MINISTRY OF SOCIAL DEVELOPMENT
TE MANATŪ WHAKAHIATO ORA

19 MAY 2015

A O'Sullivan
fyi-request-2613-c4e70792@requests.fyi.org.nz

Dear A O'Sullivan

On 16 April 2015 you emailed the Ministry requesting, under the Official Information Act 1982, the following information:

- *A full copy of Working Paper 02/04: The Effects of the Accommodation Supplement on Market Rents*
- *Please provide any other MSD documents dated 2004 or later which examine the impact of the Accommodation Supplement on market rents, house prices or housing affordability.*

Please find enclosed a copy of the Working Paper 02/04, *'The Effects of the Accommodation Supplement on Market Rents'* dated April 2004.

The Ministry has identified the report, *'Literature review of the impact of demand-side housing subsidies on the housing market'* dated February 2015, as falling in scope of your request, however I refuse your request for a copy of this report under section 18(d) of the Official Information Act on the basis that this report will soon be publicly available on the Ministry's website.

Your request for all Ministry documents dated 2004 or later, that relate to impact of the Accommodation Supplement on market rents, house prices and housing affordability is very broad and substantial manual collation would be required to locate and prepare all documents within scope of your request. As such I refuse your request under section 18(f) of the Official Information Act. The greater public interest is in the effective and efficient administration of the public service.

I have considered whether the Ministry would be able to respond to your request given extra time, or the ability to charge for the information requested. I have concluded that, in either case, the Ministry's ability to undertake its work would still be prejudiced.

However there are two reports that contain information about the Accommodation Supplement and housing affordability that are publicly available on the Ministry website:

- *Changing Families' Financial Support and Incentives for Working:* The summary report of the evaluation of the Working for Families package is the final report of the Working for Families evaluation, dated July 2010. www.msd.govt.nz/about-msd-and-our-work/publications-resources/evaluation/receipt-working-for-families/index.html

Bowen State Building / Bowen Street / Wellington 6011
PO Box 1556 / Wellington 6140 / New Zealand
Fax: +64 4 918 0099 / **www.msd.govt.nz**

- *The Household incomes in New Zealand:* Trends in indicators of inequality and hardship 1982 to 2013, dated July 2014. www.msd.govt.nz/about-msd-and-our-work/publications-resources/monitoring/household-incomes/index.html

I hope you find this information concerning the Accommodation Supplement and housing affordability helpful. You have the right to seek an investigation and review of my response by the Ombudsman, whose address for contact purposes is:

The Ombudsman
Office of the Ombudsman
PO Box 10-152
WELLINGTON 6143

Yours sincerely

Anna Butler
General Manager, Housing, Income Support and Employment

This paper was written by

Adolf Stroombergen
Infometics

Centre for Social Research and Evaluation

Ministry of Social Development

The Effects on Markets Rents of the Accommodation Supplement

1. Introduction

In 1999 Infometrics produced an econometric model of market rentals for Housing New Zealand.[1] Although designed to be a forecasting model, the approach taken was to develop a structural model that sought to explain the relative importance of various factors that influence market rents.

Taking advantage of this property, in July 2003 The Ministry of Social Development requested that Infometrics update the model and that it be used to examine the issue of whether the Accommodation Supplement is subject to provider capture. That is, is the Accommodation Supplement raising rents and thereby undermining its effectiveness as a housing subsidy to those on low incomes?

The approach taken is firstly to update the model for New Zealand as a whole. This is described in Section 2. In Section 3 the Accommodation Supplement is incorporated into the model in order to ascertain whether it is having any measurable effect on market rentals.

Section 4 examines the issue of causation – do changes in the Accommodation Supplement tend to lead changes in markets rents, or does the reverse apply? In Section 5 we repeat the analysis in Section 3, but instead of using mean rentals as the dependent variable we use the lower quartile of market rents. Section 6 applies the model to the effects of the Accommodation Supplement in Auckland.

Testing whether the Accommodation Supplement has caused a level shift in market rents is undertaken in Section 7. Finally Section 8 presents some summary comments and suggestions for possible future research.

2. National Model of Market Rents

Following the models developed by Infometrics 1999, the rental equation takes the following form:

[1] Infometrics (1999), *Regional Model of Market Rentals*, report by David Grimmond to Housing New Zealand Ltd, March 1999.

$$DR = a + \sum b_i DR_{-i} + g_1 DYD_{-i} + g_2 DRD_{-i} + g_3 DHC_{-i} + g_4 DOR_{-i} + Z + e$$

– where the dependent variable, DR, the change in market rentals, is a function of:

- The change in lagged rentals which proxies for influences that we have not been able to model. If b_i for i=1 is greater than -1 rental setting is subject to habit persistence. A value that less than -1 (that is, more negative) implies a mean reversion tendency such that a period where rents are higher than the underlying conditions would suggest is likely to be followed by a reduction in rents in the next period.

- The change in the difference between rental yields and the risk free yield available from 10 year government bonds, YD (annual rental/house price, less 10 year government bond rate). This term is intended to proxy a risk premium for investing in rental housing, but it is calculated using aggregate data and so is unlikely to be an accurate measure of the size of the risk premium. However, movements in the differential over time would be expected to influence rent setting behaviour. The lower the differential the greater the incentive to raise rents, although this may come about by a fall in house values. We therefore would expect g_1 to have a negative sign.

