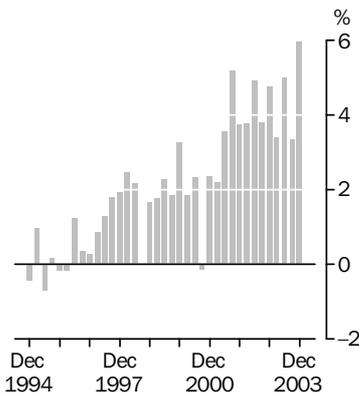


# HOUSE PRICE INDEXES: EIGHT CAPITAL CITIES

EMBARGO: 11.30AM (CANBERRA TIME) THURS 4 MAR 2004

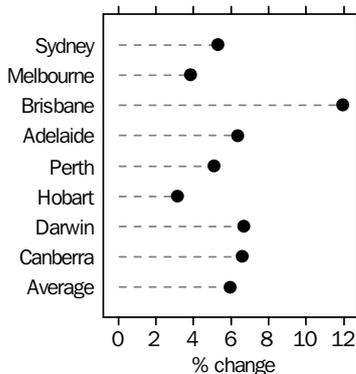
## Established house prices

Quarterly % change



## Established house prices

Quarterly % change  
December quarter 2003



## KEY FIGURES

ESTABLISHED HOUSE PRICES	Sep Qtr 03 to Dec Qtr 03 % change	Dec Qtr 2002 to Dec Qtr 2003 % change
<b>Weighted average of eight capital cities</b>	<b>6.0</b>	<b>18.9</b>
Sydney	5.3	15.5
Melbourne	3.8	12.5
Brisbane	12.0	35.1
Adelaide	6.4	24.2
Perth	5.1	22.2
Hobart	3.2	21.4
Darwin	6.7	13.2
Canberra	6.6	25.3

## KEY POINTS

### ESTABLISHED HOUSE PRICES

#### QUARTERLY CHANGES

- The price index for established houses in Australia rose 6.0% in the December quarter 2003, compared with an increase of 3.4% in the September quarter 2003. This was the largest quarterly increase since March quarter 1989.
- Prices rose in all capital cities: Brisbane (+12.0%), Darwin (+6.7%), Canberra (+6.6%), Adelaide (+6.4%), Sydney (+5.3%), Perth (+5.1%), Melbourne (+3.8%) and Hobart (+3.2%).
- Contributing to the increase this quarter was a compositional shift towards sales at the middle to upper end of the market (see note on page 2).

#### ANNUAL CHANGES

- Over the year to December quarter 2003, established house prices rose 18.9%.
- Annual increases in the capital cities were: Brisbane (+35.1%), Canberra (+25.3%), Adelaide (+24.2%), Perth (+22.2%), Hobart (+21.4%), Sydney (+15.5%), Darwin (+13.2%) and Melbourne (+12.5%).

## INQUIRIES

- For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Steve Whennan on Canberra 02 6252 6251.

# NOTES

## FORTHCOMING ISSUES

*ISSUE (Quarter)*

*RELEASE DATE*

March 2004

3 June 2004

June 2004

2 September 2004



## CHANGES IN THIS ISSUE

There are no changes in this issue.

## COMPOSITIONAL CHANGE IN ESTABLISHED HOUSE PRICE INDEX IN DECEMBER QUARTER 2003

As noted in paragraph 8 of the Explanatory Notes of this publication, movements in the average price of established houses derived from sales data in each period can be influenced by compositional changes. That is, the prices from one period to the next can relate to houses of different quality and there may be price index movements resulting from a greater or lesser number of transactions at the upper or lower end of the market. It appears that this has been a significant factor in the increase in the established house price index in the December quarter 2003.

Analysis of recent sales data indicates that, in most capital cities, the number of transactions of properties at the lower end of the market in the December quarter 2003 has decreased compared with the September quarter 2003, while the number of transactions of properties at the middle to upper end of the market has increased over this period.

