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Calculating stratified residential property price indices to test for differences in trend, seasonality and cycle

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Abstract: This paper extends work presented at the sixth PRRES conference where the seasonal effects of residential property markets were examined. Work from that paper suggested that there is locational variation in the seasonal effects of transaction volumes and prices in the residential real estate market in Adelaide. This paper uses all residential transactions in Adelaide, South Australia over a eighteen-year period to examine if there are significant variations in the trends, seasonality and cycles of residential property prices when the data is stratified by region, dwelling type and price ranges. This research demonstrates that the use of a non-stratified general index for residential properties may lead to incorrect conclusions about any specific sector of the market particularly in regard to long-term growth rates.

Introduction

For most Australians the investment in their family home is their greatest investment. In recent years more Australians have moved into the private rental investment market with over 50% of the owners of private rental accommodation being investors who own only one residential investment property (Yates, 1996). Arguably the need for information about what residential market activity is increasing, however much of the information that is provided to home buyers and investors is provided by local real estate agents and investment advisors who have only local knowledge and may be considered to be somewhat biased in their opinions. There is a need for reliable, unbiased information about the long-term performance of residential property. While academic journals and conferences (such as PRRES) provide a forum for discussion by academics and research professionals, it is unlikely that many of the findings become generally disseminated to the community. The Centre of Land Economics and Real Estate Research (CLEARER) has decided to release a series of residential property indices relating to Adelaide and South Australia. The intention is to release these indices on a quarterly basis via the World Wide Web. The purpose of this research is to investigate some of the issues that arise in terms of stratification of the index and the index methodology.

Work on developing housing indices has been ongoing, with early works by Bailey et al. (1963) involving a discussion of a regression method for price indexing which was later expanded by Goodman (1978). The principal works are based on hedonic price functions and repeat sales, and were the focus of a great deal of literature in the early 1990's. (Case & Shiller, 1989 and Mankiw & Weil, 1989 are important examples) These methods involve analysing individual transactions rather than aggregated data. The advantage of these methodologies is that the effect of time and a variety of property characteristics can be considered jointly. The effects of time can then be considered with all other factors being held constant leading to the term constant quality indices. Work on these indices in Australia has concentrated in Adelaide and Perth with discussions on methodologies (Rossini, 1996 & Costello, 1997) and on particular issues such as holding periods (Costello et al, 1996), location (Kershaw & Rossini 1999 & Costello, 2000) and later the effects of seasonality (Rossini, 2000 & Costello, 2001).

The choice of methodology depends somewhat on the actual data that is available, its quality and quantity and the characteristics of the market. In some cases a simple median or mean price index may be sufficient to provide vital information while in other cases this may provide misleading results. The experience from the works in Adelaide suggests that most useful result will come from a constant quality index based on a simple hedonic model of raw transaction using a simple natural logarithm transformation of the dependent variable (price). A second issue is the need to stratify the data before index creation. The justification for the stratification is that there may be variations in the sub-markets that make up the broader housing market and that these variations lead to differences in long term performance, seasonality and cycles.

In this paper a series of data stratifications is used to empirically determine if there are differences. The paper deals with the issue of property prices (rather than transaction volumes) and examines if there are marked variations across the strata in terms of seasonality of prices, long-term trend (growth) and cyclical behavior. The paper also explores ways to present this data in an easy-to-understand format that can be disseminated to the wider community. Because of this the presentation is largely tabular and graphical rather than statistical.

Methodology:

In order to find a suitable method to stratify the data, the 2000 S.A. Valuation List was used. This has details of every property in South Australia. The original strategy was to separate properties by some geographical regions, dwelling type and price range. All residential properties with a postcode between 5000 and 5199 were extracted. This postcode range is generally considered to include all of the metropolitan area. This resulted in 407520 properties with a land use code for a detached house, semi detached house, home unit or multiple flat building. Rural living properties, guesthouses, hotels-motels etc were excluded. The dwelling type and number of main rooms were cross tabulated to produce Table 1. The dwelling type classifications are those used by the S.A. valuation office and may be summarized as follows. Detached houses are Torrens titled with one detached dwelling on the site. Semi-detached dwellings are usually Torrens titled but with two attached houses. These are typically single story maisonetts.

Rooms	Landuse				Total
	Detached House	Semi Detached House	Home Unit	Multiple Flats Building	
Total	**323504**	**27841**	**52164**	**4011**	**407520**
1	25	6	35	28	94
2	171	27	561	1147	1906
3	1586	722	9342	590	12240
4	22279	7568	29563	759	60169
5	141449	15716	10224	382	167771
6	80766	2914	2029	383	86092
7	41689	591	315	112	42707
8	22070	198	62	245	22575
9	8376	63	17	68	8524
10	5093	36	16	297	5442

Table 1 - Residential Properties in Adelaide by dwelling type and number of rooms

Home Units are generally strata titled but definitely capable of individual ownership. This would include residential flat buildings converted to individually owned units through strata titling. Multiple flat buildings have multiple dwellings but under single ownership. Number of rooms is the number of main rooms in the dwelling. Typically a 5-roomed detached or semi-detached house will have three bedrooms, living area and kitchen-dining area. Home units with 4 main rooms are almost always 2 bedrooms. The number of rooms recorded for multiple flat buildings is unfortunately inconsistent. In some cases the number refers to the total of number of rooms in the multiple dwelling rather than the number in each flat.

Rooms	Landuse			
	Detached House	Semi Detached House	Home Unit	Multiple Flats Building
1	**0.0%**	**0.0%**	**0.1%**	**0.7%**
2	**0.1%**	**0.1%**	**1.1%**	**28.6%**
3	**0.5%**	**2.6%**	**17.9%**	**14.7%**
4	**6.9%**	**27.2%**	**56.7%**	**18.9%**
5	**43.7%**	**56.4%**	**19.6%**	**9.5%**
6	**25.0%**	**10.5%**	**3.9%**	**9.5%**
7	**12.9%**	**2.1%**	**0.6%**	**2.8%**
8	**6.8%**	**0.7%**	**0.1%**	**6.1%**
9	**2.6%**	**0.2%**	**0.0%**	**1.7%**
10	**1.6%**	**0.1%**	**0.0%**	**7.4%**
Percentage of Total Residential	**79.4%**	**6.8%**	**12.8%**	**1.0%**

Table 2 - Percentage of dwellings in Adelaide by land use and number of main rooms.

The data from table 1 was converted to percentage terms in table 2. Several factors are immediately identified to assist in stratification. Nearly 80% of dwellings are detached houses with a clear split at the 5-room mark. Almost exactly half of the houses have 5 rooms or less. Semi-detached houses are usually small and make up 6.7 percent of the housing. Home units account for 12.8 percent of the dwellings with just over 55% of these being 4 rooms. There are a very small number of multiple flat buildings. They represent only one percent of the dwellings and with the problem of identifying the number of rooms it was decided that further analysis would be fruitless. At this point it was decided to analysis houses and semi-detached houses together but that a possible division between houses up to 5 rooms and over five rooms would be sensible. Home units appeared to fit into three clearly identifiable groups. The predominant 4 room units, and those with more or less than 4 rooms.

Further division of the housing stock was based on the date of construction. Properties built prior to 1900 were bundled together and then 20 year time periods established for the others. Properties were then allocated into the appropriate classification type and the frequencies calculated. Figure 1 is a bar chart of the frequencies of the different dwelling types. It indicates the vast number of houses built since the Second World War. It is also evident that most houses built prior to prior to 1980 were smaller, with newer homes being mainly larger. This is a significant reason for the choice of a constant quality price index compared to a basic median price index. Over the last twenty years (This includes the 18 years of the index) new housing stock is considerably larger than the existing housing stock. On average the housing stock is getting larger. Since living space is usually the primary factor in price variations it is reasonable to expect that a mean or median price index will increase simply because on average the housing stock is getting larger.

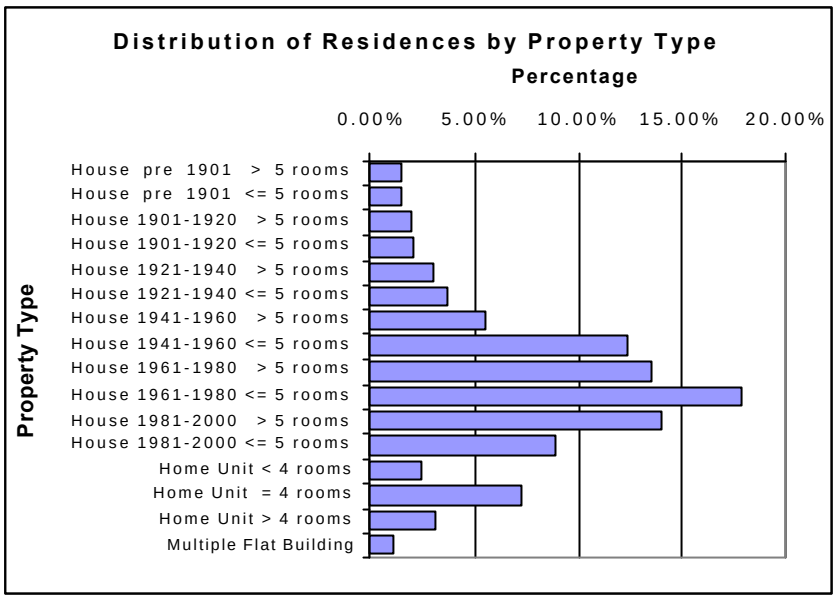
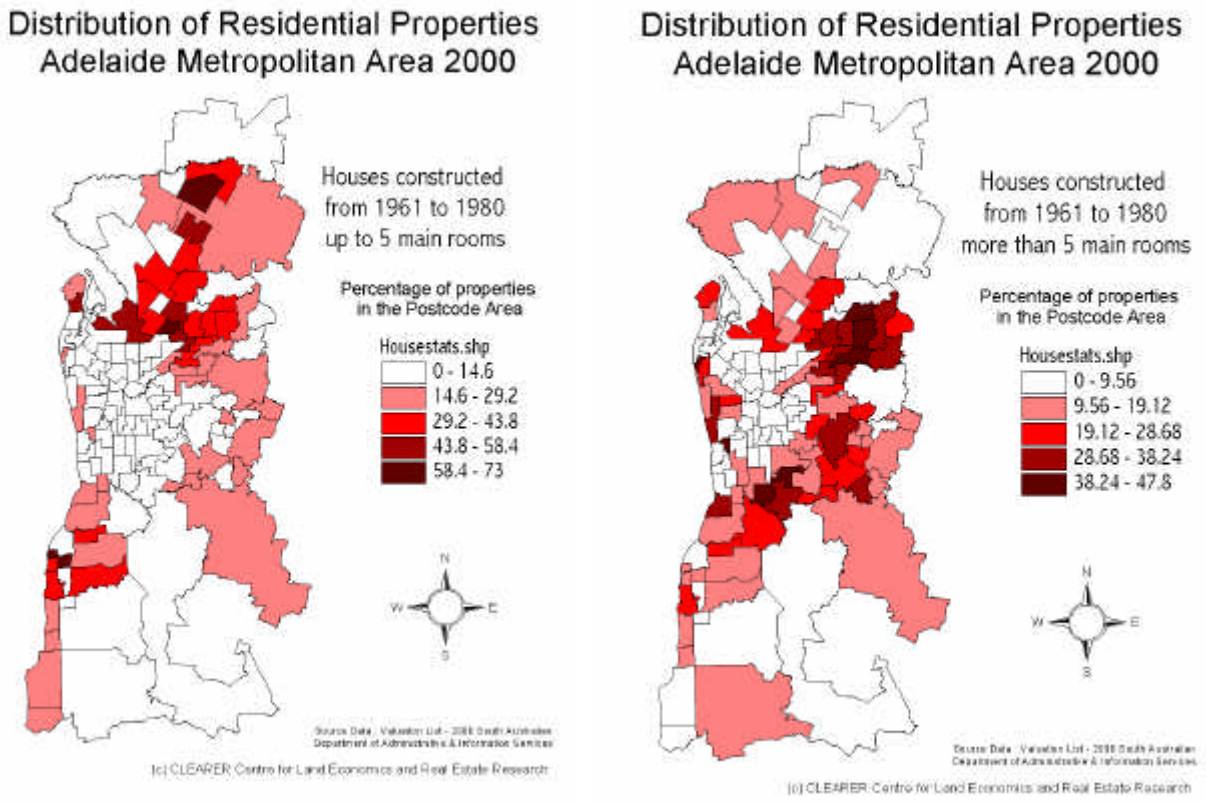


Figure 1 - Distribution of properties by property type.

The percentage of each dwelling characteristics was mapped at postcode level. Two examples are shown as Figure 2. These show the spatial distribution of properties built from 1961 to 1980. They show that most of the development during this period was in key outer parts of the city. Interestingly there is a large difference between the percentages of large and small homes in most locations. Several postcodes that have a high percentage of smaller houses built during the period have a low percentage of larger housing and visa versa.

