

E626

**New house price model update at
April 2013**

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New house price model update at April 2013

1. CLIENT

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2. INTRODUCTION

This report updates the BRANZ Study Report 196 produced in 2008. It provides more recent data on trends including new housing cost factors.

3. SUMMARY

The main changes in prices and cost factors since the last report in early 2008 are:

- New housing costs have risen about 8% on average nationally.
- Construction industry labour rates have risen about 12.5%.
- Material costs rose 12%.
- Profit margins went down by 2% points between 2008 and 2011, the last data available.
- Median section prices for all NZ are up 3% according to the Real Estate Institute. In Auckland median prices are up 8% and in Canterbury up 7%, over the 5 year period.
- A small sample suggests land development costs (infrastructure, professional fees and council fees) have risen 25% in the 5 year period.
- Building consent fees have also risen by 75% in the six years to March 2013 according to a BRANZ survey.


Housing affordability has improved in most locations, between 2008 and now, due to a drop in mortgage interest rates. However, in Auckland median priced housing, new or existing, is unaffordable for a median income household unless they have a large deposit.

The Productivity Commission study on housing affordability had one main recommendation related to the construction industry, namely the Productivity Partnership should find solutions in consultation with industry for supply chain issues.

Building consent analysis suggests one-off housing designs cost at least 10% more, on average, than houses from group builders, confirming previous work by BRANZ.


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4. MEDIA ARTICLES AND PRODUCTIVITY COMMISSION ON HOUSE PRICES.

11th April 2013. Auckland Council says the Resource Management Act Reform Bill timeframe will delay the implementation of the Auckland Plan due in September 2013.

9 April 2013. Nine Auckland councillors (out of 20) oppose notification (giving legal weight to the Plan) in September and say more time for consideration is needed.

9 April 2013. Ngai Tahu Property is unhappy with procurement pricing, in particular material costs.

2-7th April 2013. Milford and St Heliers community groups oppose the Unitary Plan in particular the amount of intensification in their areas.

25th March 2013. The Housing Minister acknowledge Auckland housing problems cannot be solved by land supply alone. He mentioned the cost of infrastructure, cost of building materials, cost of labour, construction efficiency, and compliance costs.

19th March 2013. Westpac bank looks at regional housing shortages. Auckland needs about 13,000 per year, currently 5,000 per year. Hamilton and Palmerston North are also under-building and possibly Wellington. Canterbury is a special case and needs at least 10,000 earthquake replacements. All other regions have sufficient housing at current rates of construction.

15th March 2013. Auckland Unitary Plan is launched.

14th March 2013. The Environment Minister has suggested stripping the Auckland Council of some planning power for a 3 year period with a Crown Agency to undertake a role in quicker land supply.

11th February 2013. A "Developments Contribution Review" was launched by Government. This looks at council development fees associated with new housing approvals. Reporting is due in May.

October 2012 The Government response to the Productivity Commission report on affordable housing noted there are "no quick fixes" and instead work is needed across a number of areas and agencies. Government is developing a work programme with four key aims; namely, increase land supply, reduce delays and costs of the RMA processes, improve the provision of infrastructure to support new housing, and improve productivity in the construction sector.


April 2012 Productivity Commission report on Housing Affordability.

The Productivity Commission was tasked with the evaluation of the factors influencing the affordability of housing and to examine the opportunities to increase affordability. Some of their recommendations in their April 2012 report were:

- Increase land supply for new housing, including moderate –density development of brownfield sites and development of greenfield sites.
- Councils review regulatory processes with the aim of providing simplified, speedier and less costly consenting processes and inspections.
- Territorial authorities should develop strategies that promote competition between developers for the right to develop land.
- Treasury should review the quality and robustness of the RIS process for changes to the Building Code.
- Building Consent Authorities (BCAs) should adopt a customer-focused approach in their interaction with building practitioners.

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- The Law Commission should consider a review of liability and the incentives faced by councils to minimise their liability.
- The Department of Building and Housing (DBH) should provide specific guidance for BCAs about what is required for an alternative solution to comply with the building code.
- The DBH should review the Multi-proof building consent process (where the same design is acceptable in all locations) to identify barriers to its application.
- Urgency should be given to Government efforts to improve BCA performance and promote greater consistency and efficiency in the building regulatory system.

The Commission's report examined the structure of the building industry and material manufacturing in some detail, but did not have many specific recommendations. The main recommendation related to the Productivity Partnership which the Commission said "should develop, in consultation with the sector, practical responses to supply chain issues". The report did not have further recommendations on this but the supply chain analysis in the report considered the small scale of firms, customerised design adding to costs, inefficient sub-contractor management, an emphasis on lowest price tendering, and the need for more prefabrication.

5. HOUSING AFFORDABILITY

Recent measures of affordability have shown an improvement, mainly due to low mortgage interest rates. Figure 1 shows one measure for median priced existing houses, and median income households. House prices are now rising and with an expected increase in interest rates within 9 months affordability is likely to drop.

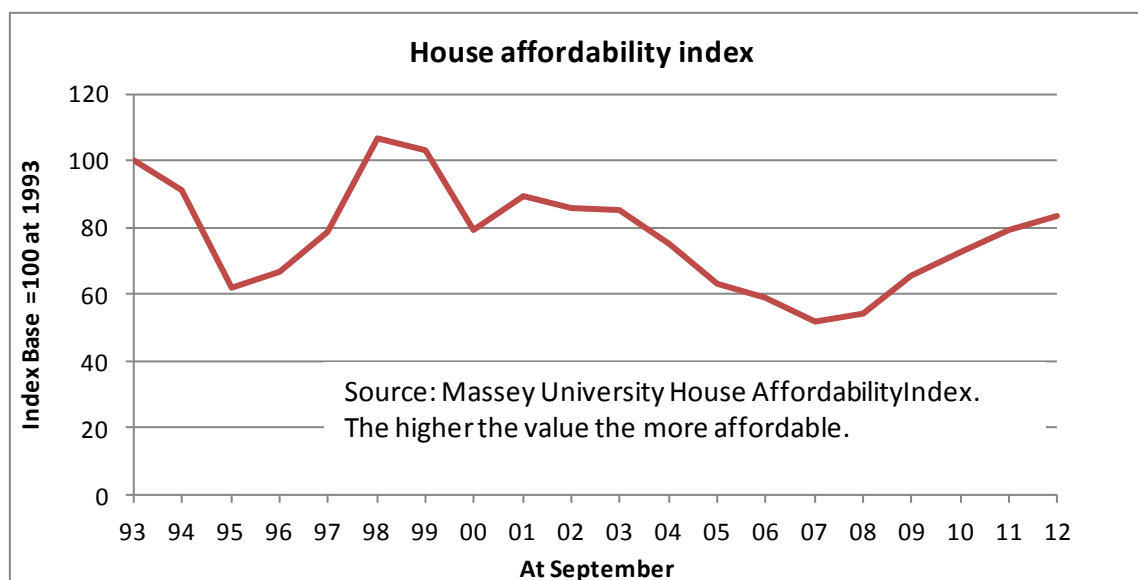


Figure 1 Massey University house affordability index – all NZ.

Other affordability measures are available which shows a similar pattern to Figure 1. It now takes approximately 55% of median income to afford a median priced house,

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according to Roost Home Loans. The same source produces regional measures and found 68% of median income was required in Auckland for a median house. Auckland is basically unaffordable for middle income households though they may be able to afford housing in the lower quartile, rather than a median priced house.

6. PRICE TRENDS

6.1 House price trends

Some new house pricing trends are now discussed for the 5 years ending 2013. They are:

- Sections. Trends are based on the average section sales price from Quotable Value New Zealand (QVNZ). There is no adjustment in this index for changing section sizes. The price change for the 5 year period was -1.0%.
- QVNZ. An index on existing house (plus section) sale prices. The price change was 2.5%.
- REINZ. The Real Estate Institute of New Zealand index was changed in 2009 to adjust for the number of sales by stratified group. It is very similar in construction to the QV index and hence gives almost identical results. The price change was 3.4%.
- BRANZ New house and section price index. This index uses the price of a new house (kept constant at 158 sqm) adjusted by the CGPI. The average section sale price from REINZ is added to the house cost to give the combined price which is then expressed as an index. The price change was 3.6%.
- CGPI. The Capital Goods Price Index (previously called the Capital Expenditure Price Index) for housing and outbuildings, from SNZ. It represents the output price of a standard new house including profit margins. The price change was 8.3%.

Figure 2 has these indexes. They shows that the NZ average section price escalation stopped between 2008 and 2012, but prices now appear to be moving up again. The other indexes show a similar pattern.


The Department of Building and Housing (DBH) (now MBIE) have developed their own building cost series for different building types including new housing. The data is the building cost in \$ per sqm for small and medium sized houses by 6 regional centres and includes profit margins. Costs are for one-off speculative houses and do not reflect the scale economies of group houses, or the additional costs of architecturally designed houses.

A composite index was developed by BRANZ from the DBH series, see Figure 3, using regional housing activity as the weights. The DBH index escalates faster than the CGPI. It is believed the DBH consultants, Maltbys, have a more immediate insight into cost impacts on builders, whereas SNZ change their regimes fairly infrequently.

The inflation rate in the small house over the last 5 years was 4.2% in total, and 11.4% in the larger house. It is not known why the larger house escalated more but it may be due to quality differences.