Industry analysts have indicated there is still strong demand for houses in the middle to upper end of the market, which is being influenced by existing home owners looking to upgrade to higher priced homes. In conjunction with this, there has been a gradual reduction in the number of housing finance commitments by first home buyers as a proportion of the total number of housing finance commitments in most States and Territories over the past twelve months. (Housing finance commitments data is published monthly in *Housing Finance for Owner Occupation, Australia* (cat. no. 5609.0).) First home buyers typically enter the housing market at the lower end.

Dennis Trewin  
Australian Statistician

## ESTABLISHED HOUSE PRICE INDEX NUMBERS (a)

<i>Period</i>	<i>Sydney</i>	<i>Melbourne</i>	<i>Brisbane</i>	<i>Adelaide</i>	<i>Perth</i>	<i>Hobart</i>	<i>Darwin</i>	<i>Canberra</i>	<i>Weighted average of eight capital cities</i>
<b>2000-01</b>	163.8	159.1	149.4	131.1	133.9	134.2	198.7	149.1	152.8
<b>2001-02</b>	192.2	193.7	169.8	150.1	145.5	140.1	204.2	173.1	178.0
<b>2002-03</b>	233.0	216.4	211.8	182.6	164.4	157.1	218.2	207.2	209.9
<b>2000</b>									
June	158.4	151.6	144.3	126.9	129.9	134.2	199.5	142.0	147.3
September	162.3	143.6	146.5	127.6	130.2	134.3	197.3	143.4	147.1
December	160.4	157.5	149.3	127.2	132.9	133.7	196.8	146.4	150.6
<b>2001</b>									
March	163.9	161.8	149.7	133.1	135.1	133.8	199.3	150.5	153.9
June	168.4	173.3	151.9	136.5	137.2	135.1	201.5	156.0	159.4
September	179.1	187.2	154.5	140.7	139.1	134.9	198.3	161.1	167.7
December	188.0	189.9	163.8	146.5	143.1	138.3	203.4	171.3	174.0
<b>2002</b>									
March	196.7	191.4	176.8	153.4	147.8	142.1	207.0	177.8	180.6
June	204.9	206.2	184.2	159.7	152.0	144.9	208.0	182.1	189.5
September	216.7	207.3	193.8	168.7	155.8	148.9	213.6	190.9	196.7
December	230.2	213.6	205.2	177.4	159.7	150.8	212.7	202.1	206.1
<b>2003</b>									
March	237.8	217.7	215.6	185.0	166.0	160.9	222.6	210.5	213.1
June	247.1	226.9	232.6	199.1	176.0	167.9	223.8	225.4	223.8
September	252.5	231.3	247.6	207.2	185.7	177.4	225.6	237.5	231.3
December	265.9	240.2	277.2	220.4	195.2	183.0	240.7	253.2	245.1

(a) Base of each index 1989-90 = 100.0.