Figure 2 - Distribution of housing in Adelaide built from 1961 to 1980



The percentage of each dwellings type in each postcode, together with other housing and housing economic data per plotted in a similar manner. This included housing densities, median prices and median rentals. The purpose was to establish a spatial data set to enable an effective decision about spatial stratification. Statistical methods such as hierarchical clustering were attempted in order to find suitable "groups" of postcodes that might form reasonably homogenous regions. This analysis proved unsuccessful and it was decided to use the spatial mapping to make subjective judgments about regions. These regions were to be defined as groups of postcodes that were contiguous and where housing as reasonably similar. Consideration was also given to the topography of each location, in particular the coastline and the elevated Adelaide Hills. Ten regions were chosen. These were a central region including the CBD, coastal and hills regions, northern and southern regions and a ring of 5 regions around the center. These regions are shown on Figure 3. The aim was to produce indices for each region, broken up by the major dwelling types and then further into low cost, typical cost and high cost. This last stratification became problematic. Low and high cost would normally be defined in terms of price. Possibilities are the lowest and highest quartiles. However as prices change over time this stratification would have to change with the index. Thus for each time period the quartile ranges would change. It is probable that as these change, that individual properties may move between low and typical or high and typical price ranges. This problem of "rolling" price ranges is further compounded if it is calculated for each region and for each dwelling type. Since this solution seems unreasonably complex and difficult to apply on an ongoing basis, it was decided to use a simpler approach. Since the number of rooms could neatly divide houses and units, this was used as the final stratification. Houses and detached houses were broken down into the up to 5 rooms and greater than five rooms categories while units were separated as before around 4 rooms.

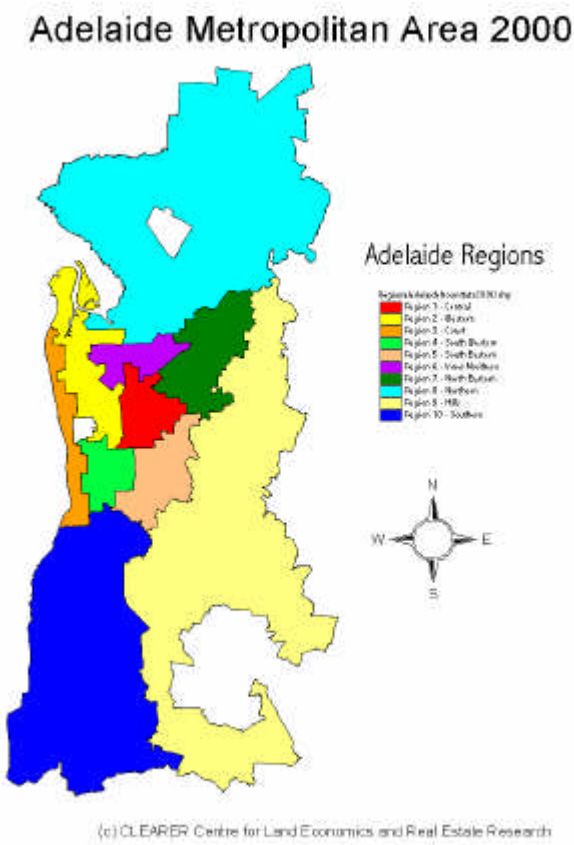


Figure 3 - Spatial Regions

Sales data was now collected and stratified on the basis outlined above. The source of data for the indices is the S.A. Sales History File. This is a record of all property transactions that occur and is created through linking data from the titles system and the valuation office. All transactions of residential properties that occurred from January 1,1984 to September 30, 2001 were extracted. Probable non-market transactions were excluded. This data set became the basis for all index work. Basic indices were calculated first using the mean and median prices for each quarter. The hedonic models were then estimated for each stratum of the data. The models were specified as

$$Y^* = \beta_0 + \beta_1 d_1 .... \beta_n d_3 + \gamma_1 X_1 .... \gamma_3 X_n$$

Where Y^* = natural log of the observed transaction price

β_0 = a constant

d_1 = dummy variable for quarter 1

d_n = dummy variable for quarter n

β_1 = price index for quarter 1

β_n = price index for quarter n

X_1 = 1st physical attribute variable

X_n = nth physical attribute variable

γ_1 = price index for physical attribute 1

γ_n = price index for physical attribute n

The physical attributes used in these models were; land area, building area, condition code and a series of dummy variables for building style, wall cladding and roof cladding.

For each index the base quarter is the first quarter in 1993. This period is chosen because it represents a point at which there is a change in the method for holding data. It is also very conveniently in the middle of the time period.

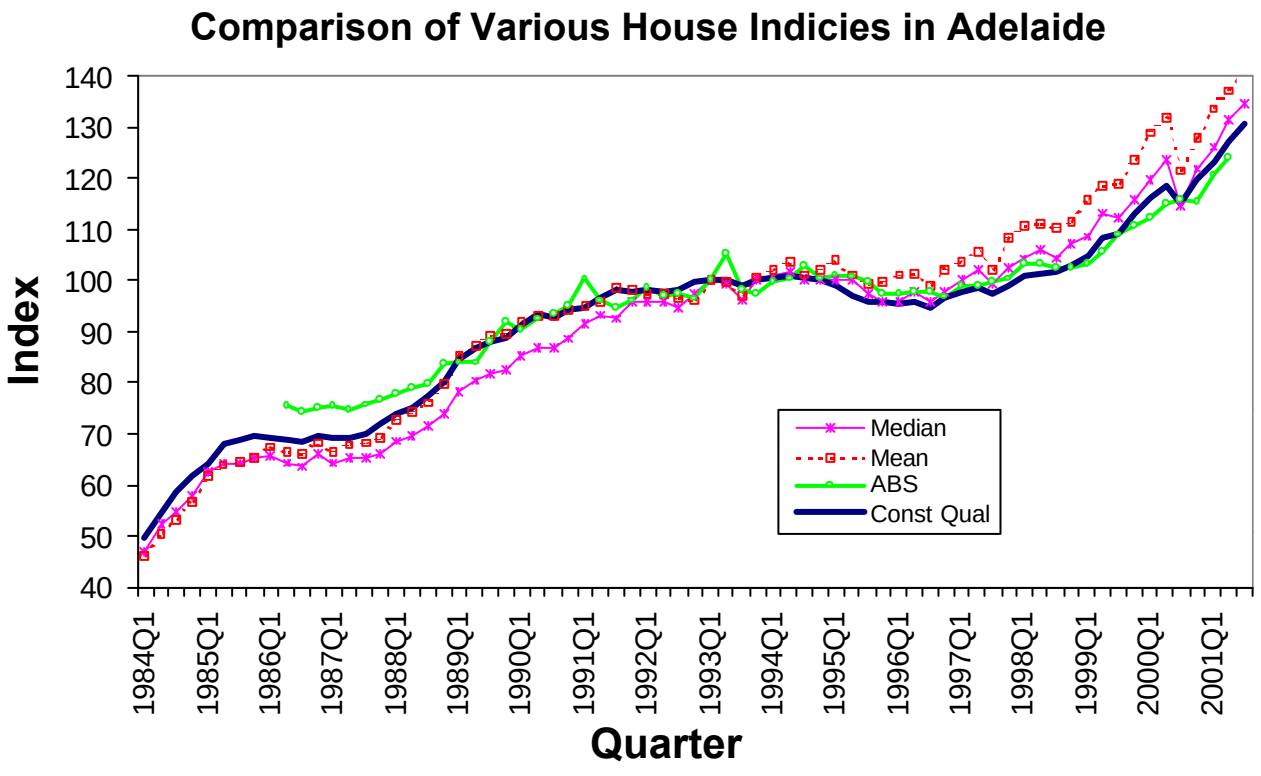
The creation of the index allows for easy assessment of seasonality, trend and cycles. For this paper seasonal factors are estimated using the ratio to moving average method that is frequently used in classical time series decomposition. This is a straightforward procedure discussed in most business statistics, forecasting and econometric texts (for example Mendenhall & Sincich, 1996, Hanke & Reitsch, 1998, Wilson & Keating, 1999). The disadvantage with this method is the lack of statistical testing. A more robust method is to use a series of seasonal dummy variables in a linear regression. However this procedure is consider unnecessary for this paper. Trend and cycle should be obvious from an inspection of a time series chart of the index. Regression could be used in order to estimate growth rates, however since the data is already in a smoothed index form, the indices can be used to estimate the annual growth as a simple compounding percentage. The comparison procedure for this paper will be to compare directly season factors and growth rates and to search for similar cyclical patterns in the index charts.

Results

The calculated indices are shown in appendix 1 to appendix 7. Each appendix has the regional indices for one property type (e.g. all houses, houses of 5 rooms or less) In each case the index is presented for each region with the seasonal factors and annual growth rates at the bottom of the page. Summaries of these are presented in this section for discussion. Appendix 8 contains a comparison of the indices for house prices. Four indices are presented, the constant quality index, mean and median price index and the index for established house prices in Adelaide obtained from the Australian Bureau of Statistics. These indices are plotted in Figure 4. These results demonstrate the need for the quality adjustment of the index. Both the median and mean price indices tend to over estimate growth in house prices (6.64% p.a. and 6.66% p.a. respectively) compared to the constant quality index (5.71%). This is most likely due to the general increase in house size (quality) over the index period. All three indices show similar cycles. There is a noticeable drop in each index in the third quarter of 2000. This coincides with the introduction of the goods and services tax.

There is an interesting difference in the ABS figures. While they track the constant quality index closely over from 1989 onwards, there is considerable variation during the period from 1986 to 1989. The reason for this is unknown but requires investigation. This results in the very low estimate for long-term annual growth of just 3.35%. The ABS index is also considerably “lumpy”.

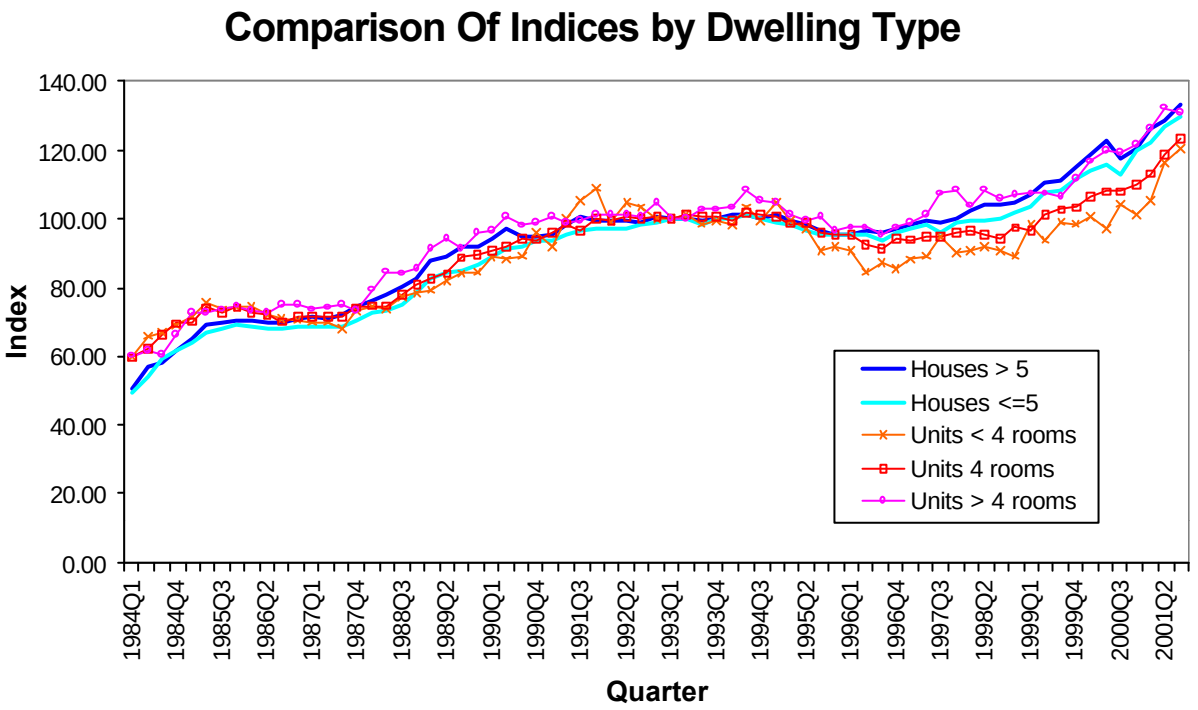
Figure 4 - Comparison of Various House Indices for Adelaide



Examination of the season indices (Appendix 8) shows some differences. An index of 1 indicates no seasonality. A value of .95 indicates that the seasonal affect on prices would be 95% of the "on average" figure. The values for the constant quality index suggest no real seasonality while the mean and median index suggest some influence with about 1% lower prices in quarter three which would correspond to the winter period. If there were a "down period" in prices it would be expected to be during winter. The ABS index suggests a highly seasonal result with prices in autumn (quarter 2) being over 10% higher than those in spring (quarter 4). This result is against expectations and is inconsistent with the findings by Rossini (2000) and Costello (2001) who found little or no seasonal influence on residential property prices. It is unclear why the ABS index gives results at such variance to other work.

