



Nelson, Tasman and Marlborough Housing: Regional Context and Characteristics

*A report for the Affordable Housing in the
Nelson, Tasman and Marlborough Regions:
A Solutions Study Research Programme*

PREPARED BY

Motu Economic and Public Policy Research

FOR THE

**Centre for Housing Research,
Aotearoa New Zealand**

AND

Ministry of Economic Development

AND

**Work and Income – Nelson, Marlborough
and West Coast Region**

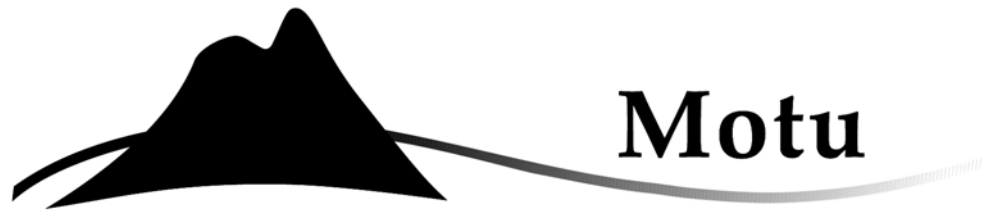
OCTOBER 2005

ACKNOWLEDGEMENTS

This report was produced for the Centre for Housing Research, Aotearoa New Zealand (CHRANZ), the Ministry of Economic Development, and Work and Income – Nelson, Marlborough and West Coast Region. The CHRANZ Board gratefully acknowledges the financial and other support provided by Housing New Zealand Corporation.

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Motu Economic and Public Policy Research**

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October 2005

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Acknowledgements

We thank the Centre for Housing Research Aotearoa New Zealand (CHRANZ), Ministry of Economic Development and Ministry of Social Development for their funding of the research programme *Affordable Housing in the Nelson, Tasman and Marlborough Regions: A Solutions Study*, of which this paper forms a part. We thank also our colleagues in the programme: Kay Saville-Smith and Ruth Fraser (CRESA), Ian Mitchell and Steve O'Malley (DTZ) and Ralph Lattimore, and the reference groups in Nelson, Tasman and Marlborough for their input.

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1 Executive Summary

This paper, the first in a series of papers within the research programme *Affordable Housing in the Nelson, Tasman and Marlborough Regions: A Solutions Study*, describes key characteristics of the housing sector and economies of Nelson, Tasman and Marlborough (NTM). We cover housing developments - and economic, labour market and demographic data affecting housing - from the early 1980s onwards. Data are presented for the NTM regions and for New Zealand, as a comparator. Comparisons are also made with other housing 'hotspots'. We begin by presenting data on house price and rental developments, and on housing affordability. House prices rose by 70% between 2002 and 2004 in each of Nelson, Tasman and Marlborough, raising the question of what lies behind the dramatic price behaviour. Rents also rose sharply. We examine developments across a range of demographic and economic factors that may influence the demand for owner-occupied and rental housing. We also analyse trends in household tenure and ownership; and we examine housing supply responses to the demand pressures within the regions. The final section of the paper synthesises the foregoing material and looks forward. The forward-looking component includes projections for the regions, based on reasonable estimates of future demographic and industrial developments both in NTM and across the country more widely. We draw out the implications for NTM housing market developments both of the historical and the forward-looking data. In particular, we examine implications for housing affordability for different groups and different areas.

2 Introduction

This paper describes key characteristics of the housing sector and economies of each of Nelson, Tasman and Marlborough (NTM). It is the first in a series of papers within the research programme: *Affordable Housing in the Nelson, Tasman and Marlborough Regions: A Solutions Study*.¹ The data for the paper are principally gathered from publicly available statistical, research and policy sources; many of which, however, require further processing to be relevant at the local level. A forthcoming companion paper will provide further background on developments in NTM housing, based primarily on data gathered from local sources relating to new housing developments in each of the regions.

The current paper covers housing developments - and economic, labour market and demographic data affecting housing - from the early 1980s (where available) to the present. Where possible, data are presented for the NTM regions and for New Zealand, as a comparator. In some cases, comparisons are also made with other housing 'hotspots' - Thames-Coromandel and Tauranga. The latter are both sunny, coastal locations sought by retirees and vacation dwellers, as in Nelson, Tasman and Marlborough. Data are chiefly presented at Territorial Local Authority (TLA) level (coinciding with regional council level in each case). We disaggregate some measures to Area Unit (AU) and meshblock (MB) level. Within a city, an AU corresponds approximately to a "suburb" while an MB corresponds approximately to a city block. Within rural areas, AUs and MBs are defined by community similarity and population size.

We present some data also at a level known as a Labour Market Area (LMA). An LMA is derived (from census data) by drawing boundaries around areas so that most people who live within that area also work within that area, and *vice versa*. For instance, the Nelson LMA extends into Tasman since many people live in eastern Tasman and work in Nelson, or live in Nelson and work in Eastern Tasman. An LMA has more economic coherence than does a TLA, but a TLA is the relevant area when considering local regulatory and planning issues. Both are

¹ The research programme is funded jointly by the Centre for Housing Research Aotearoa New Zealand (CHRANZ), Ministry of Economic Development and Ministry of Social Development.

therefore relevant to the study. Each of the AU and MB divisions are helpful in interpreting smaller scale housing developments.

The Appendices present maps of the northern portion of the South Island showing the TLA boundaries and the LMA boundaries (the names of the LMAs are indicative only). The latter are shown according to two definitions depending on the proportion of people required to live and work within the same LMA. One definition results in 58 LMAs across New Zealand, the other results in 140 across New Zealand. The maps demonstrate that, on either definition, the Nelson LMA stretches well into Tasman, so people commute freely across the TLA boundary; "Motueka" has its own well defined work-force living nearby. Within Marlborough, Picton has its own distinctive labour shed.

We begin by presenting data on house price and rental developments since 1981 for each region. We also present data on housing affordability. This sets the scene for the analysis that follows, raising the question of what lies behind the dramatic price behaviour observed in each region since 2002. We then examine developments across a range of demographic and economic factors. These developments influence the demand for owner-occupied and rental housing. They include statistics on population and population structure, labour market developments, production trends, industry and occupational developments, and relevant producer price developments. A number of these factors are chosen on the basis of previous statistical studies indicating that these factors impact on house prices across New Zealand TLAs.² Thus we hypothesise that they should, at least in part, be "responsible" for the observed house price developments across the three regions.

Our focus then turns specifically to housing sector developments. Our analysis here examines trends in household tenure and ownership; and we examine housing supply responses to the demand pressures within the regions. The housing supply response is particularly important in understanding price

² For example, see: Grimes, Arthur, Andrew Aitken & Suzi Kerr (2004) "House Price Efficiency: Expectations, Sales, Symmetry", Motu Working Paper 04-02, Wellington: Motu; and: Grimes, Arthur & Andrew Aitken (2004) "What's the Beef with House Prices: Economic Shocks and Local Housing Markets", Motu Working Paper 04-08, Wellington: Motu.

developments. If demand increases substantially (for instance due to a population or income increase), house prices and rents will rise if new housing supply is not forthcoming. Alternatively, people will be forced to commute longer distances depending on whether housing is available in more outlying areas. If new sections and new houses come rapidly to market following the increased demand, the price response will tend to be muted as the new housing needs are met.

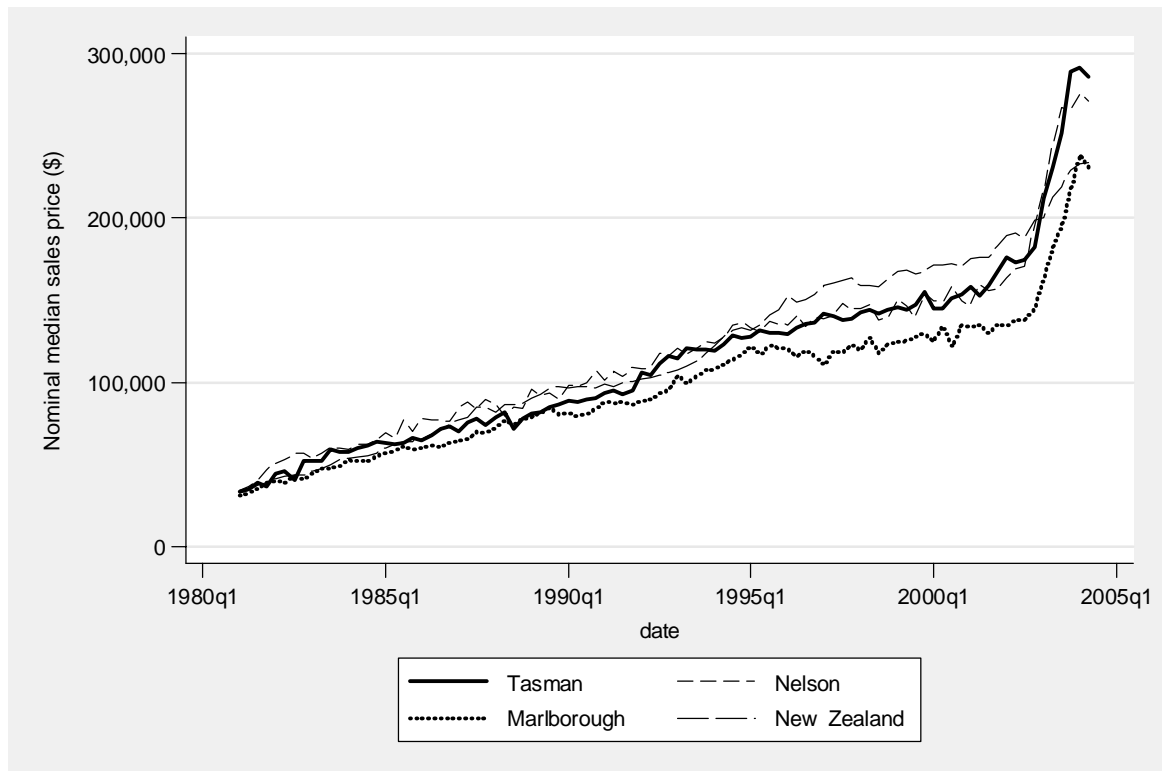
In analysing housing supply responses in this paper, we examine the available statistics relating to new house supply. The companion paper uses locally derived data relating to actual and intended developments to shed more detailed light on supply responsiveness.

The final section of the paper synthesises the foregoing material and looks forward. The forward-looking component includes projections for the regions, based on reasonable estimates of future demographic and industrial developments both in NTM and across the country more widely. We draw out the implications for NTM housing market developments both of the historical and the forward-looking data. In particular, we examine implications for housing affordability for different groups and different areas. We also draw out aspects where our knowledge could usefully be extended. This study is the first in a series of five on the NTM housing sector, and subsequent studies will expand our information by further "on-the-ground" data gathering designed to shed light on additional factors of importance for housing in the three regions. Subsequent studies are also designed to address the "solutions" aspect of the research programme; solutions are not addressed in this initial paper.

3 House Prices, Rents & Affordability

By any measure, housing costs rose rapidly in each of Nelson, Tasman and Marlborough starting in 2002. Figure 1 graphs the median house sales price in each of the three regions together with the median price for New Zealand (each in current dollar terms). The data, covering 1981-2004, are obtained from Quotable Value New Zealand.³

Figure 1: Median House Sales Price, 1981-2004



³ The house price data has been "mix-adjusted" by Motu and is therefore not official QVNZ data. We use only data for residential stand-alone dwellings, and have also used information on Rateable Values to remove some of the impact of variation in the types and quality of houses sold in each quarter. The use of median rather than average values further serves to reduce spurious price observations due to an unrepresentative mix of houses sold in any quarter.

The figure demonstrates the strong run-up in prices in each of the three regions since 2002. It also shows that prices stagnated in each of the three regions relative to New Zealand house prices between 1995 and 2002; thus much of the recent price behaviour in these regions can be considered "catch-up". To demonstrate this more clearly, Figure 2 graphs the three regions' median house prices as a ratio of the New Zealand median price. For comparison, we also graph the ratio of Thames-Coromandel and Tauranga to New Zealand (Figure 3).

Figure 2: Ratio of Median TLA House Sales Price to NZ (NTM)

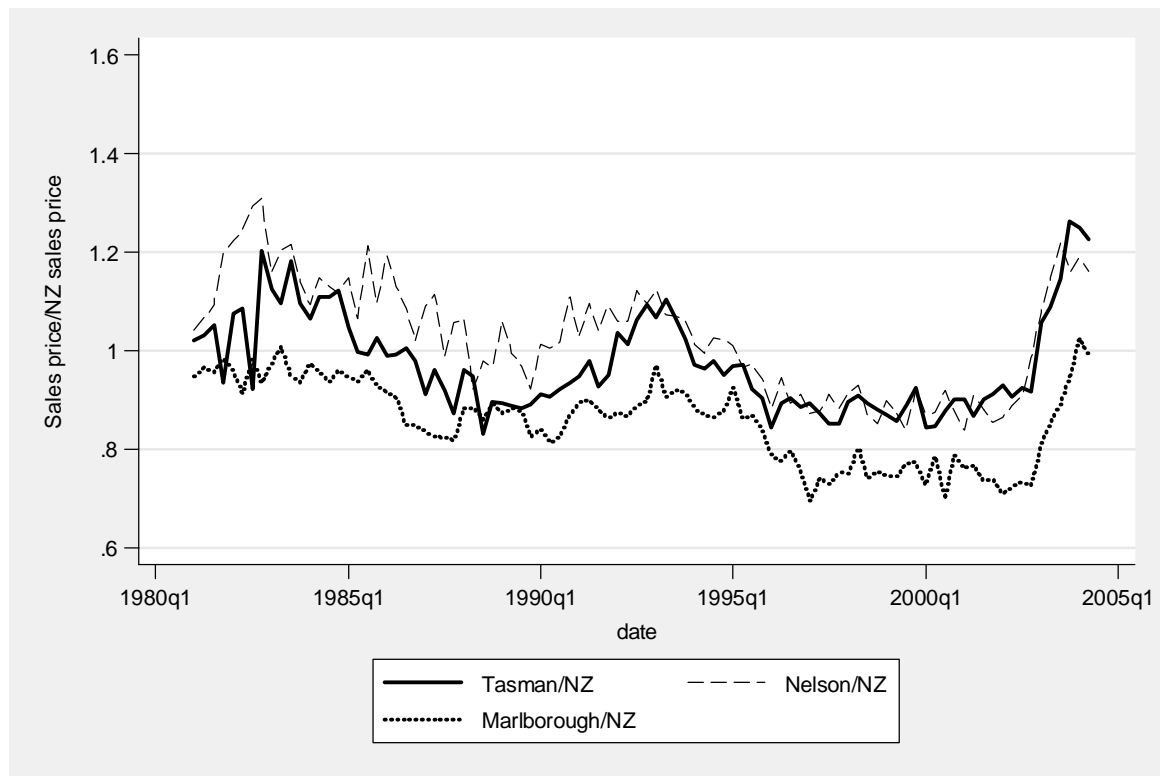
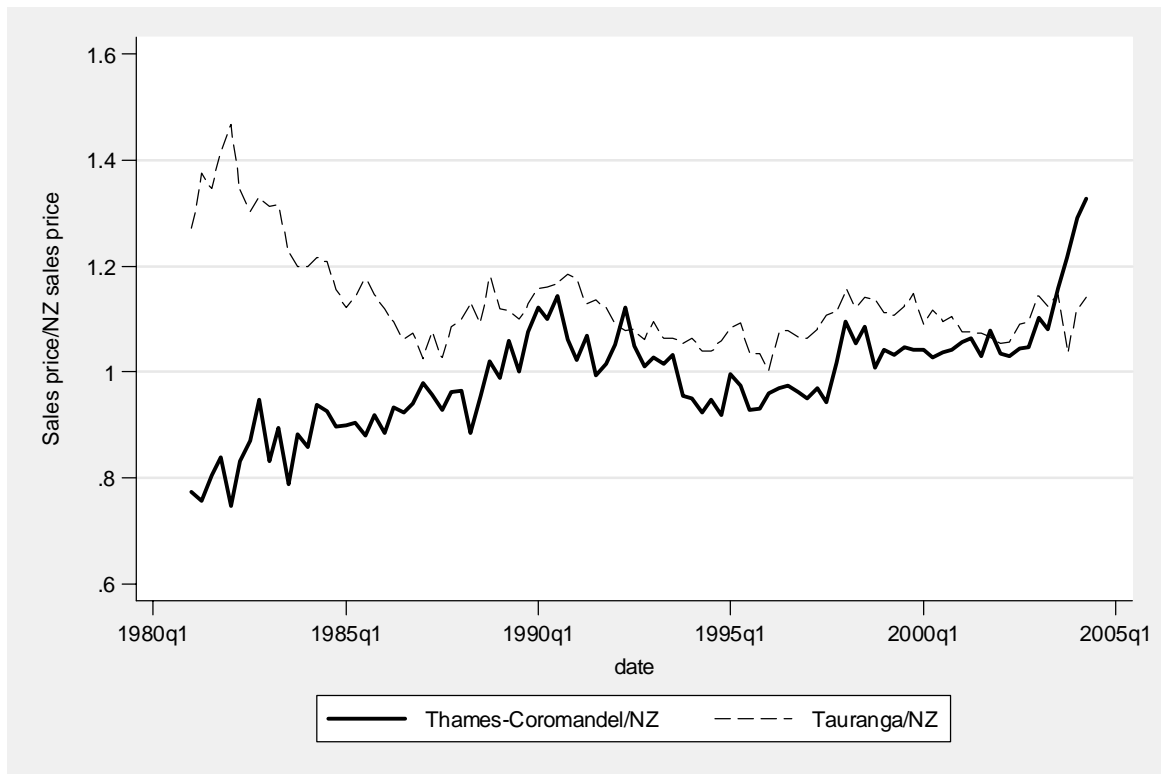


Figure 3: Ratio of Median TLA House Sales Price to NZ (Thames & Tauranga)



Marlborough prices began the 1980s at close to the New Zealand median and finished the period almost exactly equal to the New Zealand median. It was the 1995-2002 period (rather than post-2002) that was unusual, a period when its prices fell to below 80% of the New Zealand figure.

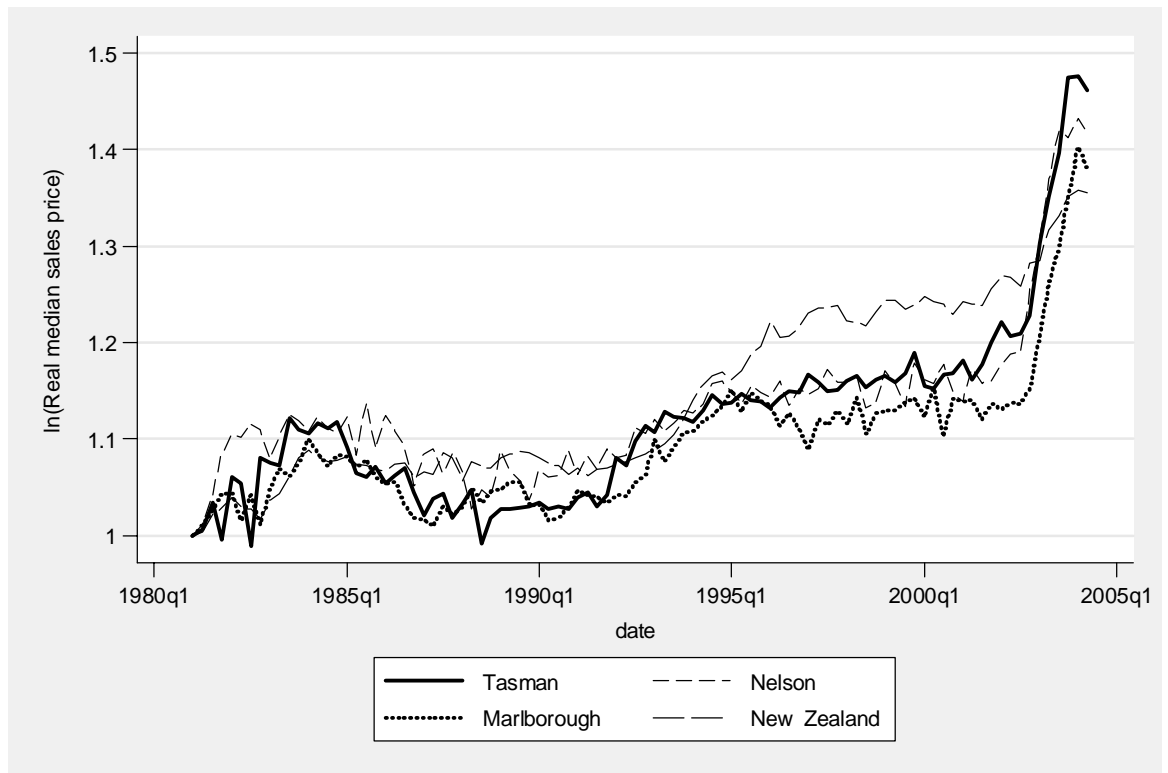
For much of the early 1980s, each of Nelson and Tasman house prices were around 10%-20% above those of New Zealand. As with Marlborough, these regions' prices then slumped in relative terms to around 90% of New Zealand prices through the late-1990s. Their revival through to 2004 lifted them each back to around 20% above the New Zealand median, again similar to their early-1980s starting relativity.

Thames-Coromandel, like each of NTM, has also experienced strong house price rises since 2002. Its sales prices rose to around 30% above the New Zealand median. While its current house price relative to that of New Zealand is unprecedented in its history, the recent Thames-Coromandel price behaviour is

similar to that in each of NTM, and is likely to reflect similar demand factors. A contrasting picture, however, is given by the behaviour of prices in Tauranga. Traditionally a high priced area (i.e. in the early-1980s), Tauranga's price behaviour has since mirrored that of New Zealand closely, retaining an approximate 10% premium above the New Zealand median price since 1985. It has not experienced the same degree of recent price pressure as has NTM (or Thames-Coromandel) despite being subject to similar demand pressures (and even stronger population growth). This suggests that the price pressures experienced in NTM and Thames-Coromandel are not an inevitable consequence of increasing demand for sunny, coastal, provincial locations.

