid work' renters who are typically aged pensioners, or tenants receiving other forms of statutory income (eg, Domestic Purposes Benefit, Sickness Benefit, Unemployment Benefit). Numbers in this group tend to fluctuate according to prevailing economic conditions.

The second group comprises an 'intermediate' market segment of renters. These are defined as households with at least one member in paid employment who are unable to purchase a lower-quartile priced house.<sup>116</sup>

<sup>116</sup> Calculations assume normal lending criteria and a maximum debt servicing ratio of 30% of gross household income; a 25-year mortgage term using market interest rates; and a 10% deposit.

The relative size of this intermediate market segment more than doubled on the back of the housing cycle upswing rising from 26% of private renting households in 2001 to 58% in 2006. As a result of easing house prices and lower interest rates, the current number of intermediate renters has reduced; however, the Commission's projections suggest intermediate renters are likely to continue to grow both in absolute numbers, and as a proportion of all renters.

The third group of households in the private rental sector are defined as 'Relatively well-off' renters with a household income that enables them to purchase a modestly priced dwelling. Of particular note in Table 11.3 is the absolute decline in the numbers of renters in this market segment between 2001 and 2006. This coincided with rising house prices and mortgage interest rates in the mid-2000s which reduced the ability of households with above median incomes to purchase. These households effectively swelled the ranks of intermediate renters during this period. The absolute number of relatively well-off renters in 2011 has increased, indicating that affordability isn't the only criterion determining whether a household will choose to own their own house. Surveys of residential preference indicate that some households which could purchase 'entry-level' housing continue renting in order to enjoy high amenity locations close to the central city or around the harbour foreshore in Auckland and Wellington (Page, 2007; Beacon Pathways, 2010).

As noted earlier (Chapter 2), the growing number of intermediate renters is indicative of missing rungs on the housing ladder. Increasing numbers of middle to low-income households who were previously able to purchase a 'starter home' are likely to rely on the private rental market as a long-term form of accommodation rather than as a temporary stepping stone. The private rental market caters particularly well for younger households such as tertiary students and early to mid-career workers who value flexibility to move around. Short-term tenancies also provide a 'stop-gap' between selling and buying, with a change in relationship status, or in emergencies (Beer and Faulkner, 2009). A recent survey of New Zealand tenants found that approximately 25% had previously owned a property. The most common reason given for moving into rental accommodation was the break-up of a relationship (SHORE, 2011).

However, for other groups the rental market tends to perform poorly. In particular:

- the quality of housing is often poor
- for those who seek longer-term accommodation, the private rental market lacks security of tenure
- income in retirement is often insufficient for those who do not own their own home.

### **Poor quality**

The poor quality of rental accommodation (Chapter 2) means that low-income renters have a greater chance of being exposed to conditions – overcrowding, dampness, poor sanitation – that can exacerbate existing social and health ailments. A number of submissions from health professionals noted this issue:

Rented housing is associated with lower incomes and poorer health, while poor quality housing is a key contributor to health inequalities. (New Zealand Nurses Organisation, sub. 36, p. 1)

Compound measures of hardship constructed from the Ministry of Social Development's 2008 Living Standards Survey show that the private rental sector houses the greatest proportion of people living in hardship (47%). In addition, their exposure to risk of hardship is well over twice that of home buyers and owners (Perry, 2010).

### **Security of tenure**

Although the flexibility of the private rental market presents benefits to some tenants, inquiry participants raised concerns about the high rate of churn in the rental market:

Tenure type becomes more of a health and societal issue when one considers the rate of tenancy churn amongst tenants. (Auckland Regional Public Health Service, sub. 10, p. 17)

While a shorter length of rental tenure may not be a problem for younger 'flatters' (who have historically made up the bulk of the rental market) it can have a number of undesirable outcomes for families with children and older people – who are the growth segments in the rental market. (Department of Building and Housing, sub. 55, p. 20)

Evidence from the Residential Tenancies Act Review provided by the Auckland Regional Public Health Service shows that the average rental tenure is 15 months. In addition, 50% end within 10 months, 33% end within 6 months, and 13% end within 3 months (Auckland Regional Public Health Service, sub. 10, p. 18).

The lack of tenure security in the rental sector is concerning for lower-income families requiring secure housing. This is a particular issue during school years as multiple changes of address are suggested to adversely affect children's educational attainment and access to healthcare:

...high proportions of children changing schools outside normal year end changes, adversely affect the performance of the entire school. (Auckland Regional Public Health Service, sub. 10, p. 18)

Older renters preferring to live independently in settled accommodation are also vulnerable in the private rental market. At their particular stage of life, both types of household value the continuity of access that stable housing provides to schooling, health care, support services, community networks, neighbours and friends.

### A lack of retirement savings

There are questions about the ability of households to adequately meet their housing costs in retirement. Inquiry participants noted that New Zealand's Superannuation system is currently predicated on the assumption that people will own their own home by the time they reach retirement.

The Commission for Financial Literacy and Retirement Income notes that; "Preserving a high proportion of people reaching retirement without a mortgage is a fundamentally important element of retirement policy" (CFLRI, 2007, p. 43). Home ownership can contribute to a positive retirement in many ways:

- Net retirement income is boosted for a retired person living in a home which he or she owns mortgage-free, because living costs are lower compared with living in rented accommodation.
- Enabling older people to live in their own home is central to 'ageing in place', which is part of New Zealand's Positive Ageing Strategy, and the preferred option of many older people (Davey, 2006).
- The house that the retired person lives in can be sold in order to move to a less expensive one, or equity can be released from the home while it is still occupied.

In addition, the reported standard of living in retirement is better for those who own the home they live in mortgage-free than for those who do not (CFLRI, 2007). Table 11.4 shows the proportion of individuals aged over 65 whose household income (after paying for housing) is less than 60% of total median income (for selected reference years). After paying for housing, those in rental accommodation are significantly more likely to have a lower income, underlining the value of owning a home, even if it is not mortgage-free, by retirement age.

**Table 11.4 Proportion of individuals aged 65+ in low-income households (after paying for housing costs) by tenure**

	Reference year = 1998			Reference year = 2007		
	1998	2001	2004	2007	2009	2010
Owned without mortgage	2%	2%	2%	7%	3%	3%
Owned with a mortgage	32%	31%	11%	16%	20%	7%
Rented	53%	30%	37%	44%	47%	24%
Total	9%	7%	7%	14%	9%	7%

Source: Ministry of Social Development, Household Incomes Report, 2011

*Notes:*

1. Low income is defined as households whose income (after paying for housing) is below 60% of the median income for the two reference years.

## Getting better outcomes from the private rental market

Over the past two decades, the private rental market in New Zealand has grown significantly, and has shown itself to be capable of responding to rapidly changing short-term demands. However, it is unclear whether the market will be able to adapt to provide quality, secure, long-term tenures:

Consideration needs to be given to improving the conditions of tenancies to give tenants greater security of occupation and certainty in rent levels. (NZ Council of Trade Unions, sub. 15, p. 6)

Rental markets internationally have a number of features that raise the quality of accommodation and length of tenure. Most of these do not appear to be present in New Zealand.

### Institutional investment

Historically, the investment in New Zealand's private rental market has very much been the domain of small-scale investors (sometimes referred to as 'mum and dad investors'). The annual ANZ Property Investment Survey indicates that the most common number of rental properties owned is one to three, and that less than 10% of property investors work full-time in the sector (ANZ, 2011). As well as operating on a very small scale, the available evidence also suggests that New Zealand landlords are reasonably 'self-sufficient' in that they are disinclined to use professional property management services.<sup>117</sup>

A number of policy makers and commentators consider long term institutional investment as the best way of increasing new supply and could also offer greater security of tenure and better quality of accommodation to low-moderate wage households facing the prospect of life-time renting (Berry and Hall, 2002). There is an alternative view, however, that finding the right stimuli for institutional investors may be something of a search for a 'holy grail' (Pomeroy, 2011). Outside student accommodation and retirement homes, large-scale landlords have a very limited presence in the New Zealand market. The share of people living in rental properties owned by private businesses, trusts or other organisations has remained low at under 5%, indicative of a very low level of institutional involvement in the sector.

The Department of Building and Housing (DBH) has commissioned three pieces of research on the potential for institutional property investment in New Zealand (PWC, 2008; Burleigh Evatt, 2009; Deloitte, 2007). This research suggests that an inability to obtain sufficient scale in a short period of time is a significant barrier to institutional investment. Institutions would need to invest upwards of \$200m in a diversified portfolio – different types of housing, different geographies and different demographic exposure. They suggested the small and dispersed nature of New Zealand's population is also a barrier to large-scale investment in private rental accommodation (PWC, 2008).

Difficulty in generating sufficient cash yield was also identified as a significant barrier to institutional investment in the residential rental market:

Institutional investment in residential real estate is not attractive because the yields are too low. It is only when yields start to compete with commercial rates that you will start to see these players enter the market. (Saltburn Limited, sub. 7, p. 2)

In particular, inquiry participants noted that the willingness of small-scale property investors to accept minimal yield on their properties has acted as a barrier to institutional involvement in the sector. Although estimates vary, the cash yield on rental properties over the 2000s house price boom is estimated to be well below 4%. It appears many property investors were absorbing at least some of the operating costs of their rental property in anticipation of future income. In contrast, institutional investors seek a cash yield of 5–6% for this asset class (PWC, 2008).

### Developing an ownership interest in rental accommodation

Property investors can face considerable risk and cost associated with tenancies, from non-payment of rent through to serious damage to property. The Tenancy Tribunal (DBH, 2011) hears 20,000 residential disputes each year involving claims of up to \$50,000. If rents are insufficient to meet the perceived risk, landlords may favour short-term leases to enable them to terminate the lease of a troublesome tenant. The current

<sup>117</sup> For example, anecdotal evidence collected in engagement meetings suggests that only around 20% of rental properties in New Zealand are managed by a property manager compared with 80% in Australia.

bond system may be insufficient to either pay the cost of damage for the landlord or provide sufficient deterrent against damage for the tenant. This could be a vicious circle; while a short tenancy arrangement may seem a prudent strategy on the part of a landlord, from the tenants' perspective, short tenancy arrangements may have the effect of reducing their attachment to the property.

There are a number of arrangements that could be devised to break this cycle but all of them centre on the tenant having more of an ownership interest in the property. The potential to build on these was canvassed in a number of our engagement meetings. The retirement village model provides one example of an arrangement that supports long-term secure tenure for both resident and owner. The resident buys a 'licence to occupy' which provides for secure tenure and specifies rights around what can be done to the property. At the end of the agreement the licence is sold back to the owner, who typically refurbishes the property and sells the licence to occupy to a new resident. The key is to devise institutional arrangements that promote long-term secure tenancy for tenants and a return that would encourage investors into the rental market.

### **Rating system for rental housing standards**

A number of OECD countries specify minimum standards relating to the quality of rental accommodation. For example, in the UK, Decent Homes guidelines developed for social housing landlords have now been extended to the private rental market. Likewise, in South Australia inspectors are able to control rents until a non-compliant rental property has been repaired or made safe.

Some submitters suggested minimum guidelines for rental properties as a means of improving quality:

Without minimum performance standards for rental properties or even an easy way for prospective renters to assess running costs, tenants not only face the risk of living in sub-standard conditions but also have limited capacity for affecting positive change. (New Zealand Green Building Council, sub. 60, p. 6)

Tenants need assistance at time of rental to understand quality and performance ... home performance is not strictly regulated, despite the significant costs involved ... a taxi driver requires registration and a special licence to carry passengers, yet there are no minimum performance requirements on rental houses. (Beacon Pathways, sub. 57, p. 5)

Given the growing body of evidence which illustrates the health, well-being and energy efficiency benefits associated with quality housing, the Commission is supportive of voluntary reporting tools which encourage landlords (and those selling housing) to disclose comparable information about housing quality, such as the level of insulation.

### **The private rental market: overall assessment**

During the recent housing cycle, the private rental market expanded rapidly to provide housing for an increasing number of households who could not keep pace with rapidly increasing house prices, or didn't wish to buy a home. The rental market delivers good outcomes for a number of tenants, particularly those who require flexibility and those who seek transitional accommodation due to changing life circumstances. However, the growth in the private rental market presents a number of challenges with regards to housing affordability in the coming years. Affordability is already an acute issue for lower-income renters, and this situation has potential to be exacerbated if rents rise back to the longer-run house price-to-rent ratio. In addition, this may generate further demand for the AS and create associated fiscal risks.

The available evidence suggests that greater numbers of households are coming to rely on the private rental market for long-term accommodation. A range of issues including poor quality, insecure tenure and inadequate income in retirement all indicate that the market is not currently equipped to deliver housing necessary for well-being in the long term. These issues appear to have been exacerbated by the dominance of small-scale investors, who are motivated by expectations of longer-term returns as opposed to growing a loyal client base by providing high-quality tenancy services. The Commission is aware of very few options which might enable the private rental market to deliver better and more affordable outcomes for a growing market. A model where institutional investment is used to deliver long-term leases, where the tenant has some ownership interest in the property and the landlord is focussed on a sustainable ongoing yield appears to be the best approach. However, the Commission understands that prevailing market conditions

have prevented such a model from emerging. As such, ongoing improvement in the overall supply of affordable housing for first-home buyers will be central in providing greater tenure choice for intermediate renters.

**Q11.3**

Has the Commission understood the current affordability issues in the private rental market?

**Q11.4**

What is required in order for the private rental market to deliver better outcomes, particularly for those tenants who are likely to rely on the market for long-term accommodation?

## 12 Rural Māori housing

### Key points

- Housing is valued more for keeping whānau connected to land, tradition, tūpuna, and their whanaunga, than as a financial investment. It is “about building communities, rather than building houses.”
- The affordability and sustainability of rural housing poses a challenge for some Māori in sustaining a connection to their land and the cultural practices that centre on marae (which require a stable and continued presence). The fear is that dwindling populations in rural communities may lead to an irreversible culture loss for many whānau.
- The Social Housing Unit has been established within DBH, and responsibility for housing policy and non state-housing programmes transferred from HNZC to DBH and the SHU respectively. Being a social housing provider, though, may not align well with some of the aspirations Māori have for housing on their land. Aspirations to keep whānau connected to the whenua, their tūpuna, their marae, and the associated traditions are only indirectly related to providing social housing.
- The SHU has a focus on building new stock of social or affordable housing. The focus on building new houses takes a very narrow view of housing needs, particularly for rural Māori, where there is an identified issue with the quality of the existing housing stock in many rural Māori communities.
- A lack of certainty about future demand for particular homes on Māori land (due to the limited market for some homes) places home owners at quite some financial risk. Despite this, many Māori are willing to borrow to buy or build a home because of the value they place on a home on their whenua. However, concern about future saleability and security value can undermine the confidence of lenders to lend, because if they have to take possession of the house, on-selling it might not recoup the cost of the loan.
- The Commission has reviewed three models to see whether they could provide the necessary security for banks to lend: trust guarantees, a financial options system, and mutual insurance schemes. Under the right circumstances each of these shows some promise.
- The Commission has reviewed two models of housing where there is an element of common ownership. These are licences to occupy (as used by retirement village developments) and unit titles, under the Unit Titles Act 2010. The Commission has concluded that each of these models could form robust ways to manage housing on Māori land.
- There will be a considerable adjustment period between the Rural Housing Programme and the Rural Community Regeneration Programme. During this time whānau living in damaged or dangerous homes will be at risk. The Commission recommends making some seed funding available to local Māori organisations or Whānau Ora provider collectives to deliver loans for essential repairs using a microfinance approach.