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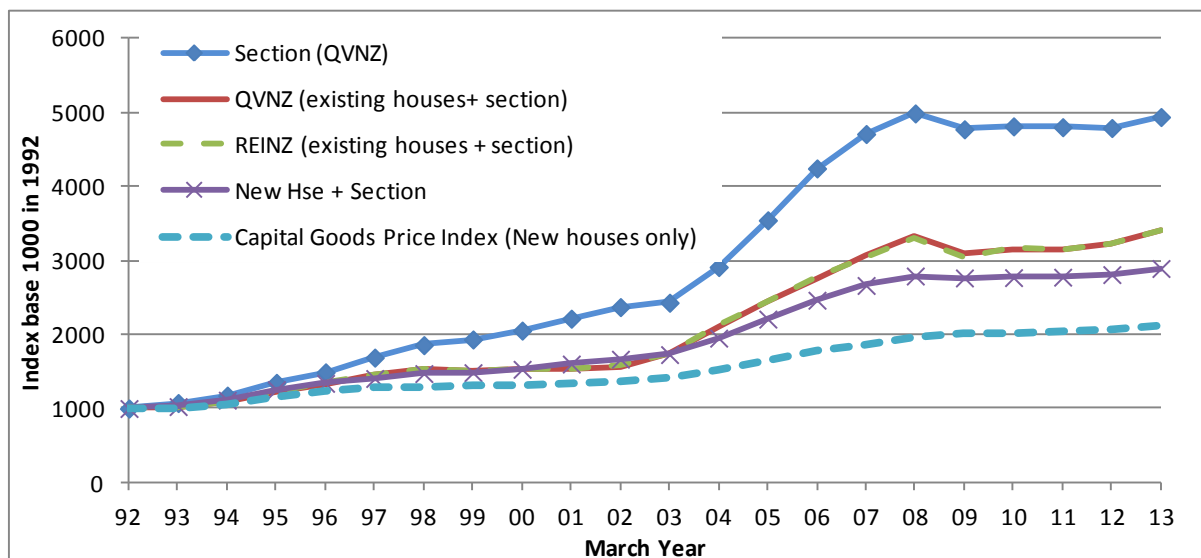


Figure 2 House price indexes

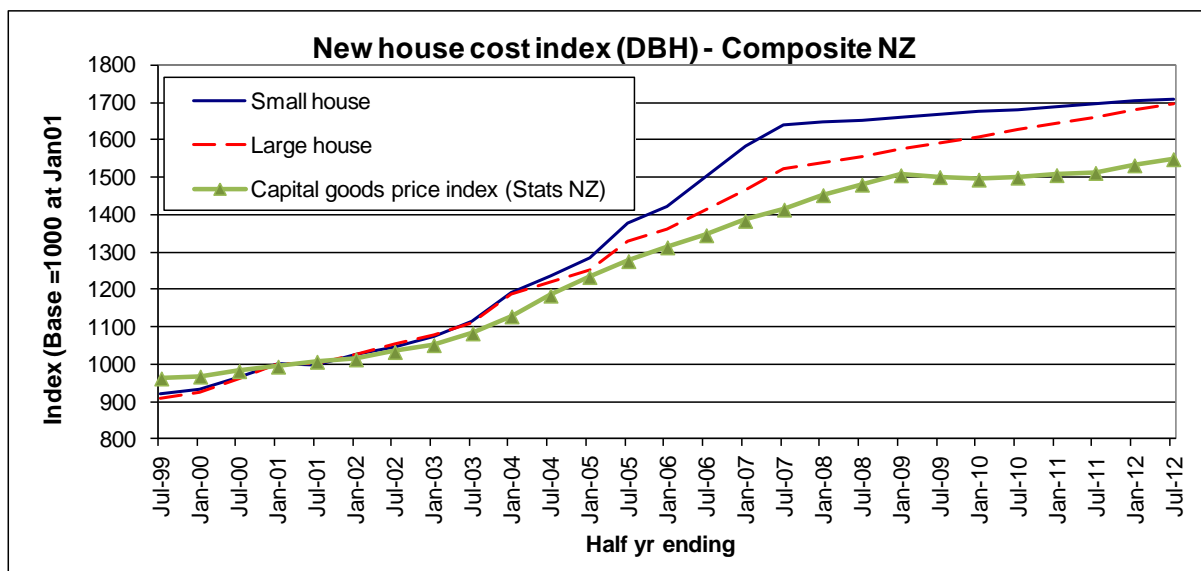


Figure 3 DBH index versus CGPI

Section prices are shown in Figure 4 for all New Zealand. Average prices fell about 11% from 2008 to 2013 mainly due to fewer sales in the upper price brackets. The impact of the global financial crisis is apparent in 2008 with a sharp fall in average prices. Median prices grew slightly (a small 3% growth) rather than fell, over the 5 year period, though initially they fell, between 2008 and 2010..

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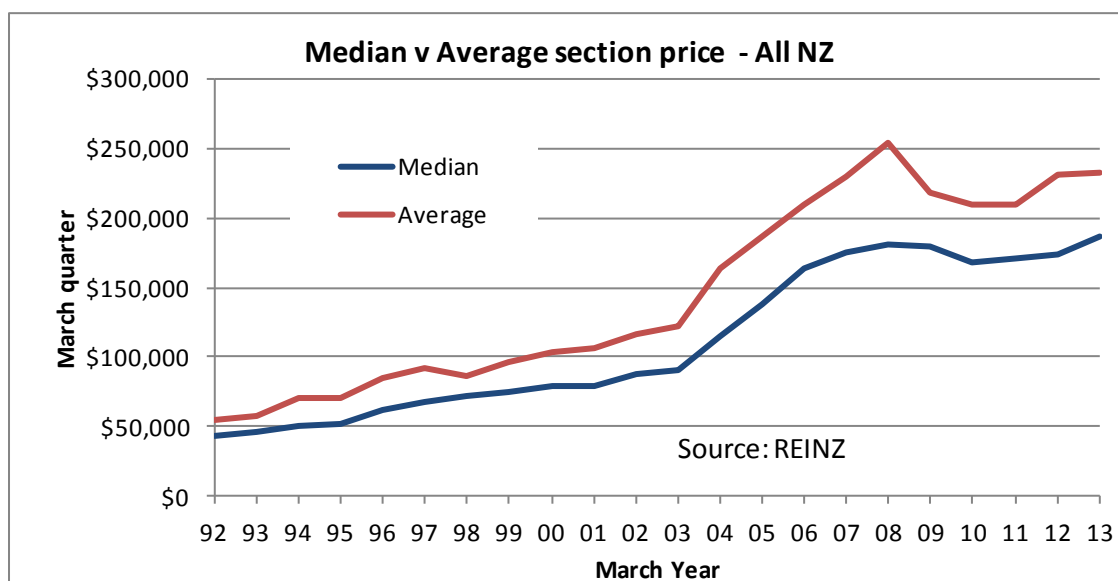


Figure 4 Median existing house sale prices versus average prices

Average floor areas in new housing have continued to trend upward but at a lower growth rate than in the 1990s and early 2000s, see Figure 5. Over 4 years their growth totalled 4.3%. Multi-unit average areas show some variation in recent years and this is caused by the changing mix of high-rise (small units) and low-rise (larger units) construction.

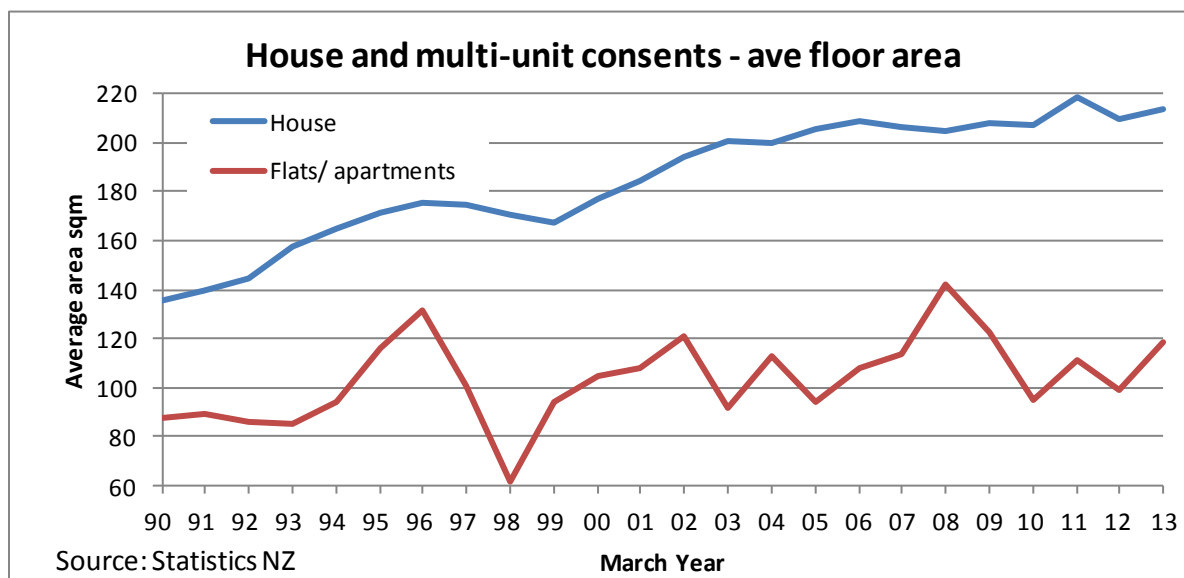


Figure 5 Average floor areas new houses and multi-units

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6.2 Component price trends

The main factors of production for new housing are labour, materials, profits (or return to capital and managerial expertise), and land. These factors are shown in Figure 6 and are discussed next.

The labour index gained 12.6% between March 2008 and March 2013. The material index derived by BRANZ indicates 11.7% escalation since 2008. The percent profit margins are for all buildings (i.e. residential and non-residential buildings) and are the operating surpluses divided by turnover, from national accounts data published by SNZ and are only available up to 2011.

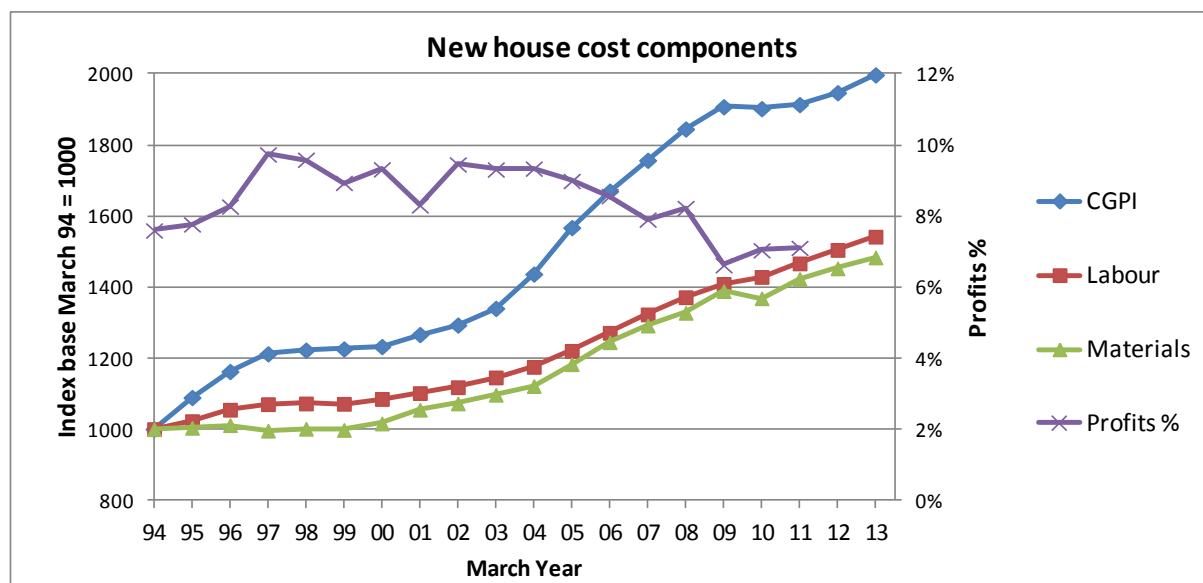


Figure 6 New house price components

6.2.1 Labour costs

SNZ publish two series for labour costs in the building and construction industry. These are shown in Figure 7 and Figure 8.

The charts have a very similar pattern and the main difference is the second chart has other costs such as superannuation, holidays, ACC levies, loans and over time, as well as the base wage / salary cost. The change in the indexes between 2008 and 2013 was very similar at 12.6% for wages/salaries only and 12.4% for all labour costs.