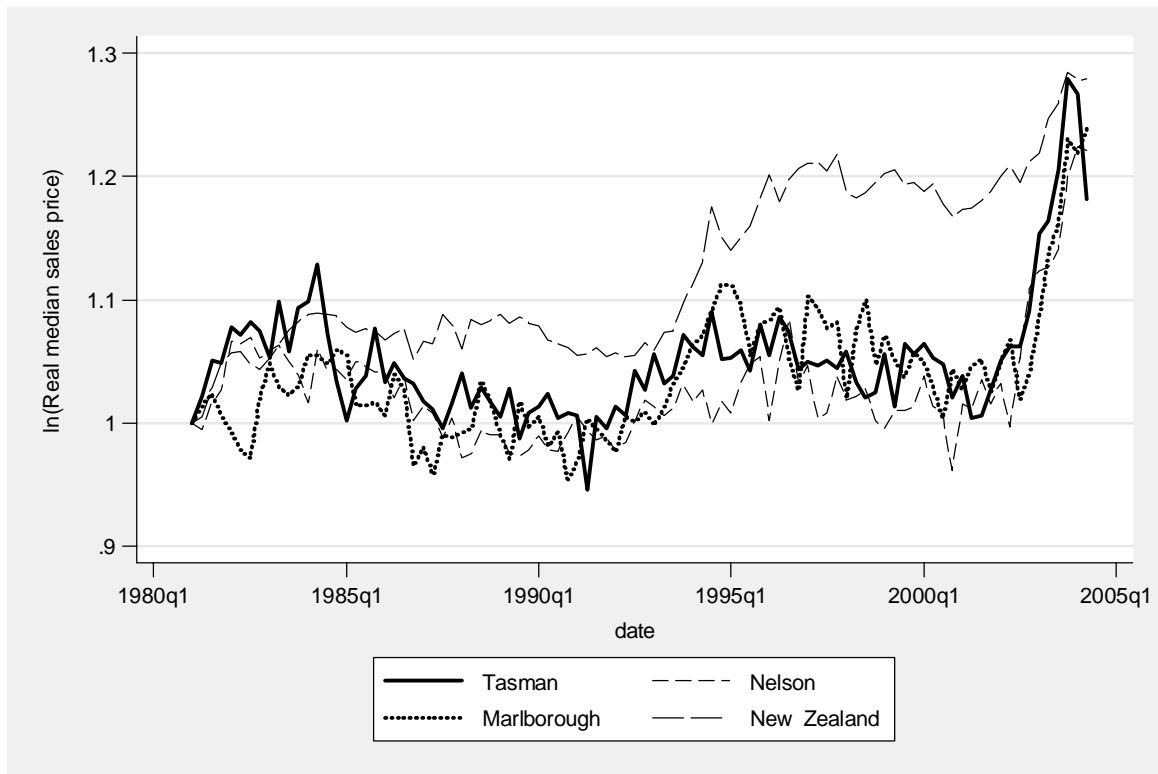
Figure 4 graphs the median house price for the three regions and for New Zealand in constant dollar terms (i.e. in relation to the Consumers Price Index). This measure demonstrates that at times, house prices in each region were increasing more slowly than consumer prices - for instance, over the late-1980s. They then rose through to the mid-1990s (albeit at a slower rate than across New Zealand as a whole) before largely stagnating again through to 2002. The magnitude of the real house price rises in the final two years (in each of Nelson, Tasman and Marlborough) is unprecedented; the rise in New Zealand at the same time was similar to the rise in the early to mid-1990s.

Figure 4: Real Median House Sales Price, 1981-2004



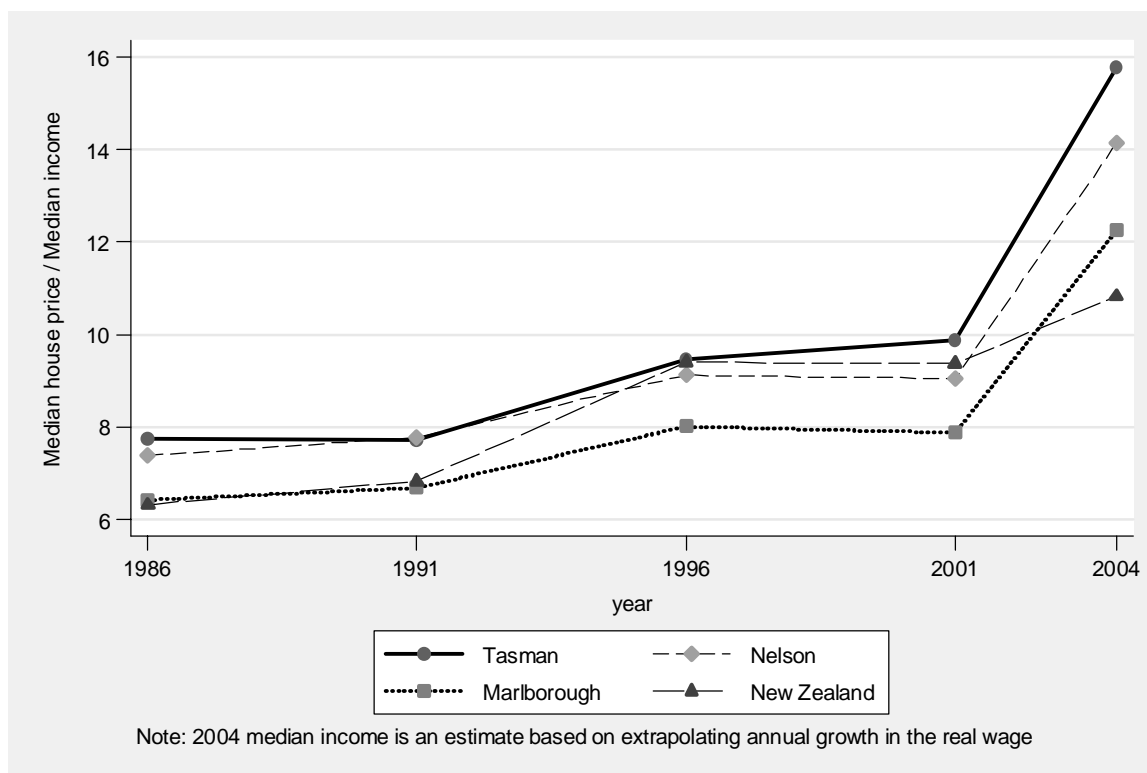
The rise in house prices is also reflected in rises in sales prices for flats/apartments. Figure 5 graphs the median apartment sales price for the three regions and for New Zealand, again in constant dollar terms (so is equivalent to Figure 4). The lagging nature of prices in Nelson, Tasman and Marlborough relative to New Zealand as a whole through much of the period is even more stark for apartments than for residential houses (possibly, as a result of strong apartment price rises in major cities). Apartment prices in NTM tended to catch up with those across New Zealand over 2002-2004, but their increase over the full period remained below that of New Zealand as a whole.

Figure 5: Real Median Apartment Sales Price, 1981-2004



The strong house price rises at the end of the period have resulted in the ratio of house prices to incomes rising. This is depicted in Figure 6 which graphs the ratio of the median house price to the median income in each region. We use census income data and so depict the relationship for census years (1986, 1991, 1996, 2001); we also update the income data and use our house price data to present an estimate of the relationship in 2004.

Figure 6: Ratio of Median House Prices to Income

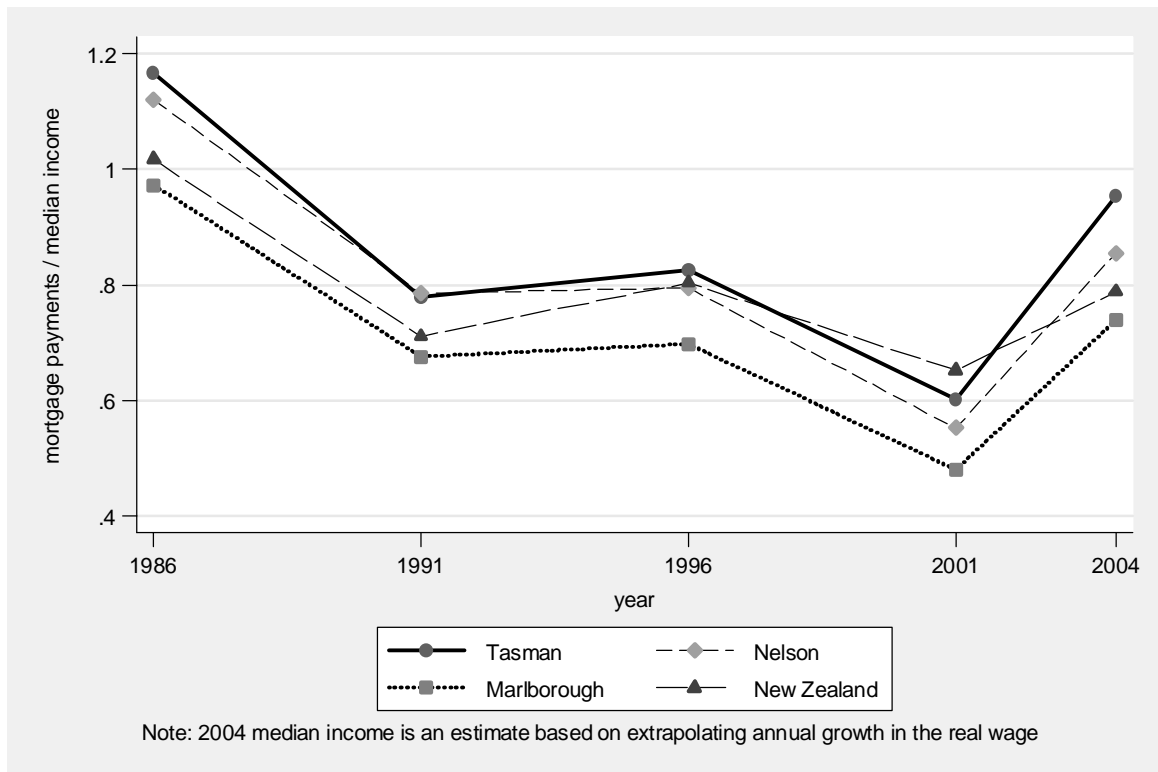


In keeping with the house price developments presented above, each of Nelson, Tasman and Marlborough had increasing ratios of house prices to incomes after 1991, following almost no change in the ratios since 1986. Between 1991 and 1996 increases in house prices were substantial (approximately 35% in NTM and 53% for New Zealand) while income increased by about 11%. Throughout the 1990s the ratio for Marlborough was below that of New Zealand, as was the ratio for Nelson in the late 1990s. There was little change in the ratios between 1996 and 2001, with marginal declines for Nelson, Marlborough and the New Zealand average. Slightly higher house price growth and below average income growth resulted in a slight increase in the ratio for Tasman. After 2001, however, the ratio rose sharply in each of the three regions, outstripping the more gradual rise across New Zealand. By 2004, the median New Zealand house price was 11 times the estimated New Zealand median income. By contrast, the corresponding ratios in Nelson, Tasman and Marlborough were 14, 16 and 12 respectively. Thus, by 2004, housing in each of these regions had become more expensive relative to incomes compared with New Zealand as a whole. This was

the case even in Marlborough (where house prices were close to the New Zealand average) since Marlborough incomes are lower than the New Zealand average. Tasman also has relatively low incomes on average and so faces a higher ratio of house prices to average incomes than does Nelson.

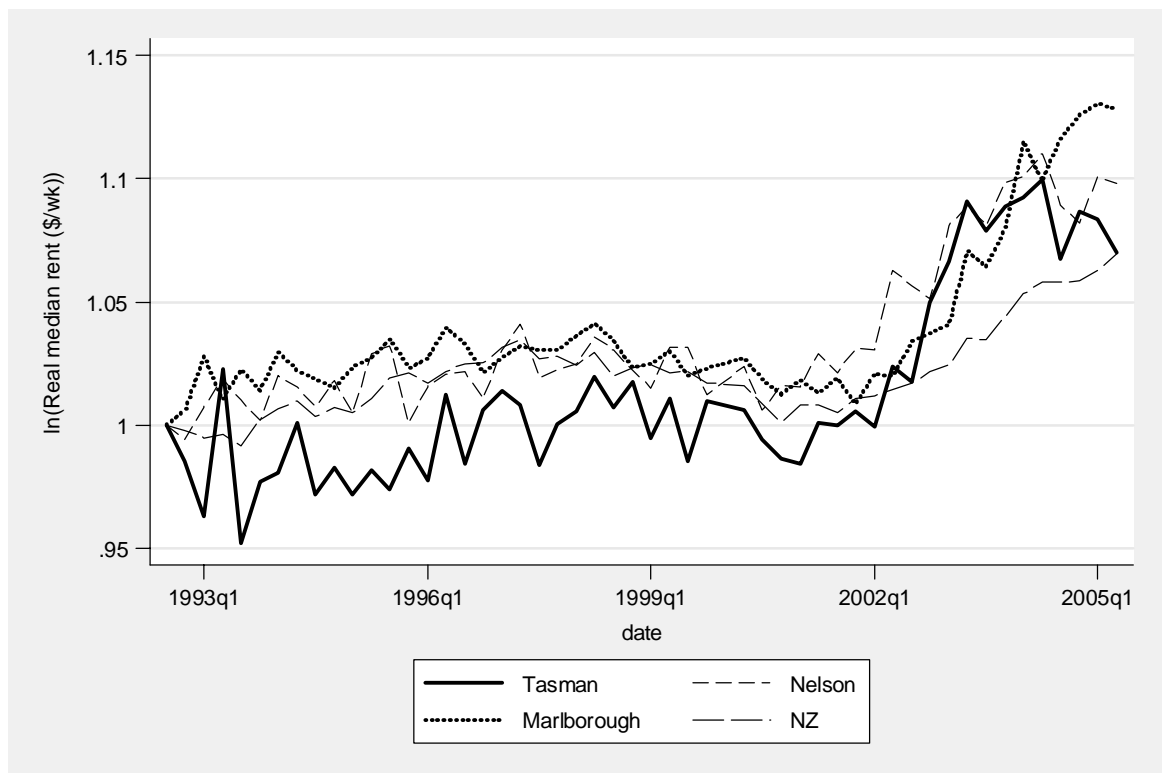
A cash-flow affordability proxy for each region can be formed by assuming that 80% of the purchase price of the house is financed by debt, with initial mortgage payments equalling the nominal mortgage interest rate multiplied by the resulting mortgage debt. These mortgage payments are then expressed as a ratio of median incomes in Figure 7. Because of the decline in mortgage rates since the mid-1980s, this measure presents a picture of improved cash-flow affordability since 1986 (for a person on the median income purchasing a median-priced house). For each of Nelson, Tasman and Marlborough, affordability was little changed in 2004 compared with 1996 and 1991; 2001 was the unusual year by this measure with considerably improved affordability (especially for Marlborough and Nelson).

Figure 7: Cash-flow Affordability



So far, the emphasis has been on house (and apartment) prices. As demonstrated later in the paper, an increasing proportion of households in each of Nelson, Tasman and Marlborough (and in New Zealand more generally) are renting rather than owning their own houses. Figure 8 graphs the average weekly rental in each region in constant dollars (deflated by the CPI). Average real rentals stayed remarkably stable between the early-1990s and 2001. Thereafter, the strong house price rises were reflected in some real increase in rents, although the real increase has been modest (approximately 10% in Marlborough, and approximately 7% in each of Nelson and Tasman).

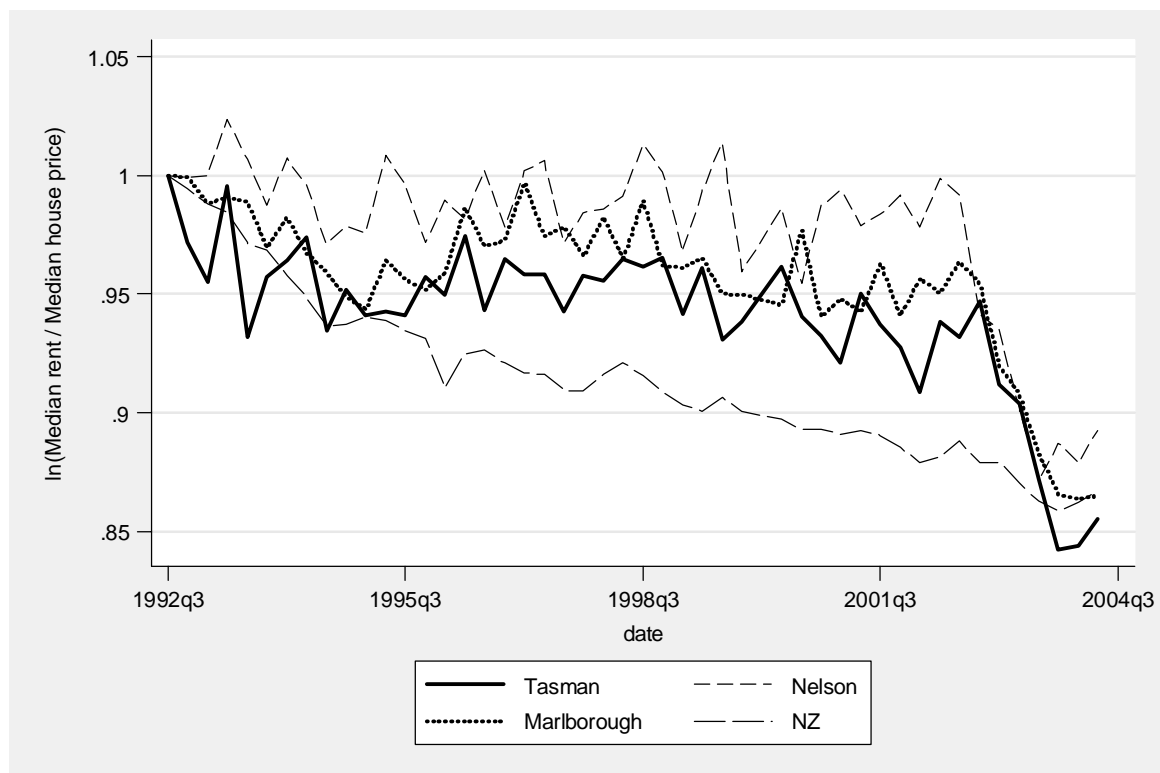
Figure 8: Real Median Rent



The difference in rental versus house price behaviour since 2002 is exhibited by the recent strong decline in rental yield (ratio of rent to house price) depicted in Figure 9 (indexed to unity in 1992/93). The rental yield in each of the three regions was on a slight declining trend through to 2002, but then fell by approximately 10% through to mid-2004 (despite broadly stable interest rates).

This substantial fall in the rental yield in each region begs the question of whether the yield will return to its prior level and, if so, whether this adjustment will be through a decline in house prices or an increase in rents. The answer to this question rests substantially on whether house prices in each of the three regions are justified by "fundamentals" both in terms of factors affecting housing demand and factors affecting housing supply.

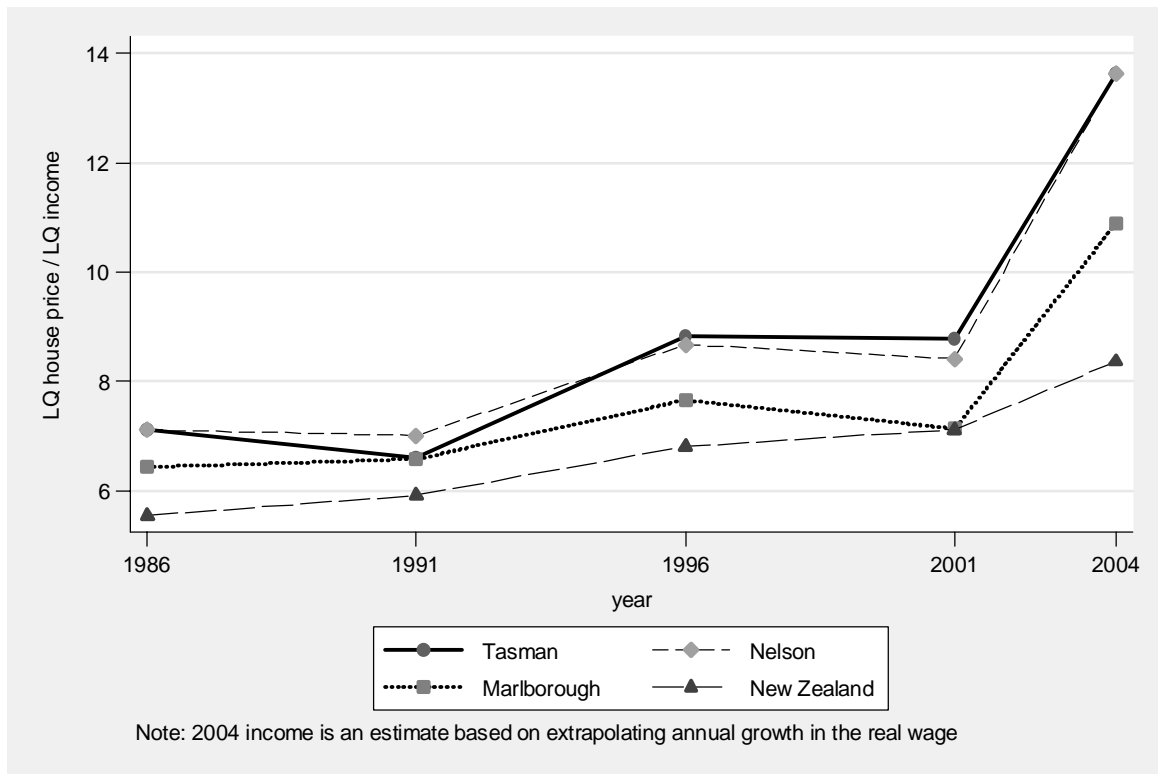
Figure 9: Ratio of Rent to House Prices



We supply some information on this matter later in this paper; a more detailed examination follows in a subsequent paper within this research programme. At this stage, however, we note that the change in rental yield in each region over 1991-2004 is very similar to that in New Zealand as a whole, albeit following a different trajectory during the period. This suggests that New Zealand-wide factors determining the rental yield (e.g. the return on alternative investments) may hold the key as to whether the NTM (historically low) rental yields are sustainable.

The preceding analysis has concentrated on median house prices, rents and incomes. Issues of housing affordability are likely to be most acute for people with lower than average incomes. We therefore examine developments in lower quartile house values relative to lower quartile incomes in each region. Figure 10 graphs the lower quartile meshblock's (median) house price relative to the lower quartile meshblock's (median) income for each region and for New Zealand. (This measure of lower quartile house affordability assumes a reasonable degree of homogeneity within each meshblock.) Lower quartile house affordability worsened slightly between 1986 and 1996 in NTM and in New Zealand, staying at similar levels through to 2001. Thereafter, it worsened materially (especially in NTM). The worsening in affordability at the lower quartile was slightly less than the worsening in affordability at the median, but was nonetheless substantial. Mortgage interest rate decreases will have alleviated some of the cash-flow pressures for the lower quartile group as occurred for the median. However, lower quartile income earners may face greater borrowing constraints than those with higher incomes, and so the rise in the ratio of house prices to incomes between 2001 and 2004 may have more significant effects for the lower quartile than for median income earners.