Rural Māori face unique housing circumstances where they are living in more isolated communities, or in homes on Māori land. The Commission has given some consideration to rural Māori housing issues, and welcomes further submissions.

### 12.1 Underlying demand for housing in rural Māori communities

#### How does housing contribute to wellbeing for Māori?

Housing can play a differing role in the wellbeing of different cultural groups. As Auckland Council put it:



Housing is also important for cultural outcomes. Council recommends that the Commission's draft report include consideration of possible cultural differences in definitions of 'affordability,' and of housing needs and preferences; particularly for Māori, Pacific, migrant and refugee populations. (sub. 45, p 1)

Individuals will place different emphasis on different kinds of value from housing. Generally, it contributes to the wellbeing of rural Māori communities in the following ways:

- Housing is valued more for keeping whānau connected to land, tradition, tūpuna, and their whanaunga, than as a financial investment. This might mean having somewhere for whānau to stay when they come back for tangi, maintaining ahi kaa<sup>118</sup> for an extended whānau to a marae, or having a tangible connection to tūpuna whenua to pass on to children and mokopuna.
- Taking care of whānau – kuia and kaumatua tend to be prioritised, rather than getting young families into homes.

### Q12.1

Has the Commission understood how housing contributes to the wellbeing of Māori communities, allowing that individuals will place different weightings on different elements?

## Sustainable housing in rural Māori communities

Not all rural Māori communities face similar circumstances. The most obvious distinction is between those that are near urban areas, and those that are more isolated.

Communities near urban centres face a different set of population drivers and opportunities than more isolated communities. Some are growing to accommodate the need for homes close to larger towns and cities, such as in the western Bay of Plenty (OAG, 2011, p. 45). Māori land,<sup>119</sup> where present in these communities, is sometimes seen by its owners as a resource that could be used to increase the supply of affordable housing for Māori whānau in the area (OAG, 2011, p. 23). The Office of the Auditor-General identified that about 30% of Māori land is in or near provincial centres (OAG, 2011, p. 25). It also noted that in the Northland, Bay of Plenty, Auckland and Canterbury regions "there was significant demand from Māori individuals and organisations to use their land for housing, given appropriate support and regulation" (OAG, 2011, p. 23).

There is the potential for Māori land that is near to growth centres to increase the supply of affordable housing and reduce some of the pressures on price for housing on general land. This must be handled with appropriate sensitivity. As Tauranga City Council points out, in relation to some near urban land:

...tangata whenua have expressed reservations about such land being alienated through the pressures of urban zoning and rates. (sub. 19, p 15)

Average Māori rural household incomes are low, which makes it hard for many whānau to afford to rent or buy a quality home (OAG, 2011, pp. 37-46). Māori have worse housing outcomes than most other groups in New Zealand (Box 38). Urbanisation, driven in part by too few employment opportunities in rural areas, has led to significant reductions in population for some communities. Additionally, a number of rural Māori communities are in areas where there is no access to the unemployment benefit. Financial pressure on households and the absence of sustainable employment for those seeking to return can stop those who wish to return home from doing so.

<sup>118</sup> Literally 'keeping the home fires burning' – keeping a connection through family with a place. This is particularly important for Māori where the place has a strong ancestral connection – such as tūpuna whenua and marae.

<sup>119</sup> Te Ture Whenua Māori act 1993 defines four kinds of Māori land, which are separate to General title land (which is what most of New Zealand now is, and is based on English land titles). Of the four kinds of Māori land, three have restrictions placed on their sale and other forms of alienation (such as leasing), and all will typically be held in multiple ownership. This poses distinct challenges for its ownership and use.

**Box 38 Māori housing outcomes**

Māori as a group experience disproportionately poorer housing situations compared with the rest of the population. Māori are:

- disproportionately represented on state housing waiting lists (31.3% of applicants in 2010, compared to being approximately 13.9% of New Zealand's population)
- more likely to live in housing of poor condition compared with the rest of the population
- less likely than non-Māori to own their own house (43.3% of Māori were owner-occupiers in 2006, compared to 69.7% of Europeans)

The Department of Building and Housing (DBH) has identified that there is already a significant undersupply of affordable housing. Because Māori have disproportionately low incomes, they are likely to struggle more to find affordable housing. This is particularly true in areas where the Māori population is predicted to grow at a rate higher than that of the general population (such as Whangarei and the Bay of Plenty).

Source: Office of the Auditor-General (2011) Government planning and support for housing on Māori land; HNZA (2010) Māori housing trends 2010

The affordability and sustainability of rural housing poses a challenge for some Māori in sustaining a connection to their land and the cultural practices that centre on marae (which require a stable and continued presence). Affordable housing in rural Māori communities therefore has a role to play in cultural preservation. The fear that dwindling populations in rural communities may lead to an irreversible culture loss for many whānau is a real one. As one participant in a recent housing hui in Kaitiaki put it, finding solutions to affordable housing challenges in rural Māori communities is "about building communities, rather than building houses."

**Q12.2**

Has the Commission appropriately balanced social, cultural, and economic challenges and opportunities for building housing in rural Māori communities?

## 12.2 Current work to address the demand for housing in rural Māori communities

### Building social housing providers-at-scale: shifting administration of funding from HNZA to the Social Housing Unit

In response to the report of the Housing Shareholders Advisory Group (HSAG), the government has established the Social Housing Unit (SHU) and Fund with the intention of building NGO and Māori social housing providers-at-scale (Heatley H. P., 2011). The government has re-focused HNZA to provide accommodation to those most in need for the duration of their need as its core business (Heatley H. P., 2011). The Social Housing Unit has been established within DBH, and responsibility for housing policy and non state-housing programmes transferred from HNZA to DBH and the SHU respectively. \$35.35 million has been allocated to the Social Housing Fund for grants worth up to 50% of the capital costs of a housing development and other support to qualifying organisations (Social Housing Unit, 2011).

The SHU has a focus on building new social or affordable housing. Being a social housing provider, though, may not align well with some of the aspirations Māori have for housing on their land. Aspirations to keep whānau connected to the whenua, their tūpuna, their marae, and the associated traditions are only indirectly related to providing social housing. For instance, these aspirations apply to those who do not qualify for social housing assistance. The Social Housing Fund and its predecessors have been the only funding available to Māori for building homes on their land.

The Commission is concerned that the focus on building new houses takes a very narrow view of housing needs, particularly for rural Māori. There is a significant need to address the quality of the existing housing stock in areas where there are many rural Māori communities. This is discussed further in section 12.6 below.

## Reviewing features of Kāinga Whenua

Kāinga Whenua loans are an extension of the Welcome Home Loan programme for houses built or put on Māori land. The Welcome Home Loan is a no-deposit or low-deposit loan for first-home buyers, provided by Kiwibank and underwritten by HNZC. The Office of the Auditor-General (OAG) has noted that: “Kāinga Whenua is not well matched to the incomes of Māori households. Loan uptake in the first year has been well below expectations.” (OAG, 2011, p. 32)

If proposed changes to the income and asset caps for Kāinga Whenua are approved (OAG, 2011, p. 81), this will represent a broader loan product for housing on Māori land. Given the other complexities and restrictions in the product, the Commission considers it is unlikely to ever deliver a great volume of housing on Māori land. The Commission has therefore considered some other models of managing and financing homes on Māori land.

## 12.3 Financial challenges to sustainable housing on Māori land

Reducing the personal financial barriers to returning to or living in rural Māori communities will help address the sustainability of some rural communities, and may make it more possible for some whānau to come ‘home’ to maintain those cultural connections. The Commission has tried to identify ways to reduce those financial barriers where they are related to housing.

The OAG’s report noted that “the limited market for houses on Māori land means that a house on Māori land is likely to lose rather than gain value” (OAG, 2011, p. 84). A lack of certainty about future willingness to buy a particular home on Māori land (due to the limited market for some homes) reduces the price a home owner is likely to get for it (should they later wish or need to sell), and places them at quite some financial risk. It also undermines the confidence of lenders to lend, because if they have to take possession of the house, on-selling it might not recoup the cost of the loan.

### Box 39 The challenge of securing a loan for a home on Māori land

Banks have been reluctant to lend money for homes on Māori land. Banks can take Māori land as security for a loan without it ‘triggering’ the processes that have to be gone through under Te Ture Whenua Māori Act 1993 for ‘alienation’. However, although the bank could take possession of the land because of a default on the loan, it is difficult to sell the land to recover the money lent. The simplest way would be to have the Māori Land Court convert it to General Title land, and then on-sell it. There is a cost involved in this process which reduces the amount of the money that is then recovered. As well, alienating Māori land is an emotive issue which can entail significant community resentment for the bank.

A solution has been to secure the loan against just the house if it is removable. However, the salvage price of the house is likely to be lower than the cost of its purchase, and the limited market for the home makes it harder to realise a good price for the house. Again, commercial banks have been unwilling to accept this form of security without the government insuring the loan.

Because trusts are tied to the land, they won’t face the changes in personal circumstance that might force an individual to sell their home on Māori land. However, the OAG identified that for a ten-house rental development carried out by a trust there would be significant upfront regulatory costs, and that a combination of repaying a table loan for the houses and the operating expenses of a rental development would lead to the organisation making a year-on-year loss for approximately the first 11 years. It could then take a further 15–20 years to recoup those upfront costs. This is a significant outlay for any organisation and, given the timeframes involved, entails significant risk (OAG, 2011, pp. 96-97).

## 12.4 Addressing the financial challenges to housing on Māori land

### Social housing grants

A grant from the Social Housing Fund rather than the loans formerly dispensed under MDP and HIF would eliminate the year-on-year loss that exists with a loan (except for the year when the upfront costs must be paid). The SHU has opened its' funding round for 2011/12, and will be providing grants for up to 50% of the capital costs of a housing development (Social Housing Unit, 2011). This is a significant step forward for making housing on Māori land accessible and affordable.

The relatively small amount of money available (\$3 million in the Māori fund, and \$5 million in the Rural fund), and the intent to use that money to access private money for housing (Heatley H. P., 2011), may make it difficult for trusts with few assets to access these funds. They would not be available at all to individual home buyers.

### Other ways to overcome the financial challenges to housing on Māori land

Māori home buyers may still be willing to borrow to buy or build a home on Māori land despite the obstacles, because of the value they place on a home on their whenua. The Commission has given consideration to three models that might ease the financial risk to home buyers while also providing confidence to lenders.

#### Trusts guaranteeing loans and finding future buyers

There has been some suggestion that trusts should guarantee home investments, and then find and manage future demand directly. This could be through maintaining a list of those who have expressed an interest in living on the land. Anecdotally, guaranteeing homes is often resisted due to the level of risk the trust would have to take on. Trusts are themselves not always confident that they will be able to organise replacement buyers. The risk that they might have to pay significant amounts of money where they cannot readily find a buyer can be impractical where the Trust has small financial reserves.

The focus that iwi rūnanga have on good stewardship of Treaty Settlement money, especially in the early years of growing that settlement into an economic base for the future of the iwi, means that they are typically reluctant to issue a guarantee that would mean risking Treaty Settlement money for no financial return. At the least, it limits the amount of housing that a rūnanga would usually be willing to guarantee to a number that would not significantly deplete those funds, were the guarantees to be called in.

#### Purchasing an Option

Another way to demonstrate continued demand is for prospective home owners to purchase an 'option' on owning one of the homes in the future. Making a financial commitment indicates that lenders and home owners can have a greater level of confidence that there is a serious demand for the homes in the future, and therefore likely to be a better price. If paying for a 'right to live on the whenua' is culturally inappropriate, then the cost of the option could form part of any payment required for the home itself. If the options were tradeable, then should someone change their mind or have their circumstances change they could on-sell it to another land owner, which recoups their investment, ensures continued certainty of demand, and minimises the management responsibility and workload for the trust or organisation.

#### Mutual insurance schemes

An alternative to having a trust guarantee the loan, is for each home owner to pay a premium into a mutual insurance fund that would insure the lender against defaults. Because the level of financial surety needed would be based on the likelihood of defaults in the future, rather than the value of the whole development, the premiums could be relatively low.

This wouldn't provide certainty of future demand – the home owner would still be taking a risk – but the lender would have greater certainty that should the borrower default, they would get the loan back in full.

Because the lender would want the insurance to be in place before lending, initial funding for the scheme would probably be needed either from the government or from a larger trust (possibly an iwi rūnanga or the

Māori Trustee). The premiums would then form a repayment of this initial capital, reducing the costs of the sponsoring organisation, enabling it to reuse that capital to insure further homes.

Under the mutual insurance approach, the ultimate liability for a default would fall on all the owners. That liability would only be realised if the insurance fund were depleted. This model would have limited applicability to small housing developments (and none to a single home development).

Table 12.1 **Strengths and weaknesses of mutual insurance schemes**

Strengths	Weaknesses
Could meet a private lender's security requirements without using a government programme	It would cost more to individual borrowers than a Kāinga Whenua loan, if they could get one
Don't need to be tested for or meet the restrictions on Kāinga Whenua	Reliance on third party for insurance premium seed funding
Places more control over how it works in the hands of Māori	Reduced certainty about availability of funding. Reliance on ability to negotiate a solution with a private lender
Regularity of premium payments provides signal of when assistance or support might be needed	Mutual insurance is only practical where there are a greater number of homes to spread the premiums between

If the development were setup by a trust already involved in social service provision then the regularity of a household's premium payments would be an early indicator of potential financial difficulty. This would enable them to provide or access support and assistance for that household, to improve their circumstances and help reduce the risk of default.

Although this would be more expensive than a Kāinga Whenua loan or previous approaches to state lending on Māori land, it is likely to still be cheaper than buying a home on general land. It has the potential to lead to greater scale in building homes on Māori land.

### Q12.3

Are the options the Commission explored for improving the ability of lenders to lend viable? How else might certainty of future demand or security for loans be achieved?

## 12.5 Alternative models for managing housing developments on rural Māori land

The Commission has reviewed two models of managing housing where there is an element of common ownership. These are:

- licences to occupy, as used by retirement villages; and
- unit titles, under the Unit Titles Act 2010.

The Commission has concluded that each of these models would form robust ways to manage housing on Māori land. They might make it easier to run developments on Māori land, although they will not address affordability issues. The details of these models and their advantages and disadvantages are discussed further below. The need for a significant amount of cash upfront to pay the planning and infrastructure charges would remain a barrier to affordability for Māori organisations with low financial capacity.

### Licences to occupy

Using a Licence to Occupy approach, as it's done by retirement villages, would mean upfront capital payments for the homes. There would be almost no loan cost. Only the ongoing maintenance costs and rates would need to be paid. The upfront capital cost would limit potential residents to those who already had considerable equity available to invest.

Housing on Māori land using licences to occupy has an established history. The difference between the usual model and the one used by retirement villages is that typically a licence to occupy Māori land has been for the land alone, but the whānau with the licence builds or buys and owns the house as their own possession.

#### Box 40 How licences to occupy Māori land for housing have worked previously

Licences to Occupy have recently been favoured as a means for establishing a legal right to occupy or own a home on Māori land because:

- It is easier to get a licence to occupy (where a trust is in place on the land), than alternatives like an occupation order. It is also an easier process with the Māori Land Court for noting a licence to occupy by a registrar, as opposed to requiring a court hearing for the issuing of an occupation order.
- HNZC, the only organisation that has been willing to lend money for homes on Māori land, has required that the borrowers have a licence to occupy.

The licences to occupy that are used commonly are licences to occupy the land alone – the house remains the property of the owner. To get a licence to occupy, the agreement of every owner, or their trustees, must be had. Where there is no trust over the land, and there are a large number of owners, it is virtually impossible to get such a licence.