Some construction skills are transferable between manufacturing and the electricity, gas and water industries so these indexes are included for comparison. However the main conclusion is that construction industry labour cost escalation is similar to that in other industries in the long-run.

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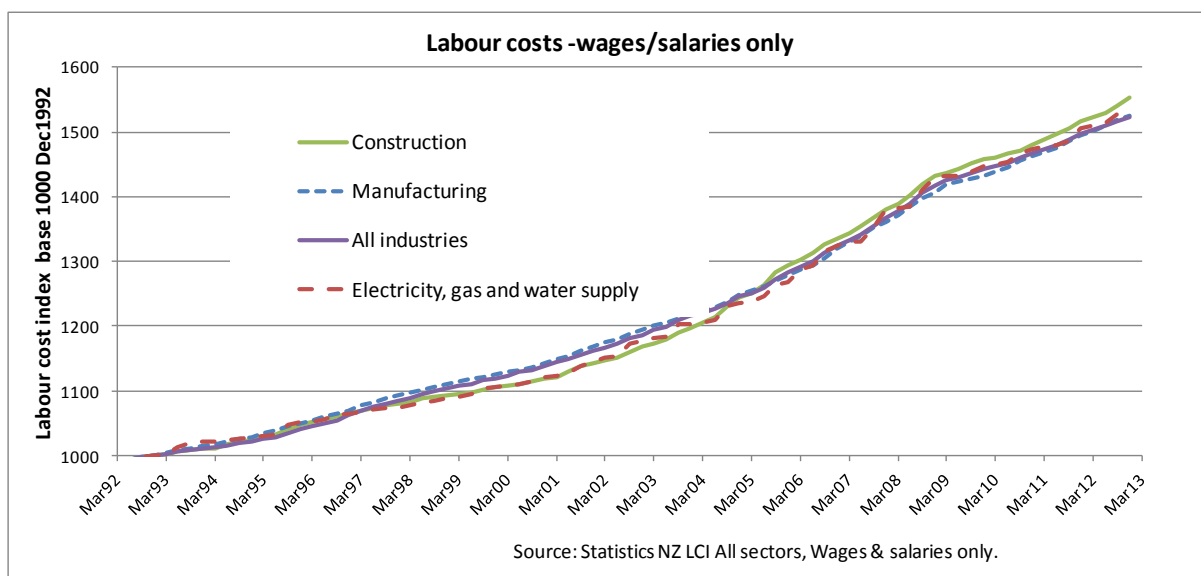


Figure 7 Labour costs - wages/ salaries only.

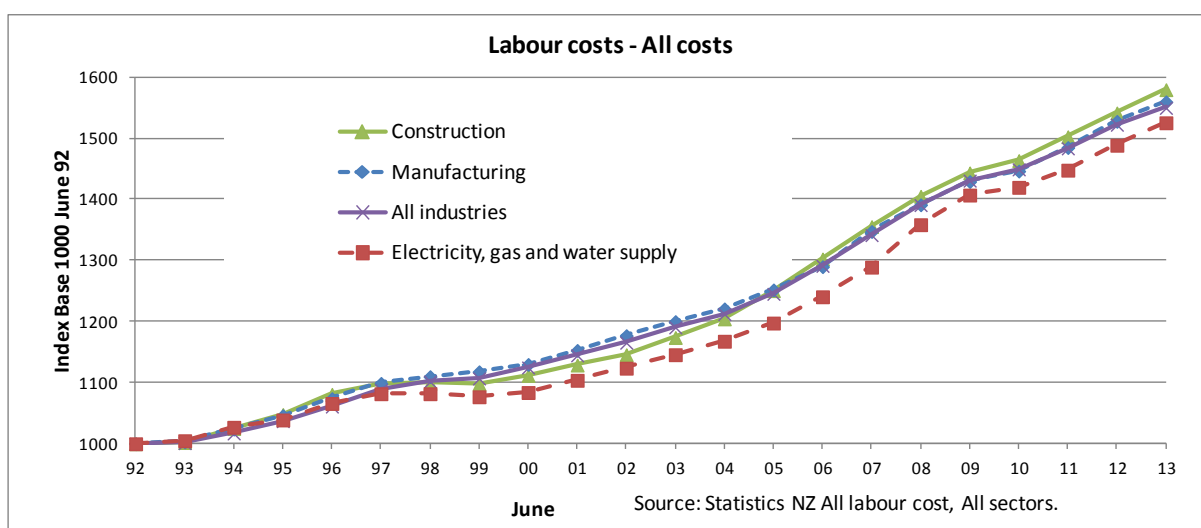


Figure 8 Labour costs – all costs

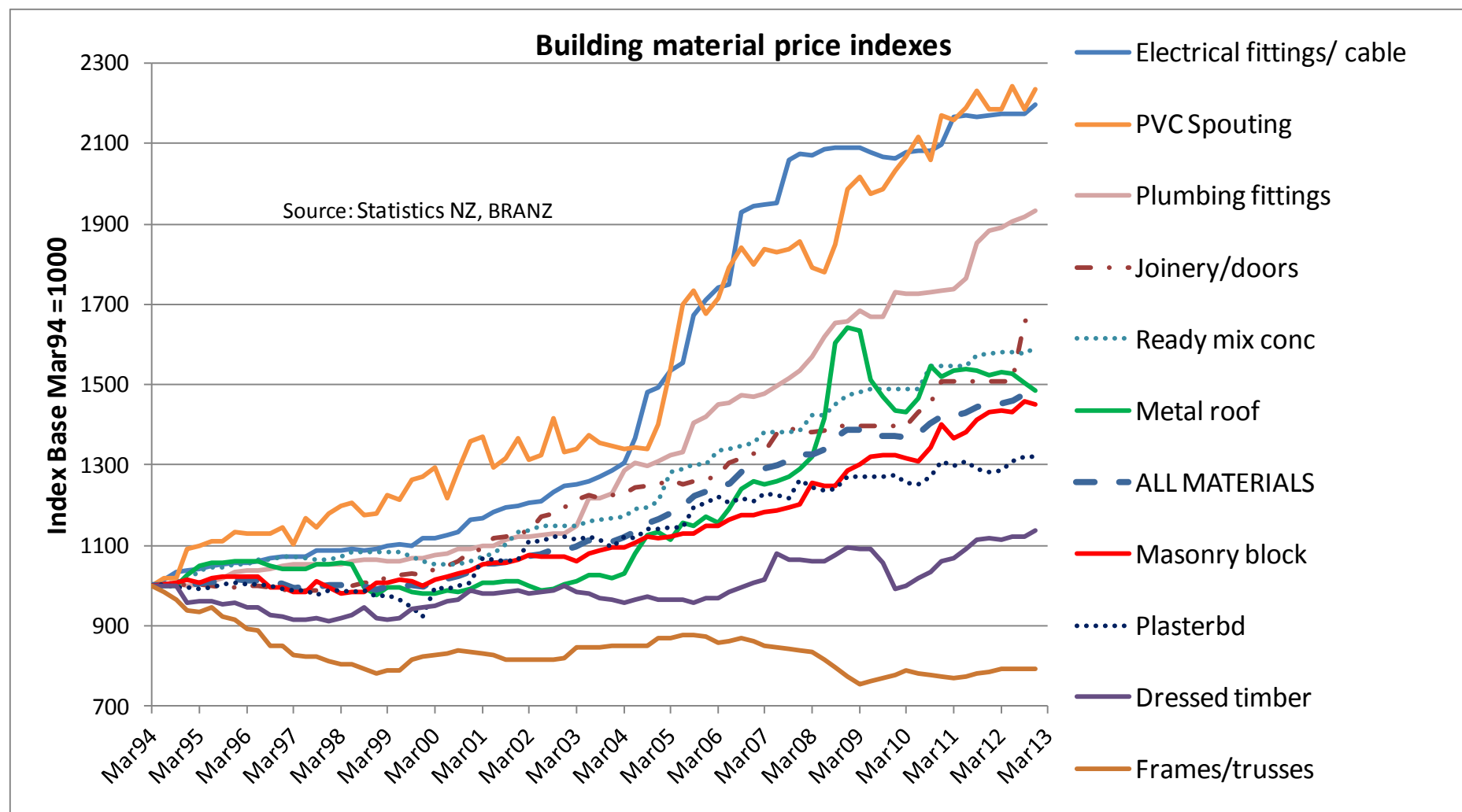
6.2.2 Materials

Statistics NZ collect data on price movements in a variety of building materials and products for their producer price index and the consumer price index. These are shown in Figure 9, and since early 2008 the largest escalation has been in plastic products, joinery and door and plumbing goods of between 21% and 25% increase over 5 years. Other timber products such as framing and finishing timber have been static or had a small drop in price. The rise in plastic based products (spouting, plumbing items, etc) is mainly due to rises in petrochemical prices. Steel prices rose sharply in 2008 due to Chinese demand, causing a spike in metal roof prices.

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Figure 9 Material price indexes



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A composite index was produced by BRANZ for materials in a new house using the 12 items costed by SNZ, (clay brick prices are no longer collected) and this composite index is also shown in Figure 9. The weights are shown in Table 1 based on an analysis of material types and quantities in typical houses. Over the last 5 years the composite materials index rose by 11.7%. The index is not a complete one because not all materials are covered by SNZ. The main items not covered include hardfill, windows, insulation, and carpets.

Table 1 Composite materials index weights

Composite materials price index weights					
Based on materials in the Exemplar House					
				Percentage	Percent ignoring "Other"
Doors/joinery				8	10.7
Metal roofing				8	10.7
Ready-mix concrete				7	9.3
Wood frames/trusses				12	16.0
Finishing timber				3	4.0
Paint				4	5.3
Wallpaper				1	1.3
Concrete masonry				2	2.7
Plasterboard				15	20.0
PVC spouting/other				3	4.0
Electrical items				5	6.7
Plumbing/ drainage/ sanitary items				7	9.3
Other				25	
				100	100
Other includes items for whom Statistics NZ do not have price measures					
e.g. hardfill, windows, insulation, bricks, most claddings, steel items, etc.					

6.2.3 Land cost

The trends in the price of an average section are shown in Figure 10. The chart also shows land as a percentage of the total house and section package, assuming an unchanged average new house size of 158 sqm floor area, and cost adjusted by the housing CGPI. The chart indicates that the section component has risen from 22% to 46% of the total price of a new house and section, since 1987. This ignores the increase in new house sizes, and other costs (design, legal, etc), which bring the section component back to about 40%.