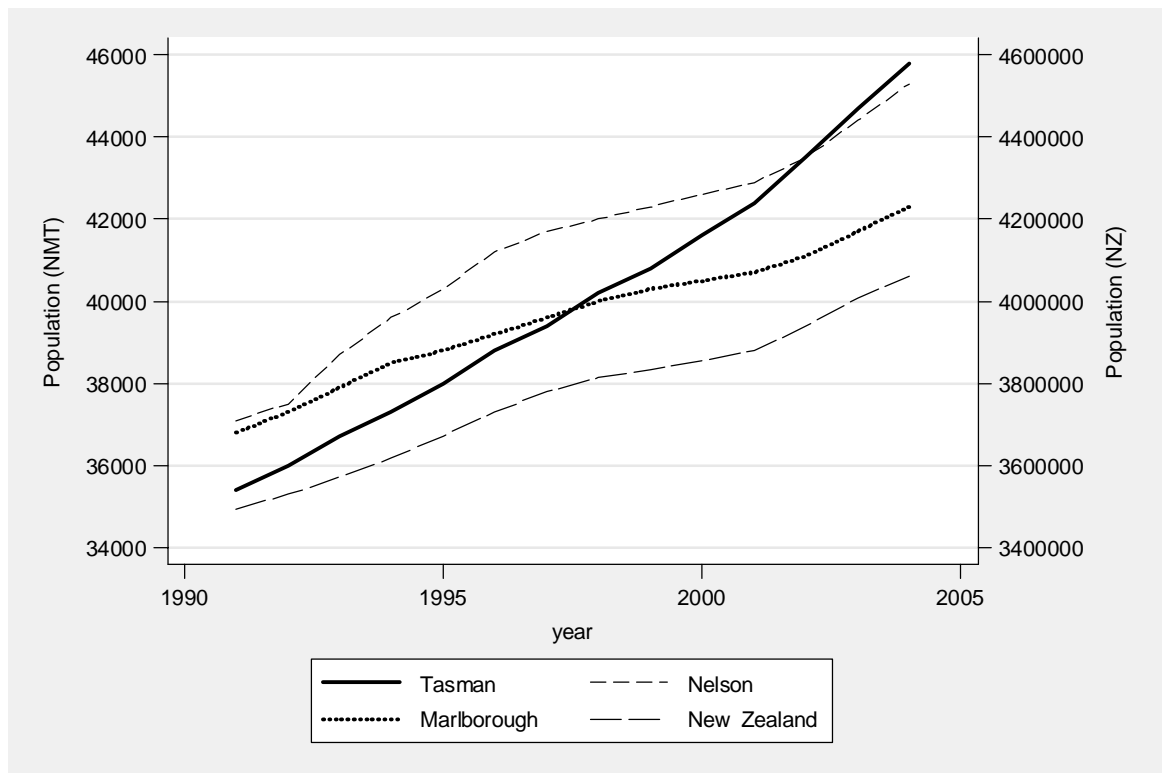
Figure 10: Ratio of Lower Quartile House Prices to Lower Quartile Income



4 Demographic Developments

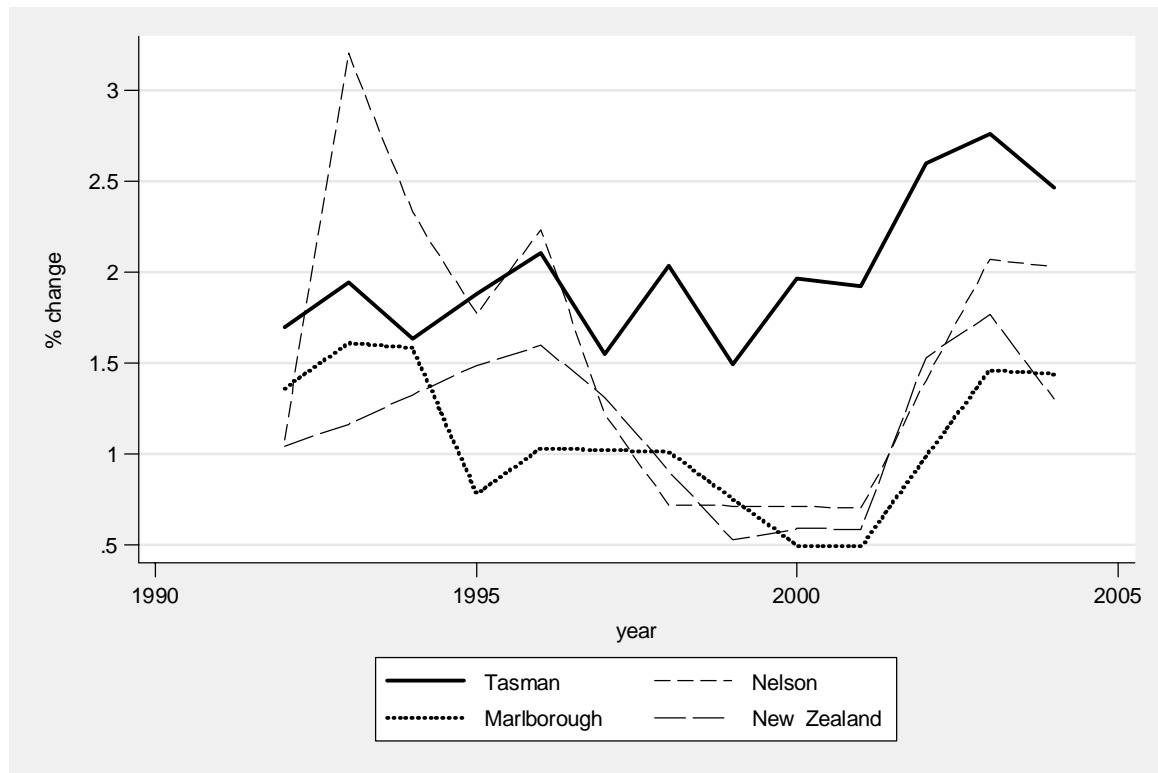
Each of Nelson, Tasman and Marlborough has grown consistently since 1991 (see Figure 11, in which New Zealand is graphed using the right hand scale). In Marlborough's case, population growth has closely mirrored the pattern and scale of New Zealand growth; Nelson has grown a little faster, while Tasman's population growth has considerably outstripped that of New Zealand and of the other two regions.

Figure 11: Population Estimates, 1991-2004



This pattern is emphasised in Figure 12, which depicts annual percentage changes in population since 1992. Nelson experienced strong growth early in the period; thereafter Tasman has consistently been the fastest growing of the three regions.

Figure 12: Population Estimates (% change), 1991-2004



The increase in population has the effect of increasing demand for housing in each region. A complicating factor is that the age structure of the population in each region has also changed considerably. In each of Marlborough, Nelson and Tasman, the proportion of the population aged 15-34 years decreased markedly relative to 1986 proportions. This is depicted in Figure 13 and Figure 14, showing the male and female population of Marlborough by age-group in each of 1986 and 2001 (the patterns for Nelson and Tasman are similar). The shrinking young adult population in part reflects earlier declines in birth rates seen across New Zealand, as seen in the small proportion of 0-9 year olds compared with 10-19 year olds in the 1986 pyramid. It also reflects an increasing tendency for young adults to migrate from provincial areas to the cities in search of tertiary education and job opportunities.

Figure 13: Age-sex Pyramid for Marlborough (1986)

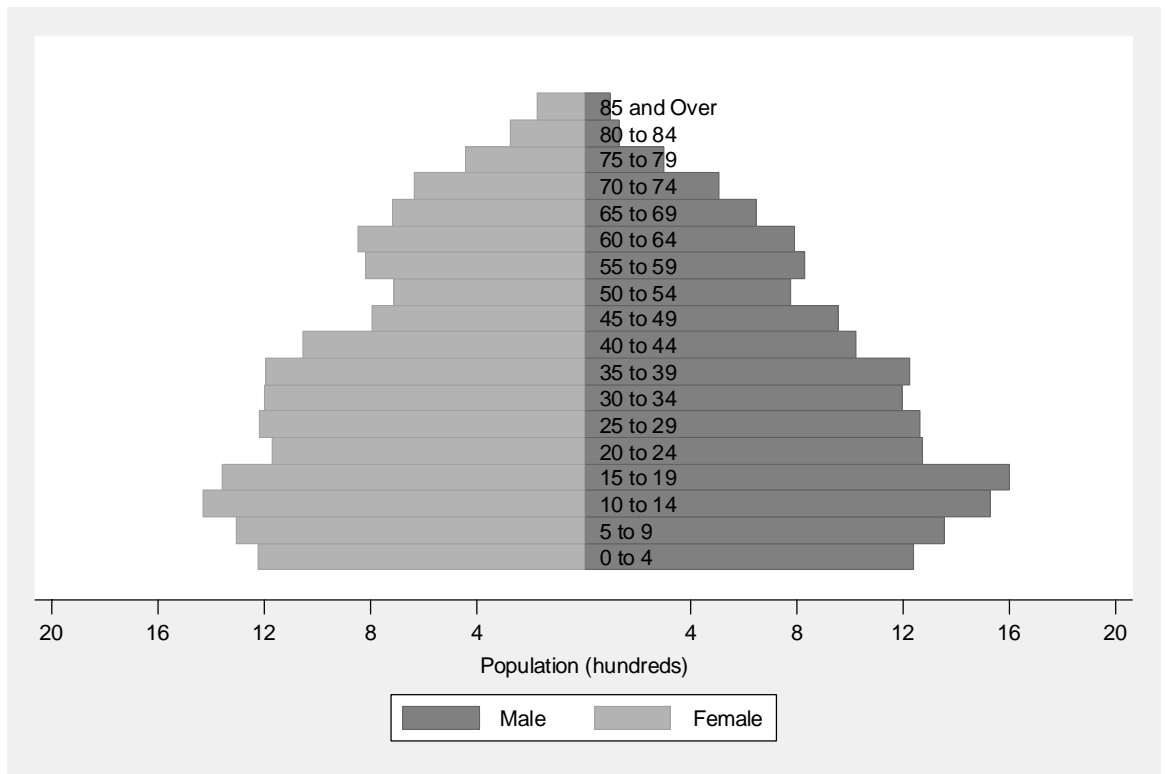
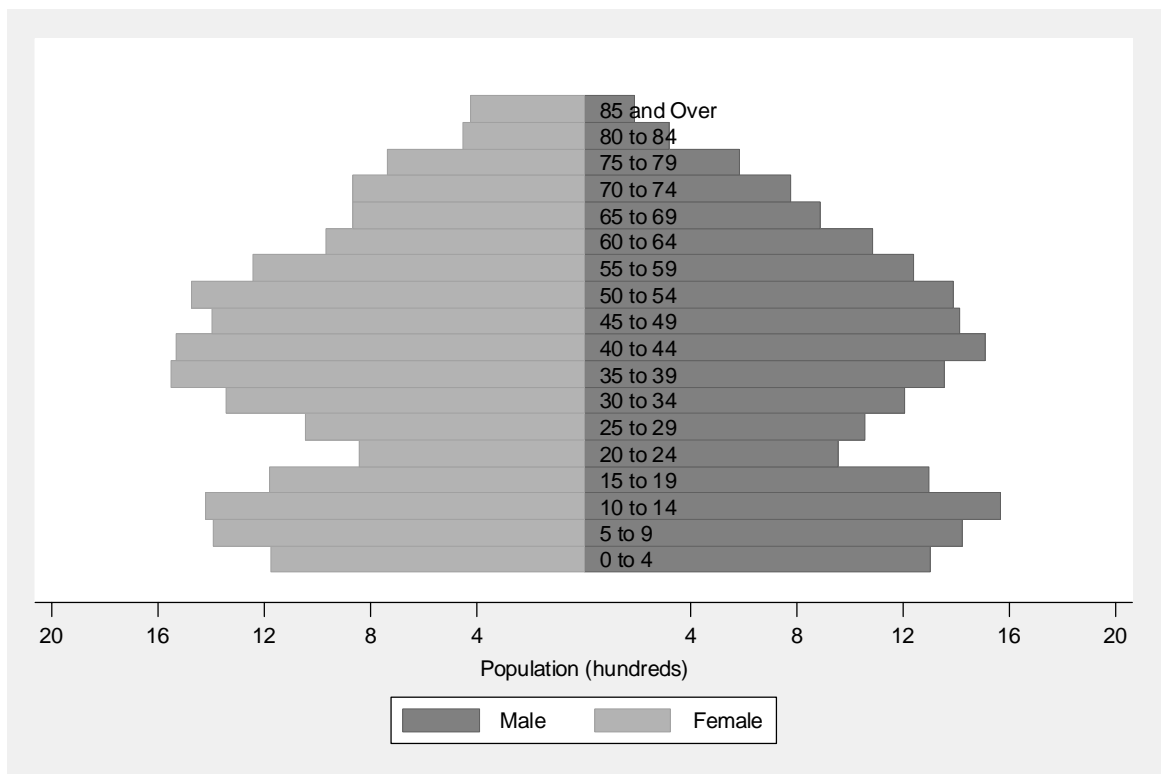


Figure 14: Age-sex Pyramid for Marlborough (2001)



Traditionally, the 20-34 year age-group represents the prime household formation years; thus the declining population in this age group over 1986-2001 represents a source of decreased pressure on the housing market (especially for first-time home-buyers). However the strong growth in population aged over 75 years (also depicted in Figure 13 and Figure 14) indicates the likelihood of strongly increased demand for housing suitable for more elderly people, especially women living on their own (as shown in the unbalanced sex proportions at older ages). This is particularly the case for Nelson which has a higher proportion of its population in this age-group than does either Tasman or Marlborough.

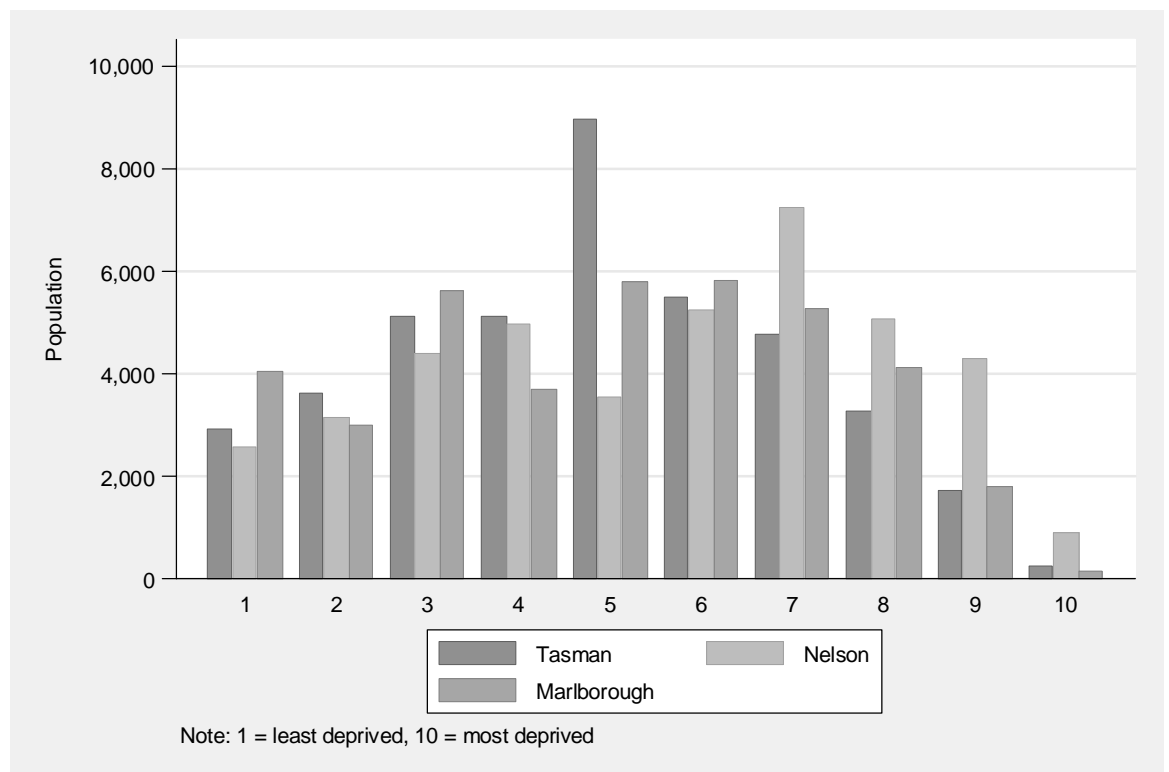
In each of the TLAs, Europeans form a high proportion of the population relative to New Zealand as a whole; and, in each case, the European proportion changed little between 1986 and 2001. In Nelson the European proportion was 89.0% in 1986 and 88.8% in 2001; in Tasman the figures were 91.7% and 91.6%; in Marlborough they were 87.9% and 88.4%. For each TLA, Maori was the dominant non-European ethnicity comprising around 7% of the population in each of Nelson and Tasman, and 10% in Marlborough in each of 1986 and 2001. On average, across New Zealand, Maori tend to be over-represented in lower socio-economic groups. The proportionately low Maori population in Nelson and Tasman suggests that socio-economic deprivation in these regions may therefore be lower than is experienced nationwide.

One way of examining the distribution of socio-economic groups across different TLAs is to compare "Deprivation Indices" for each region. A deprivation index examines the prevalence of various markers of poverty across households within meshblocks across the entire country. Typical markers include: no access to a telephone, receipt of a means-tested benefit, unemployment, low income, no access to a car, single-parent family, no formal qualifications, not living in an owned home, and household overcrowding.⁴ Each meshblock is assigned a score based on the prevalence of these indicators within that meshblock, and deciles are formed across the country, assigning one-tenth of the country's population to each decile. Decile 1 represents the population within the least deprived meshblocks;

decile 10 represents the population in the most deprived meshblocks. If a TLA's distribution of living standards reflected those of the entire country, 10% of its population would be assigned to each decile.

Figure 15 presents the distribution of the deprivation index for the 3 TLAs in 2001. Each TLA stands out as having a minimal proportion of its population in the most deprived decile; Tasman and Marlborough are also heavily under-represented in the second most deprived decile. Marlborough's population is fairly evenly spread across the other eight deciles, while Tasman is heavily over-represented at the 5th (approximately middle) decile. Nelson has a considerably higher proportion of its population in the 6th to 9th deciles, indicating a greater prevalence of deprivation than in either Tasman or Marlborough.

Figure 15: Population by NZ Deprivation Index (2001)



⁴ Crampton, Peter, Clare Salmond, Russell Kirkpatrick with Robyn Scarborough & Chris Skelly (2000) *Degrees of Deprivation in New Zealand: An Atlas of Socioeconomic Difference*, Auckland: David Bateman.

Nelson has 42.3% of its population in the most deprived four deciles, so notwithstanding its low representation in the 10th decile, it has a similar proportion of its population with below-average living standards as does New Zealand as a whole. With 24.4% of its population in the top three deciles, Nelson also has less of its population represented in the top three deciles than does either Tasman (28.3%) or Marlborough (32.2%). Overall, none of the three TLAs stands out as having particularly high or low living standards relative to New Zealand as a whole, but Nelson is less affluent on average than Tasman, with Marlborough being slightly more affluent (on average) than either of its western neighbours.

One contrast between the regions that is relevant to living standards, is the distribution of families versus other household types across the TLAs. In 2001, Marlborough and Tasman each had approximately 66% of households described as "1 family"; the corresponding figure for Nelson was 60%. Nelson had a higher proportion of "1 person" households (25%) than either Tasman (22%) or Marlborough (24%), reflecting the higher proportion of retired people living in Nelson.

A link from demographic to economic influences is provided by the qualifications and the occupational choice of the population in each region. We break down qualifications into four categories (plus "qualification not specified"): no qualification, school qualification, post-school qualification, and degree qualification. In 2001, the distribution across New Zealand of these four categories was 24%, 34%, 18% and 10% respectively (with 14% unstated). The proportions in each of Nelson, Tasman and Marlborough closely mirrored those of New Zealand as a whole. None of the groups - other than degree qualification - differed by more than 3 percentage points from the New Zealand figure in any of the TLAs in 2001, and only one differed by more than that in 1986 (Nelson was 4% over-represented in post-school qualifications in that year).

In 1986, Nelson was equal to the New Zealand average for its population proportion having a degree qualification, and was 4% over-represented in the combined grouping of degree or post-school qualification. By 2001, its degree qualification proportion fell 2% short of the New Zealand average, although the combined grouping remained 1% ahead of New Zealand.

In 2001, Tasman's degree qualification proportion fell 4% short of the New Zealand proportion and its combined grouping fell 2% short (having been equal in 1986). Marlborough fell even further behind. By 2001, its degree proportion fell 5% short of New Zealand's, while its combined grouping fell 4% behind (having been almost equal in 1986).