As well, for the home to remain the property of the licensee, rather than all the landowners, there must be an agreement between the licensee and the owners (or their trustees) that the house will be a chattel of the licensee, and not an improvement to the land. This has been required by HNZC in the form of a tripartite agreement with the borrower and the other owners of the land, allowing it to take security over the house. Because this agreement requires the consent of all the owners, it typically only occurs where there is a trust in place. The licence to occupy is included in the tripartite agreement for expedience, and doesn't reflect a preference on HNZC's behalf.

Under the retirement village model of using licences to occupy, a tripartite agreement would probably not be required.

With retirement villages, the licence to occupy is for the house or unit itself, which is not owned by the person who lives in it. A 'capital sum' is paid when the Occupation Right Agreement is settled, and is refunded when the resident departs. Deferred Management Fees are charged typically for the first two years and are usually capped at 20–30% of the capital sum. These fees are used for refurbishing the unit before it is on-sold, and are only payable on leaving the home. They are deducted from the capital sum, which is refunded on departure.

The retirement village approach relies on a household 'trading down' – owning a home with a higher price, selling it, and having a sufficient capital sum left after repaying the mortgage (if they are not mortgage-free) to make the capital sum payment to get their licence to occupy. This works well in a retirement environment. It could also work well where a whānau with a mortgage for a home on general land sells it to move into a home on Māori land, where they need to pay a capital sum for the licence to occupy.

Because owning Māori land makes buying into a development on Māori land cheaper than if it were on general land, a model that has previously only worked at scale for the retirement market could help younger households into affordable housing. The requirement that the household has saved the equivalent of the build cost of a house in equity will still place some limits on who could take up such a scheme.

**Table 12.2 Strengths and weaknesses for using the retirement village approach to licences to occupy on Māori land**

Strengths	Weaknesses
Risk pooling – financial risks of owning homes on Māori land and any difficulties with on-selling sit with an organisation, which may have more resources than a single whānau to bear and manage them.	Not all trusts/organisations will be well placed to manage this risk. Refunding capital sums on departure requires certainty that there will be a demand for the home in the future – further capital sums coming in.
Individual whānau would not make a capital loss on their housing investment.	Licences to Occupy cannot be used as security for a mortgage – would limit the kinds of whānau (particularly first-home buyers) who could access a home under this model.
Single management organisation makes managing the development less complicated. Can build on existing practice in managing rest homes, without having to reinvent the wheel.	-
Ownership of homes and land being vested in the trust better aligned with cultural importance of an intergenerational asset.	Lose some of the flexibility for making alterations that home ownership allows. Makes it harder to pass something on to one's children directly (although current LtOs can't be succeeded to in the way that Occupation Orders can either).

## Unit titles model

The Unit Titles Act 2010 updates the Unit Titles Act 1972. It is the legislation that guides how apartment blocks and similar developments are organised and managed. This is relevant to Māori housing developments more generally because it is a model of home ownership where individuals own their dwellings but everyone owns the land they sit on.

A unit title approach is a way of passing on ownership of the development to remove the role and financial pressure on the trust. Its success is dependent on the ability of the residents to pay their individual mortgages and costs toward common spaces and maintenance. The OAG has identified that “servicing a home loan is unaffordable for many Māori households” (OAG, 2011, p. 79). As well, Kāinga Whenua loans (the only loans available for homes on Māori land) are only available for detached, removable houses (HNZC, 2010a, p. 10).

The additional benefit of a unit titles approach is that it has an established set of management procedures and regulatory environment. If these were available more generally to housing developments on Māori land, the management capability needed to set up or run such a development would be less.

Under the unit titles model, individual residents:

- own their unit, giving security of tenure and the ability to alter its' interior;
- also have a share in 'common property'; and
- manage the property as a body corporate consisting of everyone who owns a unit (the body corporate can delegate management to a committee). (Department of Building and Housing, 2010a)

**Table 12.3 Strengths and weaknesses of using the unit titles approach to managing a housing development on Māori land**

Strengths	Weaknesses
Home ownership model (often preferred) which includes security of tenure and the ability to make changes to the interior of a dwelling (where it is part of a larger building)	If on Māori land, it's unlikely that the owner would be able to mortgage it
It has a built in mechanism for managing common ownership of some areas and property (such as the land)	Shareholders in the Māori land it's built on who don't live there would not be included in the body corporate decisions for how common property is managed <sup>120</sup>
Owners can on-sell their unit	Potentially complicates land management by needing both a body corporate and a land trust. Each member would still require a licence, lease, or occupation order to live there

The advantage that a unit titles approach has is that the regulations under the Unit Titles Act provide a readily usable framework for organising how the development would work. As well, a body corporate managing the land that the development sits in on would place the management of the relevant part of the land in the hands of those living there, making it simpler to resolve matters of how it will be cared for. Major decisions (such as alienation of the land) would still be reserved for all shareholders in the land block.

However, elements of the model might prove useful for developments on Māori land. Licences issued by trusts could be written so that they can be sold and on-sold, enabling individual owners and the body corporate to manage the sale of units independently. For there to be an effective market for homes using a unit title model, there would need to be an established demand for the units in the future, to give confidence to buyers that they will be able to on-sell their unit for at or about what they paid for it.

Sale as a means of exchanging title may not be a culturally acceptable way to organise who benefits from the land by being able to live on it. Because the right to ownership descends from having common tūpuna, deciding who can use it based on how much they can afford may be inappropriate. Market exchange is also not well-suited where land and housing built on it is seen as a resource for taking care of the elderly or those in need. However, it is a way of reducing some financial barriers to owning a home on Māori land, as the risk of financial loss is reduced (if continued demand is assured).

#### Q12.4

Would the unit titles model or retirement villages approach to licences to occupy be useful for housing developments on Māori land? Are they worth further exploration?

## 12.6 Aligning rural housing solutions with other social service provision

The Commission considers it likely that Māori organisations, particularly those already involved in social service provision, will prove more efficient at working directly with their whānau and clients on housing solutions than government agencies have. Providing funding and some autonomy to Māori organisations that have accountability to their local communities means those who are best placed and best motivated to find housing solutions are empowered to do so. In turn, this aligns with Māori aspirations to have a greater control over their own futures and the way government influences them. It also aligns closely with the developing Whānau Ora approach.

Whānau Ora is an approach to providing services and opportunities to whānau as a whole, rather than focusing separately on individual whānau members. Selected whānau have a practitioner to work with them to identify their needs, develop a programme of action to address them, and broker their access to a range of health and social services (Te Puni Kōkiri, 2011). Funding for service delivery must come from largely pre-

<sup>120</sup> This is particularly a problem if the whole land block is used for the development



existing sources. Because housing services have been specific contracts to build a specific number of units, there has been no housing 'funding streams' that could be rolled into Whānau Ora. Government spending on Māori housing is outlined below (Box 41). Integrating that funding with other social service delivery has the potential to lead to better outcomes for Māori.

#### Box 41 Government spending on Māori housing

Funding available for Māori housing includes:

- \$35.35 million Social Housing Fund – of this, only \$3 million is tagged for Māori housing specifically, and \$5 million for rural social housing. In theory Māori organisations would be able to apply for all of it.
- \$0.456 million Special Housing Action Zones – managed by Te Puni Kōkiri, this small fund is used to build capability in Māori organisations and communities to address housing issues.

Whānau Ora is an appropriate vehicle for integrating housing and a wider range of social services, but given current hindrances to implementation, the Commission has some hesitation about recommending rolling housing into Whānau Ora. Throughout our engagement meetings with those involved in Whānau Ora, a recurring theme was that enthusiasm was waning due to holdups and delays. One participant went so far as to say that "collectives move at the pace of the lowest common denominator." Regardless of whether funding for housing assistance is provided to Whānau Ora collectives or to organisations with a wide portfolio of existing social services, the Commission endorses integrating housing assistance with other local delivery of social services.

### Addressing the quality of the rural housing stock

For some whānau, their housing affordability issue is not about paying a mortgage or rent. The state of repair for houses in some rural areas has been a significant concern. The Salvation Army noted:

There are no reliable estimates of the extent of the rural Māori housing problem although a preliminary report undertaken for Department of Building and Housing suggested that there were as many as 9,600 rural houses in poor condition and in need of repair or replacement. Three quarters of these houses were said to be in Northland... Moreover the high housing costs in urban areas, alongside diminished employment opportunities there, may mean that the populations in such areas as Northland, Eastern Bay of Plenty and the East Coast grow and hence place further pressure on the existing and by all account inadequate housing stock. (sub. 59, p 1)

Repairing the rural housing stock has had a specific programme since 2003 (Rural Housing Programme). That programme has been wound down, to be replaced by a Rural Community Regeneration Programme. This programme is yet to be initiated, but the Commission understands the main features would be:

- Iwi having an oversight and facilitation role in procuring land suitable for social housing developments.
- Approved social housing providers to be responsible for social housing provision.
- A pooled-risk underwriter assisting the providers to raise capital.
- The Crown regulating and monitoring approved providers and, where appropriate, providing capital and guarantees. (Minister of Housing, 2011b, p. 7)

It is unclear when this programme will be implemented, although the Minister of Housing has proposed 'demonstration projects' over the next two years (Minister of Housing, 2011b, p. 7). The Commission understands that these projects would be funded through the Putea Taiwhenua (\$5m) of the Social Housing Fund. The aim of the projects is to "move households from substandard, isolated rural owner-occupied housing into durable homes" (Minister of Housing, 2011b, p. 7). The homes in question would be owned by tribal authorities and rented to their members (Minister of Housing, 2011b, p. 7).

**Box 42 Maintaining rather than building homes – the Rural Housing Programme**

An often understated cost of housing is maintenance. Although a whānau might be able to cover the mortgage costs of a home, when times get tough one of the first things that is postponed to reduce costs is maintenance. In the early 2000s, poorly maintained homes in some rural, predominantly Māori, communities were identified as a significant problem.

The Rural Housing Programme was a response designed to assist whānau with essential repairs and in extreme cases, source a new home to replace houses that were not cost effective to repair. Between 2001 and 2010 \$139.5 million was spent on essential repairs to houses and infrastructure, and a limited number of replacement houses.

In 2010 the programme was reviewed by DBH, which concluded that the programme did not provide value for money, as it did not lead to sustainable improvements in the rural housing stock. The programme had failed to deliver its objective of eliminating poorly maintained houses for the regions it was targeted, and would prove insufficient to the task for the foreseeable future. The programme was wound up, pending options for a replacement programme, with whānau still on its waiting list.

So far, the closest thing to a replacement has been the rural fund component of the social housing fund. At \$5 million, it is less than half the average annual cost of the Rural Housing Programme, and is intended for organisations building or buying social housing in rural areas, rather than repairs.

It is also unclear to the Commission whether the programme is intended to improve most rural communities, or whether it is selecting some as 'sustainable' to be moved to, thereby incentivising the disestablishment of other communities. The Commission sees risks with both.

If helping most communities is the intention then it will require a significant outlay of resources. Two years of demonstration projects will leave limited coverage of the affected areas. In the meantime, the housing situations of many whānau will deteriorate.

The decision to leave a community where one lives on one's whenua tūpuna, in the house of one's immediate ancestors, is a difficult and emotional one, as is choosing to go from being an owner-occupier to a renter. The Commission suggests that the availability of better housing will not prove to be a strong incentive to move for some in rural situations, potentially limiting the effectiveness of the intervention.

However the intention is worked out, under the proposed intervention there will be a considerable adjustment period. During this time whānau living in damaged or dangerous homes will be at risk.

The Commission suggests making some seed funding available to local Māori organisations or Whānau Ora provider collectives to deliver loans for essential repairs using a microfinance approach. Using small loans for housing repairs allows Māori organisations to 'recycle' funding in a way that the suspensory loans (which were essentially grants)<sup>121</sup> made under the RHP were not giving greater value for money.

**Micro-finance**

Microfinance refers to small loans made to those on low incomes who typically find it hard to access credit, without collateral that the loan can be secured against. Central to the microfinance model is group lending, where borrowers are in small groups. The loan is repayable only by the individual it is made to, but the ability of all members to borrow depends on the credit rating of the group as a whole (Maclsaac & Whahid, 1993, pp. 597-598). This incentivises the group to support one another and to "...invest in feasible and productive undertakings" (Maclsaac & Whahid, 1993, p. 598).

A common request from Māori organisations is that the funding for housing programmes be devolved to them, as they would administer it more efficiently, and through loans be able to 'recycle' it. The

<sup>121</sup> A suspensory loan involves under the Rural Housing Programme did not have to be repaid if the occupant still lived in the house three years after the repair was made. This appears to have been more a mechanism to prevent the grants being used to do up homes for on-sale, than any attempt at making an actual loan.

Commission considers that a microfinance approach might be well suited to addressing need for credit to repair homes. It devolves responsibility and the ability to make decisions about priorities to communities, and overtime could be a self-sustaining response to the need for home repairs in rural areas. Local community members are well placed to determine what repairs and in which order would best raise their wellbeing. The Commission suggests, though, that having access to an independent building assessor to provide professional advice and assurance about the costs of repairs may prove crucial to this initiative becoming self-sustaining. Further discussion of how a microfinance approach might fit is included in the table below.

**Table 12.4 Features of microfinance and their applicability to repair loans on Māori land**

Feature	Rationale	Applicability
Group lending	For group lending to work, there must be some feeling of solidarity amongst members, so that they will encourage and support each other.	Whānau and hapū connections could be well suited.
Targeted to the 'functionally landless'	Borrowers typically have insufficient land or other collateral for loan security.	Banks are reluctant to accept Māori land as security for loans. Most also will not take security over the house.
Small, regular payments	Small weekly payments make the debt servicing less burdensome, and enable issues to be identified early.	Māori households in areas where there are greater numbers of rural communities typically have lower incomes.
Commercial interest rates	Still lower than 'loan sharks'. Because there are more, smaller loans, operating costs are greater relative to the size of money being lent.	High-cost 'loan sharks' have been identified as a problem previously (albeit more for living-related expenses). As needs continue to grow, building the sums available to be lent may also be necessary.

*Source:* Productivity Commission analysis of N. Maclsaac & A. N. Whahid (1993); The Grameen Bank: Its Institutional Lessons for Rural Financing

This chapter is very much the initial thinking of the Commission. It is intended to stimulate further discussion about ways that access to affordable housing for rural Māori can be improved. The Commission welcomes further submissions and engagement with Māori on ways to address the affordability of housing in rural areas or on Māori land, in ways that preserve connection to land, tradition, and tūpuna.

# Summary of questions

## Chapter 7 – Urban planning and housing affordability

**Q7.1**

How can territorial authorities streamline and speed up their planning and consenting processes to improve housing supply responsiveness?

## Chapter 8 – Charging for infrastructure

**Q8.1**

What would be the advantages of making decisions about developments contributions contestable through changes to the Local Government Act that would enable a merits-based test?

**Q8.2**

What mechanisms could be used to discourage frivolous litigation?

## Chapter 9 – Building regulations and affordability

**Q9.1**

How can we get fast diffusion of knowledge about what works and what doesn't? Are there ways of improving feedback loops about building innovations?

**Q9.2**

What are the potential advantages and disadvantages (and current barriers) to the consolidation of BCAs?

**Q9.3**

What are the potential advantages and disadvantages from a contestable market for building consenting and inspection services, either publicly or privately provided?

## Chapter 11 – Where housing affordability bites

**Q11.1**

Has the Commission understood all the issues for the sustainability and scalability of Community Housing provision? What else should we consider?

**Q11.2**

How else might scale in the third sector be achieved, other than through stock transfers, extending income related rents to the community housing providers, or through the Social Housing Fund?