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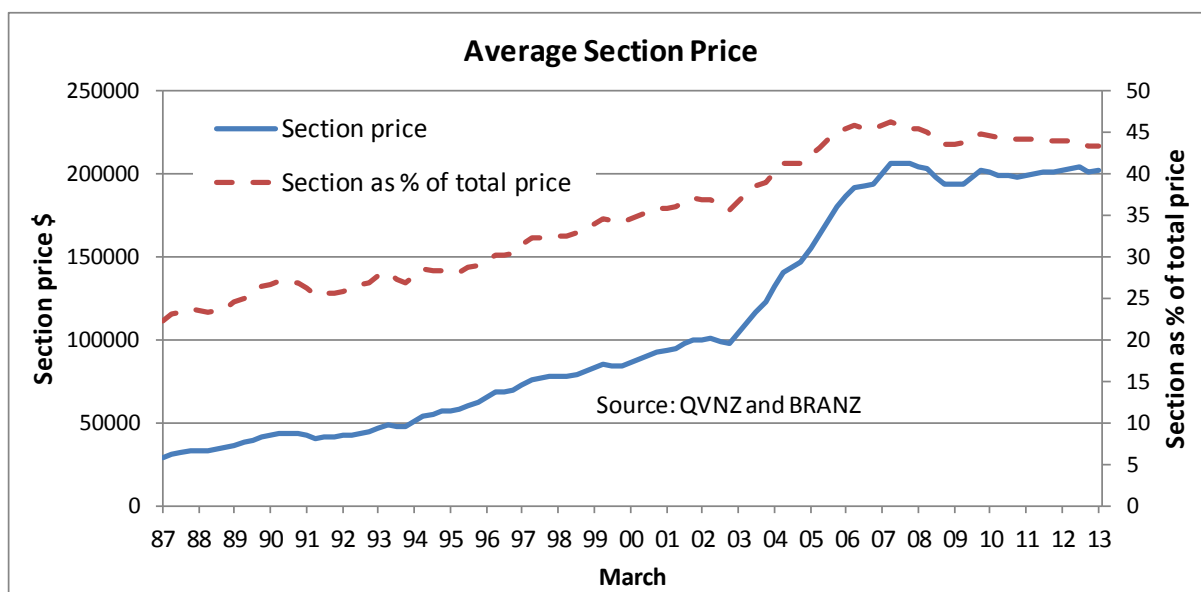


Figure 10 Section price trends

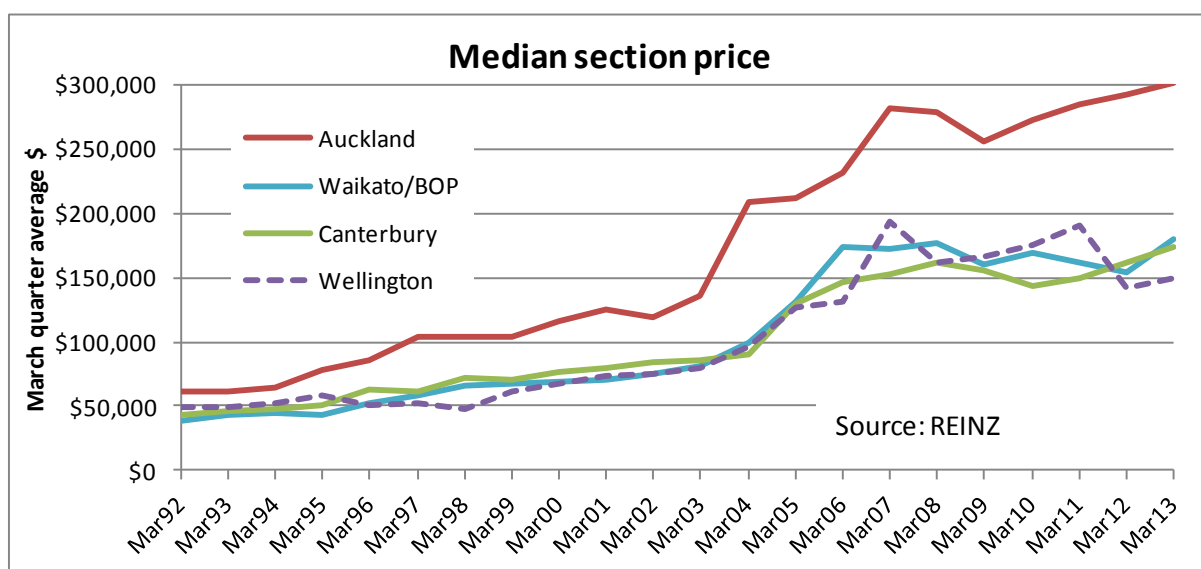


Figure 11 Regional median section prices

Regional land prices shown in Figure 11 have changed over the past 5 years by 7.9% in Auckland, 7.0% in Canterbury, -6.8% in Wellington (i.e. a decline in price), and by 1.8% in Waikato/ BOP.

6.2.4 Profit margins

The national accounts produced by SNZ enable a measure of profits in the construction industry. Profits are calculated as the operating surplus as a percentage of total turnover, and are for aggregated buildings and civil engineering work. Separate residential construction profit data was not available. Services are the sub-contractors and earn significantly higher profits than the main contractors. More recent data has not been published by SNZ.

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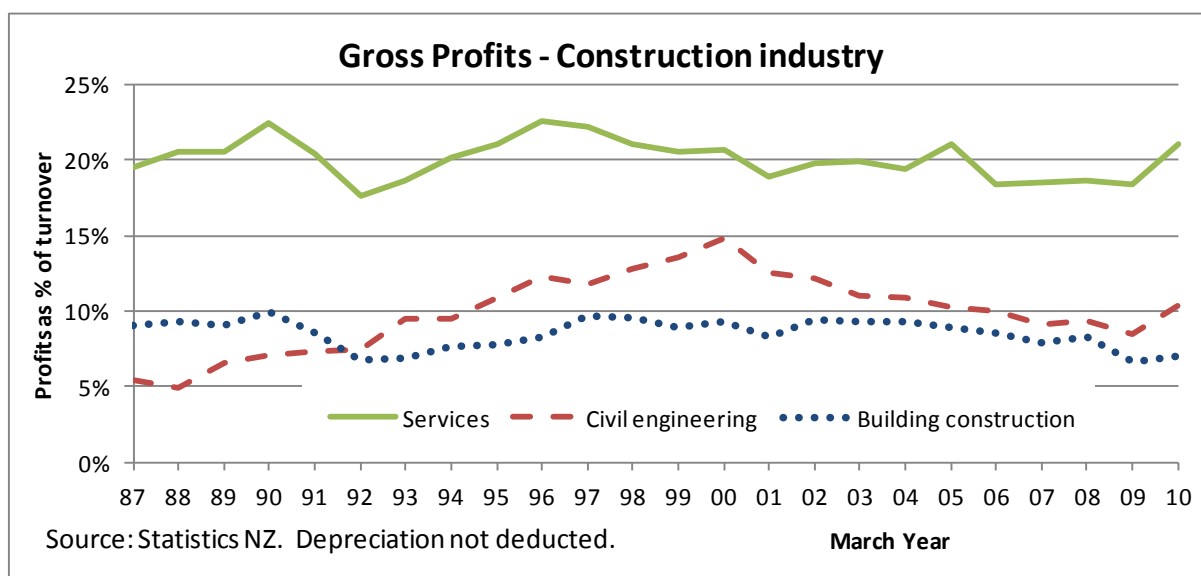


Figure 12 Profit margins – By three segments

6.3 Import content

The 2006/07 input/output tables of the economy have recently become available but unfortunately more recent data is still 2 to 3 years away. These tables measure what each industry produces for, and receives from, other industries. It also records the imports into each industry. General results are shown in Figure 13 for the main imports. Both direct and indirect imports are included including imports into upstream industries that supply construction. In total about 20% of the output of the industry consisted of import content. The largest single items are petroleum products, other chemical products, and steel products.

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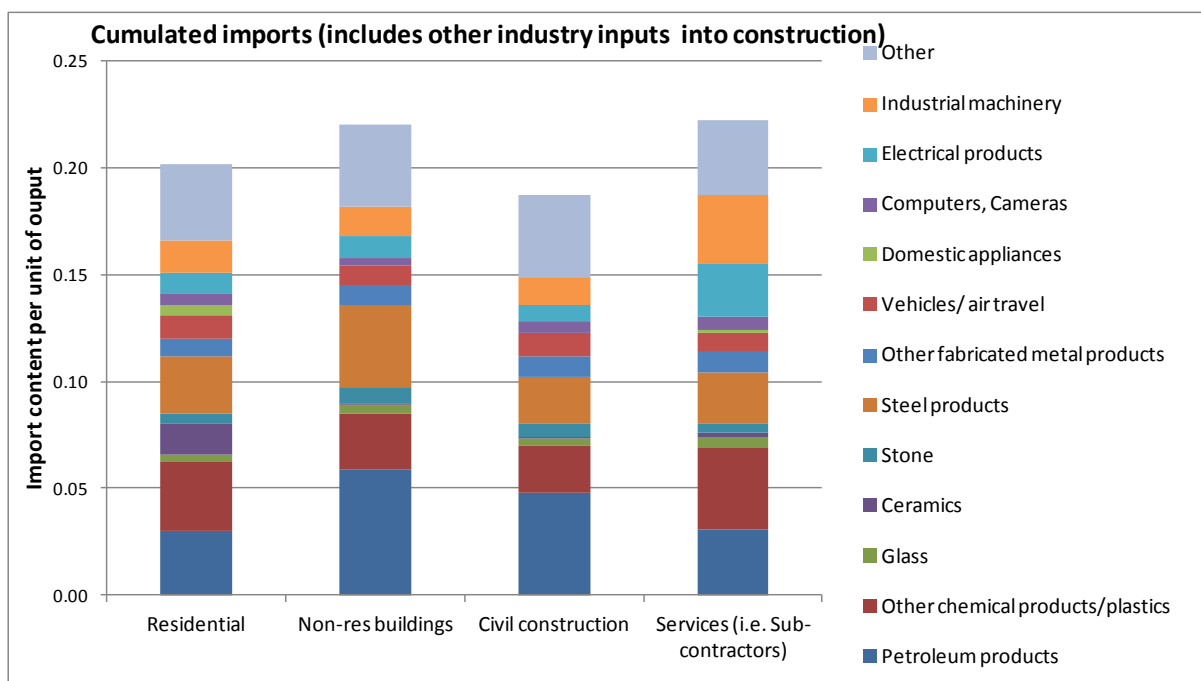


Figure 13 Direct and indirect imports into the construction industry

Figure 14 is a more detailed breakdown for residential construction and is the same chart as in the earlier report (previously Figure 17). There are a number of changes in the percentage shares of imports between 1995/96 and the latest data for 2006/07. The share of plastics appears to have dropped in the latest chart while the petroleum products share has risen. There may be some shifting between the two categories for some products because the total of the two categories is similar in both periods. In general oil prices rose in price by about three-fold from 1995/96 to 2006/07. So it appears that product substitution has occurred, away from petroleum/ plastics based materials to other materials, otherwise the combined share of the two categories (plastics and petroleum products) would be a lot higher in 2006/07.