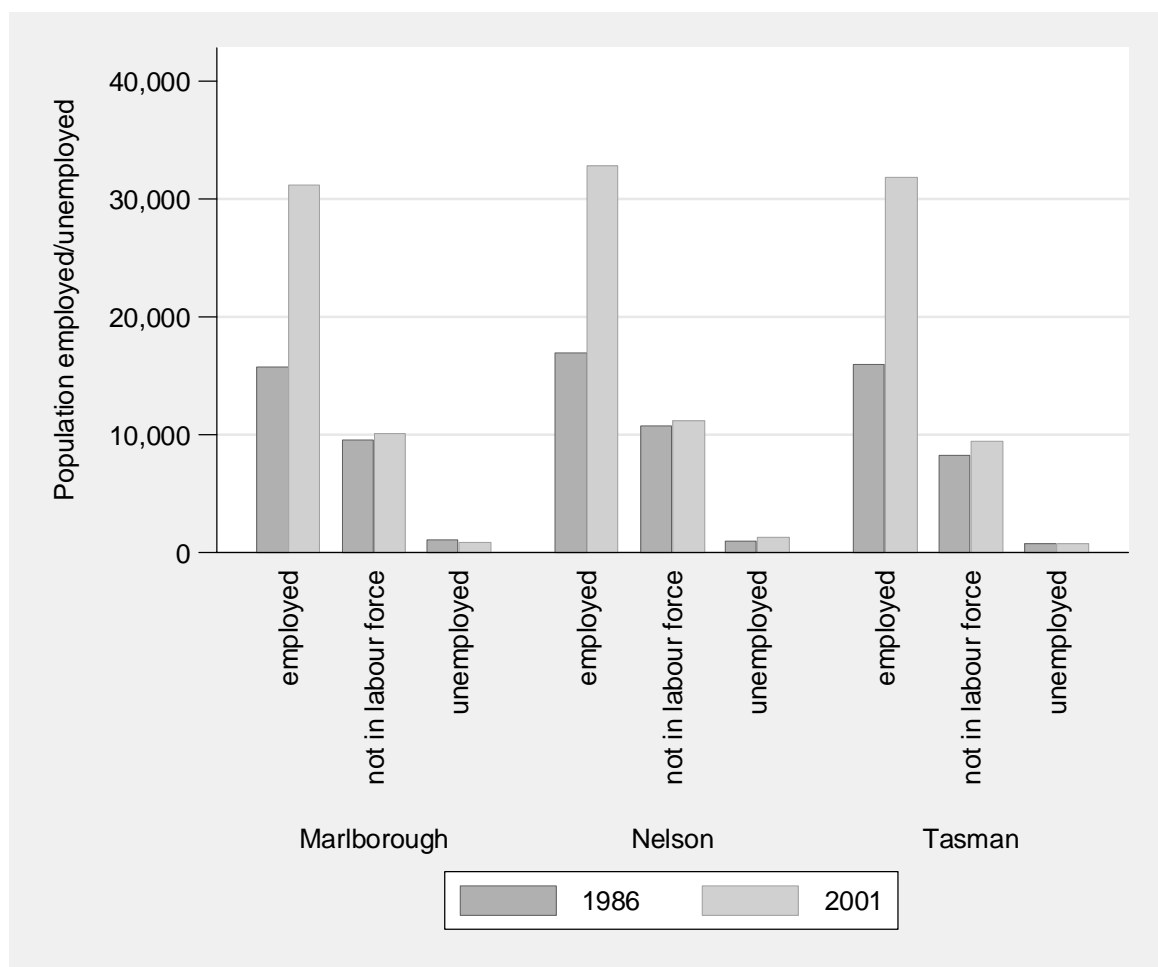
The situation, measured by LMA, gives a very similar picture. Nelson City (TLA) has slightly higher average qualifications than does Nelson LMA indicating that a slightly higher proportion of well qualified people who work in Nelson tend to live within the city boundaries, while a slightly higher proportion of people without formal qualifications who work within the city choose to live outside it.

Overall, the qualifications data indicate that none of the three regions has "upskilled" to the extent seen on average in New Zealand since the mid-1980s. Nelson has the smallest proportion of people with no qualifications and the highest proportion with degree qualifications out of the three areas. Yet Nelson also has higher deprivation than does the other two TLAs. This suggests that the causes of deprivation in Nelson are not linked solely, or even principally, to the human capital of the individuals that reside there. The patterns may reflect life-style choices or they may reflect relative fixed costs of living in the three areas, of which housing costs may be prominent.

5 Economic Developments

Between 1986 and 2001, employment almost doubled in each of the three TLAs; numbers not in the labour force and unemployed stayed almost the same (albeit with an initial large rise followed by a large fall through the period). Figure 16 contrasts these figures for the two years for the three TLAs.

Figure 16: Employment and Unemployment



The increase in employment in each TLA was accompanied by a substantial change in occupations across the three regions. Figure 17 - Figure 20 graph the occupational proportions in each of the four LMAs for 1986 and 2001. Motueka and Picton both experienced a sharp downwards movement in their

agricultural labour proportion, with some compensating rise in the manual labour proportion. Nelson experienced a slight fall in its agricultural proportion and also in its manual labour proportion. "White collar" occupations increased in prevalence. Blenheim, which started with a relatively low agriculture share for the region, retained its proportion of both agricultural and manual workers. Nevertheless, as for the other LMAs, its share of professional and administrative workers increased.

Figure 17: Employment by Occupation, Motueka (LMA)

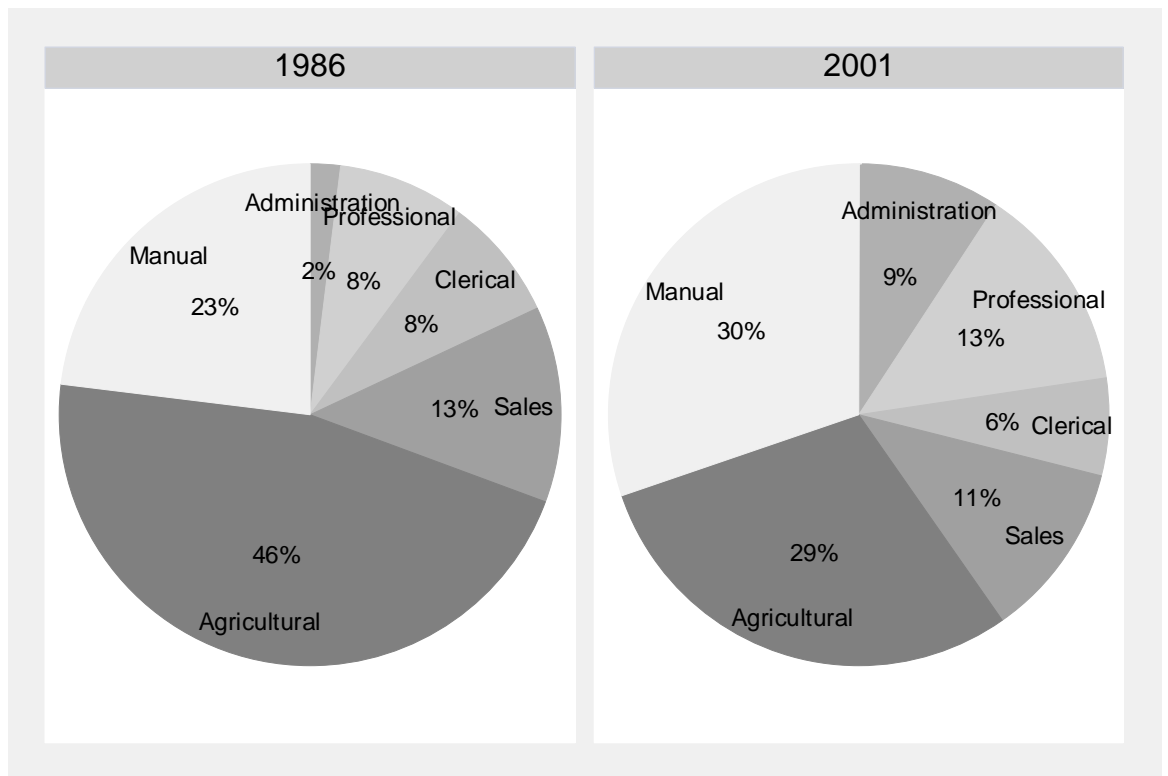


Figure 18: Employment by Occupation, Nelson (LMA)

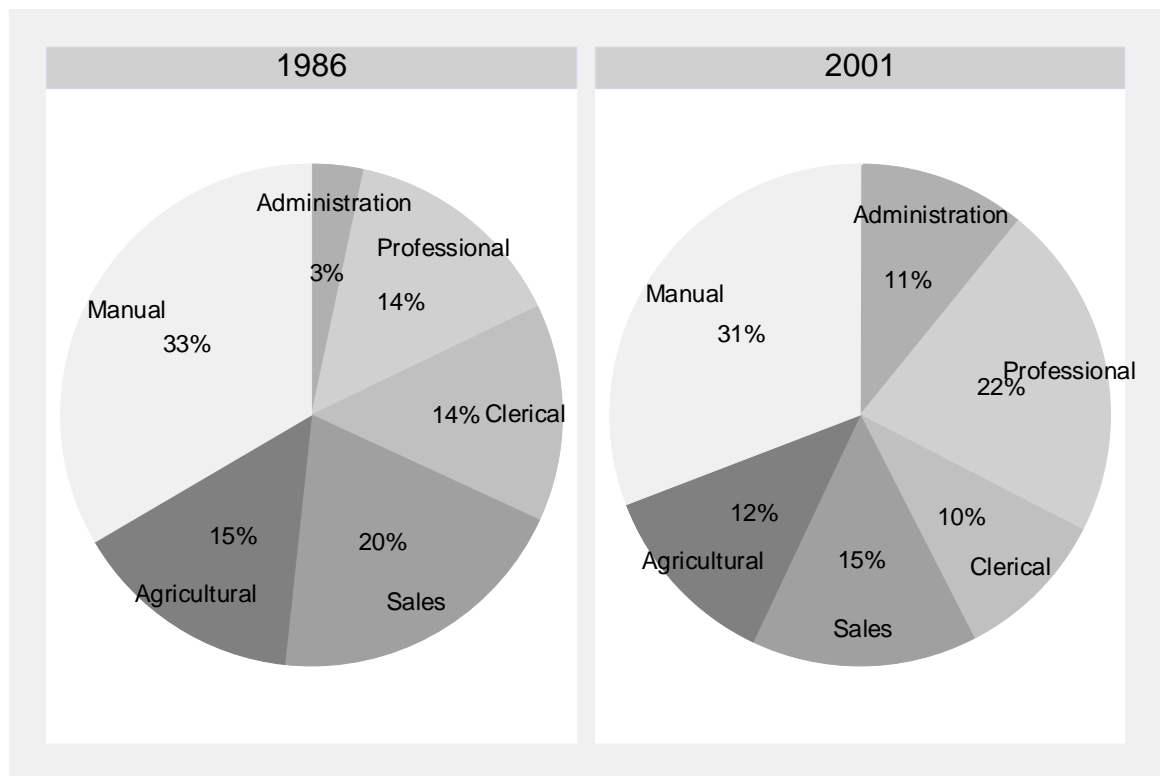


Figure 19: Employment by Occupation, Picton (LMA)

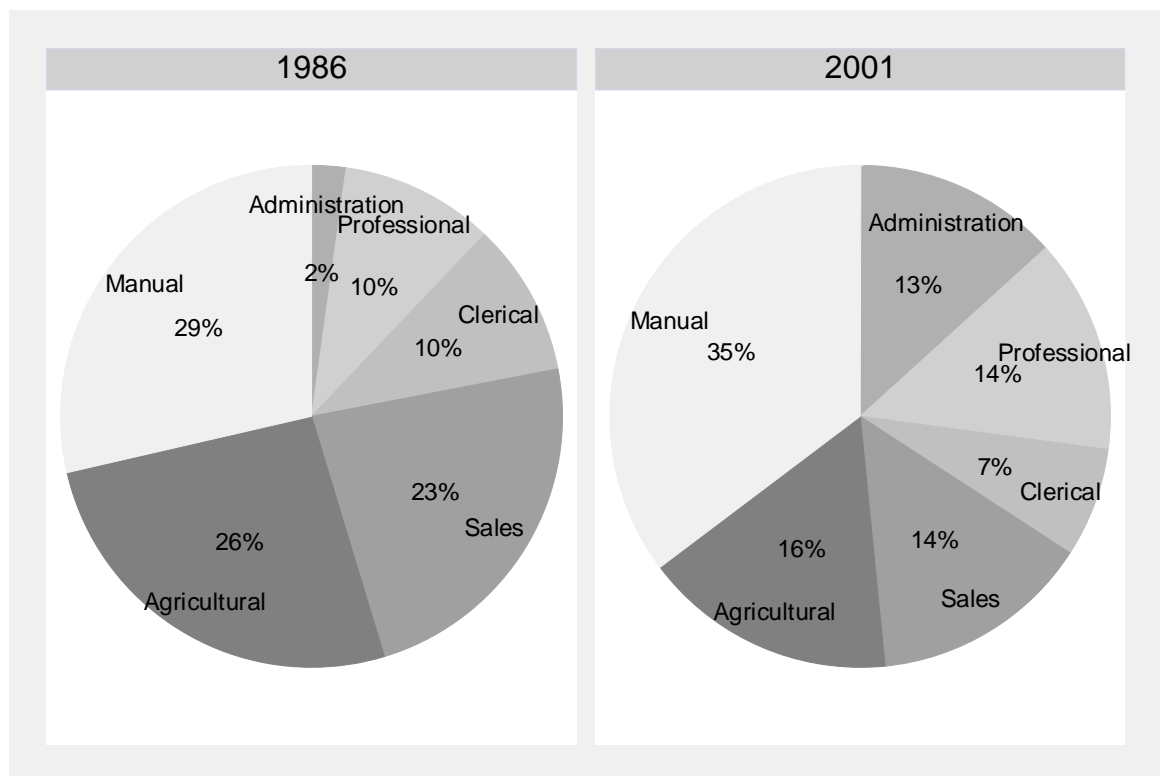
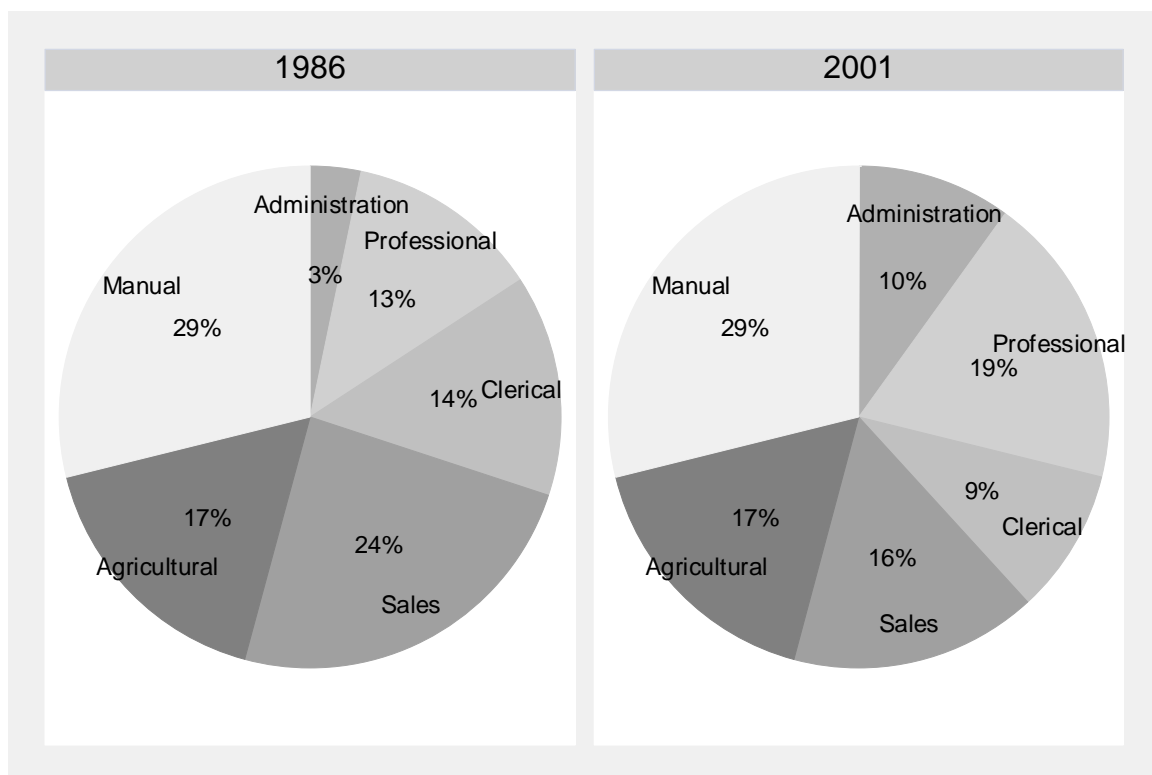


Figure 20: Employment by Occupation, Blenheim (LMA)



One implication of this changing occupational structure, is that a greater proportion of the population in each case is likely to prefer to live in urban than rural areas. Thus housing demand will tend to become relatively more concentrated in towns than rural areas.

Industry structure has changed in tandem with the change in occupations. Figure 21 - Figure 24 graph the proportions of employees in each LMA according to nine industry groupings (plus not specified/defined) in 1986 and 2001.⁵ The fall in agricultural employment in Motueka and Picton is again very strong. The key industry that has risen in importance is "Retail and Hospitality". Its share of employment grew by 4-5 percentage points in each of Motueka and Nelson, and by 3 and 1 percentage points respectively in Picton and

⁵ Category labels are as follows: AGR: Agriculture, Forestry & Fishing; MIN: Mining; MAN: Manufacturing; EGW: Electricity, Gas & Water; CON: Construction; RET: Retail trade & Hospitality; TRN: Transport & Communication; FIN: Finance & Business services; GOV: Government & Social Services; NSP: Not Specified/Defined.

Blenheim. The rise in employment in this industry reflects the increased importance of tourism for these regions.

Figure 21: Employment by Industry, Motueka (LMA)

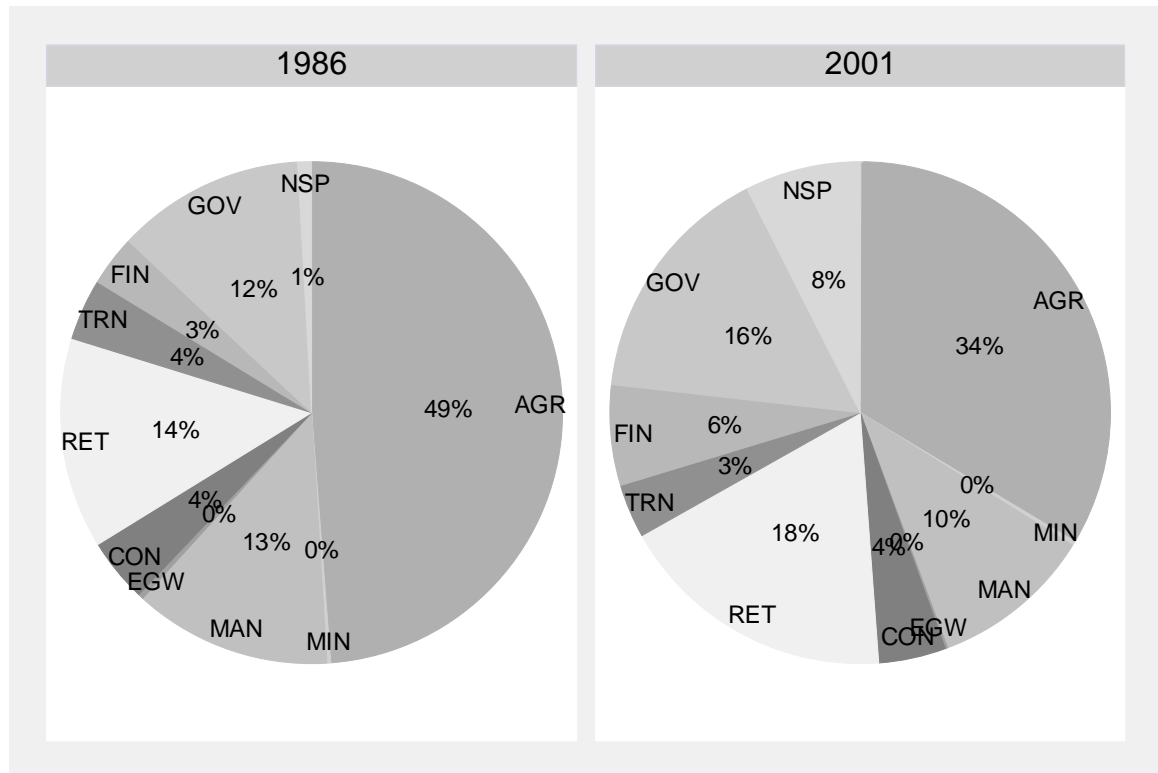


Figure 22: Employment by Industry, Nelson (LMA)

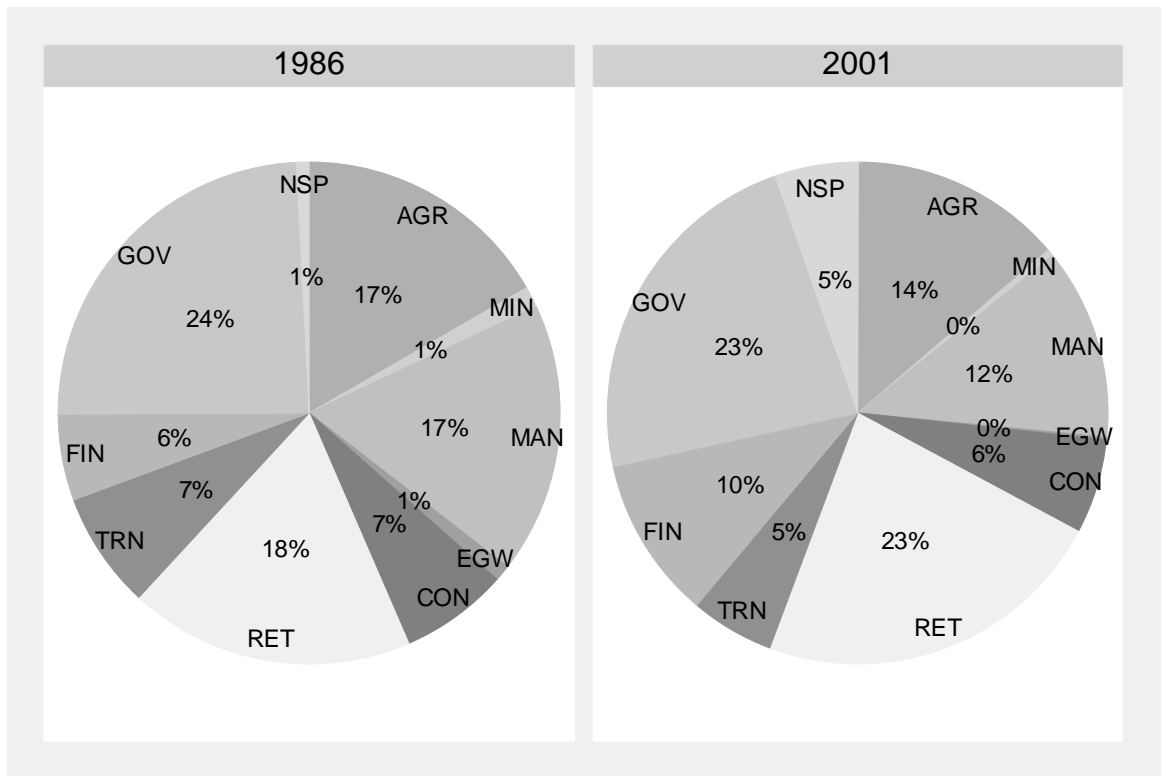


Figure 23: Employment by Industry, Picton (LMA)