**Q11.3**

Has the Commission understood the current affordability issues in the private rental market?

**Q11.4**

What is required in order for the private rental market to deliver better outcomes, particularly for those tenants who are likely to rely on the market for long-term accommodation?

## Chapter 12 – Rural Māori housing

**Q12.1**

Has the Commission understood how housing contributes to the wellbeing of Māori communities, allowing that individuals will place different weightings on different elements?

**Q12.2**

Has the Commission appropriately balanced social, cultural, and economic challenges and opportunities for building housing in rural Māori communities?

**Q12.3**

Are the options the Commission explored for improving the ability of lenders to lend viable? How else might certainty of future demand or security for loans be achieved?

**Q12.4**

Would the unit titles model or retirement villages approach to licences to occupy be useful for housing developments on Māori land? Are they worth further exploration?

# Findings and recommendations

Below is the full set of findings and recommendations from the draft report.

## Summary of findings

### Chapter 6 - The role of taxation

**F6.1**

The tax bias in favour of equity invested in owner-occupied housing is not as large as is often suggested, once GST and territorial government rates are taken into account.

**F6.2**

A decision on whether to adopt a capital gains tax on housing should be based on a coherent set of principles that have general application, not just to housing — a wider matter that runs beyond the scope of this inquiry. There are a number of difficult issues associated with a capital gains tax that would also need to be further considered. This is a complex matter that is sometimes overly simplified by commentators. These questions suggest that the design of a regime for bringing capital gains and losses from changes in the relative price of assets – including houses – into the tax net would depend importantly on the policy objectives (revenue raising, stabilisation, equity and efficiency); and that there may be more to - and less in - it than initially meets the eye.

**F6.3**

- The elimination of depreciation allowances for houses (and other buildings) can be seen as a pragmatic balancing of a number of considerations in the light of a particular set of circumstances – the housing market boom of the early 2000s. Its aptness going forward, in what could be different circumstances, should be monitored; ideally in the context of establishing an approach that is durable across a range of different circumstances.
- The full deductibility of interest expense for business borrowers (and assessability for savers), including of that component that is not 'real', is a tax distortion that favours borrowing to invest in real assets, including for investment in rental dwellings. However, it is a general flaw in the income tax system that best would be addressed as such, rather than specifically in the context of housing.
- No changes, to ring-fence losses on residential rental investments from other taxable income, are called for.

**F6.4**

The existing GST treatment of housing, which applies equally to rental and owner-occupied housing, is appropriate.

Territorial rates, which also apply equally to rental and owner-occupied housing, are also an efficient form of tax.

**F6.5**

With respect to housing affordability:

- GST is front-loaded into the acquisition price of a house, which can raise the hurdle to first home ownership, offset at least in part by the availability of Kiwi Saver and Welcome Home assistance for first home buyers.
- rates can cause strains for those who are 'housing rich but income poor'. The (government funded) rates rebate scheme, and rates postponement arrangements

offered by local authorities are available to ease these strains. There may be a growing need for these, particularly the latter, uptake of which has been low, as the community ages.

## Chapter 7 – Urban planning and housing affordability

### F7.1

The prevailing principles and practice of urban planning have a negative influence on housing affordability in our faster growing cities. Through their plans, councils may directly facilitate or impede residential development by constraining the amount of land they allow for the construction of new stock. Where and when land is provided influences the private and public costs of development and therefore directly influences housing prices. The widespread planning preference for increasing residential densities and limiting greenfield development to achieve this places upward pressure on house prices across the board.

### F7.2

Promoting greater affordability of land and houses, providing for diverse demand, encouraging home ownership, and reducing the negative impact of land banking can be addressed by:

- An active approach to the identification, consenting, release, and development of land for housing in the inner city, suburbs, and city edge.
- Adopting a strategy that allows for both intensification within existing urban boundaries and orderly expansion beyond them to promote efficient urban development, offer a range of lifestyles, and avoid imposing unreasonable and costly constraints on individual segments within the housing market by recognising the benefits of advancing multiple forms of development.
- Identification of substantial areas of brownfield and greenfield land for development, with provision for more efficient use of existing suburban areas through infill where practical and acknowledging the likelihood that greenfield development also provides an opportunity to achieve medium density settlement.
- Promoting competition between developers for the sale of construction-ready sections.

### F7.3

Current legislation does not appear to provide a framework either within or between the Resource Management Act and Local Government Act whereby councils (and other government agencies) might test the trade-offs among objectives and outcomes associated with the four well-beings to reach a position which clearly establishes defensible priorities. The Acts both jointly and individually have purposes which may be difficult to fulfil without recourse to such frameworks.

## Chapter 8 – Charging for infrastructure

### F8.1

Infrastructure charges, especially development contributions, can be difficult and costly to implement. While housing affordability may be diminished, infrastructure has to be paid for. If implemented well, the charges will reflect the incremental costs of necessary infrastructure, and can encourage more efficient investment and location decisions.

**F8.2**

Development contributions are most likely to be justified only for major items of infrastructure, especially network infrastructure, where closed or partially-closed access enhances the ability to charge the beneficiaries, and which justify public supply (Box 21). Observing these criteria mean that offsite water, wastewater, stormwater, and roads are the categories best suited for funding through development contributions.

## Chapter 10 – Performance of the building industry

**F10.1**

- During the recent housing boom, the cost of building a standard house has increased at a greater rate than inflation.
- The cost of both building materials and building a standard house is substantially higher than in Australia.
- A trend toward larger and higher specification houses is also contributing to increased costs. Factors driving this trend include changing consumer preferences, the use of covenants and a desire to avoid under-capitalising given current section prices.

**F10.2**

Industry productivity performance is flat-lining, and this is reflected in growing building costs, and evidence of poor building quality. Evidence suggests that the productivity performance of the construction industry over the past thirty years has been poor relative to other New Zealand industries, and relative to other jurisdictions.

**F10.3**

The lack of scale in the New Zealand residential construction industry presents a significant barrier to productivity growth.

- Small builders are less able to generate economies of scale.
- Scale home builders can reduce construction costs through the delivery of standardised housing, but scale building firms occupy a comparatively small share of New Zealand's building market.
- A lack of available land can present a barrier to productivity through inhibiting the development of group home builders and scale developments.

**F10.4**

The fragmented nature of the residential construction industry supply chain presents a number of management difficulties which can result in lower building quality and higher construction costs.

**F1012.5**

The National Infrastructure Plan represents a good mechanism for providing, where possible, forward visibility of government investment which is reliant on the residential construction sector.

**F10.6**

Skills issues, particularly at the management level, require attention in order for the residential construction industry to better respond to industry cycles and to improve productivity performance. The Productivity Partnership Skills Strategy is focussing on a number of skill issues, which if addressed, would enable better industry productivity growth



## Chapter 11 – Where housing affordability bites

**F11.1**

The state housing stock available to be transferred is not so much surplus, as obsolete. Transferring the problem of modernisation and low demand to the community housing sector will hold back growth in this sector.

## Summary of recommendations

### Chapter 6 – The role of taxation

**R6.1**

That the Government monitor the impact of the removal of the depreciation allowance on commercial properties, including rental properties, for evidence that expenditures relevant to the proper upkeep and safety of buildings are being sustained.

### Chapter 7 – Urban planning and housing affordability

**R7.1**

Auckland Council show in its final Auckland Plan how it has considered and reconciled affordable housing alongside its other priorities.

**R7.2**

Bring significant tracts of greenfield and brownfield land to the market in Auckland – identify and assemble land that could be quickly released and identify significant tracts of land with the potential for (say) 50 years development, with at least 20 years' worth under preparation for development.

**R7.3**

Auckland Council look to collaborative models for the process of identifying, assembling and releasing large scale tracts of land.

**R7.4**

Territorial authorities:

- Take a less constrained approach to the identification, consenting, release, and development of land for housing in the inner city, suburbs, and city edge.
- Adopt a strategy that allows for both intensification within existing urban boundaries and orderly expansion beyond them.
- Develop strategies that promote adequate competition between developers for the right to develop land.

### Chapter 8 – Charging for infrastructure

**R8.1**

That the Government update the Best Practice Guidelines to Development Contributions, based on a process that takes account of the experience of both councils and the industry. The principles in the guidelines might be given statutory status by being incorporated into Schedule 13 of the LGA.

**R8.2**

That the Government leads training to enable councils to enhance their skills in implementing the proposed Best Practice Guidelines for Development Contributions.

**R8.3**

That as part of the process of updating the Best Practice Guidelines to Development Contributions, the Government:

- identify information that councils would need to provide in regular reports to

demonstrate compliance with the Guidelines

- develop a process for regular auditing of councils to assess their adherence to the Guidelines.

## Chapter 9 – Building regulations and affordability

**R9.1**

- The Department of Building and Housing publish for each BCA, the total time taken between receiving applications and finally granting consents and the number of occasions where each BCA has used the 'stop the clock' provision.
- The Department of Building and Housing audit the 'stop the clock' information from a sample of BCAs.

**R9.2**

The Law Commission gives regard in its review of the application of joint and several liability on the incentives faced by regulators.

**R9.3**

The Department of Building and Housing report on its on-going evaluation of the reforms on the allocation of risks between parties to building work five years after introduction.

**R9.4**

The Department of Building and Housing should provide more specific guidance for Building Consent Authorities about what is required for an alternative solution to comply with the Building Code.

**R9.5**

The Department of Building and Housing should review the Multi-proof building consent process with a focus on identifying barriers to its application, and suggesting ways to overcome these barriers.

**R9.6**

Statistics New Zealand consider collecting more information about the quality of New Zealand's housing stock and consumer satisfaction with the residential construction industry.

## Chapter 10 – The performance of the building industry

**R10.1**

Given that the Productivity Partnership has a number of relevant workstreams in progress, and has an established membership of relevant representatives, the Commission considers that it is well placed to develop practical initiatives to improve industry productivity. In particular, the Partnership should develop, in consultation with the sector, practical responses to the supply chain issues outlined in section 10.4.

## Chapter 11 – Where housing affordability bites

**R11.1**

The final structure of the Social Housing Unit should be a Crown Entity with an arms-length relationship to the Minister of Housing.

**R11.2**

We recommend that the Social Housing Fund be increased to better meet the expectations of future social housing provision through the community housing sector.

# Appendix A - Public consultation

## Submissions

<b>INDIVIDUAL OR ORGANISATION</b>	<b>SUBMISSION NUMBER</b>
Affordable Housing New Zealand Limited	012
Alun Breward	001
Auckland Council	045
Auckland District Council of Social Services	041
Auckland Regional Public Health Service	010
Beacon Pathway	057
Brady Nixon	026
BRANZ	040
Brent Wheeler Group	049
Building Industry Federation of New Zealand	047
Carrus Corporation	008
Catholic Diocese of Auckland	050
Cement & Concrete Association of New Zealand	027
Centre for Straight Thinking	024
David Hattam	011
Department of Building and Housing	055
Department of Public Health, University of Otago	039
Department of Labour	014
Development Contributions Working Group	022
Families Commission	009
Fletcher Building	021
G A Mourant & Co Limited	004
Habitat for Humanity New Zealand	023
Housing New Zealand	034
Human Rights Commission	038
IAG New Zealand	017
ICON Concepts	006
Laurie Meadows	002
Land Solutions	035
Local Government New Zealand	058
Martin Brown	052
Ministry of Social Development	005
New Zealand Business Roundtable	020
New Zealand Council for Infrastructure Development	030
New Zealand Council of Trade Unions	015
New Zealand Green Building Council	060
New Zealand Housing Foundation	048
New Zealand Nurses Association	036
New Zealand Property Investors	051
New Zealand Transport Agency	029
Palmerston North City Council	046
Property Council of New Zealand	028
Queenstown Lakes Community Housing Trust	042
Rangitikei District Council	018
Registered Master Builders Federation	016
Reserve Bank of New Zealand	037
Saltburn Limited	007
Simon White	013
Society of Local Government Managers	053
Solar Action	044
Tauranga City Council	019

The Salvation Army	059
Tim Robinson	056
Todd Property Group	025
Whangarei District Council	032

## Engagement meetings

### ORGANISATION

Age Concern  
 Affordable Housing New Zealand Limited  
 Auckland City Mission  
 Auckland Council  
 Auckland Council Property Limited  
 Auckland Policy Office  
 Australian Government Productivity Commission  
 Bank of New Zealand  
 Building and Construction Industry Training Organisation  
 Building Element Assessment Laboratory Limited  
 Burleigh Evatt & Co  
 Canterbury Earthquake Recovery Authority  
 Certified Builders Association of New Zealand  
 City Mission  
 Commerce Commission  
 Commission for Financial Literacy and Retirement Income  
 Community Housing Aotearoa  
 Department of Building and Housing  
 Department of Labour  
 Department of Internal Affairs  
 Department of Prime Minister & Cabinet  
 Energy Efficiency and Conservation Authority  
 Families Commission  
 Fletcher Building  
 Habitat for Humanity New Zealand  
 Home Owners and Buyers Association of New Zealand  
 Hobsonville Land Company  
 Housing New Zealand Corporation  
 IAG New Zealand Limited  
 Local Government New Zealand  
 Lockwood Homes  
 Master Builders Association of New Zealand  
 Ministry of Pacific Island Affairs  
 Ministry of Social Development  
 Ministry for the Environment  
 Mission Australia  
 New Zealand Building Industry Federation  
 New Zealand Contractors Federation  
 New Zealand Centre for Sustainable Cities  
 New Zealand Construction Industry Council  
 New Zealand Green Building Council  
 New Zealand Housing Foundation  
 New Zealand Institute of Architects  
 New Zealand Institute of Quantity Surveyors  
 New Zealand Institute of Valuers  
 New Zealand Planning Institute  
 New Zealand Property Investors Federation  
 Ngāi Tahu Property  
 Ngāti Whātua o Orakei Maori Trust Board

Office of the Auditor General  
Port Nicholson Trust  
PrefabNZ  
Primesite Homes  
Associate Professor John Boon (Unitec)  
Property Council of New Zealand  
Queenstown Lakes Community Housing Trust  
Quinovic  
Real Estate Institute of New Zealand  
Registered Master Builders Association  
Reserve Bank of New Zealand  
Ryman Healthcare  
Society of Local Government Managers  
Specialist Trade Contractors Federation  
Standards New Zealand  
Statistics New Zealand  
Tauranga City Council  
Te Puni Kōkiri  
Te Runanga o Ngāti Porou  
Te Whānau o Waipareira Trust  
The Building and Construction Sector Productivity Partnership  
The Institution of Professional Engineers New Zealand  
The Salvation Army  
The Treasury  
Todd Property Group  
Versatile Homes and Buildings and Spanbild Holdings Limited  
Victorian Competition and Efficiency Commission  
Westpac New Zealand

## Appendix B - Charging for infrastructure: International experience

This appendix discusses the international development, principles, and application of infrastructure charges which have come to the fore since the 1970s as a means funding public infrastructure associated with new development.

### United States experience

Impact fees have been a component of growth in the United States since the 1970s, widely implemented at state level in response to "*unprecedented, rapid growth accompanied by decreasing financial resources*" (US Department of Housing, 1993, p. v). They are widely accepted in principle. How charges are calculated and implemented in practice remains contentious though.

The claim for financial contributions to fund infrastructure development took off with publication of the *Fiscal Impact Handbook* (Burhcell and Listyokin, 1978). This provided a range of options for identifying the costs imposed by new development, such as projecting current per capita costs onto the expected population. Various refinements could not get away from the fact that the methodology was based on charging average and not marginal costs against new development, however. It was felt that these were unlikely to reflect the real cost of providing the infrastructure capacity associated with additional demand on existing infrastructure.