A comparison of the indices by dwelling type is shown in Figure 5. The chart shows that houses with more than 5 rooms slightly out perform houses with 5 rooms or less, however the difference is minimal and both indices follow the same trend. This chart indicates a deficiency in the home unit indices. While the index for home units with 4 rooms is quite stable, those for units with more or less than 4 rooms tend to be erratic. This is typical of a situation where the number of observation used to create the index is insufficient. While the cycle and trend are clear this variation is likely to affect the seasonal figures and suggests that the creation of the index for these properties is not viable. Not withstanding this the trend and cycle pattern does show some points of interest. The pattern for larger home units follows those for houses while the index for the other units seems to follow a different path. All five indices follow roughly the same cycle but clearly the long-term growth for smaller units is lower than for houses and larger home units. This variation in growth rate is indicated in Table 3.

Figure 5 - Comparison of indices by dwelling type



Examination of Table 3 reveals that long-term annual growth rates vary considerably across the regions and across dwelling types. For all dwelling types the central region (region 1) has the highest average annual growth rate. This is followed by the coastal region (region 3). The northern (region 8) and the southern (region 10) regions have the lowest average annual growth rates. The circle of inner regions (regions 2, 4,5,6 & 7) and the Hills (region 9) have similar growth rates in the middle ranges. In all regions the rates for houses are higher than for home units. The pattern of growth rates across the regions is consistent with a trend for purchasers preferring inner city living to outer suburban living.

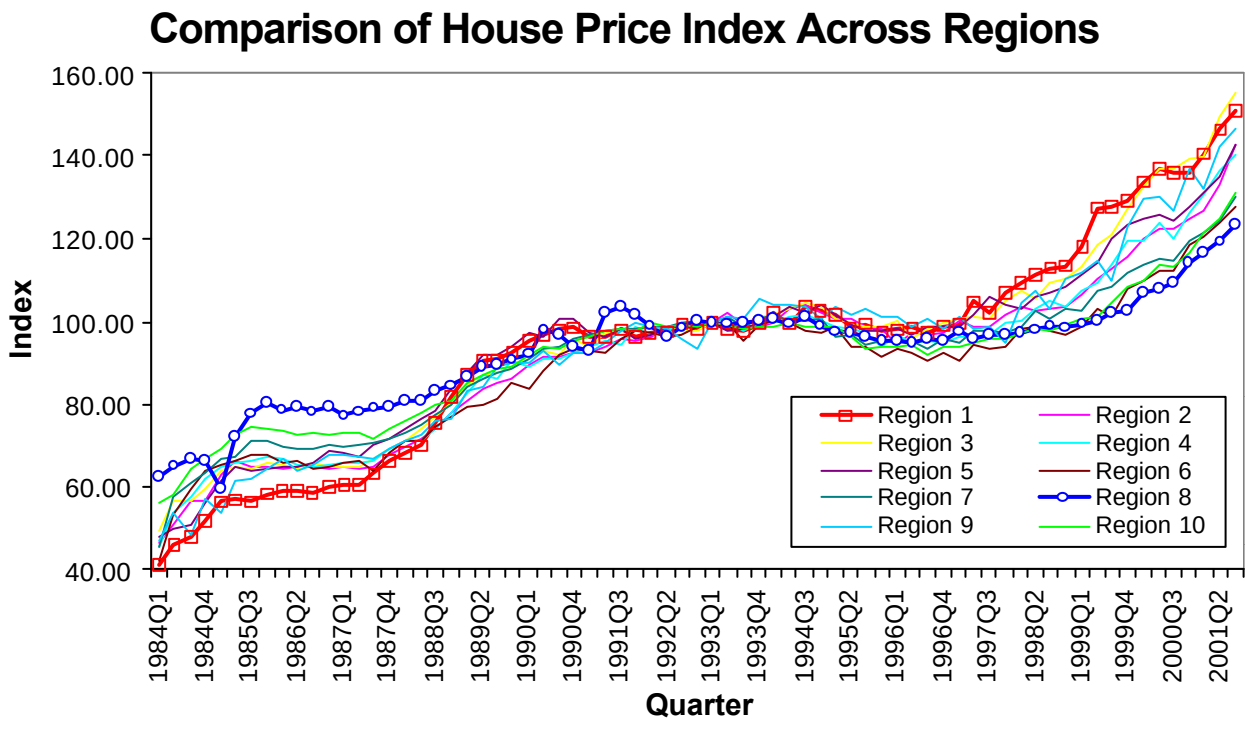
Examination of the seasonal indices for each region and each dwelling type (refer to Appendix 1 to 7) show that all indices are very close to 1. The seasonal indices for large and small home units are the most variable, but there is no consistent pattern and the small variations in these indices are likely to be due to the significantly, smaller sample size that was used for their creation. Since there is no consistent pattern to the figures and all of figures are close to 1 it is only reasonable to conclude that residential property prices are not affected by seasonal variation.

Table 3 - Average annual compounding growth rates for various dwelling types by region

Dwelling Type	Metro	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10
Houses 5 rooms or less	**5.68%**	8.12%	6.70%	7.14%	6.10%	6.55%	6.64%	6.10%	3.88%	5.52%	4.89%
Houses 6 rooms or more	**5.70%**	7.23%	6.52%	6.35%	5.45%	6.66%	5.77%	4.15%	4.33%	5.98%	5.18%
All Houses	**5.71%**	7.72%	6.67%	6.81%	6.62%	6.46%	6.58%	6.20%	3.99%	6.72%	4.97%
Units < 4 rooms	**4.08%**	5.61%	3.49%	4.46%	3.67%	N/A	2.30%	3.61%	2.44%	N/A	3.71%
Units 4 rooms	**4.25%**	4.93%	4.36%	4.81%	4.37%	4.27%	3.44%	4.35%	3.12%	N/A	3.31%
Units > 4 rooms	**4.52%**	6.16%	5.00%	5.35%	4.36%	4.51%	3.41%	4.26%	3.40%	N/A	3.19%
All Units	**4.36%**	5.22%	4.83%	4.83%	3.93%	4.20%	4.07%	4.18%	3.25%	N/A	3.33%

The chart in Figure 5 showed that across the dwelling types, that the cycles in the property market were remarkably consistent. Figure 6 shows a similar comparison across regions for all houses. Generally the same cyclical pattern is also evident. However examination of the two most extreme regions, central (region 1) and northern (region 8) shows that while the cycle is of roughly the same periodicity, that the amplitude of the cycle for the central region is significantly greater. This greater amplitude leads to the higher overall growth rate.

Figure 6 - Comparison of house price indices by region



In simple terms this means that while the market is stable (for example between 1990 and 1995) that all properties are moving approximately together. When the market moves into an expansion phase (around 1997) all sub-markets expand, however the rate of expansion is greatest in the central region and lowest in the northern region. This will result in greater long-term growth, as each expansion phase will result in a widening of the gap between prices in the central and northern regions. So while the timing of the cycles is similar the result of the cyclical movement is considerably different. A similar situation occurs with other dwelling types.

Conclusions

This paper leads to several conclusions about index creation and stratification as well as some conclusions about the residential property market in Adelaide.

The research further supports the use of residential price indices that allow for quality adjustment and supports the use of the ratio to moving average method to estimate seasonal indices. By creating indices with different strata, it is clear that stratification can produce more meaningful results and that there are significant differences in the long-term growth of residential property prices across regions and dwelling types.

In terms of the residential property market in Adelaide

- Property prices do not seem to have any significant seasonal variation
- Residential property prices appear to be cyclical with these cycles being quite consistent across different dwelling types and regions. The periodicity and movement points are similar but the amplitude of the cycles vary.
- Growth rates vary considerably across the residential market in Adelaide. Houses and larger home units have similar growth rates but most home units and particularly smaller home units show lower long-term growth. This pattern is typical across all regions.
- Residential properties in Adelaide's northern and southern regions have shown significantly lower long-term growth than the rest of the city. The best-performed residential markets are in the central and coastal regions.

In terms of future index creation the following recommendations are made in respect of Adelaide residential price indices.

- Stratification by region and dwelling type is essential if the indices are to be used at a local level.
- The regional stratification used in the paper would appear to be sound, however the northern and southern regions should be reconsidered since they are the two largest regions and show significantly different results to the rest of Adelaide. It may be sensible to further divide these regions to account for large areas of new development within much older housing stock.
- An alternate strategy would be to create a new index based on semi-detached houses since these make up a large proportion of the houses in the northern and southern regions and this may be one reason for the lower over all growth in these regions.
- While the trends in larger home unit prices seem to vary from other home unit prices, there is not sufficient data to properly estimate the index for large and small units. It is recommended that only one home unit index be produced.

It is hoped that this paper will assist in the development of these prices indices for release to the community via the World Wide Web.

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Appendix 1 - Adelaide Metropolitan Price Index – All Houses