- The change in the stock of dwellings available for rental, RD. An increase in supply should have a negative effect on rental so g_2 can be expected to be negative.

- The change in housing specific costs, HC (includes rates, insurance and maintenance costs). In the absence of other influences, landlords would be expected to eventually pass on such cost increases to their tenants. The expected sign for g_3 is positive.

- The change in the occupancy rate of dwellings, OR, defined as population divided by the number of occupied dwellings. An increasing occupancy rate is expected to put pressure on rentals, so g_4 should be positive.

- The final variable Z denotes a collection of seasonal dummies or other irregular variables.

All variables are differenced as they are I(1),[2] but the length of the time series is not long enough for us to adopt an error correction or co-integration model approach[3]. The subscript i denotes a lag of i periods, to be determined empirically. Also, a double logarithmic specification worked better than a linear specification, although YD was not logged due to the presence of negative numbers.

The results for the estimated equation are summarised in Table 1 below. Key features of the results are:

- All signs are as expected.

- The first two lags of the dependent variable are negative. The first lag is not as low as -1 and second is less (absolutely) than the first, suggesting a strong degree of habit persistence or inertia in rents. The 12th lag is positive and may be capturing an annual rent review cycle.

- The 12th lag is only significant at 10%, but its presence helps considerably to ensure normality of the residuals.

- Housing costs have the strongest effect, followed by the stock of dwellings for rent and the occupancy rate (with a 4 month lag).

[2] YD is I(0) for a subset of the period.
[3] Tests for co-integration between rents in the AS failed to identify a long run (i.e. 12 years) relationship.

- The yield difference seems to have a weaker impulse effect than expected with a one percentage point change in the difference affecting weekly rent by less than $2. However, this corresponds to a change of about 1% implying a plausible semi-elasticity of unity.[4]

- Rents during the winter months are marginally lower than during the rest of the year.

- The R^2 for the equation which is estimated in difference form is 0.42. When the predicted values are converted back into levels one period at a time, a regression of actual values versus predicted values yields an R^2 of 0.99. See Figure 1.

Table 1
Regression Results

Variable	Coefficient	P-value	Impulse Effect of 1sd change on R ($/week)*
R lag 1	-0.496	0.000	10.84
R lag 2	-0.173	0.024	6.88
R lag 12	0.103	0.099	2.17
YD lag 1	-0.949	0.003	-1.84
RD lag 1	-0.779	0.039	-15.20
HC lag1	1.339	0.002	27.99
OR lag 4	6.789	0.002	13.68
Jun/Jul/Aug	-0.0077	0.003	-1.49
Constant	0.0057	0.001	

* 1% change for YD, all evaluated at mean R. For R lag 1 the effect is $1+b_1$ and for R lag 2 the effect is b_2-b_1

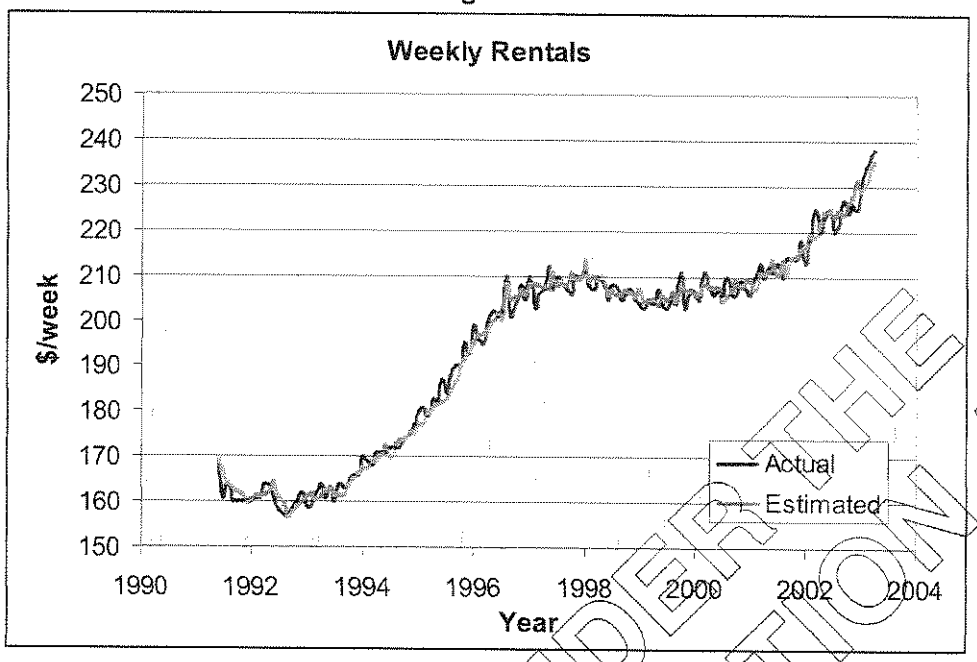
Sample period: 1991:5 to 2003:3
R^2 = 0.42 R^2 (actual level v estimated level) = 0.98
JB = 0.7 (CV=6.0 at 5%) Q(12) = 13.1 (CV=21.0 at 5%)

Explanation of Test Statistics

P-values denote the level of statistical significance of the coefficient (formally, a test of the hypothesis that the coefficient equals zero).
R^2- measures the goodness of fit.
Q(P) is the Box-Pierce-Ljung Q-statistic based on the first P residual autocorrelations and distributed approximately as c_p^2.
JB is the Jarque-Bera Lagrange multiplier test for normality of the residuals. It is distributed as c_2^2 and tests for excess skewness and kurtosis in residuals.