A symposium of the American Planning Association in the late 1980s set out many of the underlying issues and principles (Nelson, 1988). In particular, it endorsed the notion of a *rational nexus test* as the rationale for calculating development impact fees. Such a test should demonstrate that:

- The fees charged are reasonably connected to the community growth generated by new development and particularly the additional facilities required to service that growth; and
- There is a reasonable connection between the expenditure of the fees collected and the benefits accruing to the development from which they were collected (Nicholas and Nelson, 1988).

These principles remain central to guidelines and practice. However, it is usually difficult to establish and measure the nexus between development-induced growth, fees levied, expenditure, and the distribution of benefits.

For example, there are issues around the divisibility of costs and benefits. At a conceptual level there is debate about the focus on input costs as a basis for charges compared with a focus on the impacts of development expenditure (Heikkila and Davis, 1997). The latter, an output-focused approach is considered more likely to identify the marginal expenditure required to mitigate impacts in particular settings (which may be higher or lower than the current average cost of supply) and can be aligned with changes in the level of service arising from the investment.

A US Department of Housing and Urban Development publication in 1993 was intended to deflect the criticism that fees increased housing costs and denied home ownership to "moderate income people" by analysing past experience and developing guidelines for drafting state legislation. State enabling legislation was called for "*to assure fairness, equality, and uniformity among local impact fee programs, as well as minimal effect on housing affordability*".

The criteria outlined by the Department of Housing called for the following provisions (among others) in designing impact fee legislation (pp. vi-viii):

- Specification of land use types eligible for assessment and clarity of the basis for assessment;
- Stipulation of the types of facilities eligible for funding through fees, specifying only facilities reasonably related to the new development and excluding spill-over into expansion or upgrading for existing residents;

- Definition of a defined service area for fee calculation, assessment, collection, and spending;
- Requirement to demonstrate a rational nexus among the development's needs (a needs test), the fee charged (proportionality), and the benefits to the new development from the facility funded (benefits test);
- The level of service funded should be on a par with service levels experienced by the existing community; adopting a higher level of service would require funding by other means;
- Provision for exemptions for specified types of development consistent with community priorities, including the option of waiving fees for affordable housing;
- Specification of timing, noting that "*planning has unique consequences for the land seller, developer, builder, and home buyer. To minimize the effects the fee may be assessed early in the development process ... and collected late in the process (e.g., at building permit issuance)*".

In 2008 the Department of Housing and Urban Development (HUD) issued another set of guidelines, promoting fees as a means of assuring "adequate public facilities" in response to the growth of communities, nominating as the principal facilities to be funded in this way:

...additional water and sewer systems, schools, libraries, parks and recreation facilities, and other infrastructure made necessary by the presence of new residents in an area. (p. 1)

The new guidelines were issued:

...to educate practitioners on impact fees and present recommended approaches that can reduce potentially adverse effects of impact fees on housing affordability. (p. 3)

It noted, however, that:

...impact fees are not the best way in which to finance most public facilities from a variety of theoretical perspectives and instead taxes are "*although where they do not have the ability to raise taxes, elected officials may see impact fees as a pragmatic solution.*" (p. ii)

The report noted the inequities if average or equal charges are applied across new developments, effectively subsidising development more remote from headworks, for example. In this example, inequity is compounded if the more remote properties are occupied by higher income households making greater demands on the resources involved (such as water treatment and distribution).

Marginal cost pricing was canvassed. This would see a two or three part charge: the capital cost of an asset averaged across households, possibly a distribution charge based on distance from headworks and development density to cover variations in local distribution costs <sup>122</sup>, and a per unit volume charge for consumption. In theory, the distribution of demand for network infrastructure -- the location of new development -- would be influenced by the variable pricing resulting.

The reason marginal cost pricing was not widely used in the US included the complexity and cost of calculating and explaining the resulting prices, and the political costs of doing so. The report concludes that "*only water and wastewater facilities would seem to be the appropriate facilities for which impact fees should be assessed. ... Yet impact fees are used to help finance ... other facilities by an ever-increasing number of communities*" (p.20).

The guidebook suggests six policy-making criteria for funding policy development (pp. 28-30):

- Revenue potential: will it generate sufficient revenue?
- Proportionality: how are the costs of new developments apportioned relative to the demand, the costs, and how does this relate to horizontal (equal charges/dwelling) and vertical (charges based on capacity to pay) equity?

<sup>122</sup> The density charge is less relevant if on-site reticulation is in the hands of the developer, as in New Zealand.

- Geographic equity: How important is marginal cost pricing to reflect differences in servicing costs between, .g., infill, suburban, or ex-urban development?
- Administrative ease: are administrative, compliance and enforcement costs (transaction costs) reasonable relative to the funding outcome achieved?
- Public acceptance: Will current ratepayers, for example, face higher rates for the benefits of new development, and how acceptable is that likely to be?
- Housing affordability: Does the funding reflect differences in cost by the size and type of housing (proportionality) and does it have the capacity to vary this based on ability to pay?

The Guide discusses the merits of the widely-utilised approach of charging average or flat fees which has the benefit of simplicity but raise equity issues:

Flat rate impact fees compromise affordability and are socially negative to the degree that they systematically overcharge purchasers in smaller, less expensive house or apartments and undercharge others in the more valuable houses. (p. 43)

The report recommends the use of fees calculated on an area of dwelling basis, on the empirical grounds that smaller and lower income households tend to occupy smaller dwellings and make less demands on services, allowing, though, that the rate could be set on a sliding scale, with the marginal fee diminishing as size increases (p.53).

An alternative approach was recommended by the National Association of Home Builders (NAHB, 2008) promoting flat fees rather than fees graduated by unit size. One of the reasons is that the measured difference in household numbers by dwelling size is minimal, unlikely to justify the more complicated methods associated with proportionate share methods and the greater difficulty in defending them. This rejoinder also suggests that unit type is a superior basis for differentiating fees than unit size. However, it argues that the legal test of "rough proportionality"<sup>123</sup> can be satisfied using an average fee calculation. The assumption that flat fees are regressive and graduated fees progressive is contested on several grounds:

- When household size varies within the same size dwellings, higher income households with fewer occupants would tend to over-pay whereas lower paid households with more occupants would tend to underpay;
- The assumption that higher income households occupy larger buildings is "very crude";
- Flat fees are less prone to the vagaries of the market and therefore easier to predict than;
- Flat fees make calculation of revenue credits easier <sup>124</sup>(p.2).

The difference does not appear to be resolved and graduated or proportional fees are still promulgated by different agencies and councils. The Washington-based National Housing Conference, for example, promulgates on its good practice the use of proportionate fee schedules as a means of keeping smaller homes more affordable. It also suggests that these can be further revised – or subject to selective waivers - to influence prices in rapidly growing districts, and to increase affordability.<sup>125</sup>

## United Kingdom experience

Impact fees are held to be more structured and less open to bargaining between planning authorities and developers than the traditional British practice of ad hoc negotiation of charges within development agreements under Section 106 of the Town and Country Planning Act 1909. These arrangements were

<sup>123</sup> Dolan v City of Tigard, 512 U.S. 374 (1994)

<sup>124</sup> Revenue credits are provisions that need to be made in a graduated fees regime to avoid double dipping by way of future contributions from user charges and rates. In the case of flat fees, any contribution from other sources of revenue would be deducted from the anticipated costs prior to calculation of the average fee.

<sup>125</sup> Revise Impact Fee Structures [http://www.housingpolicy.org/toolbox/strategy/policies/impact\\_fees.html](http://www.housingpolicy.org/toolbox/strategy/policies/impact_fees.html), accessed Nov. 2011



based on the notion of sharing in the betterment arising from planning decisions more than any analysis of costs arising or benefits accruing from development.

The case for impact fees in Britain was couched in terms of privatising the financing of public infrastructure and as such was seen as consistent with the pre-eminence of a market-based political economy in the last two decades of the 20<sup>th</sup> century. It was also seen as simpler than what went before and as providing "*a financial dimension to the planning system*" and "*local authorities new means of influencing the pattern of urban development*" (Goodchild et al., 1997, 164).

Two shortcomings were identified, though:

- A potential conflict between economic and environmental matters on the grounds that "efficiency in the use of public facilities does not always lead to patterns of urban development that are acceptable from an environmental viewpoint", and
- The rationale and debate is about the cost of development rather than the justification for development in the first place.

It was also feared that the revenue generating capacity of impact fees would lead to a reduction in the share of central funding to local government, and that the value of fees would be absorbed into land values, potentially resulting in an increase in prices from costs previously spread over the community as a whole.

The authors' main argument, though, was that development impact fees should not substitute for good planning: the capacity to recover costs does not necessarily make a particular planning strategy more or less appropriate.

## Australian experience

A concern over the prospect that a shift to full, up-front charges for the cost of new physical and social infrastructure would reduce housing affordability in Australia was articulated in 1992 by Walsh. He was reacting to the emerging view that the supply and development of land for housing, especially on the urban fringe, was effectively cross-subsidised, encouraging urban sprawl.

Walsh argued for a simple distinction between predominantly user charges for physical infrastructure and predominantly community-wide taxes and charges for social infrastructure, "reflecting the facts that [for the latter] the bulk of benefits flow to the community as a whole, rather than to individual users, and that the provision of social facilities also usually serves important re-distributional purposes" (p.7). He saw onsite infrastructure as a developer responsibility (and therefore a cost to purchasers) but argued that off-site infrastructure should be funded by user charges across the system as a whole.

## Australian Productivity Commission 2004

A number of inquiries have been held since into the cost of housing in Australia. The 2004 report into first home ownership by the Productivity Commission (2004) found that while infrastructure charges had increased over time, this increase did not explain the surge in housing prices since the mid-1990s, and that reductions were unlikely to significantly influence affordability. This was partly because charges on development for items of wider benefit to the community had been limited, with most charges justified on efficiency or equity grounds. Unlike a tax, infrastructure charges enhance the value of a property (Productivity Commission, 2004, p. 155).

The Commission acknowledged the debate over how far charges were passed forward to buyers or back to land owners on purchase of raw land by the developer. The resolution of where the burden of charges falls depends in part on whether the value of the investment in infrastructure is recognised in the price the buyer is prepared to pay. Even under these circumstances, the Commission felt that any increase in charges upfront is likely to be reflected in a reduction in raw land prices rather than an increase in the new home costs (p164), especially if that increase is a reduction in existing subsidies (in which case the increase represents a transitional issue)..

It was felt that excessive infrastructure charges arise from:

- Inappropriate concentration of charges on individual projects (i.e., some projects paying more than their fair share);
- Excessive standards, perhaps adopted to minimise public liability for future maintenance costs;
- Double charging, when residents pay through upfront charges and rates;
- The funds raised through charges not being spent on the designated purpose;
- Lack of scope for or the high costs of appeal.

While acknowledging the importance of testing proposals for charges against the principles of need nexus, equity, and accountability, the Commission recognised the difficulty of doing so in practice. It suggested that they might be applied differently to different types of infrastructure: distinguishing among basic (equivalent to onsite), major (shared), and social infrastructure (p.168).

The Australian Productivity Commission concluded that:

...though changes in the level and form of infrastructure charges are not responsible for recent sharp declines in housing affordability, compliance with some general charging principles will help to promote more efficient and equitable outcomes. (p. 176)

### **The Victorian Competition and Efficiency Commission 2005**

The Victorian Competition and Efficiency Commission (VCEC) as part of a more general review of housing regulations in 2005 revisited a 2001 review of local government development contributions (which are only a minority of total charges on land development), and drew on the Productivity Commission's 2004 report.

It reiterated the infrastructure charging problems identified in its own 2001 review:

- Failure to differentiate clearly between *use nexus* (sharing costs across all users) and *impact nexus* (recovering additional costs from development);
- Uncertainty over what items may be levied, especially with reference to discretionary social or community services;
- No definitive advice on cost apportionment;
- "Unfair" distinctions between development and community infrastructure that directed contributions more towards the former than the latter;
- Cumbersome administration, especially when development streams were small or sporadic;
- The inability to require developments to pay for off-site works not anticipated in an approved development contribution plan;
- Difficulties in projecting costs and demands;
- Confusion over whether owners exempt from rates should also be exempt from contributions;
- Difficulties collecting contributions from state infrastructure developments.

(Victorian Competition and Efficiency Commission, 2005b, p. 405).

The VCEC felt that reform provisions introduced after the 2001 review, but only recently enacted, covered these issues, and should be allowed to work through the system. They included detailed guidance and simpler methods for preparing development contributions plans. They also provided greater capacity to fund community facilities through contributions (pp.406-407).

The VCEC endorsed the 2004 view of the Australian Productivity Commission that developer contributions should be demonstrated to be necessary, efficient and equitable; that guidelines were required based on

these principles and subject to independent scrutiny; that provision should be made for contributions to compensate for the cost of out-of-sequence development; that there should be opportunities for alternative arrangements to meet household needs; and that those imposing charges should be accountable for the actual expenditure of the funds raised.

Submissions to the VCEC raised concerns about a number of matters – funding alternatives, transparency and accountability, arrangement for levying state agencies, affordability, and implementation. By and large the position taken was that the recently revised arrangements through the passage of the *Planning and Environment (Development Contributions) Act 2004* addressed most concerns, subject to regular monitoring and auditing of how well they were being implemented (Box 43).

#### Box 43 **VCEC; Finding on development contributions**

The Planning and Environment Act 1987 embodies requirements that could be expected, if adhered to by councils, to ensure development contributions are levied only for infrastructure linked to the development, that levies are spent as hypothecated, and that double dipping does not occur. There appears to be no independent, comprehensive monitoring or public disclosure of local governments' adherence to the requirements designed to prevent abuses of the development contributions system. Independent monitoring of councils' adherence to the requirements embodied in the Act and related guidance material is needed to identify the effectiveness of those requirements, and if and where reform might be needed.

*Source:* (VCEC (2005) Housing Regulation in Victoria: Building Better Outcomes, p.417)

The VCEC did acknowledge that increasing reliance on development contributions raised the question of local government financing generally, something that fell outside its remit (p.411).

The Commission did not pursue the question of the marginal cost of providing infrastructure in response to some submitters' concerns over their impact on affordability. It felt that factors other than local body infrastructure charges, including land shortages and cheap finance, played a bigger role in affordability, and that the shift to upfront charges rather than paying over time should not affect it. The average cost per lot is small relative to other factors (p.421). Evidence presented by the Department of Sustainability and Environment indicated that impact or developer charges amounted to 12% of average land and development charges (of \$32,507). Utility charges under state legislation accounted for 53% and stamp duties and registration charges for the balance (35%).

The VCEC also noted a "growing consensus among economists that almost all of any developer contribution is passed on to the ultimate consumer in the long run" (p.420).

It concluded that "the cost represented by development contributions is not an adequate measure of the extent to which they affect housing affordability" and that "it is hardly appropriate to attach the odium of higher costs (and diminished affordability) to the instrument used to raise the money to pay for infrastructure" (p.422).

#### **Australian Productivity Commission 2009, 2011**

A recent review of Public Infrastructure Financing by the Australian Productivity Commission noted the proliferation of development contributions since the 1980s, and their diverse scope (Chan et al., 2009). This was seen to reflect increasing demands for infrastructure associated with expansion, rising service level expectations, and the possibility that the demand for lower density housing had increased the cost of infrastructure supply. At the same time, there is a growing commitment to economic instruments to promote more efficient investment.