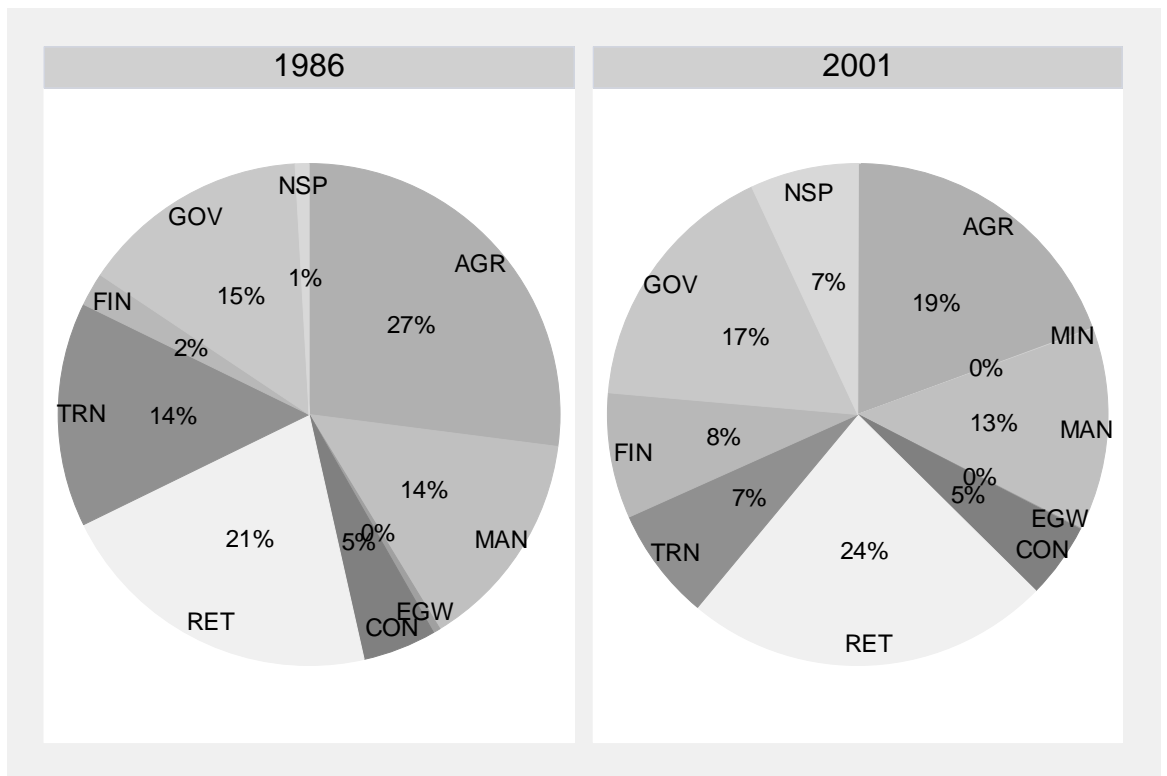
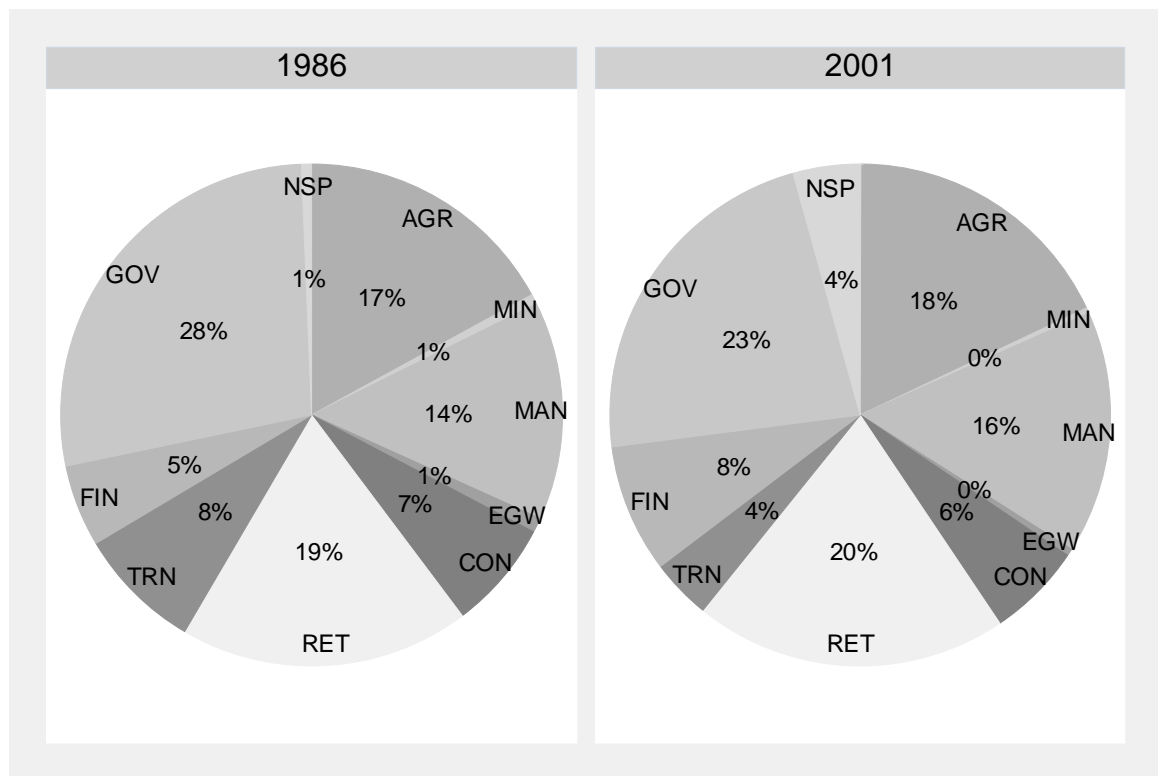


Figure 24: Employment by Industry, Blenheim (LMA)



The fortunes of the industries that are heavily represented in each region are important for influencing living standards and hence demand for housing by local residents. Figure 25 - Figure 27 graph the number of people employed in each of eighteen industries (i.e. at a finer level of disaggregation than for the Labour Market Areas) for each of the past four censuses, at TLA level.⁶

⁶ Bars on following graphs should be read left to right, 1986-2001. Category labels are as follows: ACR: Accommodation, Cafes & Restaurants; AGR: Agriculture, Forestry & Fishing; COM: Communications; CON: Construction; CUL: Cultural & Recreational services; EDN: Education; EGW: Electricity, Gas & Water; FIN: Finance & Insurance; GOV: Government; HEA: Health & Community services; MAN: Manufacturing; MIN: Mining; NSP: Not Specified; PER: Personal & Other services; PRP: Property & Business services; RET: Retail trade; TRN: Transport & Storage; WHO: Wholesale trade.

Figure 25: Employment by Industry, Nelson

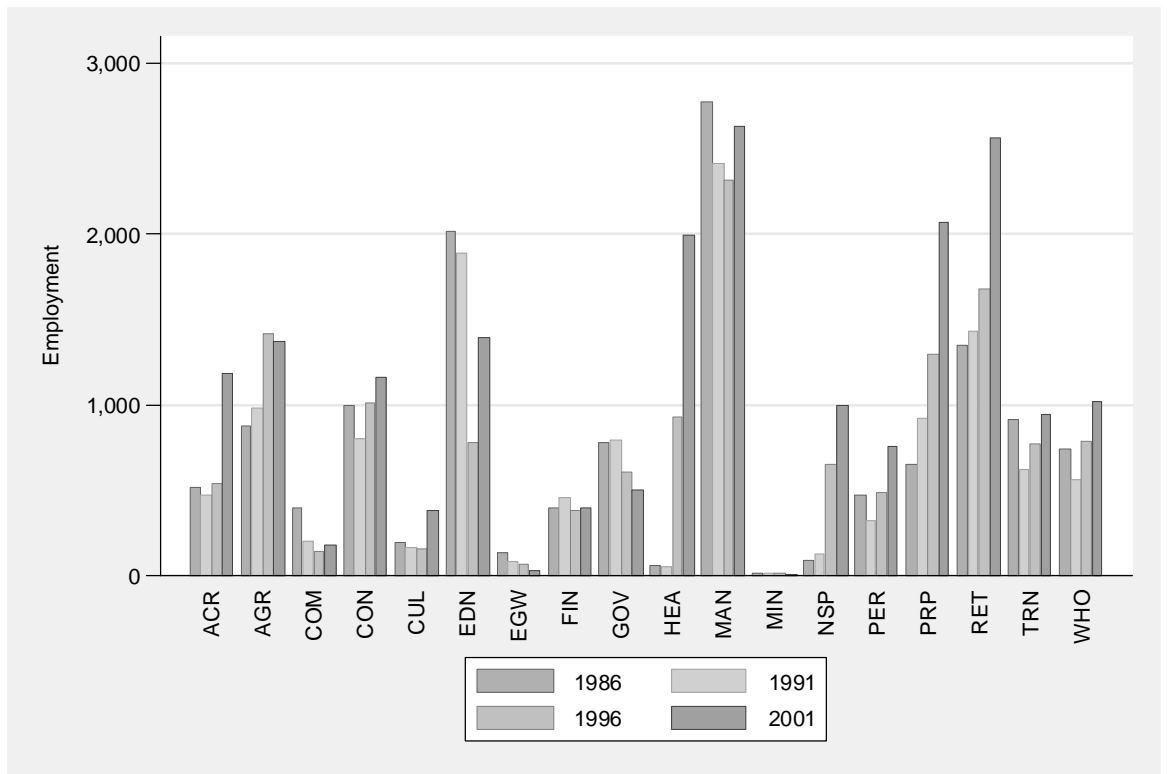


Figure 26: Employment by Industry, Marlborough

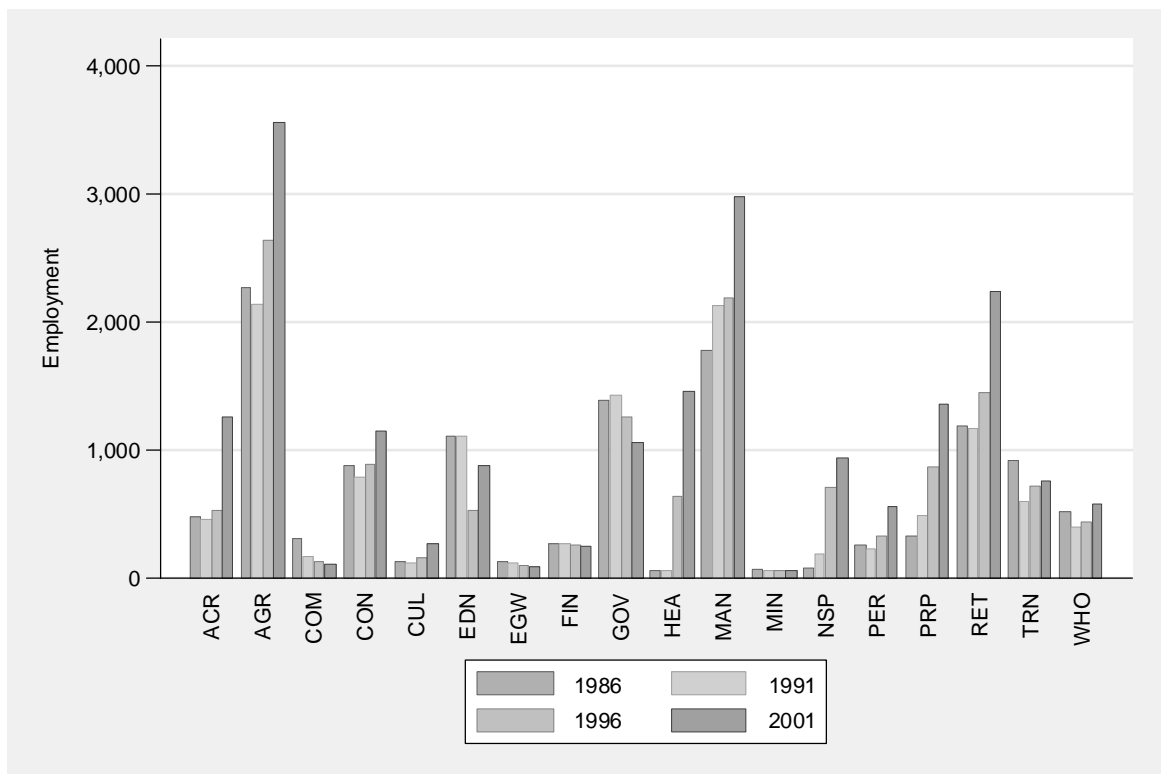
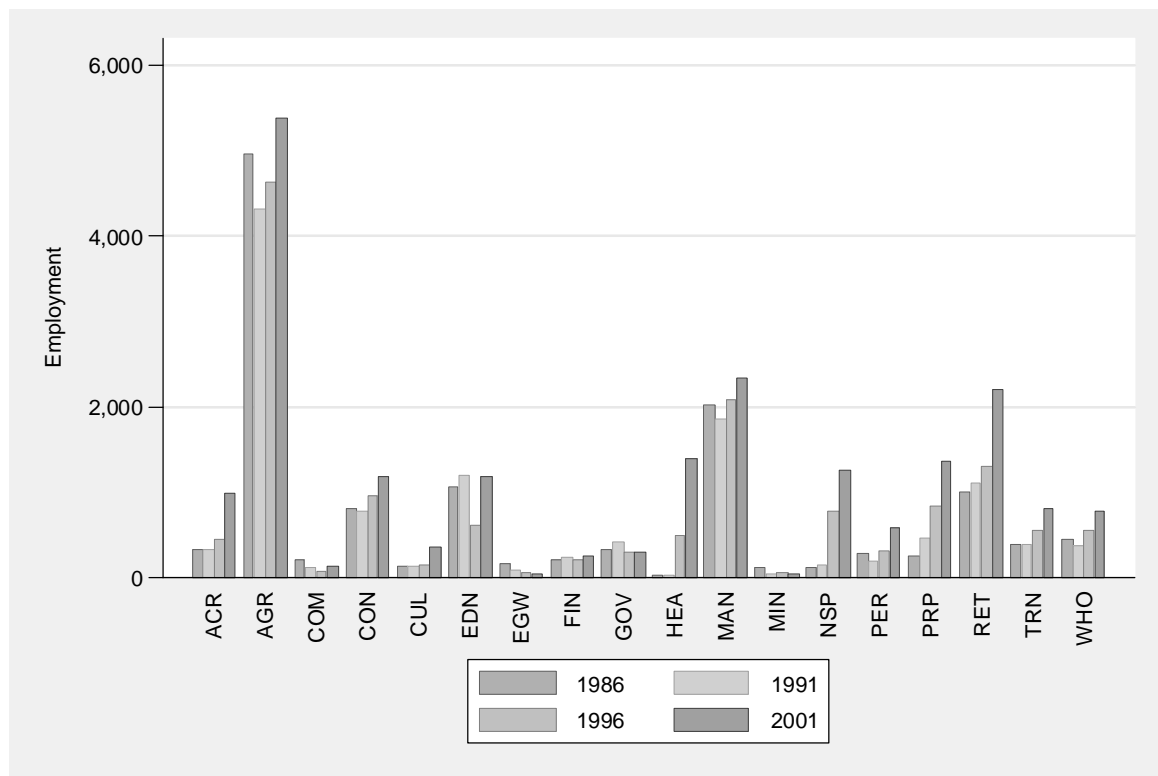


Figure 27: Employment by Industry, Tasman



Each of the three TLAs has experienced a sharp rise in employment in Accommodation, Cafes and Restaurants (ACR) and in Retail Trade (RET). The rise has been particularly strong since 1996. This is in keeping with the previous findings regarding the increasing importance of tourism in the region.

Very few industries have seen absolute declines in employment; rather their decline in employment share generally reflects weaker than average employment growth. One particular case is agriculture (AGR). Despite its declining share, agricultural employment increased in Nelson (especially between 1991 and 1996), Tasman (especially between 1996 and 2001) and showed a particularly strong increase in Marlborough (especially between 1996 and 2001). The increase in agricultural employment means that accommodation needs have increased in rural areas, notwithstanding the relative decline in the agricultural industry compared with other industries. It is important, therefore, that the housing supply in these areas (or reasonable transport links to areas with expanded housing supply) increases.

Increasing employment and increasing productivity has resulted in economic growth in each region that has considerably outstripped the New Zealand growth rate (Figure 28). Tasman, and to a slightly lesser extent, Marlborough, has shown particularly strong growth. Nelson growth has been constrained by its more slowly growing population, but has nonetheless experienced stronger growth than New Zealand as a whole. Strong economic growth, in turn, has contributed to increased demand for housing in each of the regions.

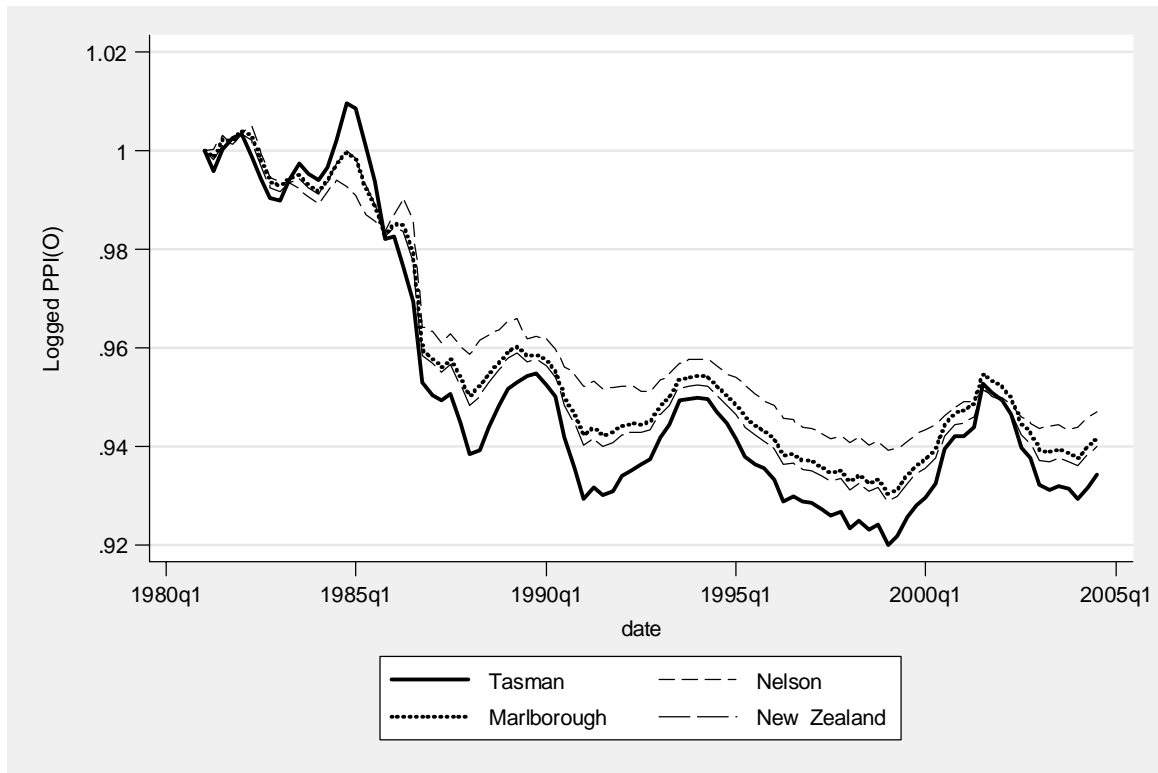
Figure 28: Gross Economic Product, 1981-2004



While the volume of production has risen strongly in Tasman, the price performance of its products has been muted, and broadly in line with national average prices. Figure 29 graphs the real producer price index relevant to each TLA's product mix, together with the series for New Zealand (for 1981-2004). While Tasman's prices have been fairly similar to those of New Zealand as a whole, both Marlborough's (and, especially Nelson's) product prices have been

slightly stronger (at least, to mid-2004). The relatively strong price behaviour of products produced within these TLAs are factors underpinning incomes, and hence housing demand, in those TLAs.

Figure 29: Real Producers Price Index (Output), 1981-2004



Household income is a key determinant of housing demand. Individuals' qualifications, occupation choices, family circumstances and local economic performance all influence household incomes. Figure 30 and Figure 31 graph the distribution of household incomes for 1986 and 2001 for the three regions plus New Zealand.

Figure 30: Distribution of Household Income (1986)⁷

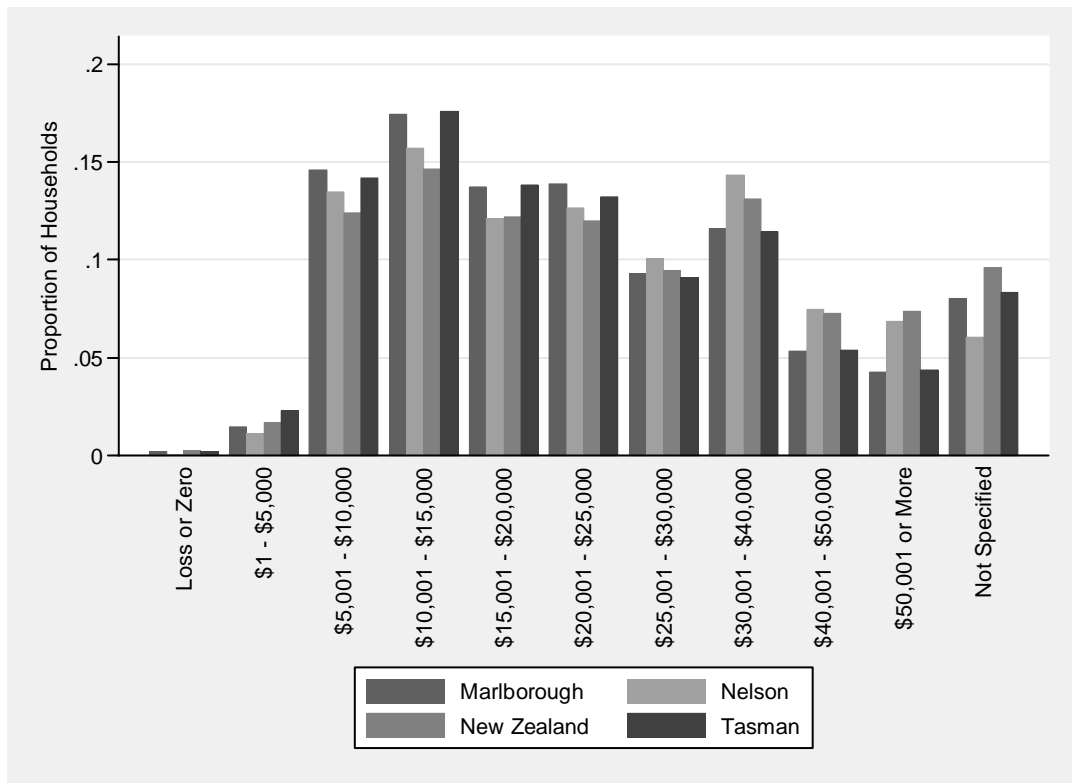
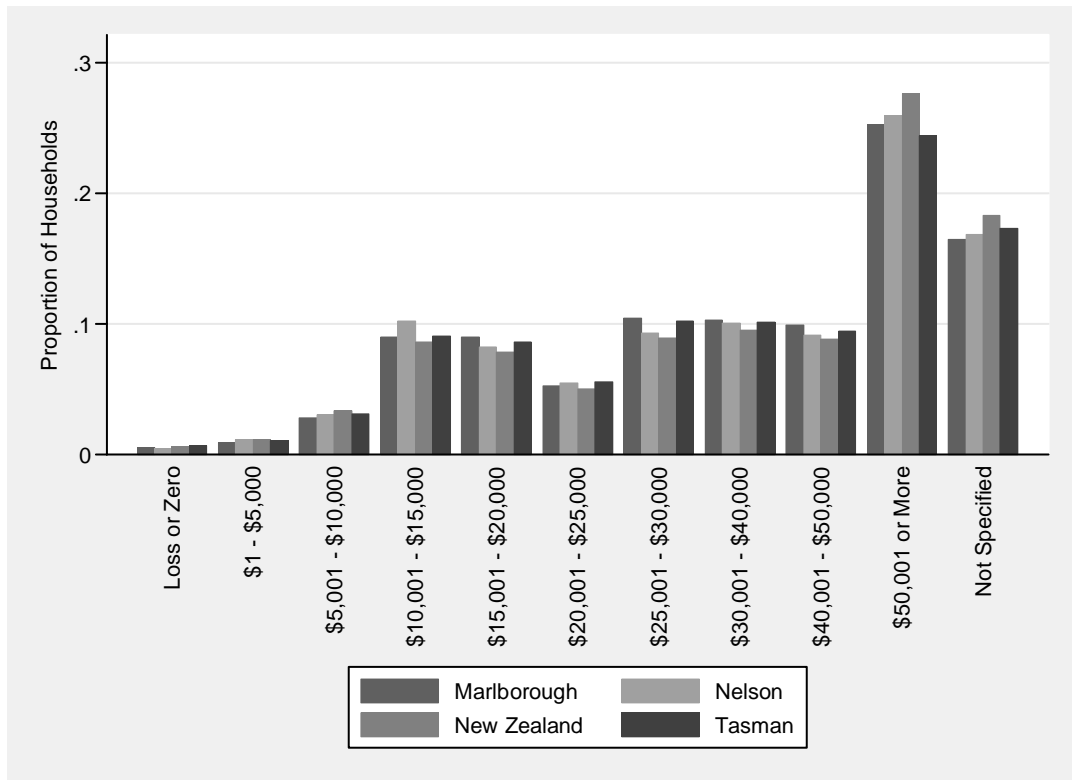


Figure 31: Distribution of Household Income (2001)



⁷ Bars should be read left to right, Marlborough, Nelson, New Zealand, Tasman.