## ESTABLISHED HOUSE PRICE INDEXES, Percentage Changes

<i>Period</i>	<i>Sydney</i>	<i>Melbourne</i>	<i>Brisbane</i>	<i>Adelaide</i>	<i>Perth</i>	<i>Hobart</i>	<i>Darwin</i>	<i>Canberra</i>	<i>Weighted average of eight capital cities</i>
PERCENTAGE CHANGE (from previous financial year)									
<b>2000-01</b>	7.0	10.0	5.1	6.4	6.4	4.0	-0.3	8.8	7.4
<b>2001-02</b>	17.3	21.7	13.7	14.5	8.7	4.4	2.8	16.1	16.5
<b>2002-03</b>	21.2	11.7	24.7	21.7	13.0	12.1	6.9	19.7	17.9
PERCENTAGE CHANGE (from corresponding quarter of previous year)									
<b>2000</b>									
June	11.1	13.7	2.1	8.9	7.0	8.6	2.3	9.7	9.7
September	11.3	4.5	3.6	6.2	7.1	7.2	—	10.6	7.5
December	5.9	9.7	5.5	4.3	6.1	4.6	-1.1	7.6	6.6
<b>2001</b>									
March	4.7	11.1	5.9	7.7	6.6	4.0	-0.8	7.5	6.9
June	6.3	14.3	5.3	7.6	5.6	0.7	1.0	9.9	8.2
September	10.4	30.4	5.5	10.3	6.8	0.4	0.5	12.3	14.0
December	17.2	20.6	9.7	15.2	7.7	3.4	3.4	17.0	15.5
<b>2002</b>									
March	20.0	18.3	18.1	15.3	9.4	6.2	3.9	18.1	17.3
June	21.7	19.0	21.3	17.0	10.8	7.3	3.2	16.7	18.9
September	21.0	10.7	25.4	19.9	12.0	10.4	7.7	18.5	17.3
December	22.4	12.5	25.3	21.1	11.6	9.0	4.6	18.0	18.4
<b>2003</b>									
March	20.9	13.7	21.9	20.6	12.3	13.2	7.5	18.4	18.0
June	20.6	10.0	26.3	24.7	15.8	15.9	7.6	23.8	18.1
September	16.5	11.6	27.8	22.8	19.2	19.1	5.6	24.4	17.6
December	15.5	12.5	35.1	24.2	22.2	21.4	13.2	25.3	18.9
PERCENTAGE CHANGE (from previous quarter)									
<b>2000</b>									
June	1.2	4.0	2.1	2.7	2.5	4.4	-0.7	1.4	2.4
September	2.5	-5.3	1.5	0.6	0.2	0.1	-1.1	1.0	-0.1
December	-1.2	9.7	1.9	-0.3	2.1	-0.4	-0.3	2.1	2.4
<b>2001</b>									
March	2.2	2.7	0.3	4.6	1.7	0.1	1.3	2.8	2.2
June	2.7	7.1	1.5	2.6	1.6	1.0	1.1	3.7	3.6
September	6.4	8.0	1.7	3.1	1.4	-0.1	-1.6	3.3	5.2
December	5.0	1.4	6.0	4.1	2.9	2.5	2.6	6.3	3.8
<b>2002</b>									
March	4.6	0.8	7.9	4.7	3.3	2.7	1.8	3.8	3.8
June	4.2	7.7	4.2	4.1	2.8	2.0	0.5	2.4	4.9
September	5.8	0.5	5.2	5.6	2.5	2.8	2.7	4.8	3.8
December	6.2	3.0	5.9	5.2	2.5	1.3	-0.4	5.9	4.8
<b>2003</b>									
March	3.3	1.9	5.1	4.3	3.9	6.7	4.7	4.2	3.4
June	3.9	4.2	7.9	7.6	6.0	4.4	0.5	7.1	5.0
September	2.2	1.9	6.4	4.1	5.5	5.7	0.8	5.4	3.4
December	5.3	3.8	12.0	6.4	5.1	3.2	6.7	6.6	6.0

— nil or rounded to zero (including null cells)

## PROJECT HOME PRICE INDEX NUMBERS (a)

<i>Period</i>	<i>Sydney</i>	<i>Melbourne</i>	<i>Brisbane</i>	<i>Adelaide</i>	<i>Perth</i>	<i>Hobart</i>	<i>Darwin</i>	<i>Canberra</i>	<i>Weighted average of eight capital cities</i>
<b>2000-01</b>	138.4	136.9	132.0	141.9	126.2	140.7	156.8	153.5	134.9
<b>2001-02</b>	141.3	142.1	133.5	148.2	128.8	145.1	158.5	161.3	138.1
<b>2002-03</b>	145.2	147.2	142.9	155.9	132.9	158.5	167.2	171.4	144.1
<b>2000</b>									
June	125.6	124.8	120.2	130.4	115.6	127.9	144.6	136.1	122.9
September	137.8	135.7	131.4	141.7	126.3	140.3	157.6	151.6	134.3
December	138.3	136.4	132.8	140.6	125.9	140.3	157.6	152.5	134.8
<b>2001</b>									
March	138.2	138.0	132.5	141.8	125.8	140.5	156.7	153.5	135.1
June	139.1	137.6	131.4	143.4	126.9	141.8	155.1	156.5	135.4
September	139.8	140.0	131.8	144.9	127.7	142.7	155.3	157.9	136.4
December	140.9	142.6	132.1	147.5	128.5	143.4	156.8	160.8	137.6
<b>2002</b>									
March	141.4	142.4	133.9	149.3	129.2	144.6	159.2	161.8	138.5
June	142.9	143.4	136.0	151.2	129.6	149.7	162.5	164.8	139.9
September	143.6	143.9	139.1	153.6	130.3	152.5	164.5	166.5	141.3
December	144.3	144.9	141.0	155.5	131.6	154.4	164.5	168.6	142.5
<b>2003</b>									
March	146.1	148.1	143.0	156.7	133.1	161.2	169.7	172.1	144.7
June	146.9	151.8	148.6	157.9	136.6	165.7	169.9	178.3	147.9
September	148.7	152.5	155.5	160.7	140.9	166.7	170.0	184.6	151.2
December	150.0	152.2	161.1	164.9	143.8	168.9	175.1	186.7	153.7