The review notes that when a nexus does not exist between a development, infrastructure, and expenditure, the contributions become little more than a tax on development. On the other hand, if there is a connection there should be advantages by way of more efficient resource decisions to the extent that they are passed on to homebuyers in prices.

This presumes that buyers have choices and that their choices reflect varying infrastructure costs and services from place to place. It also assumes that the charges are well founded in terms of both the integrity of the nexus and the cost of the asset provided. Over- or under-pricing might arise from poor design specification – a particular risk if subject to monopoly supply -- or poor timing. In particular a delay relative to expectation would inflate the apparent resource costs of a particular development.

The authors also noted:

- Substantial unspent contributions;
- Significant variability across jurisdictions.

An analysis of 2005-06 contributions across the 152 local councils in New South Wales indicated that the ten with the highest impact fee revenues accounted for 42% of the total received. Further analysis reveals significant variability even among the top ten: cash contributions amounted to 16% of operating revenue in Liverpool, 11% in Ku-ring-gai but just 2% in the City of Sydney. They accounted for 6% of revenue in the top ten and 2% in the other 142 jurisdictions.

The figures also reveal significant unspent funds<sup>126</sup>. Liverpool, for example, had an opening balance (accumulated contributions) of \$61.2m, received \$21.5m in cash and \$4.8m in interest on the account over the year, but spent only \$20m (76% of all revenue to the contributions account). At the end of the year the balance account had grown by 10% and was equivalent to 60% of all annual revenue. While retention of this magnitude reflects the lumpiness of anticipated capital works, it also represents a transfer from the development community which is likely to be reflected in property prices. If nothing else, the interest accruing to the account reflects the cost to developers of early payment for services. The figure across all jurisdictions in that year was over \$66m.

Not all councils recorded positive movements in their contributions accounts, of course

### **Infrastructure Charges Task Force, Queensland 2011**

The Infrastructure Taskforce (IFT) was appointed by the Queensland Government to report on the current regime, including opportunities to simplify charges, provide greater certainty, and consider alternative arrangement for financing trunk infrastructure. It was also seen as timely in support of a government initiative to manage growth following something of a downturn, with infrastructure charges seen by many stakeholders as potentially contributing to the growth management initiatives being pursued by the Queensland government (p.7).

Based on reviewing practice in other states and their similar reviews, submissions and presentations by interested and expert parties, and consultation based on a draft report, the Taskforce made ten recommendations to implement a simplified regime, summarised as (pp. 10-12):

1. Adopt principles to improve current infrastructure: certainty, transparency and accountability, equity and reasonableness, simplicity and consistency, efficiency and economic impacts;
2. Implement a maximum standard charges framework as specified by the Taskforce;
3. Put in place arrangements, specified by the taskforce, to “manage the payment, distribution, and apportionment of charges”, which deals with discretion around subsidies to reduce the maximum charge, distribution of funds across local government controlled networks, transitional arrangements for water and waste water networks, split of water charges between residential and on-residential uses;
4. Maximum standard charges to be applied in a standard planning regime;
5. Maximum standard charges to be set for three years subject to transitional arrangements;
6. Maximum standard charges to be escalated according to the PPI Construction Index;

<sup>126</sup> The common experience in New Zealand appears different. Most councils receive less than expected, with significant funds already spent. This reflects a depressed economy and the inherent difficulty of providing infrastructure ahead of demand, the nature, location and timing of which is difficult to predict, a problem exacerbated where zoning provisions result in sporadic and geographically diverse development.

7. Charges to be monitored and subject to ex-post evaluation;
8. The government to undertake reforms for infrastructure planning an charging beyond three years with a number of provisions nominated by the task force;
9. Local government to explore administrative improvements.

## Appendix C - Housing initiatives

Programme name	Description	Dates and expenditure	Results
Growth Fund – Pūtea Whakatipu	For providers that can deliver affordable and social housing at scale in the long term.	2011/12, \$22.35m available.	A new initiative introduced in 2011/2012 year as part of the reorganisation of support for the third sector and in part replaces the Housing Innovation Fund (HIF)
Niche fund – Pūtea Kaupapa Motuhake	For providers working at a small local scale, or with a specific client group.	2011/12, \$5.0m available.	A new initiative introduced in 2011/2012 year as part of the reorganisation of support for the third sector and in part replaces the Housing Innovation Fund (HIF)
Māori fund - Pūtea Māori	Seeks to promote sustainable communities for Māori, and the use of Māori freehold or Māori reserve land for housing.	2011/12, \$3.0m available.	A new initiative introduced in 2011/2012 year as part of the reorganisation of support for the third sector and in part replaces the Housing Innovation Fund (HIF)
Rural fund – Pūtea Taiwhenua	Seeks to promote sustainable rural communities, and the use of Māori freehold or Māori reserve land for housing.	2011/12, \$5.0m available.	A new initiative introduced in 2011/2012 year as part of the reorganisation of support for the third sector and in part replaces the Housing Innovative Fund (HIF)
Gateway Housing Scheme	Gateway Housing Scheme enables first home buyers, or community housing organisations, to defer payment (which is capped) for Crown and Housing New Zealand Corporation (HNZC) land for up to ten years, whilst they design, build, and begin to pay for their house.	This programme commenced in October 2010	Seven organisations have completed registration of interest and have been found to be eligible for Gateway land. To date 17 properties have been confirmed in Hobsonville and a further 15 sites have been identified throughout the country as available for Gateway.
Welcome Home Loans	Welcome Home Loans require no deposit for a loan of up to \$200,000 and then 15% on the amount above that (capped at \$350,000). The eligibility criteria – are principally that they be first home buyers or in a similar financial position, and their combined income be less than \$85,000.00 a year (two borrowers). HNZC insures the loans that are made by banks and other private lenders.	This programme commenced in September 2003. \$37m non-current liability in 2011/12.	7,851 loans have been approved between 2003/04 and 2010/11 inclusive. 1,405 loans were approved in 2010/11 against a target of 1,750. Demand softened over the last year as a result of subdued market conditions.
KiwiSaver Deposit Subsidy	Householders can apply for a KiwiSaver deposit subsidy if they have belonged to a KiwiSaver scheme, a complying fund, or exempt employer scheme for at least 3 years.	First home withdrawal became available from July 2010. Estimated cost to date of \$3.7 million.	Demand for the product has continued with 929 subsidies approved and paid out in 2010/2011.
Tenant Home	This scheme offers qualifying state sector tenants the	This programme commenced	59 state houses have been sold to their tenants since September 2009. Thirty seven of these sales were in

Ownership Programme	opportunity to buy the state house they occupy.	in September 2009.	2010/2011.
Kāinga Whenua Loans	Extension of the Welcome Home Loan programme which is designed to assist individuals to build on multiply owned Māori land. HNZC insures the loans which are provided by Kiwibank to assist individuals build on multiple owned Māori land. Kiwibank as the sole lender for Kāinga Whenua loans. The scheme was intended to improve access to finance which was seen as one of the greatest barriers for Māori wishing to build on multiple owned Māori land.	Programme commenced 2009/2010.	1 loan settled in 2009/2010 and a further 2 loans in 2010/2011. HNZCs implementation costs were \$100,000 plus staff time. HNZC has recommended changes to the scheme which include removing income caps and other restrictive criteria with the view to developing the scheme as a standalone product in the future.
Housing Innovation Fund	The Housing Innovation Fund aims to increase the availability of rental and home ownership opportunities for low income households and people with special needs by working with local government, third sector and community organisations.	Scheme commenced in 2003. Estimated total funding in loans and capital grants of \$131.8 million or an average of \$16.5 million per annum.	Since the Housing Innovations Fund was introduced in 2003, the fund has delivered 1,752 new or upgraded units (an average of 219 per annum) and leveraged an additional \$115 million from social housing organisations.
Māori Demonstration Partnerships	This programme was introduced in 2009/2010 to encourage sector growth and deliver affordable rental housing and home ownership opportunities to Maori. Some of the opportunities may be on multiple owned Maori land.	In the first two years of the programme grants and loans have totalled \$9.5 million.	The initiative has approved 44 new dwelling in 2009/2010 and 40 housing units in 2010/2011
Rural Housing Programme	The rural housing programme aimed to improve sub-standard rural housing and was a needs based programme. The main rural housing areas are Northland, East Cape, and the Eastern Bay of Plenty. The scheme includes suspensory loans for essential repairs and the provision of infrastructure.	2001/2002 was the start of a 5 year strategy/programme which was subsequently extended. Total expenditure since 2001/2002 is estimated at \$139.5 million	Over 3,500 dwellings have benefited from the programme over the last 10 years.
Community Owned Rural Rental Loans	Provides loans for community-based organisations to build their rental housing stock. Units were leased back to HNZC for the first 10 years of their existence. This was the first HNZC programme that provided loans to Māori trusts and, as such, represented a step forward for encouraging trusts to provide housing on Māori land.	The scheme commenced in 2002 and finished in 2008. \$6.6 million provided to Māori trusts in low-cost loans.	Results are unclear, but the programme spent less than the target amount for each year. As at June 2011 there were seven outstanding loans.
Papakāinga Lending Scheme	The Papakāinga Loan was intended to help individuals and households to build on Māori land, when they might not have qualified for a commercial mortgage because the land was held in multiple-ownership.	Scheme was introduced in 1985 and ceased in 2009.	The Corporation approved 44 loans between 2000 and 2009. Papakāinga Loan funding ceased at the end of June 2009. This programme was replaced with the Kāinga Whenua loans.

Special Housing Zones	<p>This was originally a much larger programme, which was a joint initiative between TPK and HNZC. TPK was responsible for the capacity support to Māori communities and organisations, and HNZC was responsible for the capital funding for a suite of housing initiatives developed by Māori communities and organisations able to enter into contractual arrangements.</p> <p>Funding was used for a range of purposes, including paying for professional services such as planners and architects, and funding home maintenance programmes.</p>	2000 to present	<p>The programme has been instrumental in progressing a number of housing developments. This includes two of the successful Māori Demonstration Partnership Fund projects in 2010/11.</p>
Healthy Housing Programme	<p>Healthy Housing is a joint project between HNZC and District Health Boards (DHBs). The programme works with HNZC tenants in selected areas. Healthy Housing aims to raise awareness of infectious diseases like meningococcal disease, rheumatic fever, tuberculosis, cellulitis and respiratory disease, improve access to health and social services, reduce the risk of housing-related health problems, and reduce overcrowding.</p>	2001 to present	<p>Evaluation of the Healthy Housing programme has shown significant reductions in potentially avoidable housing-related hospitalisation rates for children in participating households. The programme was also effective at reducing hospitalisations in the total participant population.</p>
Shared Equity Scheme	<p>Two year pilot study designed to improve the home ownership affordability of modest income households. The shared equity scheme allows potential home owners to bridge the difference between the maximum they can borrow from Kiwibank and the amount they need to buy a house up to a maximum value of 30% of the house price with a loan from HNZC. The loan has no interest costs and requires no repayment until the house is sold. If the value of the property increases or decreases so does the amount that needs to be repaid.</p>	Commenced 30 <sup>th</sup> June 2008 and was not continued after the end of the second year.	<p>The scheme was budgeted to provide assistance to approximately 700 low to middle income households.</p>
Low Deposit Rural Loans	<p>Home loan for low-income households with 3% deposit. Applicants completed a home ownership education course and had to prove that they could service a loan. Information and coaching/brokering support was provided for up to five years to help manage defaults in the most common default period.</p>	Introduced in 1984 and closed in 2008. As at June 2011 there were 332 outstanding low deposit rural lending loans.	<p>142 loans were provided between 2000 and 2009 for houses on multiply-owned Māori land and as at June 2011 there were 111 outstanding loans.</p>

Source: OAG, HNZC, MSD

Notes:

1. Hon Phil Heatley (2010) 'Gateway to improve housing affordability' accessed at <http://www.scoop.co.nz/stories/PA1010/S00123/gateway-to-improve-housing-affordability.htm> Accessed 7/11/2011



# References

- AIA, 2007. *Integrated Project Delivery: A Guide*. Washington DC: The American Institute of Architects.
- Allan, N. Yin, Y. and Scheepbouwer, E., 2008. *A Study into the Cyclical Performance of the New Zealand Construction Industry*. Melbourne.
- André, C., 2010. *A Bird's Eye View of OECD Housing Markets*, OECD Economics Department Working Papers, No. 746. Paris.
- Anthony J., 2003. *The Effects of Florida's Growth Management Act on Housing Affordability*. *APA Journal*, 69(3), pp. 282-295.
- ANZ, 2011. *The ANZ Property Investment Survey*. Auckland.
- Auckland Regional Growth Forum, 1997. *A Place Sought by Many: a Brief History of Regional Planning for Auckland's Growth*. Auckland: Auckland Regional Council.
- Auckland Regional Growth Forum, 1999. *Auckland Regional Growth Strategy*. Auckland: Auckland Regional Council.
- Australia's Future Tax System, 2010. *Report to the Treasurer*. Canberra: Commonwealth of Australia. Available at: <[http://taxreview.treasury.gov.au/content/Content.aspx?doc=html/pubs\\_reports.htm](http://taxreview.treasury.gov.au/content/Content.aspx?doc=html/pubs_reports.htm)>.
- Australian Productivity Commission, 2004. *First Home Ownership*, Report 28. Melbourne.
- Barker K., 2004. *Review of Housing Supply: Delivering Stability: Securing our Future Housing Needs*. London: Treasury/HMSO.
- Barker, K., 2004. *Review of housing supply: Delivering stability: Securing our future housing needs*, Final Report – recommendations. London: HM Treasury.
- BCSPP (Building and Construction Sector Productivity Partnership), 2011. *Built Environment Skills Strategy, Draft for Consultation*. Wellington: Building and Construction Sector Productivity Partnership.
- BCSPT (Building and Construction Sector Productivity Taskforce), 2009. *A modern efficient and productive New Zealand built infrastructure industry*. Wellington: Building and Construction Sector Productivity Partnership.
- Beach, R., Webster, M. and Campbell, K. M., 2005. An evaluation of partnership development in the construction industry. *International Journal of Project Management*, 23(8), pp.611-621.
- Beacon Pathway Ltd, 2010. *The Determinants of Tenure and Location Choices of 20-40 year old Households in the Auckland Region*. Wellington: Centre for Housing Research Aotearoa New Zealand.
- Beer, A. and Faulkner, D., 2009. *21<sup>st</sup> Century housing careers and Australia's housing future*, AHURI Final Report No. 28. Melbourne: Australian Housing and Urban Research Institute.
- Bell, P., 2010. *Prefab Housing: Potential for Development*. *Build Magazine*, June/July issue.
- Bollard, A. and Smith, M., 2006. *Major global developments in the New Millenium*, paper prepared for address to the Canterbury Chambers of Commerce, January 2006.
- Bourn, C., 2001. *Modernising Construction*. London: United Kingdom National Audit Office.
- Briggs, P. and Ng, T., 2009. *Trends and cycles in New Zealand house prices*. Wellington: Reserve Bank of New Zealand.
- Buckett, N., Marston, N., Saville-Smith, K., Jowett and J., Jones, M., 2011. *Preliminary BRANZ 2010 House Conditions Survey Report – Second Edition*, BRANZ Study Report 240. Judgeford: BRANZ.
- Buddle Findlay and Sapere Research Group, 2011. *Review of the application of joint and several liability to the building and construction sector*. Wellington: Department of Building and Housing.
- Building and Construction Sector Productivity Partnership, 2011. *Productivity Partnership Draft Research Action Plan*. Wellington.
- Buiter, W. H., 2010. *Housing Wealth Isn't Wealth*. *Economics*, 3(22). Available at: <<http://www.economics-ejournal.org/economics/journalarticles/2010-22>>, [Accessed August 5, 2010].
- Burcell, R.W. and Listokin, L., 1978. *The Fiscal Impacts handbook*. New Brunswick: The Centre for Urban policy research.
- Burchell, R.W., Listokin, D. and Galley, C. G., 2000. Smart Growth: more than a ghost of urban policy past: less than a bold new horizon, *Housing Policy Debate*, 11(4), pp.821-879.