[4] This is a semi-elasticity because it is the percentage change in weekly rent divided by a percentage point change in the yield differential.

Figure 1



3. Modelling the Accommodation Supplement

The Accommodation Supplement is a collection of rules that describe eligibility and the amount of benefit payable in each set of circumstances. To include this in a regression means that the rules and amounts have to be converted into a quantitative time series.

There are various ways of doing this; the number of people receiving it, a mean or median weekly benefit weighted by region and number of people per household, or the total value of AS benefits paid. The last of these is considered to be the best measure as it captures both the rate of benefit and the number of people who receive it. That is, it captures the overall weight or prevalence of the AS in the market.

Figure 2

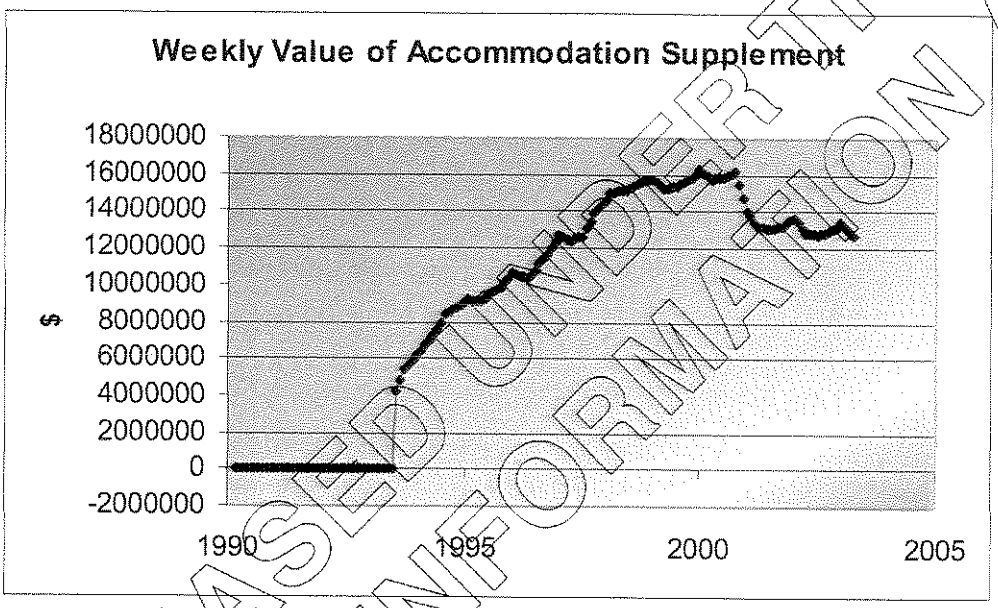


Figure 2 above shows the weekly value of the Accommodation Supplement from the period 1993 to 2003. The data is interpolated from weekly observations taken approximately once each quarter.[5] The drop around October 2000 corresponds to the move back to income related rents for Housing New Zealand tenants. Note also that the Accommodation Supplement was introduced in 1992, but consistent data is not available for the 1990-93 period.

Figures 1 and 2 do not show much of a relationship between the value of the Accommodation Supplement and weekly market rents. Of course this does not mean that there is no relationship, but if one does exist it is being camouflaged by other factors.

Table 2 shows the results of incorporating the change in the log of the Accommodation Supplement into the earlier equation. Statistically it is insignificant although it has the expected positive sign. Its impulse effect is very small. An increase in the weekly rate of the Accommodation Supplement of one standard deviation, which corresponds to a change in the mean benefit of about $7/week or a change in the number of people receiving it of about 37,000, raises market rent after a five month lag by about $0.05 or five cents.

[5] The quarterly series was provided by Donald Woolford of the Ministry of Social Development.

Table 2
Results with Accommodation Supplement

Variable	Coefficients without AS	Coefficients with AS	P-value
R lag 1	-0.496	-0.501	0.000
R lag 2	-0.173	-0.177	0.021
R lag 12	0.103	0.113	0.071
YD lag 1	-0.949	-0.905	0.005
RD lag 1	-0.779	-0.762	0.042
HC lag1	1.339	1.305	0.003
OR lag 4	6.789	6.764	0.002
Jun/Jul/Aug	-0.0077	-0.0075	0.003
Accom Supp lag 5		0.0011	0.174
Constant	0.0057	0.0055	0.001

The weekly value of the Accommodation Supplement in March 2003 was $12.7m, of which about 17% is paid to mortgagors. The total rental market of about $84m, so the share of the rental market 'affected' by the Accommodation Supplement is about 13%, which would lead one to expect a larger effect than that identified above. Some possible reasons for not finding an effect are suggested below:

1. The model is not specified in a manner that is consistent with picking up an effect on market rents. That is, there might be an important mechanism through which the Accommodation Supplement affects market rents that is unknown to us. However, we have given two presentations on these results as the paper progressed and no such mechanisms have been suggested.