Period	Metro	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10
1984Q1	49.48	41.07	46.16	49.01	45.53	47.70	41.87	45.39	62.13	46.97	56.01
1984Q2	54.71	45.73	50.89	56.30	53.46	49.42	53.12	57.64	64.91	53.67	58.07
1984Q3	58.70	47.52	56.38	56.26	57.69	50.69	59.28	60.75	66.62	48.22	64.44
1984Q4	61.68	51.68	56.34	59.55	61.80	55.95	63.59	63.28	66.25	56.83	66.74
1985Q1	64.39	56.11	62.55	63.65	64.75	61.06	65.41	66.53	59.51	53.80	68.86
1985Q2	67.69	56.62	66.35	65.03	65.95	64.84	66.44	67.36	72.16	61.27	72.41
1985Q3	68.86	56.24	64.93	64.30	66.15	63.50	67.47	70.60	77.38	61.52	74.57
1985Q4	69.62	58.05	65.09	65.59	67.03	63.91	67.48	71.34	80.36	64.64	73.97
1986Q1	69.14	59.20	64.08	65.47	66.88	65.01	65.89	69.22	78.41	66.81	73.58
1986Q2	68.79	58.89	65.05	64.29	65.48	64.95	66.44	69.13	79.55	63.61	72.65
1986Q3	68.61	58.63	64.98	65.90	64.91	65.87	64.45	69.04	78.03	65.25	73.08
1986Q4	69.53	60.11	64.16	64.73	65.45	68.39	65.06	69.84	79.20	67.71	72.79
1987Q1	69.46	60.15	64.69	64.72	65.65	68.06	65.75	69.21	77.24	67.51	72.93
1987Q2	69.35	60.25	64.17	64.70	65.83	67.10	66.08	69.91	78.04	67.27	72.88
1987Q3	70.01	63.16	65.04	66.51	66.36	69.99	63.57	70.48	79.08	66.51	71.85
1987Q4	71.89	66.41	67.51	68.83	69.14	71.49	68.03	71.55	79.51	68.90	74.08
1988Q1	73.84	67.94	69.64	71.47	70.69	74.19	70.60	72.90	80.86	70.80	75.63
1988Q2	75.08	69.81	71.71	74.05	70.77	76.13	70.90	74.72	80.62	72.77	77.56
1988Q3	77.38	75.52	74.10	76.78	73.80	78.39	74.25	77.03	83.14	75.68	79.85
1988Q4	80.11	81.44	77.59	80.17	77.46	83.36	76.72	79.95	84.34	76.08	80.87
1989Q1	84.75	87.15	80.70	84.48	82.76	87.52	79.32	83.88	86.81	83.09	85.25
1989Q2	86.62	90.25	83.66	87.26	86.88	91.76	79.67	86.41	88.88	83.83	87.27
1989Q3	87.89	90.91	85.07	87.47	86.05	92.22	81.19	87.54	89.29	88.83	88.68
1989Q4	88.61	92.58	86.16	88.64	90.16	93.85	85.22	88.28	90.71	89.77	88.90
1990Q1	91.16	95.28	89.49	91.48	88.96	97.23	83.33	90.53	92.22	89.97	91.77
1990Q2	93.71	96.41	90.98	93.07	90.59	96.04	88.22	93.52	98.17	92.82	93.96
1990Q3	92.97	97.85	91.31	91.77	90.79	100.51	91.68	93.85	96.83	89.36	93.49
1990Q4	94.46	98.63	92.34	95.70	92.52	100.46	93.32	95.80	93.90	92.31	95.31
1991Q1	94.59	96.26	92.52	94.08	93.73	97.07	93.14	96.55	92.85	92.62	96.09
1991Q2	96.81	96.05	93.85	97.12	95.21	96.35	92.70	97.46	102.04	94.64	97.34
1991Q3	98.21	97.91	95.92	97.63	94.41	98.16	95.68	98.18	103.62	97.51	97.94
1991Q4	97.97	96.15	95.37	97.72	98.98	95.52	97.38	97.96	101.69	99.70	97.71
1992Q1	98.12	97.25	96.03	98.21	96.44	96.66	97.19	98.20	98.93	98.50	99.55
1992Q2	98.02	97.37	98.97	98.46	97.49	98.96	95.97	98.41	96.01	97.82	98.31
1992Q3	98.38	99.18	99.47	97.72	99.58	98.55	96.49	99.68	98.52	95.86	99.21
1992Q4	99.77	97.87	99.18	97.43	99.69	98.59	98.25	100.11	100.24	93.55	98.69
1993Q1	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1993Q2	99.98	97.87	101.93	99.73	99.80	97.61	99.93	100.93	99.29	101.21	99.30
1993Q3	98.86	97.37	99.46	99.48	97.68	97.82	95.12	98.96	99.90	100.62	97.96
1993Q4	99.99	99.51	99.05	101.15	99.71	99.70	99.29	100.84	100.17	105.34	98.66
1994Q1	100.35	101.89	99.97	101.50	99.84	101.33	100.01	101.45	100.84	103.86	99.07
1994Q2	100.90	99.41	102.87	102.92	101.11	103.35	99.68	100.29	99.38	103.66	99.83
1994Q3	100.23	103.25	103.77	104.28	101.66	102.26	97.71	100.18	100.93	103.38	99.08
1994Q4	100.06	102.31	102.01	103.33	100.23	103.64	97.04	100.66	98.64	100.58	98.83
1995Q1	98.92	101.36	100.65	100.86	98.94	101.52	98.31	96.05	97.39	103.42	98.31
1995Q2	97.19	98.64	100.78	99.62	97.76	99.15	93.89	96.59	97.25	101.51	95.96
1995Q3	95.86	99.49	98.71	98.61	97.28	97.51	93.86	94.45	96.34	103.06	93.25
1995Q4	95.77	97.53	97.92	98.98	94.03	97.51	90.98	95.16	95.29	101.02	93.71
1996Q1	95.27	97.87	94.13	100.02	96.70	98.01	93.30	95.03	95.16	101.27	94.01
1996Q2	95.62	98.61	96.89	95.83	94.82	96.64	92.31	95.16	94.99	98.56	94.14
1996Q3	94.78	97.16	96.49	97.84	95.16	98.71	90.22	93.61	95.66	100.73	91.87
1996Q4	96.41	98.79	97.23	99.60	94.61	98.82	92.51	95.66	95.37	97.98	93.79
1997Q1	97.77	99.40	100.02	100.58	95.94	98.87	90.44	94.79	97.52	101.29	94.01
1997Q2	98.52	104.77	98.97	100.97	96.09	101.72	94.38	97.45	95.69	97.95	94.92
1997Q3	97.37	102.00	98.94	100.75	96.52	105.97	93.51	97.68	96.82	98.89	95.76
1997Q4	99.09	107.22	101.72	104.59	99.85	103.64	93.86	96.96	96.81	94.72	95.63
1998Q1	100.75	109.28	103.20	107.57	100.16	102.87	98.03	98.79	96.99	104.31	96.99
1998Q2	101.52	111.14	102.58	105.08	102.82	105.96	98.40	102.59	98.07	107.42	97.87
1998Q3	101.63	113.06	103.07	109.12	104.75	106.82	97.51	100.82	98.70	102.80	97.47
1998Q4	102.96	113.20	103.59	110.03	103.41	108.36	96.55	103.02	98.25	110.30	99.38
1999Q1	104.72	117.76	106.71	113.24	107.49	111.26	98.54	102.67	99.44	111.59	100.83
1999Q2	108.39	127.48	110.07	118.24	109.22	114.42	103.06	107.38	100.39	114.50	101.17
1999Q3	108.85	127.93	112.61	120.90	113.77	120.07	101.28	108.39	102.15	109.58	104.35
1999Q4	112.94	129.25	115.79	127.57	119.49	123.48	108.12	111.66	102.70	123.09	108.21
2000Q1	116.23	133.61	120.10	132.19	119.18	124.47	109.85	113.75	106.83	129.65	109.83
2000Q2	118.61	137.10	122.54	136.75	123.61	125.47	111.80	115.04	107.97	129.95	113.60
2000Q3	114.85	135.85	122.58	136.94	120.30	124.17	111.84	114.74	109.07	127.08	113.26
2000Q4	119.79	136.16	124.65	139.05	126.05	127.87	118.53	119.76	114.32	136.93	116.60
2001Q1	123.22	140.50	127.05	139.46	130.57	131.12	120.78	121.36	116.37	131.87	121.66
2001Q2	127.28	146.22	132.65	149.51	136.60	135.24	123.58	124.33	119.16	142.41	124.71
2001Q3	130.79	150.80	142.84	155.27	139.89	142.78	127.66	130.07	123.32	146.54	130.81
						Seasonal Factors					
Q1	**1.002**	1.004	0.999	1.003	1.002	1.001	1.004	0.998	0.990	1.006	1.003
Q2	**1.004**	1.001	1.007	1.000	1.001	0.999	1.002	1.003	1.003	1.004	1.003
Q3	**0.994**	0.997	0.998	0.996	0.994	1.000	0.990	0.997	1.006	0.991	0.996
Q4	**1.000**	0.998	0.996	1.001	1.002	1.000	1.003	1.003	1.001	0.999	0.998
Growth over 70 Quarters	**164.35%**	267.19%	209.47%	216.82%	207.26%	199.31%	204.92%	186.59%	98.48%	211.97%	133.53%
Ave Annual Growth	**5.71%**	7.72%	6.67%	6.81%	6.62%	6.46%	6.58%	6.20%	3.99%	6.72%	4.97%
No of Obs	**264518**	29204	27763	21536	18308	17831	12492	37481	47454	5862	46578
R Squared	**0.660**	0.793	0.750	0.752	0.774	0.741	0.758	0.734	0.706	0.749	0.717

Appendix 2 - Adelaide Metropolitan Price Index - Houses 5 rooms or less

Period	Metro	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10
1984Q1	49.26	39.04	46.25	45.40	50.02	48.62	41.64	46.97	62.11		57.45
1984Q2	53.67	43.37	50.64	55.92	53.45	46.43	54.52	54.86	64.39	53.45	58.20
1984Q3	59.15	46.58	56.30	55.91	58.71	49.52	60.71	61.73	68.57	50.75	65.96
1984Q4	61.76	51.88	56.59	57.87	62.62	53.98	63.72	64.90	66.72	59.98	69.03
1985Q1	63.86	53.98	63.18	62.01	65.00	59.19	66.11	65.83	59.60	48.34	71.04
1985Q2	66.95	54.58	66.54	63.51	66.27	61.76	67.69	66.95	71.83	62.13	73.84
1985Q3	68.15	54.70	64.61	63.43	65.91	61.10	68.00	69.47	77.39	52.82	75.71
1985Q4	69.05	57.33	65.38	64.41	68.14	62.55	68.01	69.86	79.69	61.27	75.21
1986Q1	68.40	56.25	63.95	63.08	66.50	64.57	66.67	69.70	77.74	65.82	74.28
1986Q2	68.13	57.06	65.03	62.15	66.18	60.72	66.59	68.05	79.75	62.55	74.30
1986Q3	67.82	56.89	64.87	62.40	65.99	63.12	65.38	68.24	77.83	62.77	74.32
1986Q4	68.54	57.29	64.29	61.86	64.71	65.61	65.54	68.21	79.87	67.64	74.15
1987Q1	68.26	57.00	64.70	62.89	65.12	63.77	65.81	68.97	77.22	66.92	73.20
1987Q2	68.25	57.07	63.91	62.69	65.35	64.42	67.37	68.77	78.08	65.54	74.03
1987Q3	68.69	60.18	64.29	64.37	66.16	66.99	63.75	69.57	78.87	60.72	72.84
1987Q4	70.54	62.83	67.32	66.80	68.91	67.60	68.99	71.00	78.98	64.89	74.80
1988Q1	72.34	64.32	69.50	69.78	70.69	70.53	71.11	71.68	79.99	66.92	75.71
1988Q2	73.36	66.65	71.22	70.39	71.31	73.05	71.63	73.36	80.20	68.51	77.25
1988Q3	75.30	70.12	73.57	72.87	73.48	74.61	73.94	75.95	82.44	70.20	79.79
1988Q4	78.35	76.53	77.47	78.15	77.83	80.17	78.68	79.45	83.68	72.59	79.91
1989Q1	82.65	83.09	80.55	80.36	81.50	81.93	80.14	82.58	86.05	77.25	85.71
1989Q2	84.64	86.34	84.38	83.09	87.89	88.46	79.91	85.32	87.68	81.45	86.80
1989Q3	84.99	84.81	84.64	84.81	85.65	86.97	81.08	86.44	87.50	84.24	87.94
1989Q4	86.61	87.66	85.82	84.13	89.82	89.59	84.96	86.82	90.63	85.64	90.10
1990Q1	88.89	91.10	90.13	88.91	88.14	90.16	85.32	87.69	91.66	85.21	91.13
1990Q2	91.45	94.59	90.88	88.42	90.21	91.70	89.25	92.51	95.77	87.13	93.40
1990Q3	91.72	93.37	91.51	90.05	90.60	91.82	93.29	91.96	97.14	85.63	93.72
1990Q4	93.87	94.06	92.97	93.41	93.13	94.29	93.63	95.13	96.11	90.95	95.28
1991Q1	93.56	91.62	92.27	91.48	93.18	92.75	94.30	96.65	95.59	88.44	96.72
1991Q2	95.43	93.81	94.22	93.44	95.58	97.55	93.94	96.66	100.77	89.69	96.64
1991Q3	96.58	95.08	95.15	94.86	94.65	98.08	96.44	97.06	102.16	95.75	97.56
1991Q4	96.91	91.77	95.23	95.88	98.41	94.72	97.83	98.06	101.00	98.53	97.36
1992Q1	97.00	96.00	95.90	95.75	96.68	94.37	97.13	97.18	98.33	92.97	99.66
1992Q2	96.89	95.14	97.51	96.30	98.52	97.60	97.21	97.08	96.04	95.18	98.37
1992Q3	97.88	97.43	99.60	95.65	100.45	101.39	97.14	97.64	97.67	91.17	99.20
1992Q4	99.17	97.76	100.21	98.26	102.05	102.41	98.94	99.23	97.34	90.27	97.88
1993Q1	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1993Q2	99.96	98.30	102.37	98.67	100.32	99.34	100.54	100.22	98.69	98.58	100.14
1993Q3	98.60	98.34	99.56	97.92	98.03	97.64	94.94	99.12	98.37	99.79	98.63
1993Q4	100.03	99.24	99.20	100.99	100.32	97.47	98.37	100.19	100.27	103.65	98.68
1994Q1	100.05	102.16	100.34	101.30	101.49	99.57	102.81	101.62	99.70	102.77	99.37
1994Q2	100.93	99.21	102.76	102.52	102.64	103.92	100.16	99.23	98.66	100.24	100.81
1994Q3	100.18	102.92	104.22	101.71	101.56	100.02	97.65	100.47	100.59	103.43	99.18
1994Q4	99.16	101.59	100.81	102.92	100.99	102.22	96.98	99.59	98.13	99.05	98.21
1995Q1	98.51	98.54	100.00	99.76	99.40	99.76	98.52	97.20	96.33	96.24	97.53
1995Q2	96.61	94.69	99.59	98.13	97.89	97.24	94.72	97.31	96.16	101.70	94.93
1995Q3	95.27	98.57	98.67	96.40	97.36	95.08	94.00	93.40	95.46	99.13	93.09
1995Q4	95.41	96.88	96.79	98.40	94.89	95.30	91.19	94.72	94.76	100.43	94.16
1996Q1	95.17	96.18	92.63	98.92	97.13	96.55	94.70	94.78	93.58	101.10	93.83
1996Q2	95.29	97.15	96.63	95.52	94.58	95.42	92.61	94.35	93.47	95.09	93.37
1996Q3	93.87	97.60	94.94	96.63	94.85	96.62	90.56	91.90	93.85	97.55	91.74
1996Q4	96.16	95.32	97.90	95.81	95.52	96.72	92.92	94.34	95.08	92.69	94.65
1997Q1	96.94	96.13	99.48	98.01	95.86	95.64	90.59	93.94	96.74	98.49	94.07
1997Q2	98.03	103.04	97.84	100.57	96.98	98.17	93.74	98.20	94.05	93.74	94.33
1997Q3	95.81	100.15	97.53	97.56	97.68	99.60	92.57	97.18	95.02	92.81	94.87
1997Q4	98.85	109.17	101.18	102.62	100.41	101.44	92.21	97.34	95.58	88.26	94.45
1998Q1	99.67	106.36	103.35	106.41	99.35	102.02	97.65	97.24	94.94	98.51	95.65
1998Q2	99.47	109.70	100.78	101.21	104.75	105.69	96.48	100.91	93.63	105.14	97.85
1998Q3	100.18	109.87	102.31	105.21	104.77	107.43	96.37	99.04	96.06	99.34	97.05
1998Q4	101.60	114.05	100.88	111.31	103.47	103.89	94.84	102.87	94.57	107.12	98.94
1999Q1	103.13	115.72	105.65	107.84	110.04	111.97	98.51	102.01	96.49	107.40	99.65
1999Q2	107.13	126.17	109.54	118.04	108.82	113.23	103.27	106.57	97.65	112.22	101.28
1999Q3	107.70	129.52	112.12	119.34	114.01	119.15	100.74	109.32	99.52	103.87	103.52
1999Q4	111.27	127.22	114.37	130.12	119.40	122.08	106.18	110.18	98.94	115.12	107.25
2000Q1	114.20	131.89	118.83	128.04	118.78	123.34	109.22	113.38	103.96	125.94	109.77
2000Q2	115.67	133.13	120.86	134.46	125.07	123.69	112.00	114.56	103.65	124.75	112.61
2000Q3	113.06	131.31	121.18	136.57	121.76	119.27	111.46	114.38	105.93	127.23	113.33
2000Q4	119.74	137.43	123.12	139.89	127.96	130.61	118.86	120.51	112.91	132.68	117.45
2001Q1	121.59	135.71	127.14	132.72	131.89	131.31	119.29	121.21	114.56	125.86	121.97
2001Q2	126.66	146.11	133.28	153.95	139.30	141.67	124.45	125.50	115.03	140.92	125.35
2001Q3	129.46	153.05	143.77	151.72	140.87	147.53	128.37	132.33	120.92	134.94	132.45
						Seasonal Factors					
Q1	**1.002**	0.998	1.000	1.000	0.999	0.998	1.007	0.999	0.992	1.002	1.002
Q2	**1.003**	1.002	1.006	0.998	1.004	1.003	1.005	1.003	1.000	1.012	1.003
Q3	**0.993**	0.998	0.997	0.993	0.993	0.996	0.988	0.995	1.004	0.983	0.997
Q4	**1.002**	1.002	0.997	1.009	1.004	1.002	1.001	1.003	1.004	1.003	0.998
Growth over 70 Quarters	**162.83%**	292.06%	210.89%	234.20%	181.63%	203.45%	208.28%	181.74%	94.70%	152.45%	130.54%
Ave Annual Growth	**5.68%**	8.12%	6.70%	7.14%	6.10%	6.55%	6.64%	6.10%	3.88%	5.52%	4.89%
No of Obs	**150403**	14657	19681	10088	11983	6028	9131	20239	29019	3121	26447
R Squared	**0.537**	0.724	0.708	0.715	0.718	0.703	0.715	0.637	0.544	0.665	0.631