(a) Base of each index 1989-90 = 100.0.

## PROJECT HOME PRICE INDEXES, Percentage Changes

<i>Period</i>	<i>Sydney</i>	<i>Melbourne</i>	<i>Brisbane</i>	<i>Adelaide</i>	<i>Perth</i>	<i>Hobart</i>	<i>Darwin</i>	<i>Canberra</i>	<i>Weighted average of eight capital cities</i>
PERCENTAGE CHANGE (from previous financial year)									
<b>2000-01</b>	12.4	12.2	11.7	11.6	9.9	11.5	9.5	16.4	11.8
<b>2001-02</b>	2.1	3.8	1.1	4.4	2.1	3.1	1.1	5.1	2.4
<b>2002-03</b>	2.8	3.6	7.0	5.2	3.2	9.2	5.5	6.3	4.3
PERCENTAGE CHANGE (from corresponding quarter of previous year)									
<b>2000</b>									
June	7.4	8.5	4.9	8.8	7.5	3.7	2.8	8.8	7.1
September	15.3	15.5	14.3	16.4	13.3	13.1	11.4	19.1	14.8
December	12.6	12.3	13.1	11.0	8.3	11.9	10.0	17.1	11.8
<b>2001</b>									
March	10.9	11.0	10.4	9.1	8.7	10.2	9.4	14.6	10.4
June	10.7	10.3	9.3	10.0	9.8	10.9	7.3	15.0	10.2
September	1.5	3.2	0.3	2.3	1.1	1.7	-1.5	4.2	1.6
December	1.9	4.5	-0.5	4.9	2.1	2.2	-0.5	5.4	2.1
<b>2002</b>									
March	2.3	3.2	1.1	5.3	2.7	2.9	1.6	5.4	2.5
June	2.7	4.2	3.5	5.4	2.1	5.6	4.8	5.3	3.3
September	2.7	2.8	5.5	6.0	2.0	6.9	5.9	5.4	3.6
December	2.4	1.6	6.7	5.4	2.4	7.7	4.9	4.9	3.6
<b>2003</b>									
March	3.3	4.0	6.8	5.0	3.0	11.5	6.6	6.4	4.5
June	2.8	5.9	9.3	4.4	5.4	10.7	4.6	8.2	5.7
September	3.6	6.0	11.8	4.6	8.1	9.3	3.3	10.9	7.0
December	4.0	5.0	14.3	6.0	9.3	9.4	6.4	10.7	7.9
PERCENTAGE CHANGE (from previous quarter)									
<b>2000</b>									
June	0.8	0.4	0.2	0.3	-0.1	0.3	0.9	1.6	0.4
September	9.7	8.7	9.3	8.7	9.3	9.7	9.0	11.4	9.3
December	0.4	0.5	1.1	-0.8	-0.3	—	—	0.6	0.4
<b>2001</b>									
March	-0.1	1.2	-0.2	0.9	-0.1	0.1	-0.6	0.7	0.2
June	0.7	-0.3	-0.8	1.1	0.9	0.9	-1.0	2.0	0.2
September	0.5	1.7	0.3	1.0	0.6	0.6	0.1	0.9	0.7
December	0.8	1.9	0.2	1.8	0.6	0.5	1.0	1.8	0.9
<b>2002</b>									
March	0.4	-0.1	1.4	1.2	0.5	0.8	1.5	0.6	0.7
June	1.1	0.7	1.6	1.3	0.3	3.5	2.1	1.9	1.0
September	0.5	0.3	2.3	1.6	0.5	1.9	1.2	1.0	1.0
December	0.5	0.7	1.4	1.2	1.0	1.2	—	1.3	0.8
<b>2003</b>									
March	1.2	2.2	1.4	0.8	1.1	4.4	3.2	2.1	1.5
June	0.5	2.5	3.9	0.8	2.6	2.8	0.1	3.6	2.2
September	1.2	0.5	4.6	1.8	3.1	0.6	0.1	3.5	2.2
December	0.9	-0.2	3.6	2.6	2.1	1.3	3.0	1.1	1.7