The change in the glass share from 9% down to 2% is puzzling and we have no explanation for the drop. There has been a shift of glazing imports, previously from Australia, but now increasingly from Asia, and the price has dropped somewhat. But the cheaper unit prices is unlikely to account for all of the observed four-fold drop in the glass import share.

Structural metal products are mainly steel sections used as framing and have remained constant at about 11% share of all construction imports. Other fabricated metal products have almost doubled in share, though still a small share of all imports, and the increase is thought to be mainly due to prefabricated steel frames being imported from some Asian countries in the early 2000s.

General industrial machinery imports have increased as a share by about two-fold and may be due to increased installations of mechanical ventilation systems in housing.

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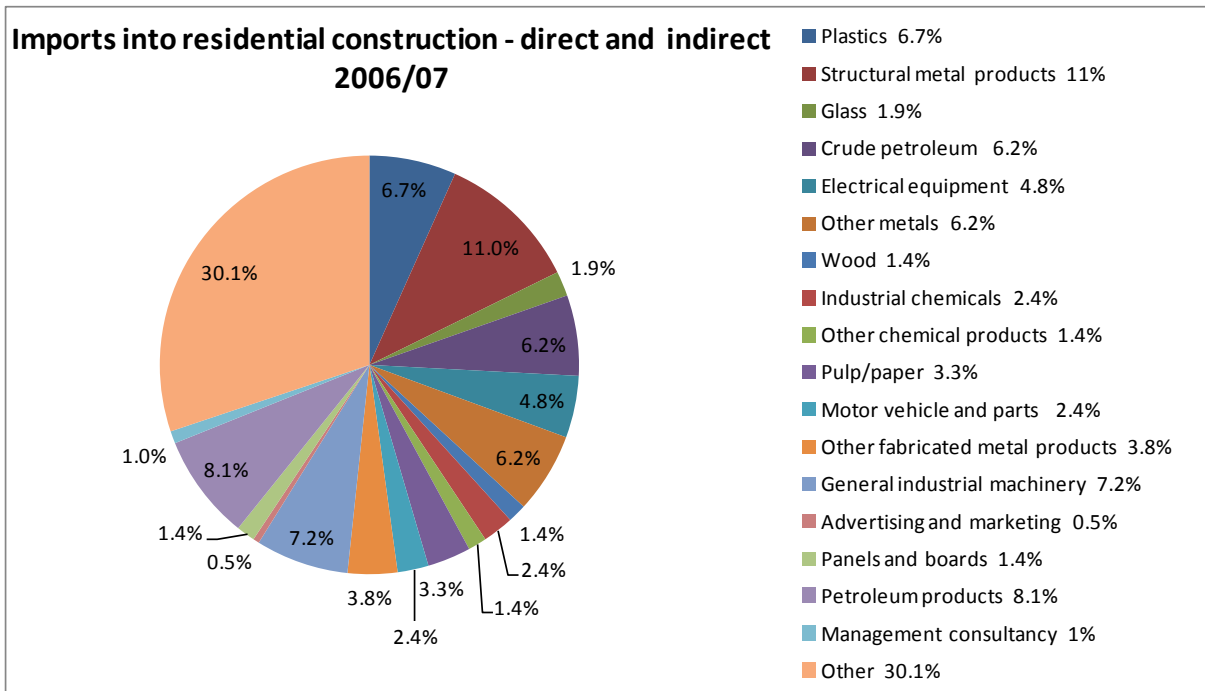


Figure 14 Detailed imports into residential buildings

Exchange rates movements eventually have an effect on import costs. Since 2008 the trade weighted exchange rate index has gone up about 7%, which in theory should make imports that much cheaper. With a 20% import content the effect on the construction industry is approximately negative 1.4% ($20\% \times 7\%$), i.e. a 1.4% reduction in industry costs.

6.4 Other cost impacts

These include:

- ACC Levies
- Building consent fees.
- Changes in the building code
- Land development cost

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6.4.1 ACC levies

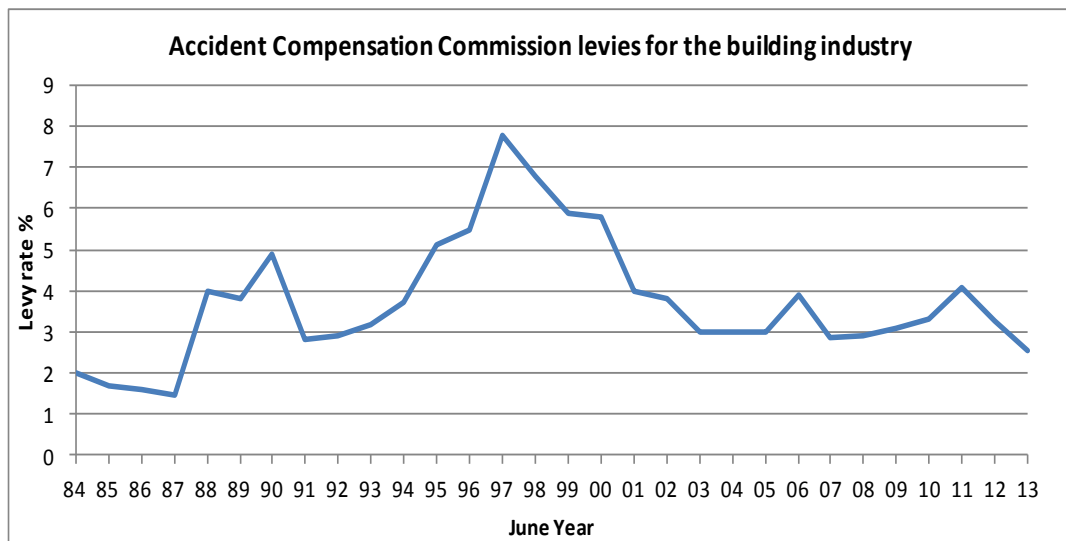


Figure 15 ACC levies

ACC levies have decreased slightly from 2008.

6.4.2 Building consent fees

Building consent fees were reported by the Department of Building and Housing in October 2008 ("Identification and analysis of building consent, inspection and approval costs"). They received returns from 53 councils and had an average fee of \$1,886 in 2006/7, and a median fee of \$1,760. BRANZ downloaded data from selected councils on their current fees, see Table 2. The PIM (project information memorandum) and CCC (code compliance certificate) costs are included with the consent cost if not separately identified. External design checks by consultants, if required, are not included.

The average and medians are respectively \$3149, and \$3085 and represent a growth of about 9% per annum in the six year period. The sample in Table 2 is smaller than that undertaken by DBH and the results are not directly comparable. However the BRANZ sample is believed to be representative of the returns received by DBH, so it appears that fees have recently escalated well above building cost inflation.

6.4.3 Changes in the building code

These changes in the last 5 years include:

A new insulation standard which is widely used though it is not mandated in the building code.

Monolithic clad housing with low risk scores now require drained cavities.

Perimeter foundations now require wider cross sections, increasing the volume of concrete used in a typical new house.

Deck construction details have been changed, involving more fixings, deeper boundary joists, and in many cases a specific design.

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The licensed building practitioner regime has increased builders costs in part due to an increase in liability insurance.

These costs on a typical new house are estimated at \$800 for extra bulk insulation, and \$700 extra for wider footings, a total of \$1,500 per typical house. Approximately 6% of new houses are monolithic with a risk score of 6 or less (from the BRANZ New Dwellings Survey) and these now require a drained cavity, costing \$3,500 per house. Extra deck costs depend on its size but are at least \$100 per deck. Most builders have historically carried insurance but the LPB regime makes liability more explicit and insurance costs have generally risen, the amount dependant on the firm size and work types. Excluding insurance these increase average about \$2,000 per house.

Table 2 Building consent fees for selected councils

Building consent fees for selected councils 2012/13					
		for large house \$330,000 single storey			
		PIM	BC	CCC	Total
Auckland		379	2950	110	3439
Central Otago		320	2760		3080
Far North			2651	161	2812
Hamilton		240	4285		4525
Hutt			4170		4170
Invercargill		225	4080		4305
Kapiti Coast		346	2451		2797
Marlborough			2794		2794
New Plymouth			3600		3600
Palmerston N		100	2260	147	2507
Queenstown-Lakes			2735		2735
Rotorua		578	2742		3320
Selwyn		200	2960	100	3260
Southland			2136		2136
Tasman		264	2826		3090
Tauranga		401	2220	91	2712
Upper Hutt			2483		2483
W Bay of Plenty			3210	80	3290
Wellington		385	2079	98	2562
Whangarei			3369		3369
Fees allow for 10 inspections.				Average	3149
				Median	3085
				Max	4525
				Min	2136

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6.4.4 Land development costs

BECA were commissioned to investigate recent projects to obtain costs for land development. In the event they were only able to find three recent examples, shown in Table 3. They are for greenfield developments adjacent to existing mains sewage, stormwater and water supply services. Each development has a mixture of detached houses and townhouses. Comparison of the results with Figure 21 and Table 5 in the original report indicates:

Urban mixed use development costs have increased from about \$60,000 per unit in 2008 to about \$75,000 now, an increase of about 5% pa. The sample size for the BECA work is small so the average may not be representative of all recent projects.

Table 3 Land development costs for recent works

Land development costs from BECA						
Area		Hawkes Bay	Waikato		Northshore	All
Type		Villas,	Townhouses &		Villas,	together
		Townhouses	Multi-storey		Townhouses	
Base Date		Current	Current		Current	
No of Units (Housing)		26	71		22	119
Average lot area (m2)		338	162		230	213
Siteworks/Infrastructure						
	Earthworks	\$61,323	\$794,241		\$62,200	\$917,764
	Civil Works	\$387,894			\$338,735	\$726,629
	Landscaping & Irrigation	\$239,200	\$762,858		\$192,720	\$1,194,778
	Electrical Infrastructure	\$264,248	\$417,015		\$156,184	\$837,447
Professional Fees (1)						
	Infrastructure design	\$77,328	\$422,552		\$31,188	\$531,068
	Surveyor		\$5,766			\$5,766
	Banks QS	\$39,100	\$39,100		\$33,997	\$112,197
	Legal	\$9,991	\$94,650			\$104,641
	Landscaping	\$8,372	\$23,634			\$32,006
Development Costs						
	Resource Consent fees	\$66,631	\$158,543		\$115,382	\$340,556
	Building Consent fees	\$60,656			\$64,658	\$125,314
	Financial Contribution	\$173,332	\$690,000		\$166,980	\$1,030,312
	Development fee	\$109,384	\$1,009,559		\$695,556	\$1,814,499
Contingencies		\$360,635	\$667,348		\$195,699	\$1,223,682
TOTAL		\$1,858,094	\$5,085,266		\$2,053,299	\$8,996,659
Total per unit		\$71,465	\$71,623		\$93,332	\$75,602
Notes:						
(1) Northshore development was a later stage in a large development for which much of the design work had previously been done, hence the low fees.						