In 1986, Nelson stood out relative to the other two regions as having much higher incomes. Its income distribution closely mirrored that of New Zealand as a whole. By 2001, there was little difference in the income distribution across the three regions, although Nelson was slightly over-represented at both the top and the bottom ends of the distribution relative to the other two regions. Each region had an income distribution similar to that across New Zealand, albeit with a slightly smaller proportion in the top income category (and, in the case of Nelson only, a slightly higher proportion in the lower categories).

6 House Ownership

Between 1986 and 2001, the number of households owning their own residence increased in each of Nelson, Tasman and Marlborough. Indeed, absolute numbers of owners increased for every household type (1 family, 1 family plus others, 1 person household, 2 families, non-family household) in each of the three regions (other than 1 family households in Nelson where the absolute figure dropped by a miniscule amount). Absolute ownership levels, therefore have not decreased.

However the population influx to each of the regions means that the *proportion* of each family type that owns their own home does not necessarily reflect the level of *absolute* ownership. Figure 32 - Figure 34 graph the proportion of each family type that owns and rents in 1986 and 2001 for each region. Ownership rates have increased slightly for some household types in some of the regions, but the overall trend has been towards rental and away from ownership. This is particularly noticeable for 1 family households; the proportion of such families owning their own house declined by 13 percentage points in Nelson (from 57% to 44%), with smaller declines in Tasman and Marlborough (6 and 7 percentage points respectively). The larger decline in Nelson, may indicate greater housing stress within Nelson city than in surrounding regions.

Figure 32: Tenure by Family Type, Nelson

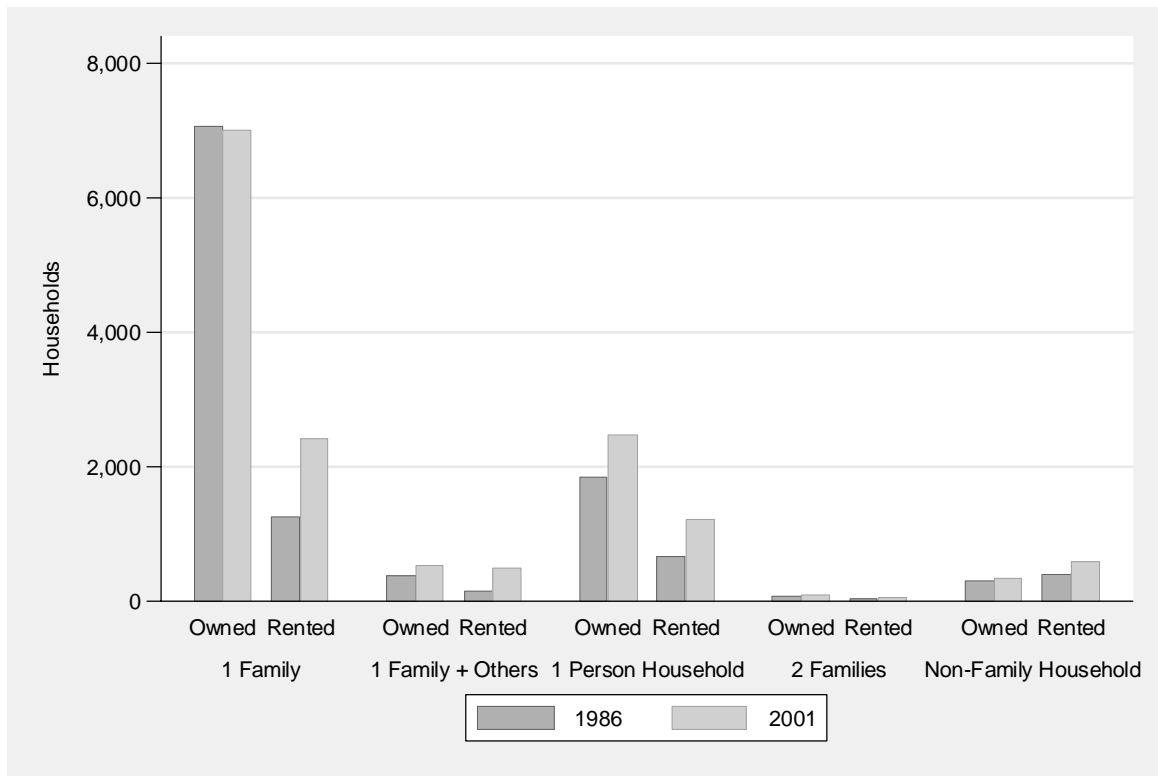


Figure 33: Tenure by Family Type, Marlborough

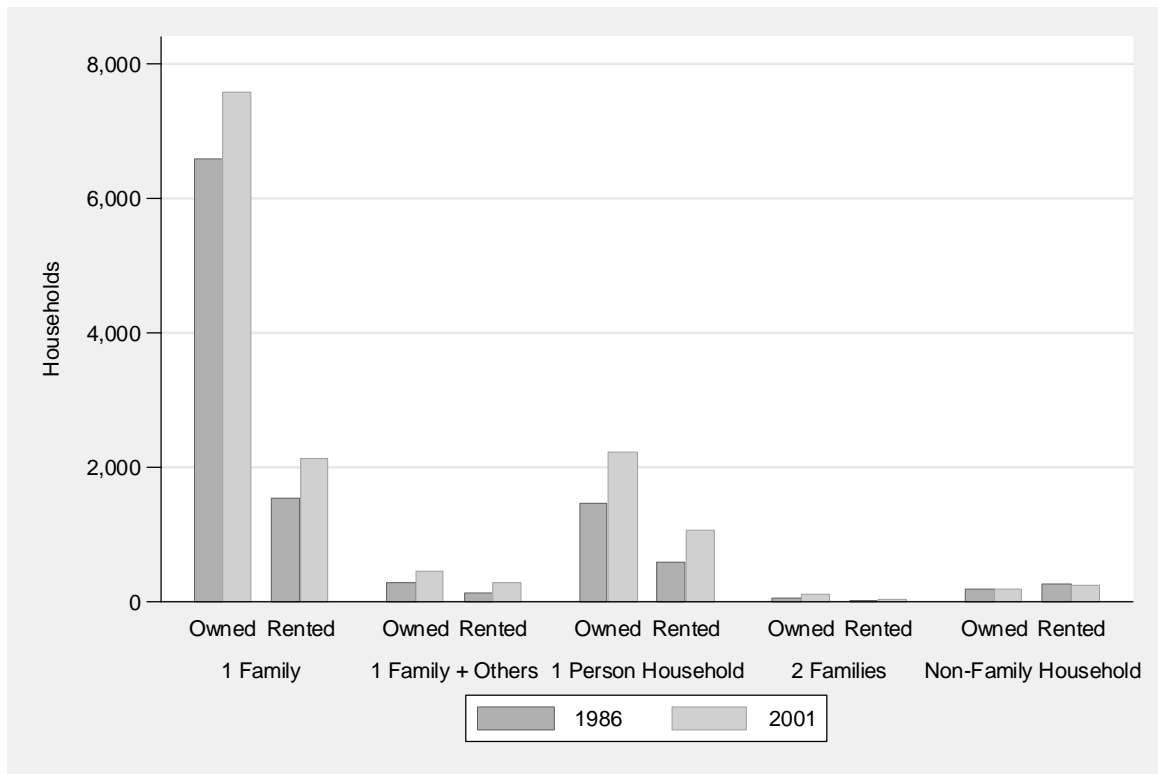
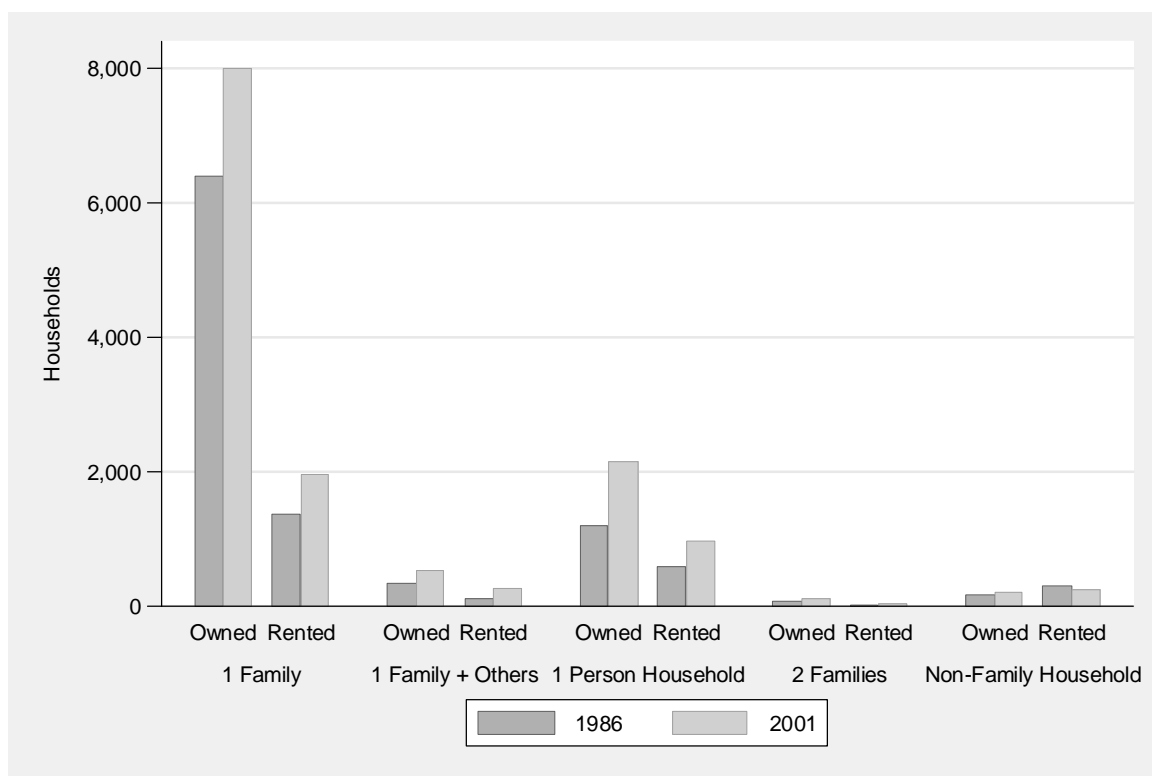


Figure 34: Tenure by Family Type, Tasman



As is the case across New Zealand, home ownership in each of the three TLAs has declined since 1991 within virtually all age groups (measured in 5 year groupings from age 20 to age 64, plus a 65+ age-group). Surprisingly, the only marked exception to this trend is a rise in home ownership for the 20-24 year age-group in Tasman for which the home ownership rate stood at 33.6% in 2001, compared with 32.6% in 1991 and 22.5% in 1981. In Marlborough, the home ownership rate of this group was virtually unchanged between 1981 and 2001. The most marked drops in home ownership by age are in Nelson. For the 25-29 year age-group, home ownership dropped from 61.7% in 1981 to 56.5% in 1991 and 37.2% in 2001; for the 30-34 year age group, the corresponding proportions fell from 77.9% to 72% and then to 57%.

While home ownership rates have tended to fall in the three TLAs, each region nevertheless has had high rates of home ownership relative to the national average. This is the case even after adjusting for personal characteristics. Figure 35 - Figure 37 demonstrate this by graphing the difference between the home

ownership rate in each of the three regions from that of New Zealand as a whole, broken down by household qualifications. The home ownership rate was consistently higher than the corresponding national figure in each of Marlborough and Tasman for each qualification level from 1991 onwards.

Figure 35: Home Ownership by Qualification (% point variation from NZ mean), Nelson

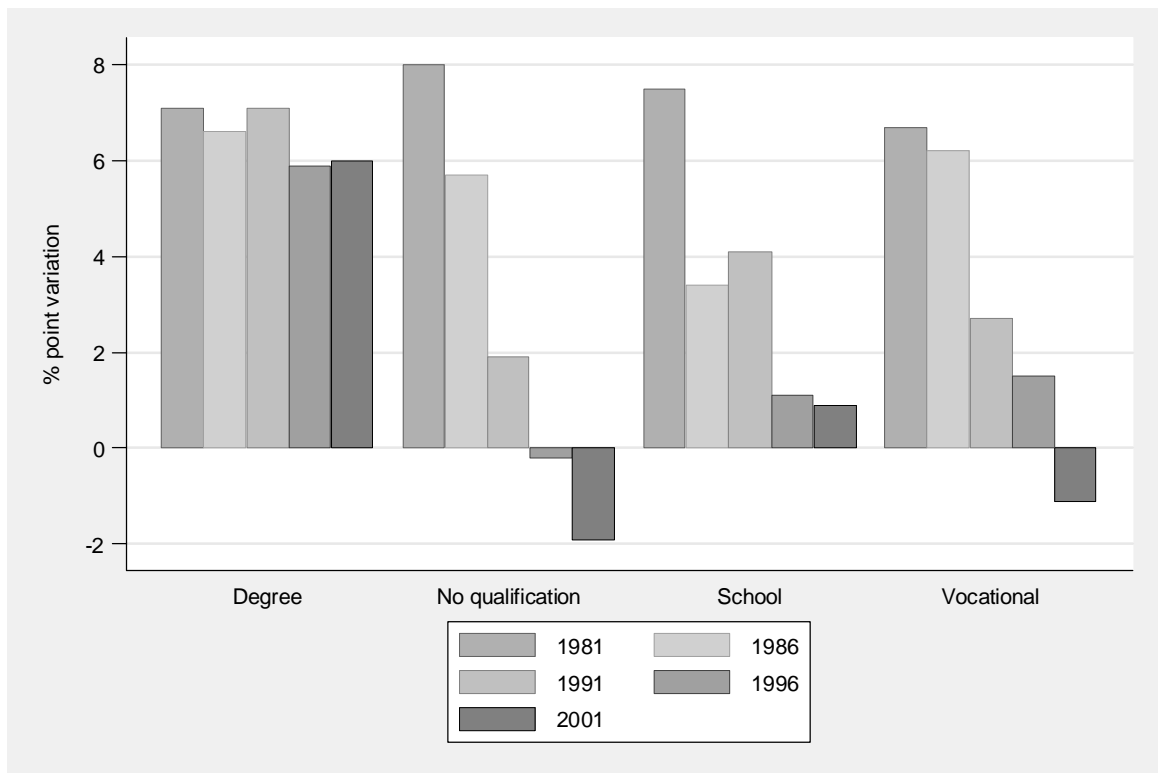


Figure 36: Home Ownership by Qualification (% point variation from NZ mean), Marlborough

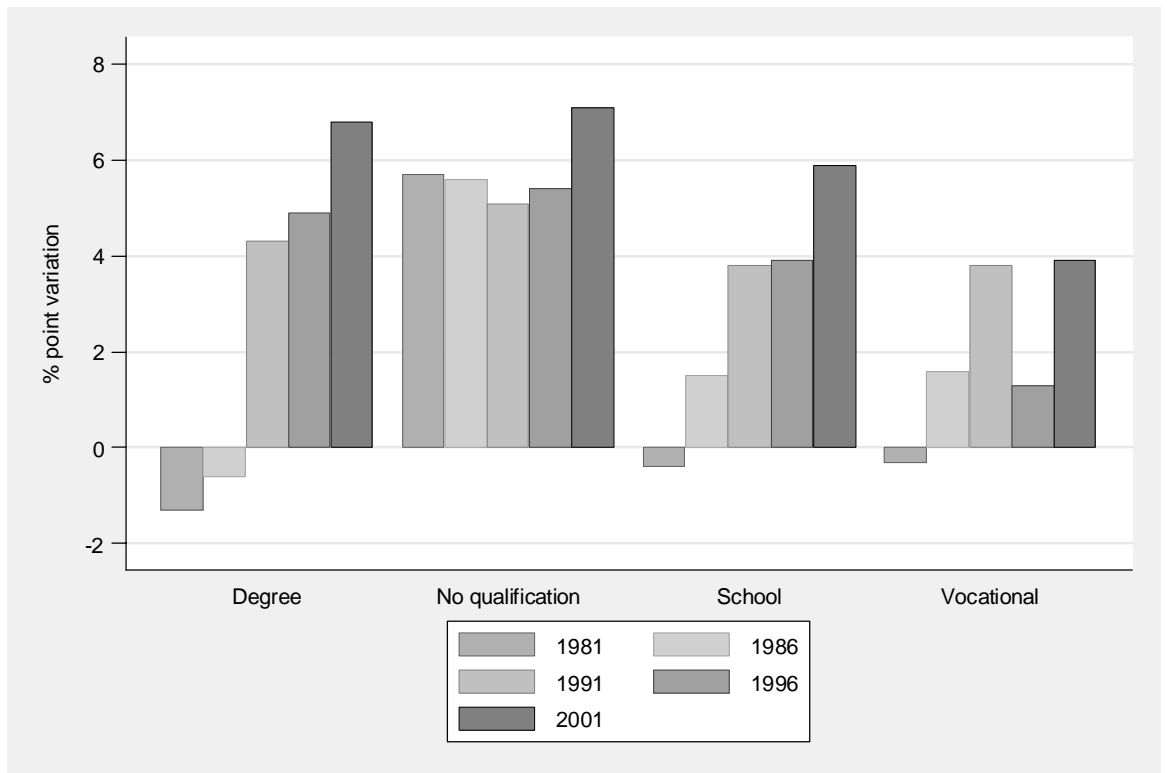
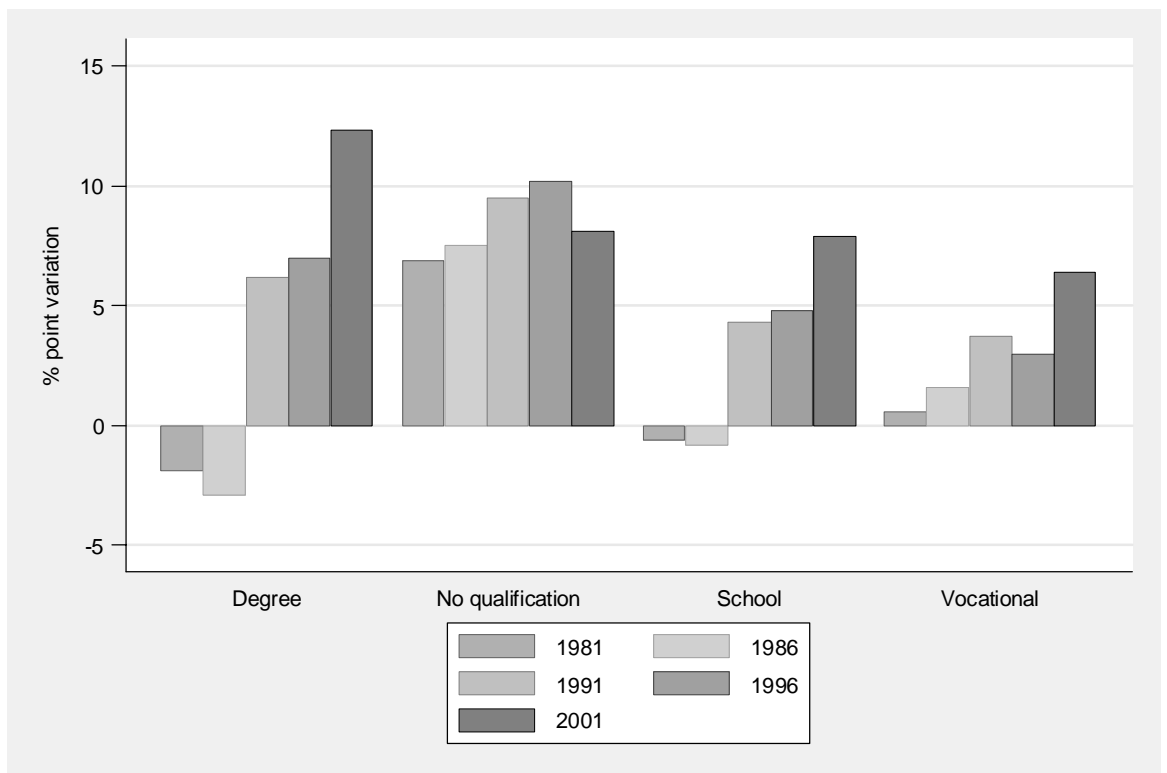


Figure 37: Home Ownership by Qualification (% point variation from NZ mean), Tasman



However, the trend is quite different in Nelson. Home ownership by degree holders has remained 6% above the national norm for that group throughout 1981-2001. For the other four qualification groups, the ownership rate has declined markedly relative to the national figures; by 2001, the home ownership rates for those with vocational and with no qualifications were below the corresponding New Zealand figures, and the rate for those with school qualifications was less than 1% above, having been more than 7% above the national figure in 1981. This finding implies a much greater degree of housing stress in Nelson than in either Tasman or Marlborough, except for those with degree qualifications (i.e. at the upper end of the socio-economic scale).