— nil or rounded to zero (including null cells)

## SELECTED HOUSING PRICE INDEX NUMBERS (a), Australia

<i>Period</i>	<i>Established houses</i>	<i>Project homes</i>	<i>Materials used in house building</i>	<i>Construction industry total hourly rates of pay(b)</i>	<i>National accounts private housing investment</i>
<b>2000-01</b>	152.8	134.9	124.4	112.9	137.7
<b>2001-02</b>	178.0	138.1	126.0	116.6	140.6
<b>2002-03</b>	209.9	144.1	130.5	120.6	146.2
<b>2000</b>					
June	147.3	122.9	125.5	109.8	125.1
September	147.1	134.3	124.5	111.5	137.5
December	150.6	134.8	124.4	112.2	137.2
<b>2001</b>					
March	153.9	135.1	124.2	113.3	137.8
June	159.4	135.4	124.4	114.4	138.1
September	167.7	136.4	124.7	115.6	138.7
December	174.0	137.6	125.2	116.3	140.1
<b>2002</b>					
March	180.6	138.5	126.1	117.1	141.2
June	189.5	139.9	127.8	117.5	142.3
September	196.7	141.3	128.8	119.2	143.6
December	206.1	142.5	130.1	119.9	144.9
<b>2003</b>					
March	213.1	144.7	130.9	121.4	146.7
June	223.8	147.9	132.1	122.0	149.4
September	231.3	151.2	132.9	123.8	152.5
December	245.1	153.7	133.6	124.2	155.2

(a) Unless otherwise specified, base of each index: 1989-90 = 100.0

(b) Base of index September quarter 1997 = 100.0

## SELECTED HOUSING PRICE INDEX NUMBERS, Australia—Percentage Changes

<i>Period</i>	<i>Established houses</i>	<i>Project homes</i>	<i>Materials used in house building</i>	<i>Construction industry total hourly rates of pay</i>	<i>National accounts private housing investment</i>
.....					
PERCENTAGE CHANGE (from previous financial year)					
<b>2000-01</b>	7.4	11.8	1.3	4.3	13.7
<b>2001-02</b>	16.5	2.4	1.3	3.3	2.1
<b>2002-03</b>	17.9	4.3	3.6	3.4	4.0
.....					
PERCENTAGE CHANGE (from corresponding quarter of previous year)					
<b>2000</b>					
June	9.7	7.1	5.3	3.6	7.5
September	7.5	14.8	3.3	4.4	16.8
December	6.6	11.8	2.4	4.4	14.9
<b>2001</b>					
March	6.9	10.4	0.3	4.1	12.7
June	8.2	10.2	-0.9	4.2	10.4
September	14.0	1.6	0.2	3.7	0.9
December	15.5	2.1	0.6	3.7	2.1
<b>2002</b>					
March	17.3	2.5	1.5	3.4	2.5
June	18.9	3.3	2.7	2.7	3.0
September	17.3	3.6	3.3	3.1	3.5
December	18.4	3.6	3.9	3.1	3.4
<b>2003</b>					
March	18.0	4.5	3.8	3.7	3.9
June	18.1	5.7	3.4	3.8	5.0
September	17.6	7.0	3.2	3.9	6.2
December	18.9	7.9	2.7	3.6	7.1
.....					
PERCENTAGE CHANGE (from previous quarter)					
<b>2000</b>					
June	2.4	0.4	1.4	0.9	2.3
September	-0.1	9.3	-0.8	1.5	9.9
December	2.4	0.4	-0.1	0.6	-0.2
<b>2001</b>					
March	2.2	0.2	-0.2	1.0	0.4
June	3.6	0.2	0.2	1.0	0.2
September	5.2	0.7	0.2	1.0	0.4
December	3.8	0.9	0.4	0.6	1.0
<b>2002</b>					
March	3.8	0.7	0.7	0.7	0.8
June	4.9	1.0	1.3	0.3	0.8
September	3.8	1.0	0.8	1.4	0.9
December	4.8	0.8	1.0	0.6	0.9
<b>2003</b>					
March	3.4	1.5	0.6	1.3	1.2
June	5.0	2.2	0.9	0.5	1.8
September	3.4	2.2	0.6	1.5	2.1
December	6.0	1.7	0.5	0.3	1.8