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6.5 Spreadsheet model

A spreadsheet model of the various trade and component inputs was developed, for two house sizes:

- Small house 145 sqm, single storey
- Large house 202 sqm, single storey

These are the model houses published by the former DBH for monitoring housing costs in six regions. Each house has been broken down into components by BRANZ and the spreadsheets for the houses are shown in Table 4 and Table 5. They use the DBH published \$/ sq metre rates and are as at July 2012. The table includes design, legal and consent fees.

The component breakdowns, including land costs are shown for the two cases in Figure 16 and Figure 17. The small and large houses have a similar percentage cost breakdown. Median section prices were used for the large house and the section cost for the small house is at the lower quartile for the region. Legal fees are assumed to be the same for both, but consent and design fees are higher for the large house.


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Table 4 Building cost components – small house

Small house (145 sqm) Costs by component					Auckland			
			Total		% contribution to total cost			
			%		Labour	Materials	Plant	
Main contractor								
	Component							
	Site prep/ general	2.1		1.77	0.31	0.00		
	Substructure	4.6		3.22	1.38	0.00		
	Frame	9.3		4.19	5.12	0.00		
	Roof	4.3		1.28	2.98	0.00		
	Wall cladding	1.5		0.73	0.73	0.00		
	Windows/Ext door	1.2		0.12	1.06	0.00		
	Interior doors	7.5		1.13	6.38	0.00		
	Fixtures & Fittings	3.3		0.50	2.81	0.00		
	Interior lining/finish	11.7		5.26	6.42	0.00		
	Paint	0.0		0.00	0.00	0.00		
	Plumbing	0.0		0.00	0.00	0.00		
	Electrical	0.0		0.00	0.00	0.00		
		45.3		18.17	27.18	0.00		
	less profit	42.2		16.90	25.27	0.00		
Sub contractor								
	Site prep/ general	3.1		0.00	0.62	2.50		
	Substructure	6.9		2.42	3.45	1.04		
	Frame	0.0		0.00	0.00	0.00		
	Roof	4.3		1.28	2.98	0.00		
	Wall cladding	8.2		4.12	4.12	0.00		
	Windows/Ext door	10.6		1.06	9.56	0.00		
	Interior doors	0.0		0.00	0.00	0.00		
	Fixtures & Fitting	3.3		0.50	2.81	0.00		
	Interior lining	2.9		1.31	1.61	0.00		
	Paint/ wallpaper	5.5		4.13	1.38	0.00		
	Plumbing	6.6		2.97	2.97	0.66		
	Electrical	3.2		0.80	2.40	0.00		
		54.7		18.58	31.89	4.19		
	less profit	44.8		15.23	26.15	3.44		
			Profit	Lab	Mat	Plant		\$ Total
	Building cost	33811	83492	133608	8930	259840		
		13.0%	32.1%	51.4%	3.4%	100%		
			Designer (3% constructn\$)					7795
			Legal					1300
			Consent fees					2400
			Levies (BRANZ & DBH)					782
			TOTAL BUILDING COSTS					272,117

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Table 5 Building cost components – large house

Large house (202 sqm) Costs by component					Auckland	
		Tot				
		%	% contribution to total cost			
			Lab	Mat	Plant	
Main contractor						
	Component					
	Site prep/ general	1.9	1.60	0.28	0.00	
	Substructure	3.3	2.32	1.00	0.00	
	Frame	10.9	4.91	6.00	0.00	
	Roof	3.4	1.02	2.38	0.00	
	Wall cladding	2.0	0.99	0.99	0.00	
	Windows/Ext door	0.9	0.09	0.85	0.00	
	Interior doors	5.3	0.80	4.51	0.00	
	Fixtures & Fittings	3.4	0.50	2.85	0.00	
	Interior lining	13.0	5.83	7.13	0.00	
	Paint	0.0	0.00	0.00	0.00	
	Plumbing	0.0	0.00	0.00	0.00	
	Electrical	0.0	0.00	0.00	0.00	
		44.0	18.06	25.97	0.00	
	less profit	41.0	16.80	24.15	0.00	
Sub contractor						
	Site prep/ general	2.8	0.00	0.56	2.26	
	Substructure	5.0	1.74	2.49	0.75	
	Frame	0.0	0.00	0.00	0.00	
	Roof	3.4	1.02	2.38	0.00	
	Wall cladding	11.2	5.61	5.61	0.00	
	Windows/Ext door	8.5	0.85	7.61	0.00	
	Interior doors	0.0	0.00	0.00	0.00	
	Fixtures & Fitting	3.4	0.50	2.85	0.00	
	Interior lining	3.2	1.46	1.78	0.00	
	Paint/ wallpaper	7.0	5.25	1.75	0.00	
	Plumbing	7.6	3.42	3.42	0.76	
	Electrical	3.9	0.98	2.93	0.00	
		56.0	20.82	31.38	3.76	
		45.9	17.07	25.73	3.09	
		Profit	Lab	Mat	Plant	\$ Total
	Building cost	43398	111734	164555	10179	329866
		13.2%	33.9%	49.9%	3.1%	100.0%
			Designer (4% constructn\$)			13195
			Legal			1300
			Consent fees			3500
			Levies (BRANZ & DBH)			993
			TOTAL BUILDING COSTS			348,854

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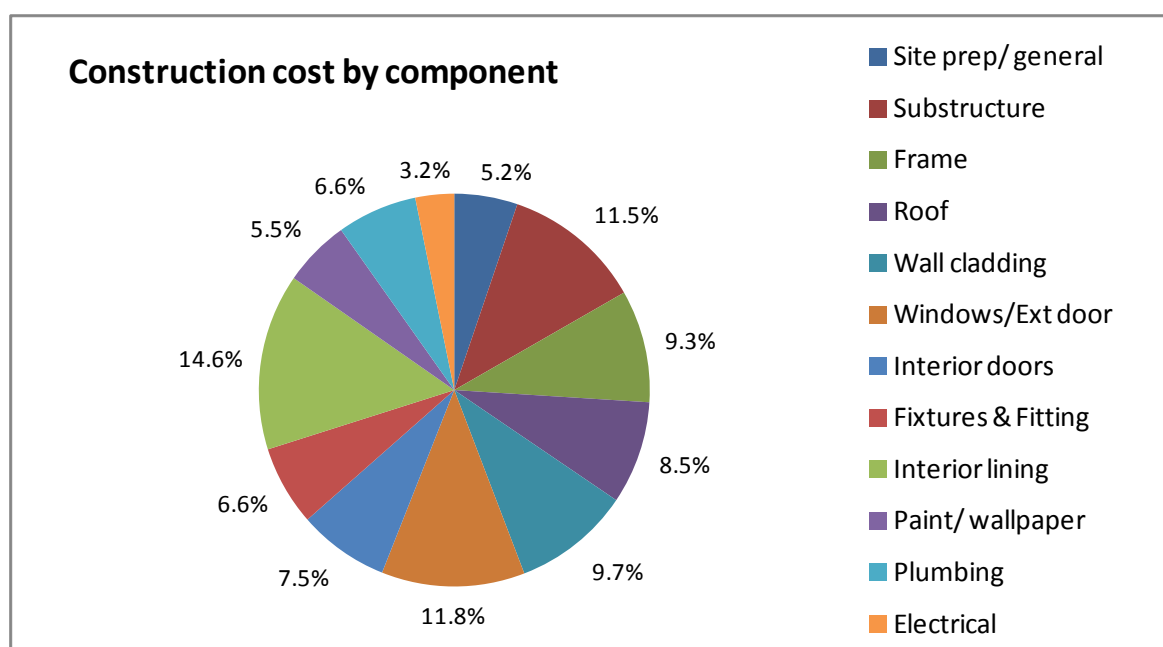
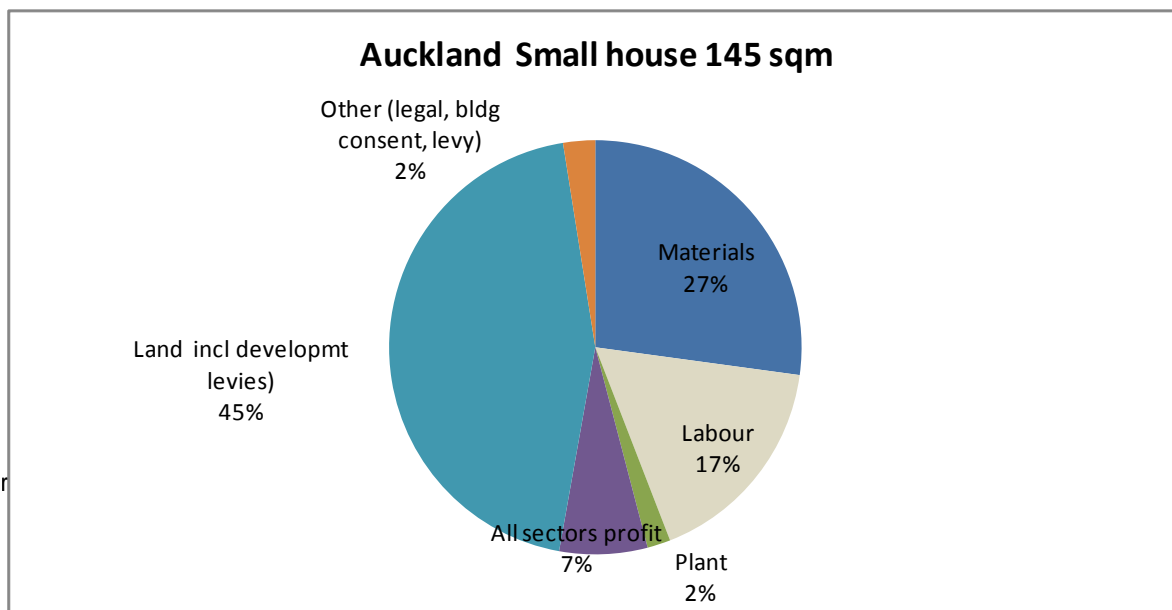