2. The Accommodation Supplement by itself is an inadequate measure of the effect of government policies on market rents. A series that combined the Accommodation Supplement, income related rents and the provision of state housing might show a stronger effect.

3. The Accommodation Supplement is changed so infrequently that the changes are lost within all of the other factors that affect rents.

4. Most landlords are unaware of whether their tenants are eligible for the Accommodation Supplement.

5. The segment of the market that receives the Accommodation Supplement may be quite distinct, certain houses not being offered to people who may might receive the Accommodation Supplement, perhaps reflecting low inter-suburb substitution in demand.

6. The Accommodation Supplement is paid to private renters, boarders, local authority renters, and mortgage holders. These groups have progressively less attachment to the private rental market, thereby muting any potential influence of the Accommodation Supplement on market rents.

7. The price elasticity of supply of rental housing may be quite high, such that a subsidy raises the quantity consumed with little impact on price. This does not mean that new rental accommodation is quickly constructed, merely that the existing stock of housing can shift quite readily at the margin between owner-occupation and renting.

8. Investment in rental property may be more affected by expected capital gains then by rental income. Coupled with the desire to keep properties fully let, landlords may not wish to take the risk of losing tenants by raising rents whenever the Accommodation Supplement is increased. The significance of the lagged rentals in the estimated equation will be capturing this inertia.

4. Granger Causality Test

Econometrics tells us little about causation. It can tell us if series are correlated, but we must rely on economic theory to provide guidance on causation. If, however, the lagged values of a series X are correlated with a series Y, then it is more likely that X is causing Y than that Y is causing X. This type of testing is known as testing for "Granger causality"[6] Formally we test:

$$Y_t = \sum_{i=1}^{n} \alpha_i Y_{t-i} + \sum_{i=1}^{n} \beta_i X_{t-i}$$

The β coefficients are tested for statistical significance. If some or all are significant then X is said to "Granger cause" Y.

We have tested this specification using:

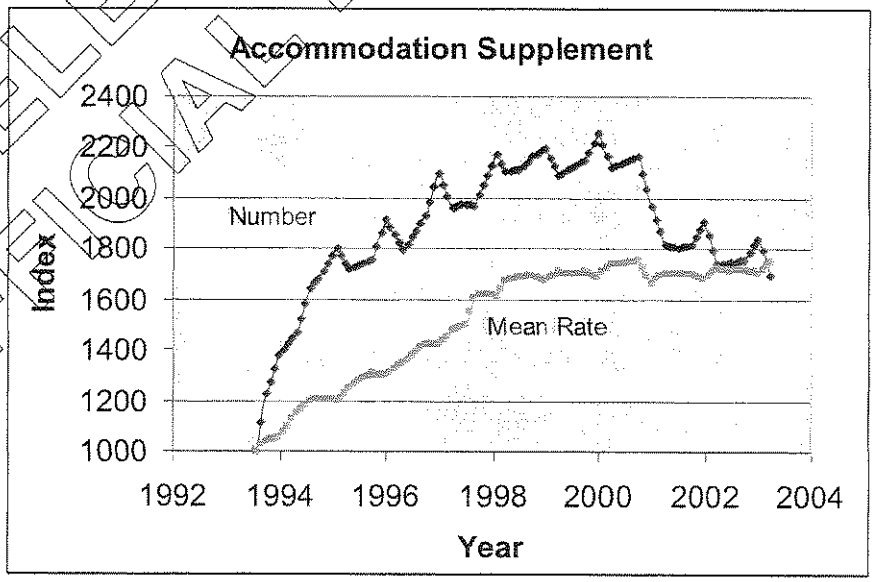
Y = change in the log of the mean rate of the Accommodation Supplement
X = change in the log of market rents

– and then again with X and Y reverse. The lags examined were 1-6, 9, 12, 18 and 24.

Neither the lags of the rate of the Accommodation Supplement, nor the lags of market rents are found to be statistically significant in explaining the rate of the Accommodation Supplement. The most significant effect is a positive coefficient of 1.37 on the fifth lag of the market rent, with a P-value of 0.32.

This finding may imply that the rate of the Accommodation Supplement is not tracking market rents particularly well, although there is no evidence of a consistent bias in either direction. However, as the average rate of the Accommodation Supplement is calculated as the total value of the benefit divided by the number of recipients, any change in the number of people receiving it in response to a change in the prescribed rates may cause perverse changes in the *ex poste* mean rate. Although there is no clear evidence of this in Figure 3, we cannot conclusively infer from these results that the Accommodation Supplement is not tracking market rents.

Figure 3



[6] Granger, C.W.J. (1969), "Investigating Causal Relations by Econometric Models and Cross-Spectral Models," *Econometrica*, Vol 37, pp.424-438.

In the equation for market rents, the first, 12th and 24th own lags are significant at the 5% level or better, with coefficients of –0.45, 0.25 and 0.14 respectively. The fifth lag of the rate of the Accommodation Supplement is significant with a P-value of 6.1% and a coefficient of 0.0075. That is, an increase in the weekly rate of the Accommodation Supplement of one standard deviation, or about $7/week, raises market rents after a five month lag by about $0.21. Again the way in which the average rate of Accommodation Supplement is calculated may be masking an effect. Nevertheless, the result reinforces the finding in Table 2 which is not subject to this effect. Hence there is no evidence of a significant lagged influence from the Accommodation Supplement to market rents.