Appendix 3 - Adelaide Metropolitan Price Index - Houses 6 rooms or more

Period	Metro	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10
1984Q1	50.43	44.23	46.87	54.05		45.66	48.42		60.46		53.58
1984Q2	57.06	49.32	51.81	56.78	55.97	52.84	47.03	63.33	64.27		57.99
1984Q3	57.87	48.59	57.37	56.80	56.13	51.44	53.62	58.91	59.93		61.68
1984Q4	61.58	50.87	55.43	61.38	61.15	59.03	62.79	60.39	61.22		62.86
1985Q1	65.44	58.73	59.32	64.93	64.75	62.94	63.67	67.77	58.54	59.38	65.68
1985Q2	69.12	59.09	65.85	66.28	66.41	66.96	61.04	67.65	71.46	60.09	70.20
1985Q3	70.06	58.48	66.33	64.70	68.20	65.63	65.04	71.64	74.79	73.48	72.73
1985Q4	70.77	59.31	64.56	66.62	65.47	64.38	65.32	73.59	80.05	68.43	71.99
1986Q1	70.50	62.41	65.22	67.51	68.15	65.44	63.77	68.40	78.20	67.99	73.01
1986Q2	69.59	60.34	65.38	66.12	64.48	67.20	65.70	69.90	76.90	63.00	70.43
1986Q3	69.84	60.02	65.88	69.66	63.28	67.10	61.47	69.90	76.33	67.91	71.49
1986Q4	70.85	62.94	63.96	67.28	68.05	70.10	63.24	71.26	75.45	67.71	70.53
1987Q1	71.32	63.19	65.23	66.18	67.36	70.75	65.95	69.28	75.72	65.85	72.73
1987Q2	71.04	62.75	65.38	66.81	68.05	68.79	62.46	70.96	75.87	68.64	71.85
1987Q3	72.11	65.88	67.50	68.50	67.50	72.08	63.40	71.02	78.05	71.28	70.84
1987Q4	73.99	70.30	67.79	70.88	70.02	73.48	65.05	71.80	79.42	75.67	73.36
1988Q1	76.01	70.92	69.54	73.26	71.13	76.02	68.35	74.36	81.32	76.42	76.33
1988Q2	77.56	72.29	73.23	77.33	70.82	77.58	68.34	75.76	79.77	77.35	77.92
1988Q3	80.38	79.93	75.95	80.25	75.17	80.44	74.06	78.17	83.02	79.66	80.06
1988Q4	82.39	85.49	78.05	81.75	77.60	84.69	71.92	80.25	83.98	81.53	83.08
1989Q1	87.59	90.99	81.79	88.09	86.13	90.69	75.96	85.33	87.12	90.50	85.05
1989Q2	89.38	93.23	82.17	92.41	85.88	93.37	78.72	87.18	90.20	85.73	88.32
1989Q3	91.94	97.78	86.11	90.90	87.19	95.14	80.09	88.62	91.24	94.30	90.30
1989Q4	91.76	98.58	87.81	94.00	91.59	97.00	86.38	89.58	89.99	95.28	87.94
1990Q1	94.17	98.65	88.67	93.70	90.92	101.45	76.99	93.45	92.03	96.30	93.54
1990Q2	97.05	98.80	91.94	96.98	91.86	97.59	85.26	94.47	101.23	98.56	95.40
1990Q3	94.93	101.18	91.49	93.99	93.12	103.69	85.80	95.77	95.47	94.98	93.83
1990Q4	95.03	103.49	91.08	98.40	91.90	103.29	92.50	96.18	89.01	91.27	95.09
1991Q1	95.65	99.76	93.12	95.98	96.58	99.00	90.93	95.78	87.64	97.95	95.66
1991Q2	98.75	98.39	93.25	99.74	95.52	95.57	89.31	98.26	103.40	99.22	98.82
1991Q3	100.57	101.51	98.14	100.18	95.59	98.35	94.16	99.20	104.78	99.65	98.81
1991Q4	99.62	101.23	95.69	99.19	100.51	96.28	96.07	97.19	101.63	97.90	99.65
1992Q1	99.52	98.90	96.29	99.86	97.06	96.68	97.37	98.95	99.08	106.10	99.58
1992Q2	99.39	99.36	103.58	100.29	96.33	99.48	91.50	99.82	95.66	99.72	98.47
1992Q3	98.87	101.00	99.18	100.09	99.11	96.48	94.51	101.68	99.57	99.29	98.96
1992Q4	100.59	97.38	98.17	97.92	96.89	95.37	96.57	100.30	104.34	95.20	100.90
1993Q1	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1993Q2	100.24	97.39	101.59	101.22	99.50	96.79	98.22	101.00	99.91	102.00	98.63
1993Q3	99.66	97.07	99.62	101.51	98.68	97.98	96.26	98.45	101.77	100.08	97.42
1993Q4	100.30	100.36	99.65	101.58	100.12	100.48	100.61	101.15	99.65	106.89	98.66
1994Q1	101.12	102.34	99.88	102.62	97.71	102.00	91.68	101.03	102.09	104.71	99.08
1994Q2	101.14	100.35	103.84	103.22	100.29	102.91	98.42	101.61	100.24	106.80	98.87
1994Q3	100.22	102.84	102.87	105.65	102.79	103.59	97.02	99.80	101.26	102.56	99.41
1994Q4	101.34	103.14	105.14	103.37	100.57	105.01	97.63	101.41	99.34	101.07	99.86
1995Q1	99.58	105.17	103.41	102.08	98.97	102.22	96.77	94.91	98.89	111.22	99.08
1995Q2	97.96	104.02	104.58	100.89	97.91	99.41	92.80	95.37	98.64	100.55	97.03
1995Q3	96.67	100.89	99.37	101.02	98.84	98.68	92.80	94.83	97.36	105.43	93.61
1995Q4	95.64	96.87	100.42	99.02	93.57	97.98	91.32	95.01	95.54	99.58	93.45
1996Q1	95.58	101.26	98.11	101.29	96.43	98.37	89.93	94.81	96.52	101.76	94.40
1996Q2	96.36	100.82	99.26	96.61	95.38	97.23	91.75	95.48	96.62	100.76	95.30
1996Q3	96.16	98.20	100.11	99.42	96.94	99.34	89.63	95.11	97.77	103.06	92.86
1996Q4	96.95	102.04	96.39	103.64	94.15	100.02	91.67	96.61	96.15	102.53	93.22
1997Q1	98.57	102.19	101.07	102.96	97.32	100.66	89.73	95.55	98.52	102.46	94.09
1997Q2	99.31	107.28	101.87	102.22	95.91	102.96	95.71	96.22	97.96	100.56	95.43
1997Q3	99.21	104.34	101.39	104.22	95.43	108.51	96.66	97.60	99.17	105.69	96.98
1997Q4	100.05	107.69	103.27	107.15	99.99	104.70	98.36	96.47	98.57	100.54	97.19
1998Q1	102.40	113.36	102.75	108.83	102.66	103.05	98.27	99.74	99.74	110.99	98.85
1998Q2	104.20	113.04	107.72	108.52	101.15	105.85	101.48	103.41	102.92	109.68	99.07
1998Q3	103.99	117.82	105.74	113.42	106.15	106.75	100.53	102.00	102.30	106.28	98.09
1998Q4	104.93	114.61	109.72	109.74	104.17	109.96	101.71	102.86	103.17	110.94	100.25
1999Q1	107.04	120.75	109.50	118.27	104.48	111.02	98.57	102.82	102.99	114.28	102.89
1999Q2	110.43	130.17	112.12	118.75	111.51	115.05	102.79	107.96	103.79	116.89	101.91
1999Q3	111.02	129.25	114.64	122.57	115.57	120.86	103.57	107.39	106.28	115.31	105.65
1999Q4	115.29	133.03	119.96	126.34	121.15	124.23	111.65	112.93	107.90	130.58	109.55
2000Q1	118.79	136.63	125.03	135.76	120.02	125.18	111.27	113.18	110.78	131.56	110.18
2000Q2	122.55	141.66	127.03	139.71	122.19	125.93	112.67	115.39	114.67	133.31	114.95
2000Q3	117.48	142.44	126.15	137.57	119.19	126.04	113.90	114.62	113.31	126.19	114.28
2000Q4	120.16	134.96	129.77	139.81	123.69	126.71	118.77	118.44	116.47	140.36	116.25
2001Q1	125.83	147.90	127.48	143.84	129.98	131.03	124.53	121.10	119.36	137.33	121.77
2001Q2	128.34	147.08	131.48	146.47	133.66	133.17	123.84	122.50	125.06	144.19	124.71
2001Q3	133.06	149.99	141.61	158.64	139.71	141.04	129.30	127.61	126.93	154.82	129.67
						Seasonal Factors					
Q1	**1.002**	1.009	0.994	1.003	1.006	1.003	0.997	0.997	0.989	1.034	1.004
Q2	**1.005**	0.998	1.010	1.001	0.996	0.996	0.996	1.003	1.008	0.989	1.003
Q3	**0.996**	0.997	1.001	1.000	0.999	1.002	0.995	0.998	1.007	0.991	0.996
Q4	**0.997**	0.996	0.995	0.996	0.999	1.000	1.011	1.002	0.997	0.986	0.997
Growth over 70 Quarters	**163.84%**	239.11%	202.12%	193.48%	149.62%	208.90%	167.03%	101.51%	109.92%	160.71%	141.99%
Ave Annual Growth	**5.70%**	7.23%	6.52%	6.35%	5.45%	6.66%	5.77%	4.15%	4.33%	5.98%	5.18%
No of Obs	**111833**	13045	7549	11419	6310	11781	3339	17180	18350	2736	20115
R Squared	**0.639**	0.760	0.727	0.698	0.772	0.687	0.777	0.726	0.692	0.709	0.663