## EXPLANATORY NOTES

### INTRODUCTION

**1** This publication provides estimates of changes in house prices for each of the eight capital cities of Australia. The information is presented in the form of price indexes constructed separately for *Established Houses* and for *Project Homes* (see below for definitions). It is calculated on the reference base 1989–90 = 100.0 for the eight capital cities. The capital city indexes measure price movements over time in each city individually. They do not measure differences in price levels between cities.

**2** The index for Project Homes is compiled by the ABS for use in calculating the House purchase expenditure class of the Consumer Price Index (CPI). The index for Established Houses, while not contributing to the CPI, is compiled and published along with the Project Homes index in recognition of the widespread interest in information specifically relating to housing.

**3** To assist in the analysis of housing price movements at the national level, Australian series have also been compiled and are presented in tables 5 and 6 along with series for prices of building materials, construction industry hourly rates of pay and private housing investment (from the Australian National Accounts). For information on the derivation of series in these tables see paragraph 13.

### DEFINITIONS

*Established houses*

**4** Detached residential dwellings on their own block of land regardless of age (i.e. including new houses sold as a house/land package as well as second-hand houses). Price changes therefore relate to changes in the total price of dwelling and land.

*Project homes*

**5** Dwellings available for construction on a client's block of land. Price changes therefore relate only to the price of the dwelling (excluding land).

### PRICE INDEXES

**6** A price index is concerned with measuring pure price change—that is, it is concerned with isolating and measuring that element of price change which is not brought about by any change to either the quantity or the quality of the goods or services for which the index is required.

**7** The techniques used to construct a price index for project homes are similar to those used for most other goods. A representative sample of project home models is selected in each city, prices obtained each quarter and the price movements for each model weighted together. Constant quality is preserved by calculating price movements on a matched sample basis (i.e. the price movements between adjacent quarters are based on the same models in each quarter). If the specification of an individual model changes substantially or a price is unable to be obtained then that model is excluded from the calculation of price movement. Adjustments are made to raw prices to compensate for any minor changes in specifications.

**8** The construction of a price index for established houses, on the other hand, poses a number of problems. First, in addition to the physical characteristics of a dwelling (such as outer-wall construction, total overall size and number of rooms) its geographical location is a significant component of quality. Second, the only price data available relates to sales that have actually taken place during each quarter. Movements in the average price derived from total sales data in each period would not provide a measure of pure price change as the measure would be influenced by compositional changes (i.e. the prices from one period to the next would relate to houses of different quality).

**9** In order to minimise the effects of compositional change on these indexes, the raw sales data is stratified by geographic area. In addition, within each geographic area, any properties with unusually low or high sale prices in the quarter are excluded. The overall movement of the index is calculated from a weighted average of the average price of each stratum.