Finally a simple regression of the rate of the Accommodation Supplement in period t against mean market rent in period t (and vice versa) has an R^2 of less than 2% and no statistical significance. Thus there is also no evidence of a contemporaneous effect.

5. A model with Lower Quartile Rents

The market rental series used in section X is a series of mean rents. Given that most recipients of the Accommodation Supplement are at the lower end of the rental market, if there is any effect at all of the Accommodation Supplement on market rents, we might expect to see it at the lower end of the spectrum.

Testing the same equation as before is theoretically somewhat problematic, as the explanatory variables are all defined with respect to the total market. For rental properties in the lower quartile of the market those explanatory variables may move in different ways. Changes in occupancy rates and changes in the stock of rental dwellings in particular may be quite different in this market segment. Changes in the yield gap and changes in housing costs are probably less segment specific. Table 3 shows the results.

Table 3
Regression Results with Lower Quartile Rents

Variable	Coefficient	P-value	Impulse Effect of 1sd change on R ($/week)*
RLQ lag 1	-0.465	0.000	6.86
RLQ lag 2	-0.238	0.003	2.87
RD lag 1	-1.187	0.006	-16.14
Accom Supp lag 5	-0.0025	0.010	0.08
Constant	0.0056	0.000	

* all evaluated at mean R

Sample period: 1991:6 to 2003:3
R^2 = 0.25 JB = 15.5 (CV=6.0 at 5%); residuals not Normal

The R^2 of the equation declines substantially from 42% to 25%, and the residuals are not normally distributed. The yield gap, housing costs, and occupancy rate are no longer significant. Only the stock of rental dwellings is retained from before. The Accommodation Supplement is significant at lag 5,[7] but still with only a very small effect on market rents; eight cents for a change of one standard deviation (being a change in the mean benefit of about $7/week or a change in the number of people receiving it of about 37,000) in the Accommodation Supplement. However, the dependent variable (lower quartile rents) has some suspect numbers, suggesting at least some element of measurement error, and therefore an estimated coefficient that is biased downwards.

[7] Up to 12 lags were tested.

Nevertheless, there is still no strong evidence for a significant effect of the Accommodation Supplement on market rents, albeit that what effect there is, is stronger at the lower end of the rental market.

6. Auckland Market

In this section we apply the national model developed in Sections 2 and 3 to the Auckland market. All series are Auckland specific except for the housing cost price index. The best equation is summarised in Table 4, with the main points being:

- The goodness of fit of the equation is lower than before, with a greater effect on lagged rents. There is also some evidence of a degree of residual autocorrelation in the residuals, but allowing for additional lags does not improve the model.
- Housing costs are no longer significant, probably because of the lack of an Auckland specific series.
- The occupancy rate is also no longer significant. A possible explanation is that Auckland tenants are more likely to live in relatively crowded conditions, being unable to afford additional accommodation that would otherwise put pressure on market rents.
- The stock of rented dwellings has an effect that is about 20% larger than in the national model. This is consistent with the insignificance of the occupancy rate and relative over-crowding.
- The yield difference has an implied semi-elasticity of unity, the same as before.
- The Accommodation Supplement is statistically significant with no lag – a contemporaneous effect. However, a change of one standard deviation (about $11 per week or 12,000 recipients) changes mean rentals by only 13 cents.

Table 4
Auckland Regression Results

Variable	Coefficient	P-value	Impulse Effect of 1sd change on R ($/week)*
R lag 1	-0.343	0.000	22.10
R lag 12	0.140	0.048	4.55
YD lag 1	-1.027	0.003	-2.55
RD lag 1	-1.071	0.002	-33.91
Jul/Aug/Sep	-0.0053	0.057	1.32
Accom Supp lag 0	0.0021	0.040	0.13
Constant	0.0076	0.000	

* 1% change for YD, all evaluated at mean R

Sample period: 1991:5 to 2003:3
R^2 = 0.31 R^2 (actual level v estimated level) = 0.99
JB = 0.4 (CV=6.0 at 5%) Q(12) = 21.9 (CV=21.0 at 5%)

The equation was also tested with the mean rate of the Accommodation Supplement instead of the total weekly amount paid. The results were virtually identical, with the mean rate of the Accommodation being marginally significant at the zero lag (P-value of 0.077), but having an impact on the market rentals of only 30 cents for a one standard deviation change of about $11.

Overall then, the inference one draws from these results is that the Accommodation Supplement does not have any significant effect on market rents in the Auckland region.

7. An Additional Test

All of the results in the above sections point clearly to the Accommodation Supplement – whether its mean rate or the total weekly amount paid – having a negligible effect on market rents. Nevertheless, there is one other test that is worth exploring, namely whether just the existence of the Accommodation Supplement has an effect on market rents. There are two obvious ways of doing this:

1. A dummy variable that takes a value of zero before the Accommodation Supplement was introduced and a value of one thereafter (ZAS).