Appendix 4 - Adelaide Metropolitan Price Index – All Home Units

Period	Metro	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10
1984Q1	59.19	56.14	61.43	60.28	61.24	60.94	55.26	58.88	60.93		63.21
1984Q2	62.85	60.30	63.31	61.36	61.41	58.37	67.95	64.57	64.38		61.01
1984Q3	64.60	61.96	65.80	66.36	67.28	64.96	68.71	66.77	65.75		62.92
1984Q4	67.41	64.28	69.09	68.43	73.11	64.14	68.22	67.86	75.07		63.44
1985Q1	69.85	65.87	69.73	71.35	75.36	66.86	72.30	72.35	77.06		63.95
1985Q2	73.49	66.73	77.84	73.57	77.38	68.00	78.62	73.27	77.60		71.84
1985Q3	73.13	70.07	72.89	72.20	75.85	68.72	81.72	76.35	78.07		75.93
1985Q4	74.80	72.24	75.63	72.36	74.00	71.23	81.32	76.37	81.82		73.00
1986Q1	72.23	69.44	76.49	71.84	74.34	68.53	75.32	75.64	86.19		73.71
1986Q2	72.39	67.26	72.06	72.49	72.68	63.48	76.88	76.29	84.84		72.82
1986Q3	72.28	72.24	70.94	68.95	74.21	67.58	74.56	74.00	80.38		70.42
1986Q4	73.04	71.24	72.34	70.41	71.84	67.49	77.56	73.44	82.09		71.96
1987Q1	71.73	68.72	72.16	70.82	68.71	69.46	79.36	73.13	83.27		72.21
1987Q2	71.76	68.17	70.14	69.86	71.39	71.45	74.96	71.80	79.40		73.60
1987Q3	71.18	67.78	71.67	70.09	70.76	69.08	73.11	75.03	83.69		73.31
1987Q4	74.32	70.88	73.80	72.99	73.54	73.03	81.99	77.28	77.61		74.01
1988Q1	75.08	72.17	73.90	74.82	74.63	73.48	80.06	79.01	80.83		74.41
1988Q2	76.51	76.48	75.18	76.54	76.63	73.77	78.76	79.63	81.83		65.23
1988Q3	77.69	77.10	77.89	78.95	78.95	76.99	82.27	80.47	81.12		77.54
1988Q4	80.39	79.65	82.64	80.84	80.97	82.36	80.58	83.12	81.45		76.34
1989Q1	82.64	86.44	81.77	83.92	81.96	81.70	84.14	85.60	89.02		80.53
1989Q2	85.18	87.99	81.54	86.33	84.99	84.25	85.48	90.21	90.05		79.78
1989Q3	87.79	84.29	87.06	89.51	82.12	94.24	87.37	88.96	88.21		84.60
1989Q4	86.89	89.29	87.36	88.94	84.32	93.05	85.28	90.92	88.72		83.82
1990Q1	91.76	97.60	92.40	91.21	88.86	89.86	93.21	89.51	94.60		85.08
1990Q2	92.99	93.58	94.80	92.93	92.29	98.70	96.42	91.60	99.53		88.00
1990Q3	94.17	93.96	95.83	92.63	93.81	92.10	95.95	93.44	94.47		91.32
1990Q4	95.10	92.88	96.52	95.94	95.08	98.31	102.99	96.98	102.07		88.95
1991Q1	96.13	97.27	96.43	96.83	95.84	98.06	98.41	99.91	100.53		89.75
1991Q2	98.46	98.07	98.47	100.70	97.39	97.51	103.25	99.23	101.51		92.53
1991Q3	99.02	104.88	101.69	96.90	95.52	101.17	100.05	101.20	104.94		90.39
1991Q4	101.99	107.82	101.22	98.56	96.93	102.30	102.07	102.20	102.78		95.72
1992Q1	100.35	105.86	105.34	97.28	100.64	96.96	101.42	101.08	96.64		97.47
1992Q2	101.29	104.52	103.29	100.18	97.81	92.55	102.79	100.80	97.52		98.99
1992Q3	100.90	103.00	105.82	99.21	102.48	97.92	102.84	100.75	100.22		95.82
1992Q4	101.35	100.03	104.94	101.93	101.92	97.85	103.78	105.36	97.80		101.28
1993Q1	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		100.00
1993Q2	100.91	104.19	107.08	100.54	102.63	96.97	95.59	101.94	102.33		95.85
1993Q3	101.03	104.09	100.97	102.30	100.25	97.20	98.17	102.69	105.65		99.53
1993Q4	102.21	105.89	102.89	102.28	99.19	105.17	95.14	101.44	98.04		95.49
1994Q1	101.53	106.49	103.06	102.07	99.65	100.57	95.71	101.62	99.92		96.22
1994Q2	104.80	107.56	107.58	104.65	102.91	103.32	102.26	100.37	102.36		96.23
1994Q3	103.05	110.29	99.91	102.63	101.02	101.92	99.39	100.08	97.72		94.77
1994Q4	104.57	106.82	106.17	104.16	102.45	101.56	99.44	98.16	99.17		93.52
1995Q1	100.00	99.27	105.29	102.91	95.18	95.34	95.89	98.88	100.99		91.62
1995Q2	99.51	102.09	105.21	103.51	95.10	97.20	102.75	96.09	90.07		95.01
1995Q3	98.33	99.99	101.65	99.67	93.81	92.46	100.28	93.18	92.03		88.39
1995Q4	98.16	98.70	105.36	98.96	89.14	97.64	97.22	95.95	95.52		85.69
1996Q1	97.73	97.94	100.37	97.06	90.42	94.16	95.62	94.68	94.62		89.60
1996Q2	94.94	98.30	92.91	91.16	89.63	93.34	93.56	89.51	97.60		85.29
1996Q3	93.67	93.30	91.48	94.88	91.18	97.70	84.86	91.55	90.81		84.85
1996Q4	95.44	98.86	93.62	95.76	89.31	92.11	90.14	89.32	92.71		89.20
1997Q1	95.45	97.38	97.04	98.11	90.40	94.76	90.55	90.78	85.41		86.26
1997Q2	95.60	98.64	95.22	98.69	88.96	94.99	93.63	92.07	90.02		88.57
1997Q3	99.24	107.52	93.18	101.41	90.35	94.42	93.26	95.80	96.73		90.52
1997Q4	99.56	101.49	97.18	102.11	91.09	92.72	91.75	95.23	89.70		84.91
1998Q1	99.14	103.84	96.35	100.32	91.18	92.92	97.45	95.46	93.42		87.19
1998Q2	100.37	109.59	95.67	105.02	95.91	95.78	92.00	93.90	85.52		88.76
1998Q3	98.57	106.05	93.76	99.01	94.81	96.03	93.23	96.17	92.80		87.69
1998Q4	99.02	103.04	95.81	102.65	94.30	98.61	98.75	95.38	94.17		90.44
1999Q1	99.52	102.83	98.38	104.63	92.80	106.15	95.52	96.27	99.76		89.08
1999Q2	102.07	110.50	100.29	106.79	99.38	98.79	93.61	97.20	93.44		90.70
1999Q3	104.28	112.29	106.01	103.11	100.97	98.00	96.48	97.37	94.09		92.54
1999Q4	105.34	114.66	104.84	110.95	99.23	103.36	99.82	99.72	102.91		98.75
2000Q1	107.80	117.11	106.11	114.91	101.54	108.36	106.33	107.20	98.77		96.32
2000Q2	109.59	116.72	110.97	117.84	102.38	104.20	102.90	102.03	99.11		99.45
2000Q3	110.16	117.25	103.60	124.37	108.52	107.20	106.43	106.56	103.25		97.01
2000Q4	111.85	122.41	116.31	119.64	108.76	100.93	105.72	108.16	98.34		105.21
2001Q1	114.63	122.77	119.60	125.85	108.23	108.16	111.34	109.03	104.45		104.41
2001Q2	121.97	134.66	115.80	135.03	114.57	116.57	111.28	115.85	107.37		110.45
2001Q3	124.92	136.86	124.14	137.71	120.13	125.31	111.12	120.46	106.65		112.11
						Seasonal Factors					
Q1	**0.996**	0.996	1.000	1.000	0.993	1.000	1.001	1.003	1.008		0.998
Q2	**1.002**	1.002	1.006	1.006	1.006	0.992	1.002	0.994	0.997		0.998
Q3	**0.998**	1.002	0.994	0.994	1.004	0.999	0.993	1.000	1.000		1.001
Q4	**1.004**	1.000	1.000	1.000	0.997	1.009	1.004	1.003	0.995		1.002
Growth over 70 Quarters	**111.05%**	143.79%	128.47%	128.47%	96.16%	105.61%	101.09%	104.59%	75.04%		77.36%
Ave Annual Growth	**4.36%**	5.22%	4.83%	4.83%	3.93%	4.20%	4.07%	4.18%	3.25%		3.33%
No of Obs	**70979**	16171	10867	13663	8079	3340	3101	8109	4092	57	3491
R Squared	**0.504**	0.503	0.598	0.789	0.745	0.833	0.741	0.754	0.698		0.707

Appendix 5 - Adelaide Metropolitan Price Index – 4 roomed Home Units

Period	Metro	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10
1984Q1	59.45	55.59	57.08	62.19	53.13	60.57	64.69	56.09	65.90		64.17
1984Q2	62.11	59.32	60.51	60.38	58.67	57.85	67.68	63.42	67.85		61.98
1984Q3	66.25	59.85	64.80	67.08	64.65	65.85	76.04	66.87	76.57		62.38
1984Q4	69.33	64.61	68.10	69.63	70.29	66.41	74.91	68.77	82.97		61.59
1985Q1	70.12	65.11	66.10	72.75	71.67	70.59	71.66	70.81	79.54		63.77
1985Q2	74.11	68.17	73.48	73.28	73.68	70.33	81.41	72.38	84.08		72.44
1985Q3	72.50	65.76	68.53	74.78	72.97	71.30	84.41	74.83	77.78		78.87
1985Q4	74.07	68.03	71.27	74.00	71.19	69.44	83.84	78.70	82.85		74.59
1986Q1	72.55	69.12	75.04	75.18	70.30	66.47	82.53	76.47	88.36		75.05
1986Q2	72.19	66.34	72.14	74.10	70.26	65.34	78.55	73.03	85.64		71.38
1986Q3	70.21	67.74	70.33	68.29	70.04	66.84	78.28	73.74	81.32		71.26
1986Q4	71.67	69.50	72.23	71.64	69.22	65.57	79.20	71.70	87.36		72.41
1987Q1	71.81	66.97	73.68	73.15	64.81	67.96	85.52	73.80	84.75		73.16
1987Q2	71.63	68.04	69.90	71.92	67.42	69.90	79.69	71.95	83.91		72.03
1987Q3	71.69	69.26	71.97	69.47	66.26	67.58	75.46	75.80	85.19		75.45
1987Q4	73.96	69.21	72.08	73.07	70.70	71.60	80.79	76.86	84.38		74.60
1988Q1	74.89	72.34	70.32	75.80	70.56	71.50	83.03	76.96	85.71		77.49
1988Q2	74.70	73.65	74.60	73.86	73.14	72.68	79.01	78.52	85.04		61.53
1988Q3	77.95	77.56	78.48	80.46	73.95	73.90	85.58	81.82	80.99		76.61
1988Q4	81.08	83.41	81.95	81.75	77.02	82.27	89.10	81.55	86.28		76.72
1989Q1	82.26	83.45	78.60	83.52	78.78	79.52	88.39	83.89	91.74		80.87
1989Q2	84.20	84.97	79.17	86.45	81.96	85.61	86.97	87.97	95.52		81.45
1989Q3	88.50	86.94	88.30	90.33	81.69	87.62	93.46	88.19	94.79		86.28
1989Q4	89.88	93.74	88.53	91.97	80.40	88.60	87.40	92.43	95.15		86.00
1990Q1	90.65	94.29	89.22	92.11	84.17	88.38	97.48	88.28	98.69		88.42
1990Q2	91.80	94.18	93.63	91.01	86.56	91.90	98.60	93.72	100.48		85.19
1990Q3	94.38	96.44	96.80	94.57	89.07	94.41	102.46	96.53	96.50		96.48
1990Q4	93.89	94.45	95.28	94.23	91.79	99.05	109.44	95.85	104.24		87.94
1991Q1	96.16	95.20	95.35	97.38	93.00	94.78	103.79	100.62	105.82		90.81
1991Q2	98.52	97.56	99.03	102.01	94.98	99.47	102.12	99.94	108.48		92.20
1991Q3	96.41	100.14	101.72	97.18	91.79	96.78	101.95	100.63	109.89		94.06
1991Q4	100.08	103.20	102.41	102.68	94.99	106.78	108.47	99.25	105.96		98.18
1992Q1	99.59	103.57	104.79	97.61	96.27	97.53	104.72	100.47	103.15		100.85
1992Q2	100.39	106.98	102.94	100.42	93.91	95.22	102.68	100.11	100.18		101.53
1992Q3	100.07	101.07	104.12	101.00	96.62	98.16	106.08	101.06	98.51		97.19
1992Q4	100.84	98.87	104.65	102.13	96.56	102.41	105.57	103.89	101.65		102.61
1993Q1	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		100.00
1993Q2	101.29	100.99	106.64	102.63	98.05	101.61	101.69	101.36	104.63		97.26
1993Q3	100.55	103.45	103.11	102.29	95.57	96.62	100.50	101.49	105.30		100.89
1993Q4	100.47	102.35	103.77	103.51	95.24	100.04	97.70	101.55	102.27		97.79
1994Q1	99.65	100.99	103.14	104.37	94.68	100.43	104.12	100.17	100.14		95.96
1994Q2	101.70	104.08	103.53	104.90	96.35	100.93	105.94	99.99	103.80		97.58
1994Q3	101.32	106.08	99.48	102.56	98.57	102.28	108.73	99.78	99.76		95.38
1994Q4	100.71	100.60	103.96	104.19	99.39	98.32	106.97	96.28	100.78		96.54
1995Q1	98.36	98.57	102.60	100.44	91.21	97.59	99.92	98.30	104.19		95.29
1995Q2	98.80	102.36	106.65	105.89	91.61	94.28	104.15	92.10	97.77		95.97
1995Q3	95.78	96.92	98.33	100.84	88.86	89.88	106.42	93.42	102.34		89.33
1995Q4	95.27	91.61	107.52	101.93	85.76	97.25	96.69	92.26	99.04		85.29
1996Q1	95.46	92.62	101.86	98.63	83.68	94.79	97.71	91.89	95.84		94.79
1996Q2	92.53	92.46	95.46	91.41	84.57	91.45	96.33	90.66	101.97		86.36
1996Q3	91.34	94.46	87.47	95.15	87.34	96.52	91.25	86.21	94.64		88.73
1996Q4	94.32	94.13	93.67	93.18	86.11	89.12	100.86	89.67	98.08		83.83
1997Q1	93.79	93.40	92.62	97.04	87.89	92.66	96.46	88.96	92.94		83.78
1997Q2	94.70	95.11	94.69	97.43	86.12	94.63	98.25	92.47	94.13		88.73
1997Q3	94.84	98.82	90.86	98.50	86.72	95.88	98.77	95.48	103.74		89.43
1997Q4	96.02	98.64	96.24	100.57	84.58	95.80	98.99	95.68	93.33		84.63
1998Q1	96.44	95.54	93.43	100.31	88.79	91.64	107.39	95.83	91.39		90.95
1998Q2	95.51	98.03	96.63	101.40	88.17	92.06	88.36	93.93	89.34		88.66
1998Q3	94.60	96.92	90.37	100.67	90.01	88.48	98.45	94.54	91.79		88.87
1998Q4	97.35	99.25	95.01	103.02	88.14	96.69	107.96	97.20	94.43		92.04
1999Q1	96.40	101.04	93.72	103.90	86.73	101.08	94.64	95.93	98.80		87.72
1999Q2	101.08	104.23	98.20	106.74	93.85	103.18	93.62	98.41	95.11		90.16
1999Q3	102.60	107.65	103.22	105.12	93.99	99.47	96.86	99.58	95.18		94.56
1999Q4	103.35	108.16	104.85	112.37	93.08	100.66	101.03	101.81	101.55		101.93
2000Q1	106.26	111.98	107.40	115.12	97.93	107.66	106.80	102.36	101.85		95.77
2000Q2	107.62	113.61	107.30	119.63	97.03	103.28	111.98	101.70	102.27		97.11
2000Q3	107.96	114.22	98.39	126.42	101.22	103.68	116.57	104.35	101.95		96.03
2000Q4	110.12	114.97	110.42	120.70	101.46	98.75	106.57	107.07	99.59		107.62
2001Q1	113.02	114.90	117.15	123.69	103.89	107.20	114.68	111.37	107.27		106.03
2001Q2	118.59	128.86	113.40	134.08	109.85	113.25	118.71	116.75	108.55		110.59
2001Q3	123.24	129.09	120.45	141.44	112.27	125.82	116.85	118.26	112.83		113.41
						Seasonal Factors					
Q1	**0.998**	0.993	0.998	1.000	0.996	0.999	1.003	0.999	1.003		1.004
Q2	**1.003**	1.003	1.006	1.001	1.004	1.000	0.986	0.995	1.005		0.985
Q3	**0.995**	1.003	0.985	0.995	1.003	0.993	1.003	1.002	0.992		1.009
Q4	**1.004**	1.000	1.011	1.003	0.998	1.009	1.008	1.004	1.000		1.002
Growth over 70 Quarters	**107.29%**	132.21%	111.04%	127.44%	111.30%	107.72%	80.62%	110.84%	71.21%		76.74%
Ave Annual Growth	**4.25%**	4.93%	4.36%	4.81%	4.37%	4.27%	3.44%	4.35%	3.12%		3.31%
No of Obs	**39257**	7467	6451	7557	5455	2007	1540	4317	2156	28	2270
R Squared	**0.584**	0.716	0.507	0.755	0.726	0.779	0.684	0.708	0.659		0.674