Figure 16 Small house- Auckland - Cost breakdown

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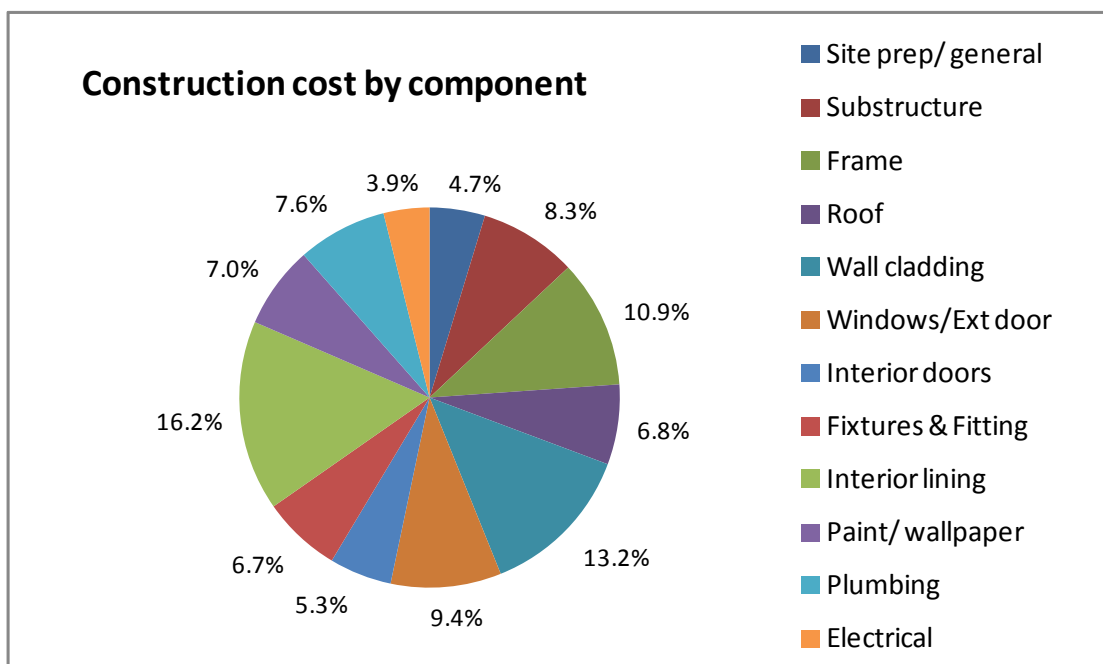
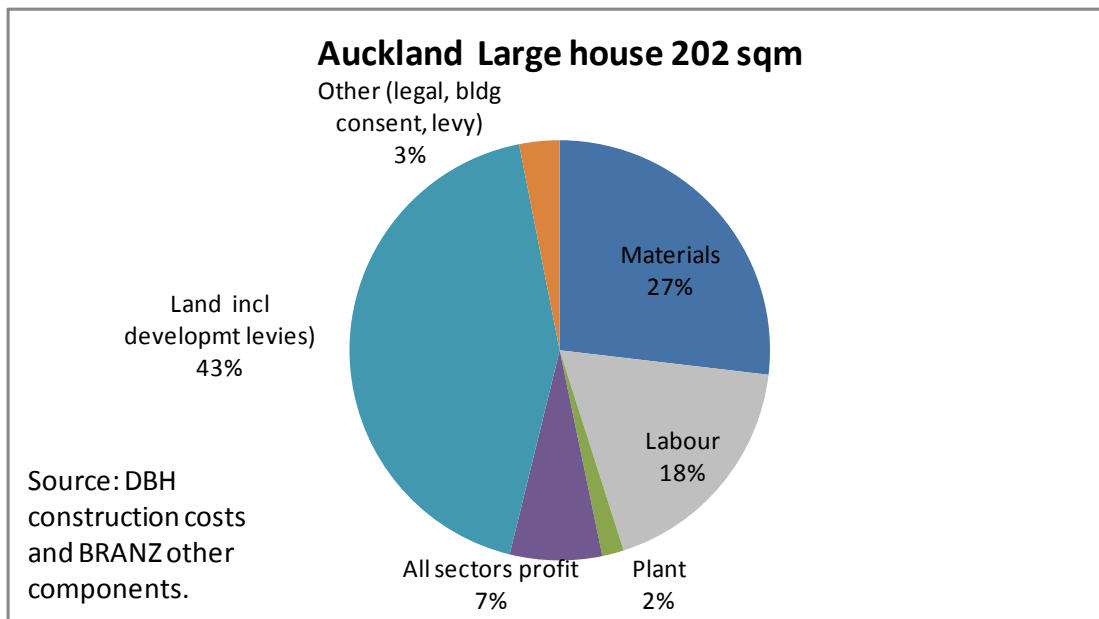


Figure 17 Large house- Auckland - Cost breakdown

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Note that the \$/ sq metres rates used by DBH and produced by Maltbys are for “speculative” houses, including profit margins and GST. Maltbys state they estimate that group housing is about 21% cheaper than spec houses, while architecturally designed one-off houses are about 20% more expensive. The next section in this report, based on an analysis of the major builders in two regions, suggests a price differential of between 10% and 15%, between larger scale builders and the overall industry. So the Maltby’s finding is in approximate agreement.


7. BUILDING CONSENT ANALYSIS

7.1 Detached houses

Individual consents from the Whats-On dataset were examined for new house distributions for two council areas. They were Manukau and Christchurch, and were chosen because they represent regions of interest for future building activity. Also construction in these areas is often of fairly simple design, mainly single storey or 1.5 storey and on flat ground with minimal foundation problems. The distributions for selected group builders are shown in Figure 18 to Figure 21. Some builders have a quite large range of floor areas and costs whereas others have a narrow offering. The \$/sqm rate varies by up to 50% in any area and probably reflects quality differences between house finish, but also market power and advertising effects. The first panels in Figure 18 and Figure 20 are for builders represented by only 1 or 2 houses in the period and it is speculated these could be one-off designs. Their average \$/sqm rates are generally more expensive than most of group builders shown, by about 10% to 15%, confirming earlier work (e.g. see Cost efficiencies of standardised housing – BRANZ Study Report 247). However the charts show some group builders are in higher cost markets.


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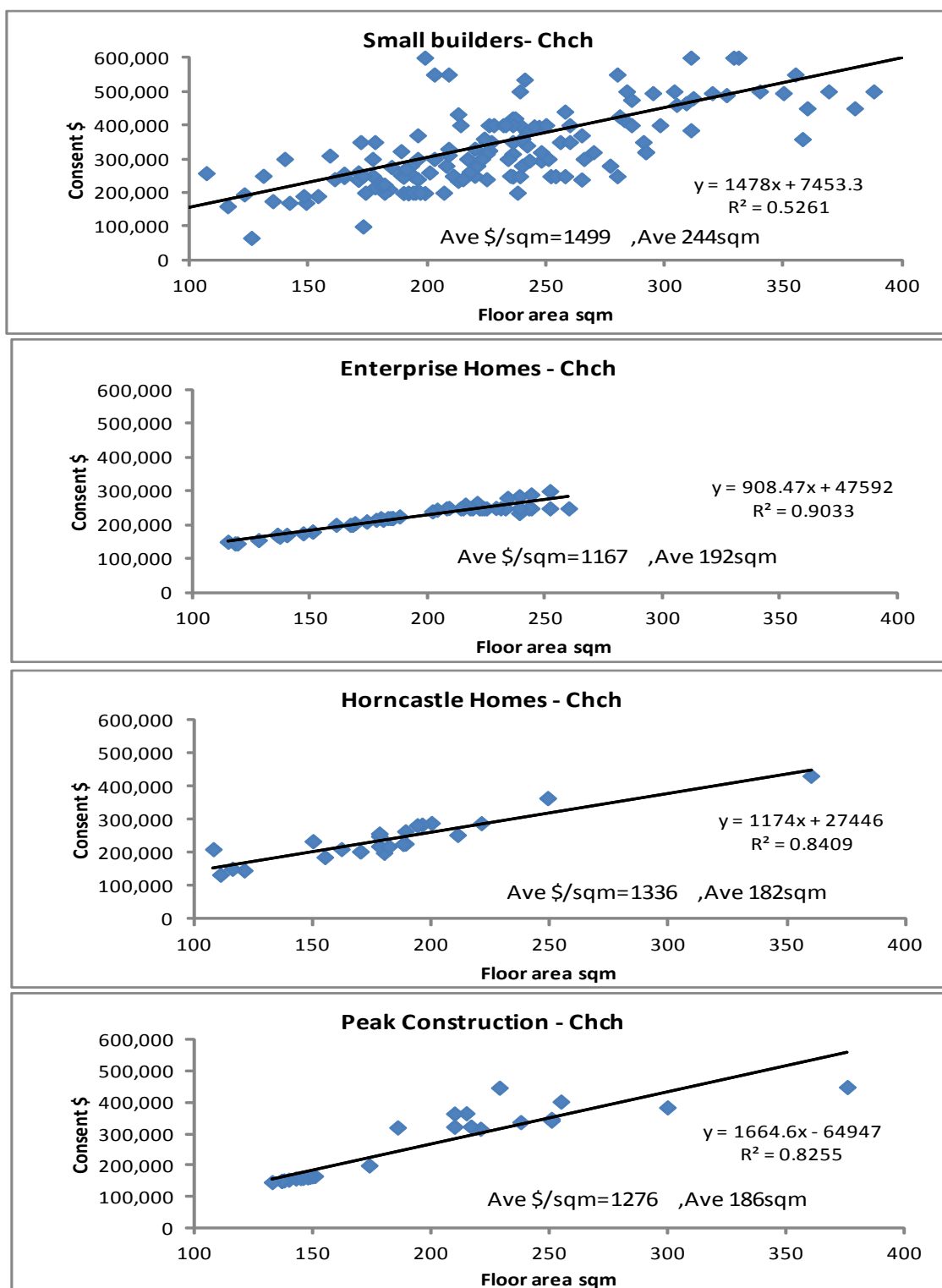