2. A refinement of the above with the a value of 0.85 from October 2000 to approximate the reduction in the number of people receiving the Accommodation Supplement when income related rents were introduced for HNZC tenants (ZASI).

As shown in Figure 1 the early part of the observation period was characterised by relatively flat rents. Although the increase in rents occurs at about the same time that the Accommodation Supplement was introduced, we have already demonstrated that rent changes thereafter did not track changes in the Accommodation Supplement. Nevertheless changes in rent were clearly higher in the latter 80% of the period. In fact, taking into account the loss of observations at the beginning of the estimation period to allow for lags, the Accommodation Supplement exists for 117 of the 143 observations – about 80%. Hence there is a reasonable probability that dummy variables of the type defined above will be statistically significant, although this may be coincidental.

The results are as follows:

Table 5
Tests of Existence Variables for the Accommodation Supplement

	ZAS		ZASI	
	Coefficient	Impulse Effect	Coefficient	Impulse Effect
National	0.0071	$1.38	0.0076	$1.48
Auckland	0.0083	$2.20	0.0093	$2.33

All coefficients have P-values below 5%

The effects are greater than those of the mean rate of the Accommodation Supplement and the total weekly amount paid. The impulse effect measures the effect on the dependent variable (mean market rental) of 'policy off versus policy on'. With the mean rental over the estimation period being $195 nationally and $250 in Auckland, it is clear that the effect of the introduction of the Accommodation Supplement on market rents has been less than 1%.

8. Summary

The analysis in the preceding sections strongly suggests that changes in the Accommodation Supplement have not affected market rentals – not in the Auckland region, nor nationally. That is, the Accommodation Supplement has not being subject to provider capture. The most generous statement in favour of provider capture that one could educe from the above results is that the Accommodation Supplement has produced a permanent lift in market rents of about 1%. Accordingly as a means of assisting low income people with housing costs the Accommodation Supplement policy would have to be judged as successful. Note that this analysis tells us nothing about whether the Accommodation Supplement is at optimal levels.
Of course there is always a chance that the models are faulty and cannot pick up an effect of the Accommodation Supplement on market rents even if it exists. Other researchers should try different specifications. On the other hand some reasons why there may truly be no effect were presented in Section 3.

One of those reasons was that the segment of the rental market that receives the Accommodation Supplement may be quite distinct, with low mobility of recipients between suburbs. Pursuing this argument a stage further, concentration of recipients in certain parts of a suburb or even in certain streets may make it more likely that the Accommodation Supplement would affect market rents in those areas, especially if tenants find it even more difficult to move house than to pay a higher rent. One manifestation of this is that houses are over-crowded.

Whether this theory has any merit is an empirical question. In our view if there is any provider capture of the Accommodation Supplement then it will have to be found at the micro-level. If it exists, it does so in small areas and/or amongst small communities. Effects at such levels are too localised to be picked up by a macroeconomic model.

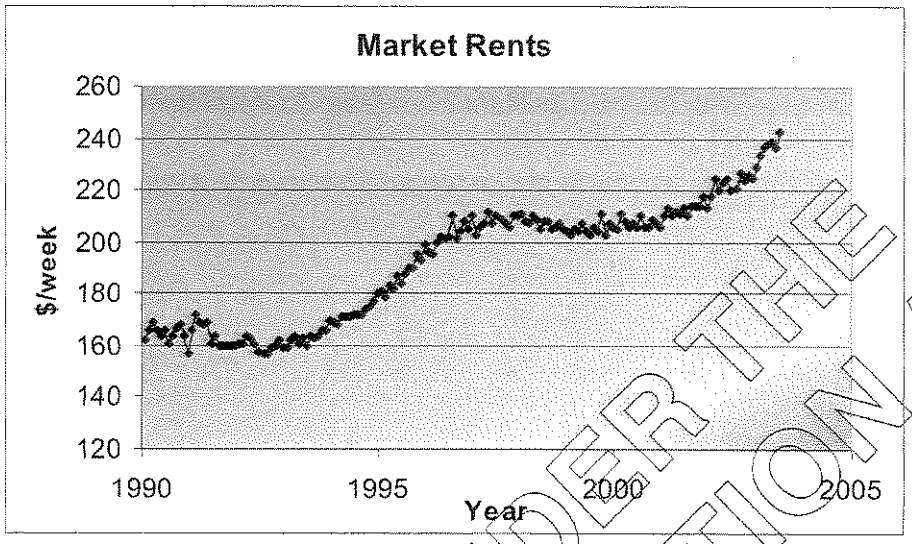
However, if such communities are at the lower end of the rental market (even below the lower quartile) it is quite likely that the supply curve is heavily influenced by changes in the HNZC housing stock, presenting little opportunity for private providers to capture the Accommodation Supplement. Hence even at localised levels there may be no observable effect of the Accommodation Supplement on market rents.