The figures on home ownership discussed above relate to census years; hence the latest figures relate to 2001. The strong increase in house prices - and strong decreases in rents relative to house prices - in each of the three regions began primarily after the 2001 census. The degree of housing stress can therefore be expected to have increased further since 2001, with a concomitant fall in the rate of home ownership.

7 Housing Supply

According to census data, the number of dwellings in each of Nelson, Tasman, and Marlborough increased steadily from 1981 to 2001. Table 1 presents the number of dwellings on census night in each TLA, and presents also the average number of residents per dwelling. For comparison, the number of residents per dwelling is presented also for New Zealand and also for Thames-Coromandel and Tauranga.

Table 1: Total Occupied Dwellings

Total occupied dwellings									
	1981	1986	1991	1996	2001	81-86 % change	86-91 % change	91-96 % change	96-01 % change
Nelson	11,424	12,465	13,686	15,378	16,284	9	8	12	6
Tasman	9,825	11,139	12,648	14,373	15,963	13	14	14	11
Marlborough	10,407	11,634	12,957	14,496	15,513	12	11	12	7
Thames- Coromandel	6,273	7,776	9,306	10,431	11,046	24	20	12	6
Tauranga	18,027	21,390	25,251	29,745	35,490	19	18	18	19
New Zealand	1,011,867	1,095,738	1,185,357	1,284,009	1,368,228	8	8	8	7
Occupancy rate¹									
Nelson	2.99	2.82	2.71	2.68	2.63				
Tasman	3.07	2.94	2.80	2.70	2.66				
Marlborough	3.14	3.00	2.84	2.70	2.62				
Thames- Coromandel	2.60	2.51	2.42	2.44	2.34				
Tauranga	3.05	2.89	2.74	2.68	2.63				
New Zealand	3.19	3.07	2.95	2.91	2.84				

Source: Statistics New Zealand

¹ The occupancy rate (average number of usual residents per household) is the number of usual residents / number of occupied dwellings (private and public).

The New Zealand housing stock increased by 7-8% in each of the four inter-censal periods, giving a total increase over 20 years of 35%. Nelson's growth rate was similar in two of the periods, but it had a slightly faster overall growth rate of 43%. Marlborough had higher growth over three of the periods with overall growth of 49%. Tasman had considerably stronger growth in its housing

stock over each inter-censal period, resulting in overall growth of 62%. Nevertheless, its overall growth in housing stock was lower than in Thames-Coromandel (76%, albeit from a low base) or Tauranga (97%, from a higher base).

As witnessed across New Zealand, the average occupancy rate (persons per household) has fallen in every inter-censal period for each of Nelson, Tasman and Marlborough. Each of these regions (and Tauranga) had an occupancy rate of approximately 2.65 in 2001, well below that of New Zealand as a whole (2.84). The low occupancy rate in these regions is likely to reflect, in part, the older age structure of their populations with a significant proportion of retirees. It also reflects a higher than average proportion of holiday homes; the low Thames-Coromandel occupancy rate is also likely to be a result of this factor.

In order for the dwelling stock to increase over time, additions to the stock must exceed demolitions. Additions require both land availability and new construction. Maintenance, including "alterations and additions" is important for limiting the number of demolitions. We examine the number of new residential building consents ("building permits") and alterations and additions consents granted in each of the TLAs since 1991. We also examine the trend real value of these consents. Subsequently, we examine land effects in more detail.

Figure 38: Number of Residential Building Consents

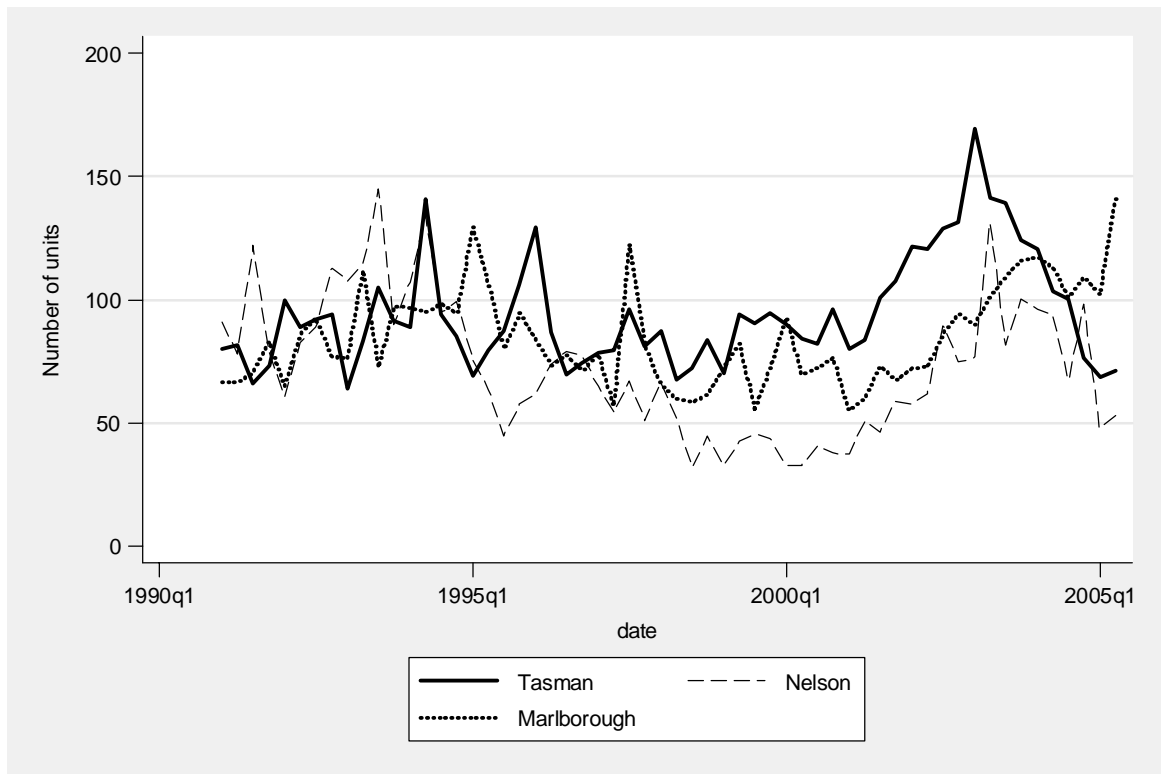


Figure 39: Trend Real Value of Residential Building Consents

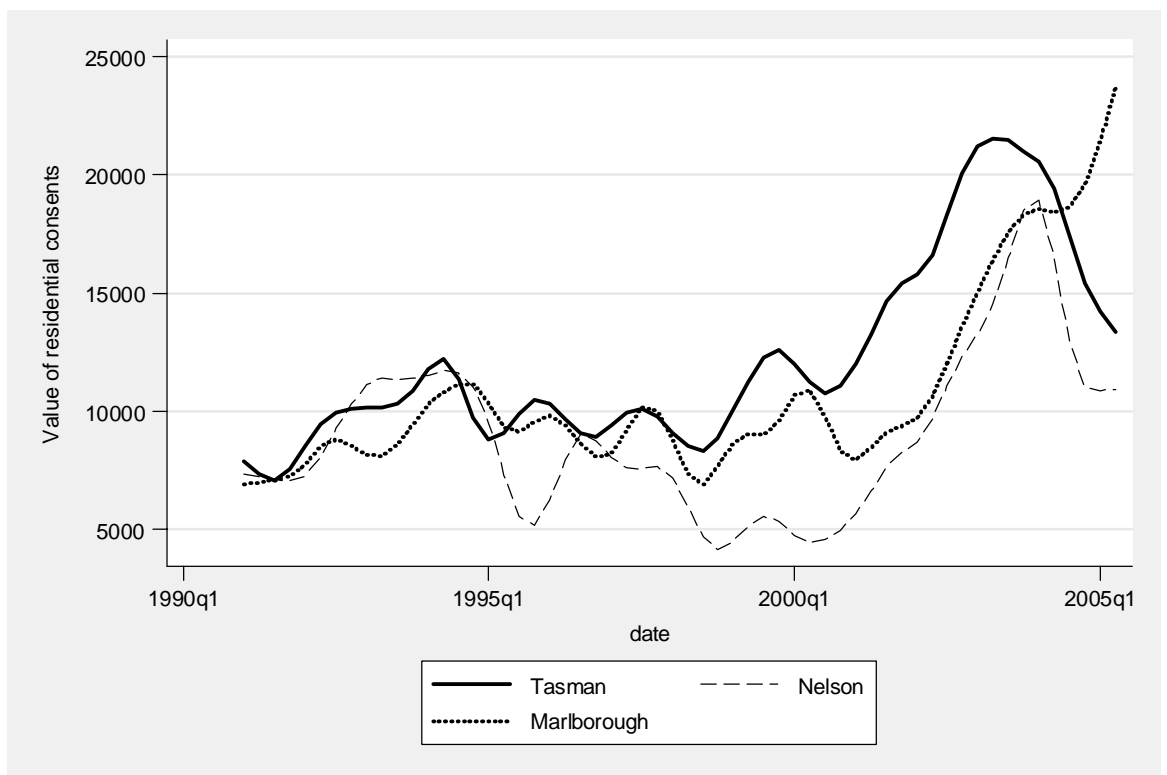


Figure 38 graphs the number of new residential building consents, and Figure 39 graphs the trend real value of these consents. In each case, since the mid-1990s, Nelson has witnessed a consistently lower pattern of building consents than either Tasman or Marlborough. We expect housing construction to respond to price signals, so that high rates of house price increase will bring forth new construction. High construction costs and/or high land prices will tend to limit new construction.⁸ We have already seen that house price trends have been similar across each of Tasman, Nelson and Marlborough, so the consistently lower construction activity in Nelson is unlikely to reflect lower prices for the resulting house. Construction costs are unlikely to differ strongly across the three regions, so also do not explain the differences in building activity.

The difference in activity may, however, reflect different prices for land. Figure 40 and Figure 41 present evidence on whether this may be the case. Figure 40 graphs the median sales price of residential sections in each of Nelson, Tasman and Marlborough, and across New Zealand. The patterns are very similar to the patterns of house prices in Figure 1.

⁸ These hypotheses are borne out in work by Arthur Grimes and Andrew Aitken, to be published shortly by Motu.

Figure 40: Sales Price of Vacant Sections

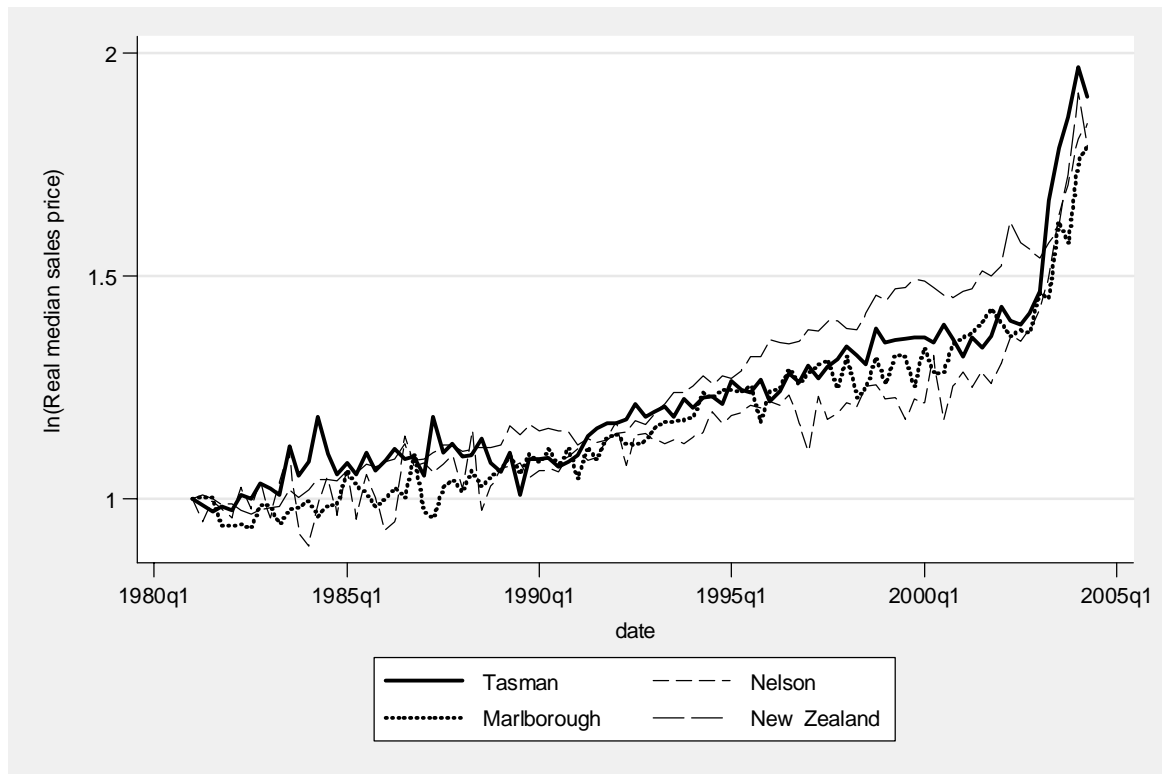


Figure 41 - Figure 42 graph the median section prices for each of NTM and for Thames-Coromandel and Tauranga relative to the New Zealand median section price. Since 1981, Nelson has had a consistently higher median section price than Tasman and, for much of the period, than for New Zealand. Tasman, like Nelson, has experienced relative section price increases since 2002 but remains below Nelson. Marlborough has had consistently low section prices compared with each of Nelson and Tasman and relative to New Zealand.

The other two fast-growing sunshine, coastal local authorities (Thames-Coromandel and Tauranga) have had very different section price behaviour from one another, and these differences may be relevant to issues of housing affordability. Thames-Coromandel section prices have maintained a steady premium over New Zealand section prices for almost the entire period. By contrast, Tauranga section prices have trended down relative to New Zealand prices throughout the period. The fact that the strong population and housing stock growth in Tauranga has not resulted in relative section price growth

indicates that Tauranga has had a much more flexible land supply response than in any of NTM or Thames-Coromandel. In turn, Tauranga's house prices have followed an initially falling, and thereafter steady, relationship to New Zealand prices. These differences in behaviour have major implications for examining options to promote housing affordability in the Tasman, Marlborough and (particularly) Nelson regions.

Figure 41: Ratio of TLA House Price to NZ for Vacant Sections (NTM)

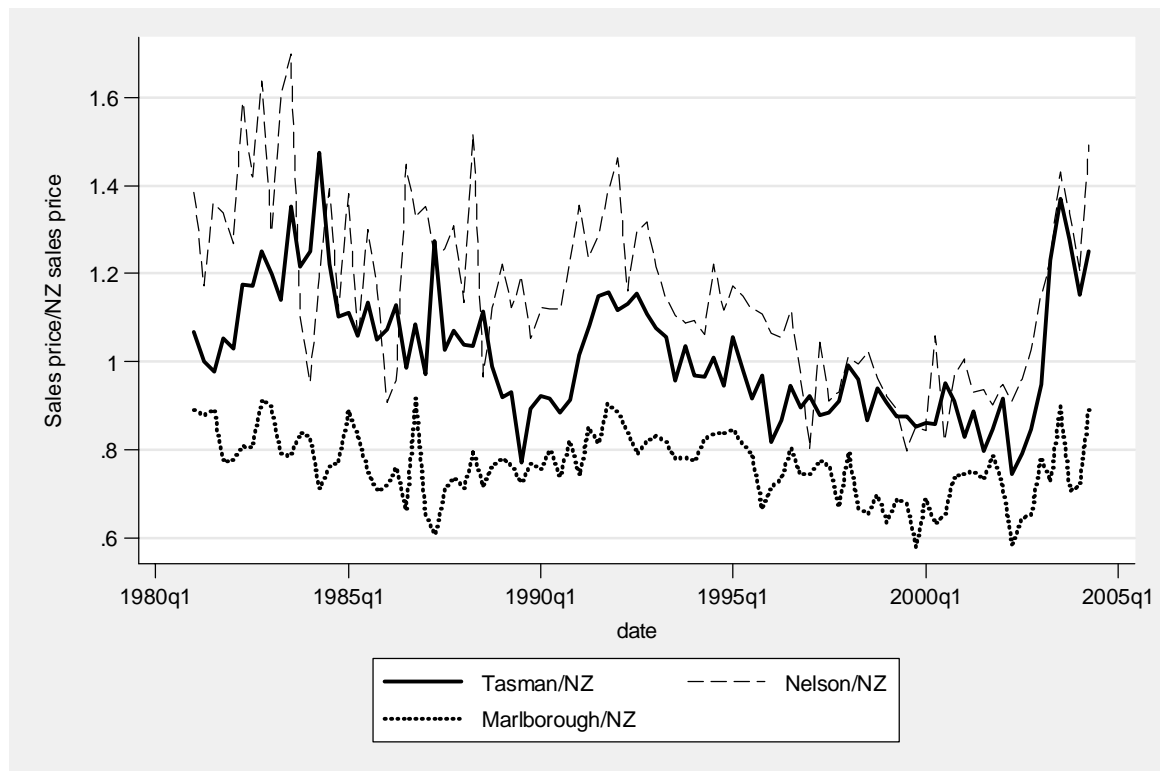
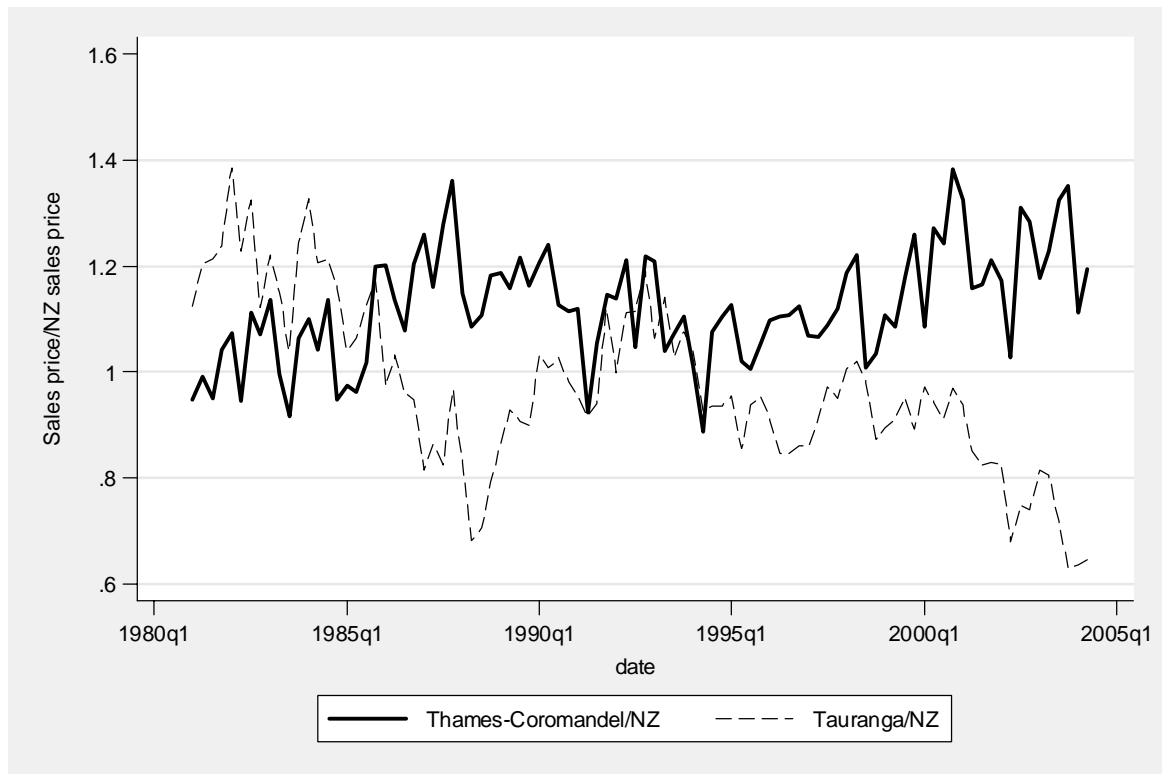
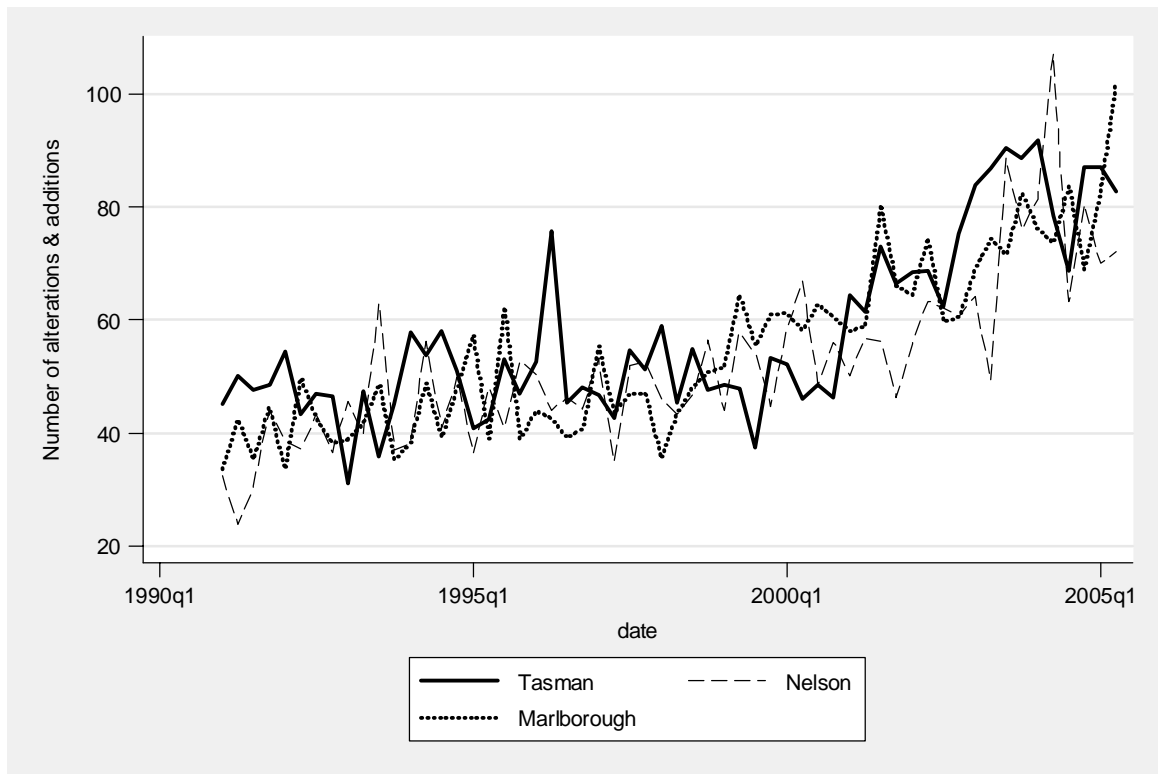


Figure 42: Ratio of TLA House Price to NZ for Vacant Sections (Thames & Tauranga)



The number of consents for alterations and additions in Nelson has broadly kept pace with those in Tasman and Marlborough (Figure 43). This suggests that demand for high quality housing within Nelson City remains strong but, relative to its regional neighbours, has been met more by renovations than by new additions.