- Burleigh, E., 2009. *Research on Understanding Investment Decision-making*. Wellington: Department of Building and Housing.
- Business and Economic Research Limited, 2008. *The economic impacts of immigration on housing*. Wellington: Centre for Housing Research, Aotearoa New Zealand and Department of Labour.
- Carney, M., 2011. *Housing in Canada*, Remarks by the Governor of the Bank of Canada, to the Vancouver Board of Trade. Speech 15 June, Vancouver, British Columbia. Available at: <<http://www.bankofcanada.ca/2011/06/speeches/housing-in-canada>>, [Accessed December 9, 2011].
- Centre for Housing Research, Aotearoa New Zealand, 2006. *Maori housing experiences: Developing trends and issues*. Wellington.
- Chan, C., Forwood, D., Roper, H. and Sayers, C., 2009. *Public Infrastructure Financing: an International Perspective*, Staff Working paper. Melbourne: Australian Productivity Commission.
- Cheshire, P., 2009. *Urban Containment, Housing, Affordability and Price Stability – Irreconcilable Goals*, Research Report 4. London: UK Spatial Economics Research Centre.
- CHRANZ (Centre for Housing Research Aotearoa New Zealand), 2007. *Affordable housing: the community housing sector in New Zealand*. Wellington.
- CHRANZ (Centre for Housing Research Aotearoa New Zealand), 2011. *Why have residential construction costs increased more than costs in other sectors of the New Zealand economy?* Unpublished discussion paper.
- CityScope Consultants, 2009. *Organising Integrated Urban Development Project*, Research Report 379. Wellington: New Zealand Transport Agency.
- CityScope Consultants, 2011. *Improving the Design, Quality and Affordability of Residential Intensification in New Zealand*. Wellington: Centre for Housing Research Aotearoa New Zealand.
- Coleman, A. 2007. *Credit Constraints and Housing Markets in New Zealand*, Discussion Paper DP2007/11. Reserve Bank of New Zealand: Wellington.
- Coleman, A. and Landon-Lane, J., 2007. *Housing markets and migration in New Zealand 1962-2006*. Wellington: The Reserve Bank.
- Coleman, A., 2010. *Squeezed in and squeezed out: The effects of population ageing on the demand for housing*, Motu Working Paper, 10-01. Wellington. Wellington: Motu Economic and Public Policy Research.
- Commerce Commission, 2011a. *Fletcher Concrete receives Commerce Commission warning: behaviour at risk of breaching the Commerce Act*. Wellington.
- Commerce Commission, 2011b. *Construction Sector Research – Key Findings*. Wellington.
- Commission for Financial Literacy and Retirement Income, 2007. *Review of Retirement Income Policy*. Wellington.
- Committee of Inquiry into Inflation Accounting, 1976. *Report of A Commission of Enquiry into Inflation Accounting*, Parliamentary Paper H4, House of Representatives. Government Printer.
- Community Housing Aotearoa, 2011a. *Community Housing Aotearoa Homepage*. Available at: <<http://communityhousing.org.nz>> [Accessed December 7, 2011].
- Community Housing Aotearoa, 2011b. *Annual Report 2010-2011*. Wellington: Community Housing Aotearoa.
- Construction Industry Board, 1997. *Code of practice for the selection of subcontractors*. London: Institute of Civil Engineers Publishing.
- Crimp, R., 2008. *Summary Report on Research and Publications Related to Engineering Lifelines and Critical Infrastructure around the World*, Report 1. Auckland: National Engineering Lifelines Committee.
- Davey, J., 2006. Ageing in Place: The Views of Older Homeowners on Maintenance, Renovation and Adaptation. *Social Policy Journal of New Zealand*, 26. Wellington: Ministry of Social Development.
- Davis, N., 2007. *Construction Sector Productivity, Scoping Report*.
- Davis, N., 2010. *Poor Productivity Needs Turning Around: What do we know about productivity in the construction industry, and what can be done to improve it?* Build Magazine, June/July issue.
- DBH (Department of Building and Housing), 2008. *Identification and analysis of building consent, inspection and approval costs*. Available at: <<http://www.dbh.govt.nz/bc-approval-costs>> [Accessed 9 December 2012].

- DBH (Department of Building and Housing), 2010. *Residential consumers experience of commissioning building work, a survey of homeowners who obtained building consents in 2005*. Wellington.
- DBH (Department of Building and Housing), 2011. *Estimated building costs*. Wellington.
- DBH (Department of Building and Housing), 2011a. *Building Act review 3: Stepped consenting*. Available at: <<http://www.dbh.govt.nz/UserFiles/File/Building/Building%20law%20and%20compliance/Paper-3-Stepped-consenting.pdf>> [Accessed 9 December 2012].
- DBH (Department of Building and Housing), 2011b. *Update on implementing the Building Act review*. Available at: <<http://www.dbh.govt.nz/UserFiles/File/Building/Building%20law%20and%20compliance/fact-sheet-BAR-results-next-steps.pdf>> [Accessed 9 December 2012].
- DBH (Department of Building and Housing), 2011c. *Multiproof*. Available at: <<http://www.dbh.govt.nz/multiproof>> [Accessed 9 December 2012].
- Deloitte, 2007. *Real estate investment trusts for residential properties report*. Wellington: Department of Building and Housing.
- Demographia, 2011. *7th annual Demographia international housing affordability survey*. Belleville: Performance Urban Planning.
- Department of Building and Housing, 2010. *New Zealand Housing Report 2009/2010: Structure, pressures and issues*. Wellington.
- Department of Building and Housing, 2010a. *Introduction to the Unit Titles Act 2010*. Wellington.
- Department of the Prime Minister and Cabinet, 2008. *Final report of the House Price Unit: House price increases and housing in New Zealand*. Wellington.
- Drage, D., Munro, A. and Sleeman, C., 2005. An update on Eurokiwi and Uridashi bonds. *Reserve Bank of New Zealand Bulletin*, 68 (3).
- DTZ New Zealand, 2008. *The Intermediate Housing Market in New Zealand*. Wellington: Centre for Housing Research Aotearoa New Zealand.
- Dunbar, R. and McDermott, P., 2011. *Improving the Design, Quality and Affordability of Residential Intensification in New Zealand*. Wellington: Centre for Housing Research, Aotearoa New Zealand.
- Duren, J. and Dorée, A., 2008. *An evaluation of performance information procurement system (PIPS)*. Paper presented at the 3rd international IPPC conference, 28-30 August, Amsterdam.
- Dwyer, G.E. and Wilkinson, B.D., 2011. *Efficient Infrastructure Charges*, Background working paper. Wellington: New Zealand Productivity Commission.
- Earthquake Commission, 2011, *Statistics, Claims Overview*. Accessed at: <<http://canterbury.eqc.govt.nz/news/progress/statistics>>.
- Education Counts, 2011, *Retention and Achievement – Updated data tables*. Accessed at: <[http://www.educationcounts.govt.nz/statistics/tertiary\\_education/retention\\_and\\_achievement](http://www.educationcounts.govt.nz/statistics/tertiary_education/retention_and_achievement)>.
- EECA – Energy and Efficiency Conservation Authority, 2011. *About the Warm Up New Zealand: Heat Smart Programme*. Accessed at: <<http://www.energywise.govt.nz/node/18453>>.
- Eom, C. S. J., Yun, S. H. and Paek, J. H., 2008. Subcontractor evaluation and management framework for strategic partnering. *Journal of Construction Engineering and Management*, 134, pp.842.
- Evans-Cowley, J.S. and Lawhon, L.L., 2003. The Effects of Impact Fees on the Price of Housing and Land: a Literature Review. *Journal of planning Literature*, 17(3), pp.351-359.
- Fletcher Building, 2007. *New Zealand/Australia Home Building Cost Study*. Unpublished.
- Gilroy, L.C., Staley, S.R. and Stedron, S., 2007. *Statewide growth Management and Housing Affordability in Florida, Background*, 53. Tallahassee, Florida: James Madison Institute.
- Girouard, N., Kennedy, M., van den Noord, P. and Andre, C., 2006. *Recent House Price Developments: The Role of Fundamentals*, OECD Economics Department Working Paper, No. 475. Paris.
- Glaeser, E.L. and Gyourko, J., 2003. *The impact of building restrictions on housing affordability*. New York: Federal Reserve Bank of New York.
- Glaeser, E.L., Gyourko, J. and Saiz, A., 2008. *Housing Supply and Housing Bubbles*, NBER Working paper 14193.

- Glaeser, E.L. and Shapiro, J.M., 2002. *The Benefits of the Home Mortgage Interest Deduction*, Harvard Institute of Economic Research Discussion Paper, no. 1979. Cambridge, United States.
- Goetz, E.G., 2004. The Big Tent of Growth Management: Smart Growth as a Movement. In: D.N. Bengston, ed. 2004. *Policies for Managing Urban Growth and Landscape Change: A Key to Conservation Management*. St. Paul, Minnesota: Department of Agriculture Forest Service, pp.45-51.
- Goodchild, B., Booth, C. and Henneberry, J., 1996. Impact fees: a review of alternatives and their implications for planning practice in Britain. *Town Planning Review*, 67(2), pp.161-181.
- Green, R., Green, K., Malpezzi, S. and Mayo, S., 2005. *Metropolitan specific estimates of the price elasticities of supply of housing, and their sources*. American Economic Review 95(2) pp.334-339.
- Grimes, A. and Aitken, A., 2007. *Housing Supply and Price Adjustment*, Motu Working Paper 06-01. Wellington: Motu Economic and Public Policy Research.
- Grimes, A. and Aitken, A., 2010. Housing Supply, Land Costs and Price Adjustment, *Real Estate Economics*, 38(2).
- Grimes, A. and Young, C., 2010, *Pacific Peoples' Homeownership in New Zealand*. Wellington: Motu Economic and Public Policy Research.
- Grimes, A., Aitken, A. and Kerr, S., 2004. *House price efficiency: expectations, sales, symmetry*, Working Paper 04-02. Wellington: Motu Economic and Public Policy Research.
- Grimes, A., Aitken, A., Mitchell, I. and Smith, V., 2007. *Housing Supply in the Auckland Region 2000-2005*. Wellington: Centre for Housing research Aotearoa New Zealand.
- Gurran, N., Mulligan, V., Baker, D., Beth Bugg, L. and Christensen, S., 2008a. *New directions in planning for affordable housing: Australian and international evidence and implications*, Positioning Paper 1089. Melbourne: Australian Housing and Urban Research Institute.
- Gurran, N., Ruming, K. and Randolph, B., 2010. *Planning, government charges, and the costs of land and housing*. Melbourne: Australian Housing and Urban Research Institute.
- Gurran, N., Ruming, K., Randolph, B., and Quintal, D., 2008b. *Planning, government charges, and the costs of land and housing*, Positioning Paper 109. Melbourne: Australian Housing and Urban Research Institute.
- Gyourko, J., 2009. Housing Supply, *Annual Review of Economics*, 1, pp. 295-318.
- Gyourko, J., Saiz, A. and Summers, A., 2008. A new measure of the local regulatory environment for housing markets: the Wharton Residential Land Use regulatory Index. *Urban Studies*, 45(3), pp. 693-729.
- Hall, V., J. McDermott and J. Tremewan, 2006. *The Ups and Downs of New Zealand House Prices*, Motu Working Paper, 06-03. Wellington: Motu Economic and Public Policy Research.
- Hartmann, A., and Caerteling, J., 2010. Subcontractor procurement in construction: the interplay of price and trust. *Supply Chain Management: An International Journal*, 15(5), pp.354-362.
- Haurin, D.R., Parcel, T.L and Haurin, R.J., 2001. *The impacts of home ownership on child outcomes*, Low Income Home Ownership Working Paper Series 01.1- 4. Cambridge, United States: Joint Centre for Housing.
- Heatley, Hon. P., 2010. Government Acts on Housing Recommendations. Available at <<http://www.beehive.govt.nz/release/government-acts-housing-recommendations>> [Accessed December 7, 2011].
- Heatley, Hon. P., 2011. *More funding to grow volume of social housing*. Available at: <<http://www.beehive.govt.nz/release/more-funding-grow-volume-social-housing>> [Accessed December 7, 2011].
- Heikkila, E. J. and Davis, W., 1997. Rethinking fiscal impacts. *Journal of Planning Education and research*, 15, pp. 201-211.
- Hinton, M., 2011. *Procurement processes in the building and construction industry: A New Zealand Productivity Commission resource paper*". Wellington.
- HNZC (Housing New Zealand Corporation), 2009. *Statement of Intent 2009 – 2010*. Wellington.
- HNZC (Housing New Zealand Corporation), 2010. *Annual Report 2009/2010*. Wellington.
- HNZC (Housing New Zealand Corporation), 2010. *Statement of Intent 2010 – 2013*. Wellington.
- HNZC (Housing New Zealand Corporation), 2010a. *Kainga Whenua loan - a guide to lending for housing on multiple-owned Maori land*. Available at: <<http://www.hnzc.co.nz/about-us/our>

- publications/Brochures/kainga-whenua-loan-guide/kainga-whenua-loan-guide.pdf> [Accessed December 7, 2011].
- HNZC (Housing New Zealand Corporation), 2011. *Annual Report 2010/2011*. Wellington.
- House Prices Unit, 2008. *Final Report of the House Prices Unit: House Price Increases and Housing in New Zealand*, Department of the Prime Minister and Cabinet. Wellington.
- Housing Shareholders Advisory Group, 2010. *Home and Housed – A Vision for Social Housing in New Zealand*. Wellington.
- Howden-Chapman, P., Matheson, A., Crane, J., Viggers, H., Cunningham, M., Blakely, T., Cunningham, C., Woodward, A., Saville-Smith, K., O’Dea, D., Kennedy, M., Baker, M., Waipara, N., Chapman, R. and Davie, G. 2007. Effects of insulating existing homes on health inequality: cluster randomised study in the community, *British Medical Journal* 334 (7591), pp. 460.
- Howden-Chapman, P., Peita, M. and Pene, G., 2009. *Living the Tokelauan way in New Zealand*. University of Otago.
- HSAG, 2010. *Home and Housed - A vision for social housing in New Zealand*. Wellington: Department of Building and Housing.
- Ihlanfeldt, K.R. and Shaughnessy, T.M., 2004. An empirical investigation of the effects of impact fees on housing and land markets. *Regional Science and Urban Economics*, 34, pp.639-661.
- Independent Inquiry into Local Government Rates, 2007. *Funding Local Government*. Wellington.
- Infrastructure Charges Taskforce, 2011. *Final Report: Recommended reform of local government development infrastructure charging arrangements*. Brisbane.
- Ingerson, J., 2011. *Average House Size by Age*. Wellington: QV.
- Inland Revenue Department/New Zealand Treasury, 2009. *The Taxation of Capital Gains*, Background paper for Session 3 of the Victoria University of Wellington Tax Working Group. Wellington.
- Invercargill City Council v Hamlin, 1994. 3 NZLR 513, New Zealand Court of Appeal.
- Jackson, N., 2011, *The demographic forces shaping New Zealand’s future. What population ageing [really] means*. Hamilton: National Institute of Demographic and Economic Analysis, The University of Waikato.
- Jacobsen, V., 1999. Resource management in New Zealand: Rhetoric, Reality and Reform. *Agenda*, 6(3) pp.225-236.
- Jaine, R., Baker, M. and Venugopal, K., 2008. Epidemiology of acute rheumatic fever in New Zealand. *Paediatrics and Child Health*, 44, pp.64-71.
- James, B. and Saville-Smith, K., 2010. *Children’s housing futures*. Wellington: Centre for Housing Research Aotearoa New Zealand.
- James, C., 2009. *Australian homes are biggest in the world*. CommSec Economics. Available at: <<http://images.comsec.com.au/ipo/UploadedImages/craigjames3f6189175551497fada1a4769f74d09c.pdf>>.
- Jones, C., Smith, F., Mead, A., Greenway, A. and Taylor, J., 2009. *Housing Stock and Housing Demand, Tauranga City* (unpublished research paper).
- Joyce, S., 2011. *Budget 2011: Canterbury trades training boost*. Accessed at: <<http://beehive.govt.nz/release/budget-2011-canterbury-trades-training-boost>>.
- Karaitiana, R., 2010. Skills in Focus as Productivity Tops Agenda, Build Magazine, June/July issue.
- Kenly, K., 2003. Strewth Mate! It’s a rip off, *Architecture New Zealand*, 4, July/August issue.
- Latham, M., 1994. *Construction the Team, Joint Review of Procurement and Contractual Arrangements in the United Kingdom Construction Industry: Final Report*. London: HMSO.
- Law, D. and Meehan, L., 2012. *Housing affordability in New Zealand: evidence from household surveys*. Wellington: New Zealand Productivity Commission/Treasury working paper (forthcoming).
- Local Government Forum and Property Council New Zealand, 2010. *Taxing Growth and Development: A Critical Review of the Role of Development and Financial Contributions*. Christchurch.
- Local Government New Zealand, 2003. *Local Government KnowHow: Best Practice Guide to Development Contributions*. Available at: <<http://library.lgnz.co.nz/cgi-bin/koha/opac-searchresults.pl?subjectitems=Best%20Practice>>.