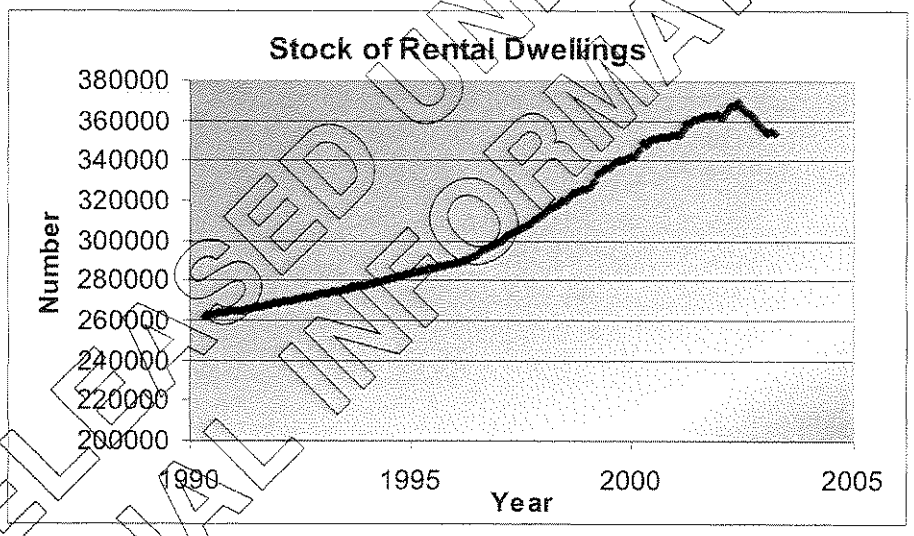
Another reason that was cited for finding no provider capture is that the price elasticity of supply of rental housing is quite high. In particular, that the existing stock of housing can shift quite readily at the margin between owner-occupation and renting. This is a theory that could be tested relatively easily.

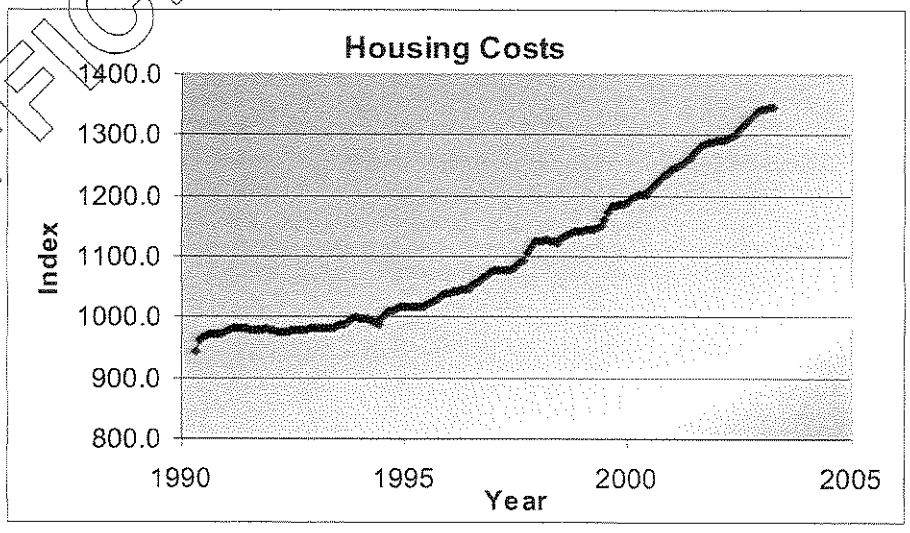
It was also hypothesised that investment in rental property may be more affected by expected capital gains than by expected rental income. In addition there is a trade-off between keeping properties tenanted and holding out for higher rents. Both of these factors are consistent with the strong habit persistence effects that the models revealed. Research that looked at rent setting behaviour by landlords could be useful in this regard.