Figure 43: Residential Building Consents for Alterations and Additions



8 Summary & Projections

Nelson and Tasman have each grown strongly (relative to New Zealand) since the early 1980s, while Marlborough's growth has been similar to that of New Zealand over the full period. Marlborough's house price growth since 1981 has also been similar to that of New Zealand, although this included a prolonged 'slow-growth' period followed by marked 'catch-up'. Nelson and Tasman house prices have grown more strongly than New Zealand prices; this pattern was particularly marked over 2001-2004. While Nelson and Tasman each had higher population growth than New Zealand over the period, it is not automatic for sunny, coastal fast-growing regions to have higher than average house price growth. Tauranga's house price growth, for instance, has broadly mirrored that of New Zealand since the mid-1980s.

Housing affordability (house prices relative to incomes), particularly in Nelson and Tasman, has been affected adversely by the strong house price growth. This has occurred both for median and for lower quartile income earners. Marlborough has also seen declining affordability, but not quite to the same degree. Lower mortgage interest rates since the mid-1990s have, however, meant that cash-flow affordability has not decreased to the same extent as indicated by the house price:income ratio; cash-flow affordability is not much different now to the situation in the early 1990s, and has improved relative to the mid-1980s. Increased borrowing limits for bank mortgages relative to house prices will also have improved access to finance for many purchasers.

According to a number of measures, housing stress is more prevalent in Nelson than in either Tasman or Marlborough. One possible reason for lower housing stress in these latter regions is that their new house construction has been more responsive to price pressures than in Nelson; each has had substantially greater new house building activity than Nelson since the mid-1990s. Subsequent papers in this research programme will examine the factors that may be at work here. Since new housing supply is crucial for meeting increased population

pressures without associated price pressures, we will place considerable importance on investigating these issues in this latter work.

The rental market is one area in which housing stress appears high in Marlborough relative to the other regions. Marlborough rents have increased sharply since late-2002 and this may reflect a particular shortage of rental accommodation in parts of Marlborough. The high rents may be due especially to a shortage of accommodation for seasonal workers. Future papers in this programme will seek to shed more light on this matter and on other possible causes of the high Marlborough rents.

Looking forward, continuing increases in population and housing market pressures across NTM are anticipated. Table 2 reproduces Statistics New Zealand population projections for Tasman, Nelson and Marlborough, together with projections for the North Island, South Island and New Zealand. We present the projections to 2016 and 2026, using the most recent population census (2001) as a base.

Table 2: Projected Population of Territorial Authorities (2001 (Base) – 2026)

Region	Variant	Population at 30 June			Change 2001-2026	
		2001	2016	2026	Number	Percent
Tasman	High		56,500	62,100	19,700	46
	Medium	42,400	52,500	55,100	12,700	30
	Low		48,500	48,200	5,800	14
Nelson	High		53,700	59,500	16,600	39
	Medium	42,900	49,700	52,400	9,500	22
	Low		45,700	45,500	2,700	6
Marlborough	High		49,400	53,200	12,500	31
	Medium	40,700	45,400	46,200	5,500	13
	Low		41,400	39,400	-1,400	-3
North Is.	High		3,634,400	4,049,300	1,105,000	38
	Medium	2,944,300	3,421,800	3,676,900	732,600	25
	Low		3,213,200	3,313,800	369,500	13
South Is.	High		1,094,100	1,171,200	235,800	25
	Medium	935,400	1,025,900	1,052,400	117,000	13
	Low		959,000	936,700	1,300	0
New Zealand	High		4,729,300	5,221,400	1,340,900	35
	Medium	3,880,500	4,448,500	4,730,000	849,500	22
	Low		4,172,800	4,251,000	370,600	10

Source: Statistics New Zealand

Tasman is projected to experience stronger percentage growth than New Zealand, and stronger growth even than the North Island, across all three variants (i.e. high, medium and low population growth assumptions). Nelson's 'medium' projected growth is comparable to that of New Zealand, while its 'high' projected growth is comparable to that of the North Island. Marlborough's 'medium' projected growth is comparable to the South Island (and hence well behind New Zealand), although its 'high' growth projection is only a little short of that for New Zealand.

Table 3 (based on the same Statistics New Zealand projections) provides more detail on the assumptions lying behind the 'medium' population projections. Tasman is anticipated to have stronger net inward migration over

2001-2011 than Nelson which, in turn, is expected to have stronger inward migration than Marlborough. The age structure of the population is such that natural increase is projected to be negative in Marlborough in the latter years of the projection period. Natural increase is also expected to be low (but positive) in Nelson and Tasman. Indeed, the population aged 0-39 years is anticipated to be virtually stagnant in Tasman over 2001-2026 (a 0.4% increase), to decline mildly in Nelson (a 2.1% decline), and to fall substantially in Marlborough (a 19.2% decline).

Table 3: Projected Population Change of Territorial Authorities

Region	Year	Population by Age Group (years) at 30 June					5 Years Ended 30 June	
		0-14	15-39	40-64	65+	Total	Natural Increase	Net Migration
Tasman	2001	9,700	13,100	14,100	5,500	42,400
	2006	10,000	14,100	16,600	6,500	47,100	1,200	3,500
	2011	10,100	14,400	18,400	7,800	50,700	1,100	2,500
	2016	9,800	13,900	19,000	9,700	52,500	800	1,000
	2021	9,500	13,900	19,200	11,400	53,900	500	1,000
	2026	9,100	13,800	18,800	13,400	55,100	200	1,000
Nelson	2001	8,900	14,500	13,400	6,100	42,900
	2006	8,900	15,400	15,500	6,500	46,300	900	2,500
	2011	8,800	15,100	17,100	7,100	48,100	800	1,000
	2016	8,700	14,600	18,000	8,400	49,700	600	1,000
	2021	8,500	14,700	18,200	9,800	51,100	400	1,000
	2026	8,200	14,700	18,000	11,500	52,400	300	1,000
Marlborough	2001	8,500	12,300	13,700	6,300	40,700
	2006	8,200	12,400	15,300	7,200	43,200	500	2,000
	2011	7,800	11,800	16,300	8,500	44,500	200	1,000
	2016	7,300	11,200	16,700	10,100	45,400	-100	1,000
	2021	6,900	10,800	16,660	11,600	45,900	-400	1,000
	2026	6,500	10,300	16,100	13,300	46,200	-700	1,000

Source: Statistics New Zealand

These statistics, in part, reflect the general ageing of the New Zealand population over this period. Migration patterns also affect the age structure projections. The population aged over 65 is expected to increase markedly in each region (144% in Tasman, 89% in Nelson and 111% in Marlborough). By 2026, the projected median age in Marlborough is 51 years; the corresponding figures for Tasman and Nelson are 47 and 45 years respectively. Currently, median ages are in the high 30's for each of the regions.

Thus the structure of housing will have to change markedly over the next 20 or so years. Demand for family homes (especially 'starter' homes) is not projected to increase markedly, whereas demand for homes suitable for retired people will rise sharply in each of the regions.

Based on these population projections, the overall demand for dwellings is projected to increase. In Table 4, we provide projections for the number of dwellings in each region for each of the population variants. We also provide projections based on two assumptions about dwelling density (i.e. ratio of population to stock of dwellings). The column headed 'Dwellings A' assumes the same dwelling density in each region for 2016 and 2026 as it had in 2001. Dwelling density has been declining in each region by approximately 0.02 per annum since 1981. The column headed 'Dwellings B' assumes that this annual rate of reduction continues throughout the projection period. In 2001, each region had a dwelling density of approximately 2.6 (see Table 1); under the 'Dwellings B' projection the density falls to approximately 2.3 in 2016 and to 2.1 in 2026. The reduction in dwelling density in this scenario is consistent with the ageing of the population projected by Statistics New Zealand.

Table 4: Projected Dwellings Requirements of Territorial Authorities (2001–2026)

Region	Variant	2001		2016			2026		
		Popn	Dwellings	Popn	Dwellings A	Dwellings B	Popn	Dwellings A	Dwellings B
Tasman	High			56,500	21,271	23,980	62,100	23,380	28,801
	Medium	42,400	15,963	52,500	19,766	22,282	55,100	20,744	25,555
	Low			48,500	18,260	20,584	48,200	18,147	22,355
Nelson	High			53,700	20,383	23,003	59,500	22,585	27,876
	Medium	42,900	16,284	49,700	18,865	21,289	52,400	19,890	24,549
	Low			45,700	17,347	19,576	45,500	17,271	21,317
Marlborough	High			49,400	18,829	21,260	53,200	20,277	25,052
	Medium	40,700	15,513	45,400	17,304	19,539	46,200	17,609	21,755
	Low			41,000	15,780	17,817	39,400	15,017	18,553

Source: Statistics New Zealand

For each year, we have entered in bold the highest and lowest dwelling projections. The sizeable gap between them indicates the difficulty that market players and planners have in judging the likely demand for housing, even in a space of less than 15 years. In Tasman, the lowest dwelling estimate for 2016 is only 2,300 greater than the stock in 2001, while the gap between the high and low estimates is 5,700. Marlborough's lowest estimate indicates an increased demand for dwellings of just 267 through to 2016, while the gap between the highest and lowest estimates is similar to that in Tasman. The gaps between high and low projections are much wider still through to 2026.

Our judgement is that the medium population projection coupled with the "Dwellings B' assumption (of declining dwelling density) is a reasonable central estimate for the projected dwellings required in future. Under these assumptions, Tasman requires 6,319 extra dwellings in 2016 relative to 2001 (40% increase), Nelson requires 5,005 extra dwellings (31% increase) and Marlborough requires 4,026 extra dwellings (26% increase). By 2026, the absolute increases relative to 2001 are 9,592 in Tasman, 8,265 in Nelson and 6,242 in Marlborough. By virtue of the age structure projections, a large proportion of these extra dwellings (especially in 2026) will have to be suitable for retired households (i.e. mainly one or two person households).

To the extent that the migration flows reflect moderately wealthy people moving from larger cities to retire to an attractive location, the nature of the 'retirement' houses that will be demanded are likely to be relatively 'up-market'. For the working population, however, economic projections indicate that incomes may remain relatively low compared with other parts of New Zealand.

We use the long-term economic projections of the New Zealand Institute of Economic Research (NZIER) that project the economy by region and by industry for each five year period through to 2025.⁹ The relevant region corresponding to NTM in the NZIER projections is 'Upper South Island' which includes NTM plus the West Coast. The NTM regions comprise 80% (by population) of this region. NZIER disaggregates industries into 29 sectors. Industries particularly relevant to NTM include: 'Agriculture' (although horticulture is not specified separately), 'Fishing', 'Forestry and logging', 'Food, beverage and tobacco manufacturing', 'Wood and paper products manufacturing', and 'Accommodation, cafes and restaurants'. As the population ages, the 'Health and community services' and 'Cultural and recreational services' industries will increase in importance.

We compare the NZIER projections for the period 2005-2025 with the population projections for 2006-2026. NZIER projects New Zealand GDP growth over 2005-2025 to average 2.02% p.a. (compound). The Statistics New Zealand medium population projection for New Zealand over 2006-2026 is for a 0.68% p.a. compound growth rate. Together, these imply an increase in per capita GDP of 1.34% p.a. which is similar to the historical experience.

NZIER projects Upper South Island economic growth over 2005-2025 to average 1.95% p.a. (compound). The Statistics New Zealand medium population projection for Upper South Island over 2006-2026 is for a 0.41% p.a. compound growth rate. Together, these imply an increase in per capita GDP of 1.54% p.a., slightly ahead of the New Zealand per capita growth rate.

⁹ Source: New Zealand Institute of Economic Research, *Quarterly Predictions*, September 2005.

The industry outlook, however, is not quite so bright. Fishing is projected to increase production by just 0.8% p.a., while each of agriculture, and food, beverage and tobacco manufacturing are projected to increase at approximately 1.55% p.a.; forestry and logging also has a moderate projected growth rate (1.75% p.a.). Each of these is well below the anticipated rate of growth of the overall New Zealand economy. Wood and paper products manufacturing is expected to grow at the overall GDP average.

The only sectors of particular importance to NTM that are anticipated to grow strongly are accommodation, cafes and restaurants (2.6% p.a.), health and community services (4.0% p.a.) and cultural and recreational services (3.6% p.a.). Each of these sectors tends to employ relatively low-paid labour. Thus even though they are expected to grow relatively strongly, they are likely to attract predominantly lower income jobs to the regions.

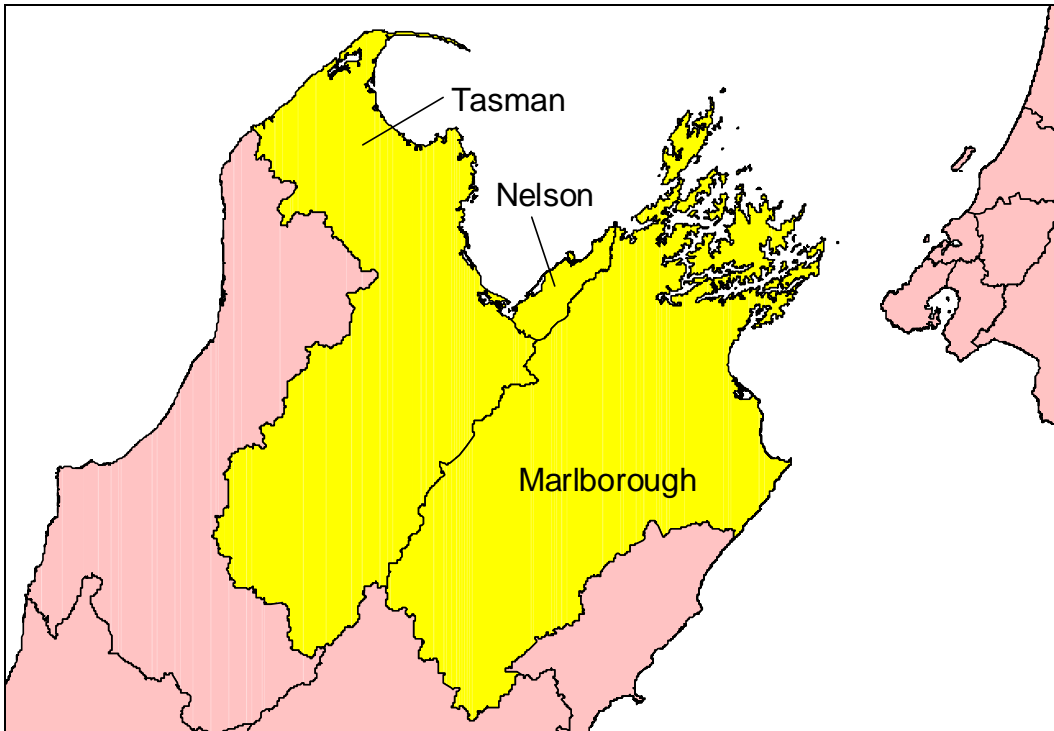
Given these industry projections, the demand for new housing for people of working age (including families) will predominantly be for moderately priced dwellings. This, in turn, requires availability of reasonably priced residential land within commuting distance of the available work. By the nature of the industry projections, much of the increased work will be in the larger towns (to which older people tend to retire). Thus moderately priced accommodation in Nelson/Richmond and Blenheim, in particular, will be required.

Specific new dwelling requirements will occur in other parts of NTM as well. We have already documented the apparent shortage of rental accommodation in Marlborough (reflected in high rent rises), possibly associated with seasonal labour requirements. Rental accommodation tends to be predominantly at the lower end of the housing spectrum (in terms of quality), again highlighting the need for increased provision of dwellings suitable for lower income earners.

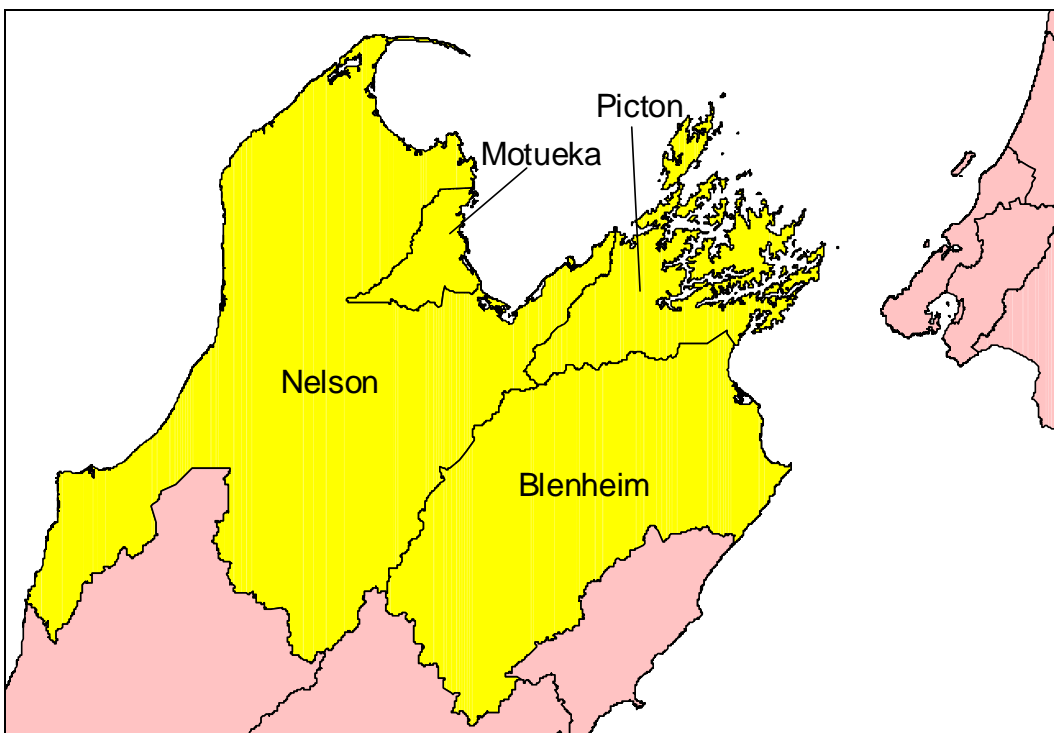
In total, our projections paint a picture of a steadily increasing demand for dwellings in each of Tasman, Nelson and Marlborough. The dominant requirements will be for new dwellings suitable for retired people and for working aged households on modest incomes (whether renting or owning).

Future work in this research programme will ascertain whether these requirements are likely to be met based on current trends and policies. If the outlook is that these needs may not be met, we will analyse potential solutions. The solutions will focus, in particular, on measures that may encourage the provision of affordable housing that meets the needs of the retired and of households on modest incomes.

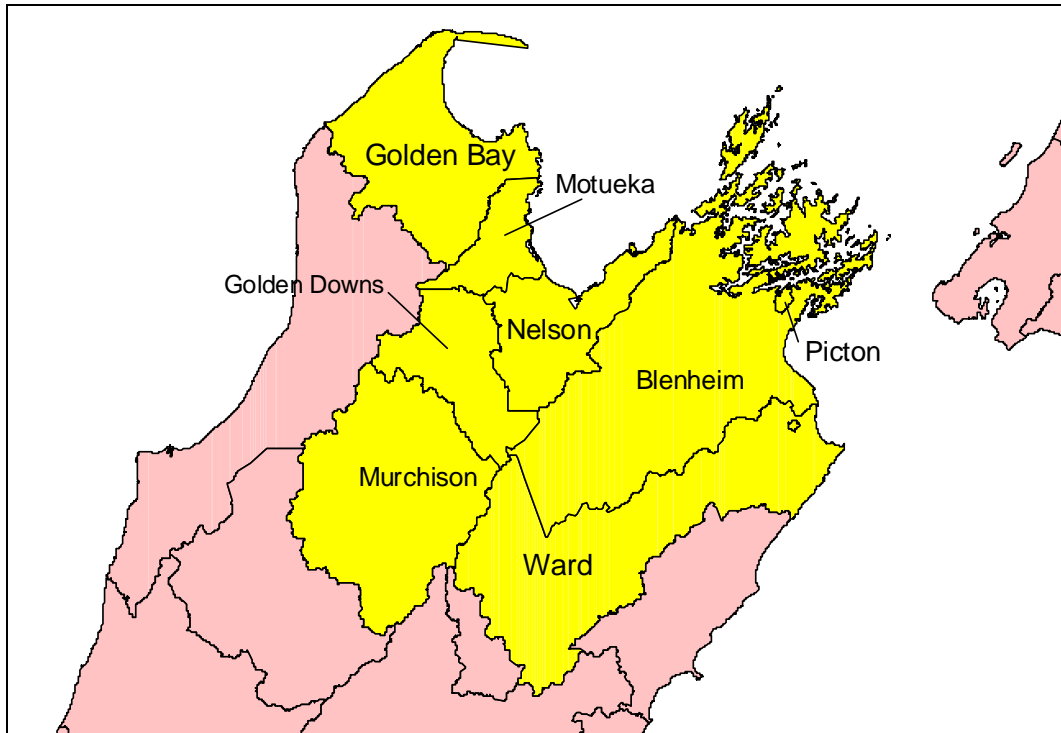
Appendix A: TLA boundaries



Appendix B: Labour Market Areas (n=58)



Appendix C: Labour Market Areas (n=140)





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ISBN 0-9582687-2-X