- Love, P.E.D., Irani, Z. and Edwards, D.J., 2004. A rework reduction model for construction projects. *Engineering Management, IEEE Transactions on*, 51(4), pp.426-440.
- Maani, S., Vaithianathan, R. and Wolf, B., 2006. *Inequality and health: Is housing crowding the link?*, Motu Working Paper 06-09. Wellington: Motu Economic and Public Policy Research.
- Maclsaac, N. and Whahid, A.N., 1993. The Grameen Bank: Its Institutional Lessons for Rural Financing. In K. P. Jameson, and C. K. Wilbur, ed. 1980. *The Political Economy of Development and Underdevelopment*. New York City: McGraw-Hill Inc., pp.596-609.
- Maclennan, D., 2008. *Focussing on the housing system and modernising housing policy*. Wellington: Centre for Housing Research New Zealand.
- Mailizia E. and Gallo L., 2009. *Proportionate-Share Impact Fees*, Supplement to the NAHB Fees Handbook 2008. Washington DC: National Association of Home Builders.
- Maltbys, 2010. Cost and Indices of Building Construction. Accessed at: <[http://www.maltbys.co.nz/pages/latestNews/BIA\\_Indices.pdf](http://www.maltbys.co.nz/pages/latestNews/BIA_Indices.pdf)>.
- Maré, D and Stillman, S, 2008. *Housing Markets and Migration: Evidence from New Zealand*, Motu Working Paper 09-06. Wellington: Motu Economic and Public Policy Research.
- Mason, G. and Osborne, M., 2007. *Productivity, capital-intensity and labour quality at sector level in New Zealand and the UK*, *New Zealand Treasury Working Paper*. Wellington.
- Minister of Housing, 2011a. *Establishing a Funding Mechanism for Future Social Housing Provision*. Wellington: Social Housing Unit.
- Minister of Housing, 2011b. *Budget 2011 - funding the new direction for social housing*. Wellington.
- Ministry of Pacific Affairs, 2009. *Exploring housing options for Pacific families*. Wellington.
- Ministry of Social Development, 2006. *New Zealand Living Standards 2004*. Wellington.
- Morrison, P., 2008. *On the Falling Rate of Home Ownership in New Zealand Market*. Wellington: Centre for Housing Research, Aotearoa New Zealand.
- Mumford, P.J., 2011. *Enhancing performance-based regulation: Lessons from New Zealand's building control system*. Wellington: Institute of Policy Studies.
- NAHB (National Association of Home Builders), 2008. *Impact Fee Handbook*. Washington, DC.
- National Housing Conference, 2010. *Revise Impact Fee Structures*. Available at: <[http://www.housingpolicy.org/toolbox/strategy/policies/impact\\_fees.html](http://www.housingpolicy.org/toolbox/strategy/policies/impact_fees.html)>.
- National Infrastructure Plan, 2011. Accessed at: <<http://www.infrastructure.govt.nz/plan>>.
- National Infrastructure Unit, 2011. Accessed at: <<http://www.infrastructure.govt.nz/>>.
- Nelson, A. C, ed., 1988. *Development Impact Fees: policy Rationale, Practice, Theory and Issues*. Chicago: American Planning Association.
- Neutze, M., 1997. *Funding Urban Services: Options for Physical infrastructure*. Sydney: Allen & Unwin.
- Newport Partners, Davidson, M.D. and Virginia Polytechnic Institute and State University, 2008. *Impact fees and housing Affordability: A guidebook for Practitioners*. Washington DC: US Department of Housing and Urban Development.
- Nicholas, J.C. and Nelson, A.C., 1988. Determining the appropriate Development Impact Fee Using the Rational Nexus Test. *Journal of the American Planning Association*, Winter, pp.56-66.
- Nickell, S., 2009. The British housing market: What has been happening? *Oxonomics*, 4(1).
- NZIER (New Zealand Institute of Economic Research), 2011. *Industry productivity and the Australia-New Zealand income gap*. Accessed at: <[http://nzier.org.nz/sites/nzier.org.nz/files/WP2011-03%20-%20Industry%20productivity%20and%20the%20Australia-New%20Zealand\\_final\\_0.pdf](http://nzier.org.nz/sites/nzier.org.nz/files/WP2011-03%20-%20Industry%20productivity%20and%20the%20Australia-New%20Zealand_final_0.pdf)>.
- O'Donovan, B. and Rae, D., 1997. The determinants of house prices in New Zealand: an aggregate and regional analysis. *New Zealand Economic Papers*, 31(2).
- OAG., 2011. *Government planning and support for housing on Maori land*. Wellington: Office of the Auditor-General.
- OECD, 2004. *Annual Report on Competition Policy Developments in New Zealand: September 2003 – August 2004*. Accessed at: <<http://www.oecd.org/dataoecd/36/52/34720907.pdf>>.
- OECD, 2011. *OECD Economic Survey, New Zealand*. Paris.

- Office of the Auditor General, 2011. *Government Planning and Support for Housing on Maori Land*. Wellington
- Office of the Minister of Building and Construction, 2011. *Building Act Review: Regulation of Guarantee Products and Services*. Wellington.
- Page, I.C., 2007. *Changing housing demand*, Study Report No. 183. Wellington: BRANZ.
- Page, I. C., 2008. *New house price modelling*, BRANZ Study Report 196. Judgeford: BRANZ Ltd.
- Page, I. C., 2010. *Construction industry productivity*, BRANZ Study Report 219. Judgeford: BRANZ Ltd.
- Page, I. C., 2011. *Construction industry data to assist in productivity research*, BRANZ Study Report 256. Judgeford: BRANZ Ltd.
- Page, I. C. and Curtis, M. D., 2011. *Firm productivity variations*, BRANZ study report 254. Judgeford: BRANZ Ltd.
- Page, I. C. and Fung, J., 2011, *Cost efficiencies of standardised new housing*, BRANZ study report 247. Judgeford: BRANZ Ltd.
- Perry, B., 2010. *2010 Household incomes report: Background and summary of key findings*. Wellington: Ministry of Social Development.
- Perry, B., 2011. *Household incomes in New Zealand: Trends in indicators of inequality and hardship 1982-2010*. Wellington: Ministry of Social Development.
- Pomeroy, S., 2011. *The contribution and potential of the private residential rental market: US case study; Canada case study*. Unpublished papers.
- PricewaterhouseCoopers, 2009. *Weathertightness – estimating the cost*. Wellington: Department of Building and Housing.
- Productivity Commission, 2004. *First Home Ownership, Report*. Canberra: Australian Government.
- PWC (Price WaterhouseCoopers), 2008. *Report on Institutional Investment in Residential Rental Accommodation*. Wellington: Department of Building and Housing.
- PWC (Price WaterhouseCoopers), 2011. *Valuing the role of Construction in the New Zealand economy: A report to the Construction Strategy Group*.
- Quintini, G. Martin, J. and Martin, S., 2007. *The Changing Nature of the School-to-Work Transition Process in OECD Countries*. Bonn: Institute for the Study of Labor.
- Riazi, M., Riazi, S., Skitmore, M. and Cheung, Y. K. F., 2011. *The use of supply chain management to reduce delays: Malaysian public sector construction projects*.
- Rogers Richard, Lord of Riverside, Chair, 2005. *Towards a Strong Urban Renaissance*. London: Urban task Force.
- Rohe, W., McCarthy, G. and Van Zandt, S., 2000. *The Social Benefits and Costs of Home Ownership: A Critical Assessment of the Research*, Working Paper no. 0-01, May. Washington, D.C.: Research Institute for Housing America.
- Rosen, S., 1974. Hedonic prices and implicit markets: product differentiation in pure competition. *Journal of Political Economy*, 82(1) pp.34-55.
- Roskuge, M., Gimes, A., McCann, P. and Poot, J., 2011. *Home ownership and social capital in New Zealand*, Motu Working Paper 11-02. Wellington: Motu Economic and Public Policy Research.
- Saiz, A., 2010. The geographic determinants of housing supply. *Quarterly Journal of Economics*, 125(3), pp. 1253-1296.
- Samuelson, P. A., 1964. *Tax Deductibility of Economic Depreciation to Insure Invariant Valuations*, *Journal of Political Economy*, 72(6).
- Sánchez, C. and Johansson, Å., 2011. *The Price Responsiveness of Housing Supply in OECD Countries*, OECD Economics Department Working Papers, No. 837. Paris.
- Sapere Research Group, 2011. *Population movement after natural disasters: a literature review and assessment of Christchurch data*. Wellington.
- Saving Working Group, 2011. *Saving New Zealand: Reducing Vulnerabilities and Barriers to Growth and Prosperity*, Final Report to the Minister of Finance. Wellington.

- Shapiro, B., 2005. *Inherent Conflicts In The Construction Industry And The Structure Of Contracts*. Paper presented at The Fundamentals of Construction Contracts: Understanding the Issues Vancouver BC.
- SHORE, 2011a. *The contribution and potential of the private residential rental market in New Zealand – landlords' survey*. Auckland: SHORE and Whariki Research Centre, Massey University.
- Short, J.R., 2006. *Urban Theory: A Critical Assessment*. New York: Palgrave MacMillan.
- Skidmore, M. and Peddle, M., 1998. Do Development Impact Fees Reduce the Rate of Residential Development? *Growth and Change*, 29, pp.383-400.
- Small, J., 2007. *Non-Rates Funding Options Available to Local Authorities*. Auckland: Local Government Rates Inquiry Covec Ltd.
- Social Housing Unit, 2011. *Funds 2011/12*. Available at: <<http://www.socialhousingunit.govt.nz/funds-2011-12>> [Accessed December 7, 2011].
- Social Housing Unit, n.d. Terms of Reference. Available at: <<http://www.socialhousingunit.govt.nz/about/terms-of-reference>> [Accessed December 7, 2011].
- Statistics New Zealand, 2003. *What is the extent of crowding in New Zealand? An analysis of crowding in New Zealand households 1986–2001*. Wellington.
- Statistics New Zealand, 2008. *Housing indicators 2008*. Wellington.
- Statistics New Zealand, 2010. *Apartment Dwellers: 2006 Census*. Wellington.
- Statistics New Zealand, 2010. *Industry productivity statistics 1978–2008*. Wellington: Statistics New Zealand.
- Statistics New Zealand, 2010a. *Subnational Family and Household Projections: 2006 (base) – 2031 update*. Wellington.
- Statistics New Zealand, 2011a. *Value of Building Work Put in Place*. Accessed at: <[http://www.stats.govt.nz/browse\\_for\\_stats/industry\\_sectors/Construction/value-of-building-work-info-releases.aspx](http://www.stats.govt.nz/browse_for_stats/industry_sectors/Construction/value-of-building-work-info-releases.aspx)>.
- Statistics New Zealand, 2011b. *Business demography tables*. Accessed at: <[http://www.stats.govt.nz/tools\\_and\\_services/tools/TableBuilder/business-statistics.aspx](http://www.stats.govt.nz/tools_and_services/tools/TableBuilder/business-statistics.aspx)>.
- Statistics New Zealand, 2011c. Household Economic Survey (Income): Year ended June 2011. Available at: <[http://www.stats.govt.nz/browse\\_for\\_stats/people\\_and\\_communities/Households/HouseholdEconomicSurvey\\_HOTPYeJun11.aspx](http://www.stats.govt.nz/browse_for_stats/people_and_communities/Households/HouseholdEconomicSurvey_HOTPYeJun11.aspx)>. [Accessed December 9 2011].
- Statistics New Zealand, 2011d. *Internal migration: Migration by age*. Wellington.
- Stroombergen, A., 2004. *The effects of the Accommodation Supplement on market rents*, MSD Working Paper 02/04. Wellington: Ministry of Social Development.
- Tax Review, 2001. *Final Report*. Wellington: The Treasury.
- Tax Review, 2001. *Issues Paper*. Wellington: The Treasury.
- Tax Working Group, 2010. *A Tax System for New Zealand's Future*. Wellington: Victoria University of Wellington.
- Te Puni Kōkiri, 2011. *In Focus - Whanau Ora*. Available at: <<http://www.tpk.govt.nz/en/in-focus/whanau-ora>> [Accessed December 7, 2011].
- The Economist, 2011. *Economics Focus: Bringing down the house*. September 24th 2011, p. 94.
- Treasury, 2011. *August Monthly Economic Indicators*. Wellington.
- UCL and Deloitte, 2007. *Shaping and Delivering Tomorrow's Places: Effective Practice in Spatial Planning*. London: Royal Town Planning Institute.
- UDIA, 2006. *The 2006 UDIA State of the Land: National Land Supply Study and Consultation Paper*. Epping, New South Wales: Urban Development Institute of Australia.
- US Department of Housing and Urban Development, 1993. *Impact Fees and the Role of the State: Guidance for Drafting Legislation*. Upper Marlboro: NAHB Research Centre.
- US Department of Housing and Urban Development, 2008. *Impact Fees and Housing Affordability: A Guide for Practitioners*. Washington, DC: Newport Partners.
- Victorian Competition and Efficiency Commission, 2005a. Inquiry into the regulation of the housing construction sector and related issues.



Victorian Competition and Efficiency Commission, 2005b. *Housing regulation in Australia: Building Better Outcomes*, Final Report. Melbourne.

Walsh, C., 1992. *Who Should Pay for Urban Infrastructure?* National Housing Convention, Hamilton Island.

Yates, J., Randolph, B. and Holloway, D, 2006. *Are housing affordability problems creating labour shortages?*, AHURI Research Bulletin, Issue 72, June.



NEW ZEALAND  
PRODUCTIVITY COMMISSION  
Te Kōmihana Whai Hua o Aotearoa