Figure 18 Christchurch builders housing distributions

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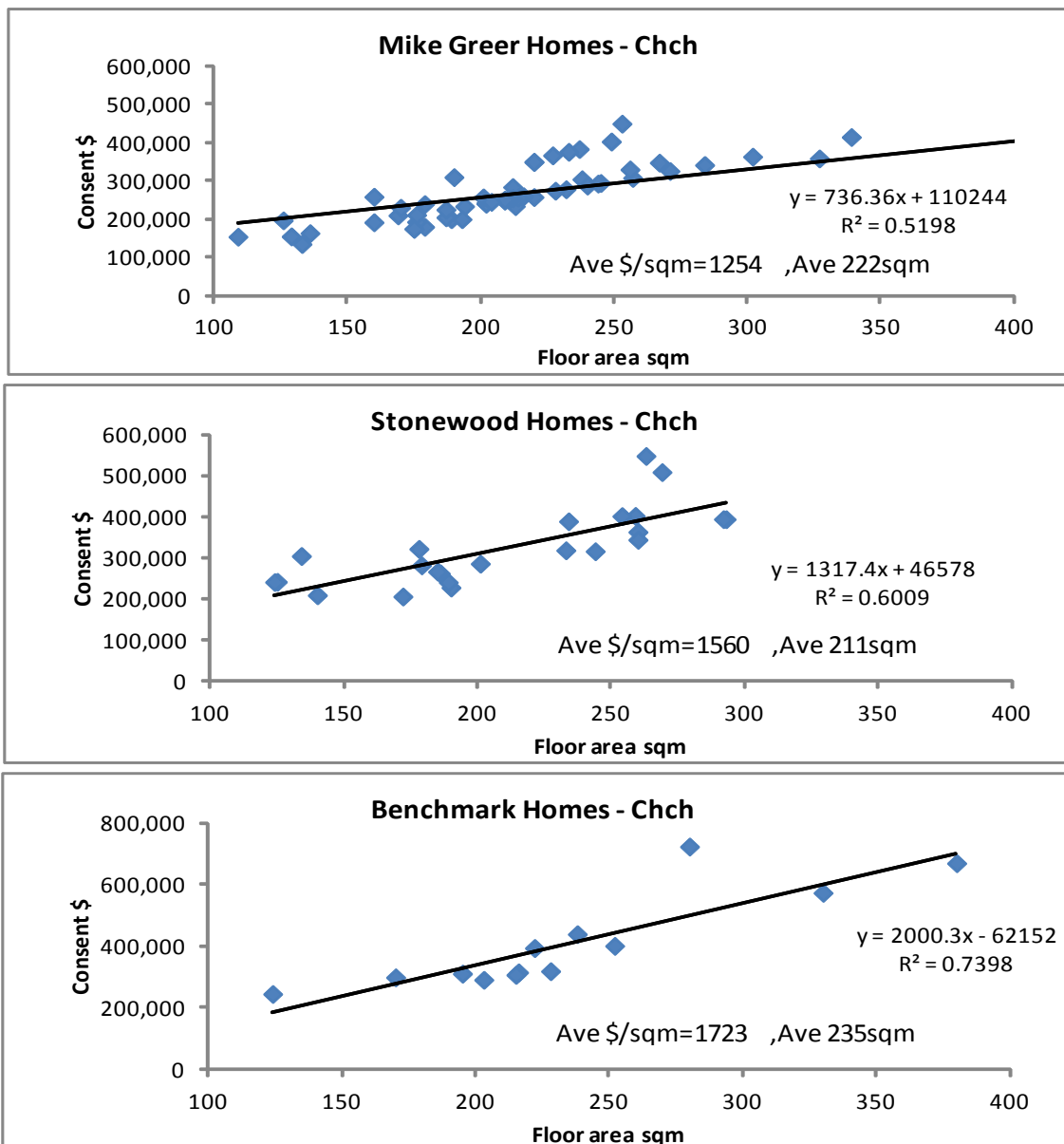


Figure 19 Christchurch builders housing distributions (continued)

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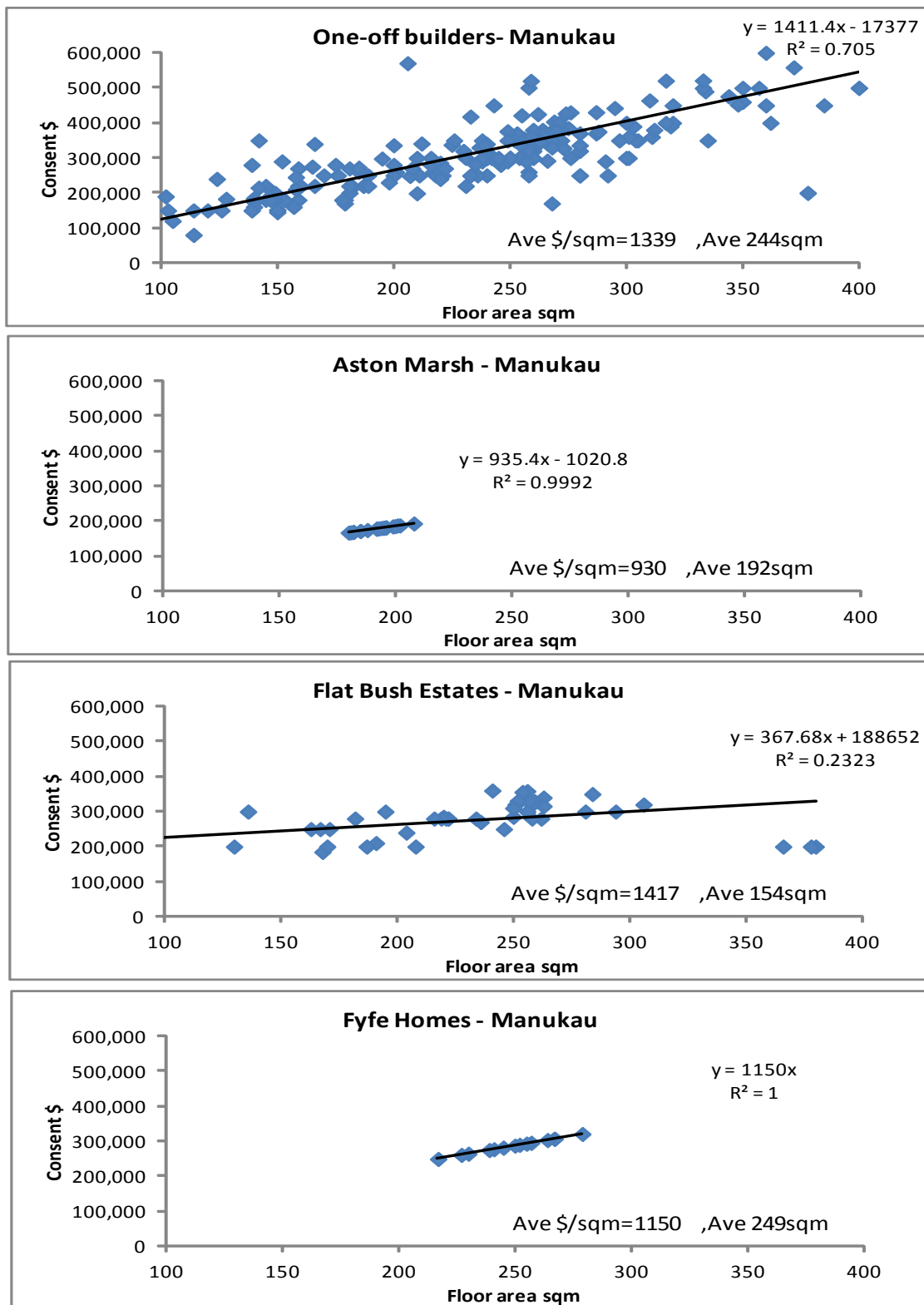


Figure 20 Manukau builders house distributions

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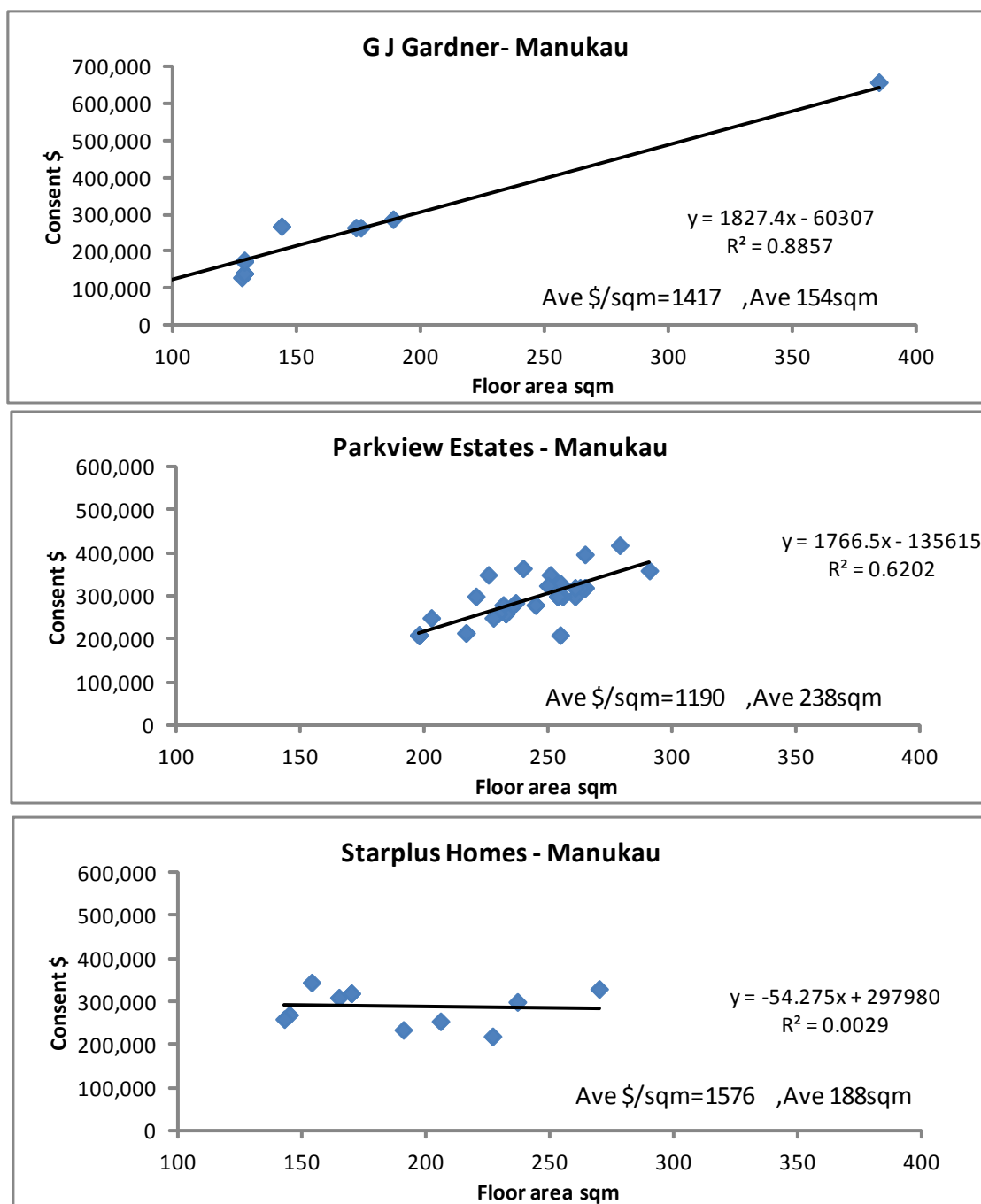


Figure 21 Manukau builders house distributions (continued)

7.2 Multi-unit residential consents

SNZ provide a breakdown between vertically attached multi-units (i.e. medium to high-rise apartments) and horizontally attached units (i.e. terraced housing, townhouses, duplexes), see

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Table 6 The horizontally attached units have similar construction to detached housing, i.e. mainly timber framing. Vertically attached units (i.e. units with floors/ ceilings in common) tend to be more expensive than detached housing on a \$ per sqm basis.

Table 6 Multiunit building consents

Building consents \$ per sqm					
Construction cost \$ per sq metres					
<-----Multi-units----->				Detached	Ratio
Year	Attached horizontally	Attached vertically vertically (<10 units)	Attached vertically vertically (>9 units)	houses	Multiunits: Houses
2007	1,214	1,901	1,610	1,496	1.20
2008	1,177	1,667	1,433	1,380	1.04
2009	1,270	4,490	1,191	1,415	1.03
2010	1,316	2,063	1,332	1,405	1.04
2011	1,339	2,393	1,839	1,626	1.13
2012	1200	2000	1200	1290	0.86

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