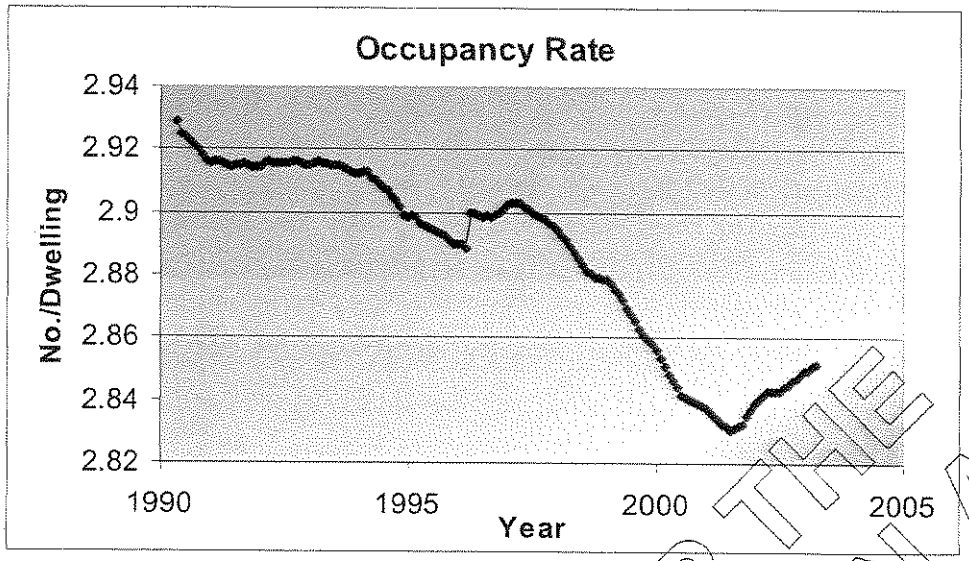
Data Appendix

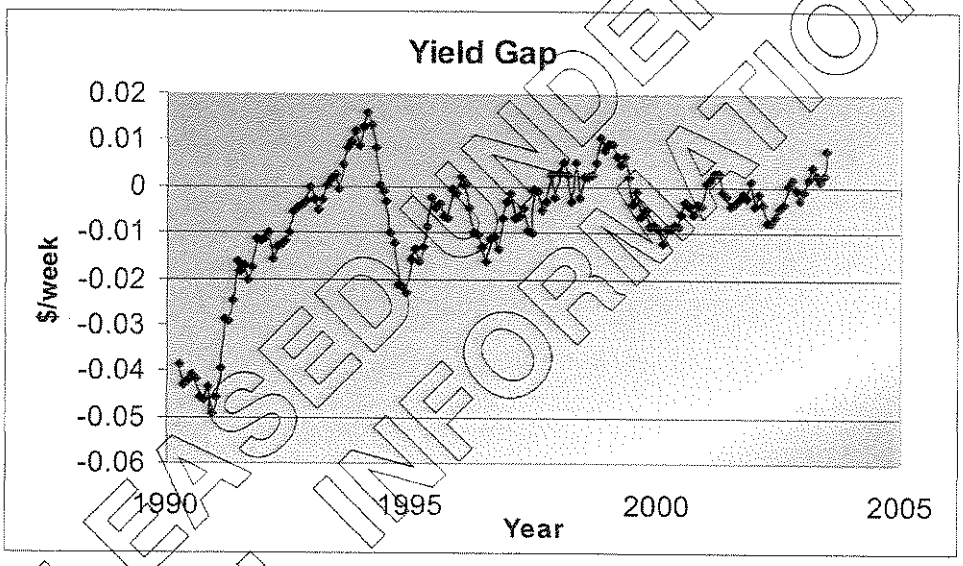
National Series

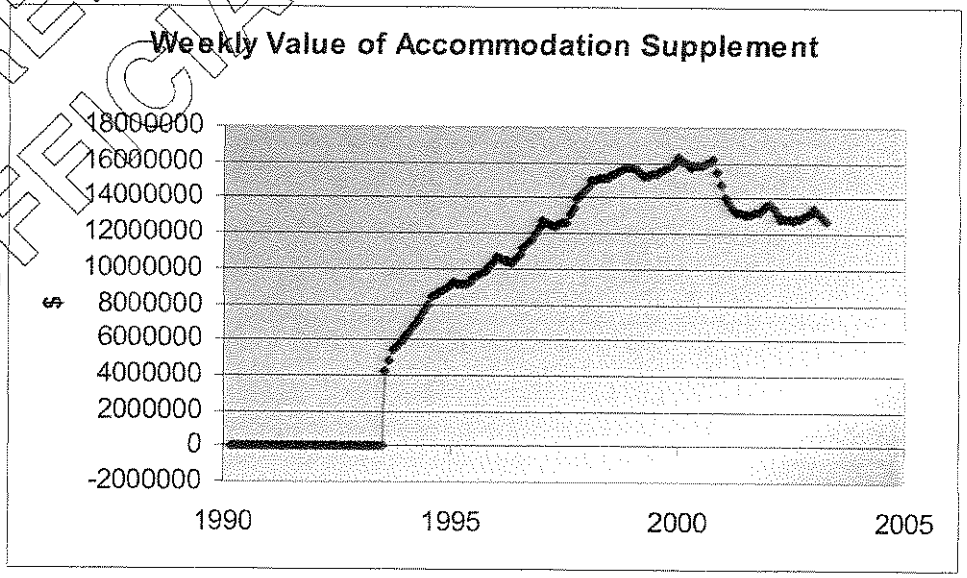












Definitions

Symbol	Variable	Description
R	Market rentals	Mean weekly rent for properties bonded each month (Tenancy Bond Centre).
YD	Yield difference	The difference between the rental yield (mean market rent divided by median house price) and the risk free yield from 10 year government bonds.
RD	Stock of dwellings available for rent	Number of privately rented dwellings from Census data, interpolated by the 'perpetual inventory method' based on the number of new monthly lettings as measured by the number of bonds (HNZC), and a constant monthly renting exit rate. (It is assumed that there is a constant relationship between new lettings and bonds.)
HC	Housing costs	Rates, insurance and maintenance costs, from the Consumers Price Index. Quarterly series interpolated to monthly series.
OR	Occupancy rate of all dwellings	Quarterly population data (interpolated to monthly data) divided by the number of occupied dwellings. The latter is derived from Census data on the number of occupied dwellings, interpolated by the 'perpetual inventory method' based on the number of monthly building consents (SNZ) and a constant monthly housing stock depreciation rate.

Means and Standard Deviations

Variable	Mean	Standard Deviation
National		
R	193	22
YD	-0.006	0.011
RD	309,040	34,999
HC	1103	118
OR	2.88	0.03
AS (total weekly $)	9,609,300	5,836,700
Auckland Region		
R	248	35
YD	-0.011	0.011
RD	96,041	14,311
OR	3.09	0.03
AS (total weekly $)	4,333,300	2,716,900