Appendix 6 - Adelaide Metropolitan Price Index – Home Units Less than 4 rooms

Period	Metro	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10
1984Q1	59.88	53.57	69.26	63.14	72.68	57.21		62.00	59.78		
1984Q2	65.93	55.98	70.44	71.93	72.74	66.12	67.18	66.02	74.39		
1984Q3	66.80	62.05	71.66	70.99	75.36	61.73	72.60	70.36	65.31		63.59
1984Q4	69.14	68.05	74.64	67.12	82.99	67.75	64.52	67.77	75.11		69.33
1985Q1	71.73	68.44	77.97	72.79	92.23	96.59	66.29	73.74	79.31		70.23
1985Q2	75.74	68.14	88.63	70.86	92.83	60.96	81.68	74.93	73.96		76.81
1985Q3	73.88	71.43	83.28	74.85	87.43	75.77	78.52	77.03	78.73		73.84
1985Q4	74.24	71.67	77.95	73.35	81.47	54.93	83.92	75.23	81.28		65.42
1986Q1	74.60	70.08	78.41	71.30	91.41	66.49	82.95	77.60	83.41		74.63
1986Q2	72.31	72.69	71.80	71.34	81.60	63.88	69.17	78.55	84.43		83.59
1986Q3	71.24	67.96	72.31	67.53	85.22	62.54	72.73	72.03	83.79		71.58
1986Q4	70.43	72.97	73.73	64.11	78.83	65.24	73.75	73.11	83.36		70.68
1987Q1	70.02	68.68	70.49	68.33	78.00	64.41	74.20	71.53	84.44		75.16
1987Q2	70.16	68.23	74.86	67.00	79.37	69.91	74.30	70.81	78.42		75.38
1987Q3	68.08	67.57	73.09	64.25	75.66	73.56	67.96	70.18	79.13		71.85
1987Q4	73.32	71.42	74.82	70.09	77.62	72.11	79.68	76.47	78.87		81.28
1988Q1	74.87	69.83	81.56	71.61	86.05	70.31	68.48	80.29	84.10		74.19
1988Q2	73.64	72.11	76.93	70.45	84.62	79.52	74.01	80.05	80.77		76.73
1988Q3	77.26	77.72	79.97	75.46	97.16	81.24	72.70	79.21	85.21		82.58
1988Q4	78.47	77.03	82.23	76.72	90.35	73.15	73.05	82.72	77.89		79.16
1989Q1	79.52	80.90	81.44	77.03	91.56	80.10	78.37	86.02	86.34		81.03
1989Q2	81.68	88.10	82.04	81.95	90.04	80.15	81.47	91.00	84.47		81.83
1989Q3	83.86	84.35	87.16	79.81	90.76	84.14	81.95	87.36	85.25		81.72
1989Q4	84.73	89.08	85.61	83.99	97.32	96.09	80.29	85.08	78.90		87.59
1990Q1	88.78	90.53	103.34	84.43	91.87	82.23	86.53	89.43	90.08		89.75
1990Q2	88.04	88.79	97.88	87.84	99.31	89.64	90.34	88.64	91.64		97.89
1990Q3	88.95	92.00	91.16	94.83	112.19	95.14	93.40	87.96	86.91		94.89
1990Q4	95.93	98.38	103.54	98.44	107.39	88.80	99.56	96.92	98.14		95.20
1991Q1	92.02	97.05	99.27	94.24	93.72	97.54	90.25	98.06	92.35		89.71
1991Q2	100.04	110.57	102.27	93.22	100.86	95.01	96.19	95.70	92.77		98.30
1991Q3	105.34	128.20	98.63	92.69	104.36	89.43	94.56	99.54	104.24		94.39
1991Q4	108.68	127.26	97.25	88.62	104.10	91.05	89.10	103.09	99.68		105.67
1992Q1	99.09	111.72	101.89	93.39	109.43	94.24	99.17	101.25	87.90		94.32
1992Q2	104.80	113.66	100.13	98.51	101.63	73.19	102.75	99.13	85.08		96.10
1992Q3	103.41	115.84	104.85	97.95	117.92	102.47	94.82	98.87	105.17		97.62
1992Q4	99.95	106.55	97.32	92.01	118.44	112.92	94.78	99.10	94.90		94.66
1993Q1	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		100.00
1993Q2	101.13	111.94	99.40	91.99	118.33	106.74	88.86	99.19	94.71		100.80
1993Q3	98.61	104.54	94.79	96.92	105.24	88.95	86.75	100.06	91.72		96.84
1993Q4	99.76	106.66	99.58	100.63	101.58	107.00	90.03	94.29	92.63		97.53
1994Q1	97.99	110.01	104.58	98.58	109.22	93.86	85.09	100.98	94.92		93.82
1994Q2	103.41	104.43	113.61	97.86	113.87	95.09	98.91	100.26	90.03		92.45
1994Q3	99.64	102.99	98.43	97.46	99.21	117.53	100.47	97.25	93.89		93.43
1994Q4	104.50	105.28	105.83	97.48	104.87	83.73	105.37	96.72	91.81		101.77
1995Q1	99.30	99.19	96.16	101.54	104.13	90.83	101.20	93.01	94.97		96.27
1995Q2	97.06	100.58	92.02	96.09	107.27	90.84	98.27	91.83	76.28		97.73
1995Q3	90.66	95.47	98.23	95.54	110.31	61.66	86.13	88.99	70.75		93.80
1995Q4	92.02	98.62	91.13	91.15	104.48	110.31	102.11	94.58	79.71		98.67
1996Q1	90.54	95.33	87.19	92.36	103.37	82.82	90.03	92.51	81.95		93.11
1996Q2	84.76	90.10	89.04	91.74	100.09	100.75	91.08	87.54	91.85		94.28
1996Q3	86.94	87.24	89.34	90.25	103.77	84.82	80.90	87.06	84.73		75.03
1996Q4	85.53	89.60	80.86	92.29	96.64	86.71	78.69	85.60	81.42		92.53
1997Q1	88.37	93.01	92.58	89.68	90.87	78.42	83.00	85.46	65.43		89.41
1997Q2	89.23	97.40	87.53	90.61	91.97	77.35	87.32	88.19	78.10		86.66
1997Q3	94.75	101.99	88.69	95.06	95.84	83.72	78.84	90.39	76.60		88.33
1997Q4	90.17	89.80	92.47	94.08	99.88	94.99	86.84	89.01	68.41		90.98
1998Q1	90.53	97.09	88.95	86.05	92.41	74.84	88.28	87.43	89.78		84.23
1998Q2	91.90	106.50	91.18	92.55	119.15	82.71	79.22	88.70	67.55		94.68
1998Q3	90.53	97.46	86.43	88.66	78.88	79.05	79.01	92.47	78.67		87.40
1998Q4	89.26	100.04	84.50	93.34	100.94	83.73	89.13	87.64	84.44		92.67
1999Q1	98.61	102.61	95.78	96.58	106.28	95.92	99.95	90.73	92.38		92.96
1999Q2	93.72	106.53	90.23	95.14	103.94	95.14	86.66	90.94	80.64		87.07
1999Q3	98.91	107.90	96.53	96.93	100.78	95.75	87.95	94.81	84.95		91.06
1999Q4	98.30	110.69	95.62	97.27	112.48	98.16	92.15	95.97	91.75		101.06
2000Q1	100.69	108.86	92.61	110.68	100.08	101.94	94.44	105.71	80.89		97.46
2000Q2	97.16	104.87	97.18	107.81	107.64	110.97	89.79	97.09	85.50		96.65
2000Q3	104.29	118.27	106.94	110.75	119.51	102.03	92.33	99.15	92.26		100.42
2000Q4	101.04	114.15	100.91	116.07	119.21		96.40	98.54	78.20		96.66
2001Q1	105.39	118.92	108.00	116.41	116.64		106.95	99.20	87.10		110.24
2001Q2	116.14	135.12	108.36	129.66	118.69		96.96	104.17	93.30		111.60
2001Q3	120.52	139.16	126.20	135.59	136.58		99.39	115.42	91.20		118.10
					Seasonal Factors						
Q1	**0.999**	0.986	1.009	1.005	0.986		1.002	1.009	1.019		0.994
Q2	**0.999**	1.005	1.005	0.998	1.011		1.006	1.000	0.979		1.016
Q3	**1.001**	1.005	0.998	0.999	1.001		0.980	0.993	1.010		0.979
Q4	**1.002**	1.004	0.989	0.998	1.003		1.012	0.997	0.992		1.011
Growth over 70 Quarters	**101.25%**	159.75%	82.20%	114.75%	87.94%		47.93%	86.16%	52.56%		85.72%
Ave Annual Growth	**4.08%**	5.61%	3.49%	4.46%	3.67%		2.30%	3.61%	2.44%		3.71%
No of Obs	**14601**	3999	2470	2231	1000	325	959	2141	903	80	561
R Squared	**0.509**	0.684	0.439	0.824	0.591		0.631	0.623	0.581		0.818

Appendix 7- Adelaide Metropolitan Price Index – Home Units - More than 4 rooms

Period	Metro	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10
1984Q1	60.20	47.26	60.04	53.39	63.77		58.22	60.57	61.38		
1984Q2	61.62	47.18	65.75	57.53	54.89	72.02	62.05	61.91	58.65		63.31
1984Q3	60.69	49.79	57.64	60.23	62.23	63.39	53.15	53.50	61.42		70.44
1984Q4	66.47	57.61	58.05	64.66	70.70	66.64	56.54	55.57	69.14		60.45
1985Q1	72.73	65.33	69.20	66.77	71.54	63.52	63.98	59.50	69.46		61.30
1985Q2	72.67	65.25	73.21	71.79	72.63	63.49	63.04	67.69	72.71		62.40
1985Q3	73.45	68.48	74.03	65.36	73.10	75.01	69.20	71.37	72.83		64.33
1985Q4	74.75	69.71	82.51	66.09	75.58	66.16	66.89	69.94	76.43		69.36
1986Q1	73.31	65.06	79.30	66.06	71.82	72.31	66.22	67.67	74.09		71.39
1986Q2	72.41	61.78	75.14	68.31	71.01	65.19	65.37	73.97	67.12		80.39
1986Q3	75.06	67.59	73.94	69.39	73.78	71.95	65.57	72.56	68.36		65.45
1986Q4	75.22	67.93	71.17	68.79	71.71	78.17	68.75	73.45	69.59		72.39
1987Q1	73.39	68.04	72.15	66.88	69.27	72.35	67.81	67.86	79.30		67.46
1987Q2	74.14	69.10	66.61	68.11	70.03	78.82	59.71	74.30	69.54		79.73
1987Q3	75.13	65.29	72.82	72.05	72.14	73.83	66.40	72.50			71.38
1987Q4	73.31	63.29	78.95	71.29	73.83	81.24	82.49	75.07	60.83		69.04
1988Q1	79.57	77.44	74.95	73.14	75.18	80.73	78.59	74.30	70.91		70.07
1988Q2	84.56	79.34	80.70	85.83	76.97	86.22	76.07	82.13	70.93		74.01
1988Q3	83.84	79.05	72.42	78.32	79.98	97.39	71.77	68.39	71.17		76.55
1988Q4	85.50	77.62	84.61	82.23	82.78	96.85	72.04	83.57	74.67		78.74
1989Q1	91.12	89.27	86.53	84.83	83.43	90.89	75.79	85.55	80.18		77.42
1989Q2	94.42	90.37	90.33	86.90	87.01	94.28	71.21	92.09	84.46		70.37
1989Q3	91.41	83.40	81.47	90.52	81.02	113.12	63.86	84.72	78.21		80.63
1989Q4	95.99	100.42	93.11	83.88	81.06	120.67	61.34	98.00	90.53		73.34
1990Q1	96.58	96.55	86.09	90.30	94.00	102.85	85.41	94.80	90.97		72.06
1990Q2	100.50	94.77	91.80	96.80	96.13	107.04	86.50	91.82	91.12		91.21
1990Q3	98.18	102.47	101.96	91.07	96.36	107.56	76.06	95.13	94.70		78.82
1990Q4	99.02	93.34	97.19	95.48	90.19	106.50	84.78	103.04	97.52		91.20
1991Q1	100.49	99.30	105.33	94.24	98.39	105.26	90.51	105.33	90.52		86.73
1991Q2	99.24	95.11	96.09	102.93	96.87	103.83	129.46	95.31	95.60		90.84
1991Q3	99.78	93.31	106.80	96.69	95.87	110.97	94.26	103.05	92.00		80.02
1991Q4	100.89	103.37	102.50	97.94	95.92	105.56	92.46	107.62	94.07		88.47
1992Q1	101.29	99.31	113.97	97.08	100.99	109.55	89.91	101.92	89.30		93.64
1992Q2	100.95	97.92	109.50	100.30	101.50	96.70	92.35	100.07	101.08		95.36
1992Q3	100.54	98.91	104.76	95.01	107.99	109.19	90.30	103.81	97.29		92.12
1992Q4	104.66	92.85	102.43	106.04	104.79	98.46	93.60	113.51	91.81		84.85
1993Q1	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		100.00
1993Q2	100.22	94.72	109.81	99.22	100.29	104.44	94.84	103.18	95.39		92.53
1993Q3	102.55	95.03	106.13	101.46	102.57	106.79	95.42	105.88	114.98		97.98
1993Q4	102.90	100.38	107.14	99.77	103.32	118.58	93.81	105.31	93.46		89.20
1994Q1	103.06	96.15	110.39	99.91	101.02	109.67	84.82	102.75	99.18		95.09
1994Q2	108.40	103.39	106.64	105.73	106.03	107.44	87.36	100.57	102.06		98.05
1994Q3	105.36	108.26	104.40	104.22	102.19	110.39	88.90	98.41	94.86		94.45
1994Q4	104.91	99.72	114.73	104.63	103.01	106.87	79.69	103.89	101.01		81.16
1995Q1	101.05	99.16	120.76	104.56	95.05	98.66	85.76	104.09	101.56		83.84
1995Q2	99.37	95.79	112.91	101.43	99.04	100.85	92.32	107.31	92.47		90.60
1995Q3	100.78	95.38	112.28	100.14	97.09	99.83	88.47	100.20	94.58		86.53
1995Q4	96.20	95.76	109.35	95.57	91.08	99.36	86.20	101.89	101.22		81.94
1996Q1	97.72	96.23	109.91	95.11	98.05	97.16	91.88	96.46	100.22		75.73
1996Q2	97.50	94.78	107.69	91.09	96.19	101.64	84.53	90.66	99.83		79.91
1996Q3	95.60	95.15	102.66	93.71	94.09	101.39	78.61	102.52	93.34		81.41
1996Q4	97.59	96.23	111.22	101.30	84.74	99.61	76.04	92.80	92.94		97.86
1997Q1	99.24	93.06	107.93	102.78	94.19	95.40	80.37	97.54	90.68		87.72
1997Q2	101.21	96.60	116.11	104.31	89.22	104.45	82.98	94.12	90.82		90.04
1997Q3	107.49	105.36	109.72	107.85	90.87	97.88	85.97	103.36	90.04		95.60
1997Q4	108.38	110.88	111.14	105.32	98.33	95.14	77.16	102.83	98.61		77.49
1998Q1	103.81	100.71	106.70	104.88	93.75	103.36	85.63	102.80	98.83		80.00
1998Q2	108.26	104.50	102.21	117.70	99.69	107.18	99.09	99.56	94.41		107.62
1998Q3	105.75	99.96	110.93	103.12	103.89	112.32	92.71	102.17	105.35		81.08
1998Q4	106.92	103.27	117.13	105.89	103.08	111.23	83.67	102.46	97.65		80.84
1999Q1	107.40	102.30	121.30	109.63	100.53	122.09	93.48	101.11	104.98		95.13
1999Q2	107.36	106.17	113.84	113.27	108.47	104.17	108.21	97.53	99.03		93.77
1999Q3	106.04	107.83	123.60	104.08	109.41	110.63	102.72	98.87	99.39		91.09
1999Q4	111.63	114.29	111.42	115.70	103.75	119.32	106.84	95.92	114.08		89.87
2000Q1	116.54	114.26	115.05	117.46	106.43	117.31	101.94	120.58	108.31		97.50
2000Q2	119.96	118.40	130.60	122.85	107.08	119.38	92.29	113.05	99.91		112.01
2000Q3	119.48	110.37	122.87	128.41	120.58	126.17	75.91	120.40	112.73		102.17
2000Q4	121.52	118.54	134.61	117.31	116.19	114.64	118.21	123.19	115.11		100.33
2001Q1	126.19	130.24	134.87	137.53	116.54	108.15	96.89	118.37	114.99		96.67
2001Q2	132.42	123.57	138.67	144.41	117.92	133.06	112.59	131.23	113.13		108.92
2001Q3	130.49	134.54	141.02	132.99	134.64	131.56	104.77	125.68	109.26		102.97
						Seasonal Factors					
Q1	**1.000**	1.009	1.008	0.994	0.996	0.982	1.010	0.996	1.034		0.983
Q2	**1.005**	0.997	0.998	1.024	1.004	0.981	1.031	0.995	1.011		1.049
Q3	**0.996**	0.993	0.985	0.991	1.010	1.025	0.971	0.993	0.933		0.991
Q4	**0.999**	1.002	1.009	0.990	0.990	1.012	0.988	1.016	1.022		0.976
Growth over 70 Quarters	**116.76%**	184.68%	134.88%	149.06%	111.12%	107.12%	79.94%	107.49%	78.01%		67.98%
Ave Annual Growth	**4.52%**	6.16%	5.00%	5.35%	4.36%	4.51%	3.41%	4.26%	3.40%		3.19%
No of Obs	**16186**	4264	1737	3800	1611	985	562	1575	968	24	651
R Squared	**0.625**	0.655	0.729	0.742	0.716	0.793	0.845	0.686	0.709	0.999	0.700

Appendix 8 - Various Adelaide Metropolitan House Price Indices

Period	Constant Quality Hedonic	Median	Mean	ABS Existing House Prices
1984Q1	49.48	46.70	46.24	
1984Q2	54.71	52.48	50.27	
1984Q3	58.70	54.48	53.24	
1984Q4	61.68	58.00	56.86	
1985Q1	64.39	62.61	61.79	
1985Q2	67.69	64.35	64.08	
1985Q3	68.86	64.35	64.58	
1985Q4	69.62	65.22	65.34	
1986Q1	69.14	65.65	67.41	
1986Q2	68.79	64.35	66.60	75.52
1986Q3	68.61	63.48	66.17	74.43
1986Q4	69.53	66.07	68.39	75.07
1987Q1	69.46	64.35	66.57	75.43
1987Q2	69.35	65.22	67.90	74.61
1987Q3	70.01	65.22	68.27	75.70
1987Q4	71.89	66.09	69.42	76.88
1988Q1	73.84	68.70	73.03	77.88
1988Q2	75.08	69.57	74.24	78.88
1988Q3	77.38	71.30	75.91	79.69
1988Q4	80.11	73.91	79.67	83.50
1989Q1	84.75	78.26	85.39	83.86
1989Q2	86.62	80.43	87.28	84.04
1989Q3	87.89	81.74	89.21	88.03
1989Q4	88.61	82.61	89.81	91.66
1990Q1	91.16	85.22	91.79	90.39
1990Q2	93.71	86.96	93.20	92.38
1990Q3	92.97	86.96	93.10	93.74
1990Q4	94.46	88.70	94.11	95.01
1991Q1	94.59	91.30	95.06	100.36
1991Q2	96.81	93.04	95.75	96.01
1991Q3	98.21	92.61	98.67	94.74
1991Q4	97.97	95.65	98.11	95.92
1992Q1	98.12	95.65	97.54	98.55
1992Q2	98.02	95.65	97.38	97.10
1992Q3	98.38	94.78	96.26	97.55
1992Q4	99.77	97.39	96.13	96.28
1993Q1	100.00	100.00	100.00	100.00
1993Q2	99.98	99.13	99.51	105.53
1993Q3	98.86	95.91	97.30	98.10
1993Q4	99.99	100.00	100.85	97.55
1994Q1	100.35	100.87	102.28	99.55
1994Q2	100.90	101.74	103.59	100.27
1994Q3	100.23	100.00	100.91	102.72
1994Q4	100.06	100.00	102.17	100.45
1995Q1	98.92	100.00	103.77	101.18
1995Q2	97.19	100.00	101.03	100.82
1995Q3	95.86	97.39	99.38	99.73
1995Q4	95.77	95.65	99.51	97.46
1996Q1	95.27	95.65	100.97	97.64
1996Q2	95.62	97.93	101.42	97.82
1996Q3	94.78	95.65	99.08	97.73
1996Q4	96.41	97.83	102.14	96.74
1997Q1	97.77	100.00	103.40	99.09
1997Q2	98.52	102.17	105.81	98.82
1997Q3	97.37	99.13	102.28	99.55
1997Q4	99.09	102.61	108.08	100.45
1998Q1	100.75	104.35	110.68	103.35
1998Q2	101.52	106.09	111.11	103.08
1998Q3	101.63	104.35	110.43	102.54
1998Q4	102.96	107.22	111.25	102.45
1999Q1	104.72	108.70	115.82	103.08
1999Q2	108.39	113.04	118.43	105.62
1999Q3	108.85	112.17	118.78	108.88
1999Q4	112.94	115.65	123.42	110.61
2000Q1	116.23	119.48	129.06	112.06
2000Q2	118.61	123.48	131.75	115.05
2000Q3	114.85	114.78	121.31	115.68
2000Q4	119.79	121.74	127.78	115.32
2001Q1	123.22	126.09	133.50	120.67
2001Q2	127.28	131.30	137.27	123.75
2001Q3	130.79	134.78	142.88	
		Seasonal Factors		
Q1	**1.002**	1.006	1.010	0.967
Q2	**1.004**	1.010	1.007	1.060
Q3	**0.994**	0.985	0.986	1.024
Q4	**1.000**	0.998	0.996	0.948
Growth over 70 Quarters	**164.35%**	188.64%	208.98%	N/A
Ave Annual Growth	**5.71%**	6.24%	6.66%	3.35%