## EXPLANATORY NOTES *continued*

### PRICE INDEXES *continued*

**10** Price information for project homes is obtained each month from a sample of project home builders in each capital city. Sale prices of established houses are obtained from real estate organisations and government agencies and relate to actual sales transacted during the quarter.

### LIMITATIONS OF HOUSE PRICE INDEXES

**11** The reliability of each index is largely dependent upon the availability of sufficient pricing information each quarter. While not a problem for project homes, difficulties are sometimes encountered when compiling the indexes for established houses as the number of price observations available depends on market activity in each quarter. This is most apparent in the established house price indexes for the smaller States and Territories.

**12** The series most affected by limited market scope is the Darwin established house price index. Rather than suppress publication, the series is included here because it is believed that the long term trend is reliable. However, because of limitations in the reliability of individual quarter to quarter movement, users are advised to exercise due caution when analysing such movements.

### NATIONAL HOUSE PRICE AND OTHER INDEXES

**13** These series are presented to facilitate analysis of price movements at a national level. Although coverage is not, in all cases, strictly national, this is not believed to significantly impair their usefulness. The derivation or source of each series is as follows:

*Established houses:* This series is derived by weighting together the indexes for each of the eight capital cities according to the value of secured finance commitments to individuals in each of the States and Territories for the purchase of newly erected and established houses in 1985–86 until June quarter 1996, and thereafter commitments in 1994–95. The source of weighting information is unpublished data from the ABS survey of Housing Finance for Owner Occupation.

*Project homes:* This series is derived by weighting together the indexes for each of the eight capital cities according to the value of secured finance commitments to individuals in each of the States and Territories for the construction of houses in 1985–86 until June quarter 1996, and thereafter commitments in 1994–95. The source of weighting information is unpublished data from the ABS survey of Housing Finance for Owner Occupation. Although the capital city price indexes for project homes are compiled for use in calculating the House purchase expenditure class of the CPI, price movements exhibited in the respective series at the national level are not directly comparable. The weighting pattern used in the CPI House purchase index differs from that described above for project homes index. The weights used for CPI purposes relate to the net acquisition of dwellings (excluding land) by private households in each of the eight capital cities (i.e. they include dwellings acquired from the government and business sectors, alterations and additions to existing dwellings and are capital city specific).

*Materials used in house building:* The series included here is that published for the weighted average of the six State capital cities in *Producer Price Indexes, Australia* (cat. no. 6427.0).

*Construction industry total hourly rates of pay:* The series included here is that published for the construction industry total hourly rates of pay excluding bonuses, private and public, in *Wage Cost Index, Australia* (cat. no. 6345.0).

*Private Housing Investment:* This series is the annually-reweighted chain Laspeyres price index for private capital expenditure (houses), as used (but not separately published) in *Australian National Accounts: National Income, Expenditure and Product* (cat. no. 5206.0), referenced to 1989–90 = 100.0.

## EXPLANATORY NOTES *continued*

### ANALYSIS OF CHANGES IN INDEX NUMBERS

**14** Each of the indexes presented in this publication are calculated on a quarterly basis with a reference base of 1989–90=100.0, except for Construction industry total hourly rates of pay, which has a reference base of September quarter 1997 = 100.0. In compiling these indexes quarterly, the objective is to measure the change between average price levels during one quarter and average price levels during the next quarter.

**15** Index numbers are also presented for financial years where the index numbers for financial years are simple (arithmetic) averages of the quarterly index numbers. Index numbers for calendar years may be derived in the same way.

**16** Movements in indexes from one period to another can be expressed either as changes in index points or as percentage changes. The following example illustrates the method of calculating index points changes and percentage changes between any two periods:

Established houses: Sydney index numbers—

December Quarter 2003 265.9 (see Table 1)

less September Quarter 2003 252.5 (see Table 1)

Change in index points: 13.4

Percentage Change =  $\frac{13.4}{252.5} \times 100 = 5.3\%$

**17** In this publication, percentage changes are calculated to illustrate three different kinds of movements in index numbers:

- movements between consecutive financial years (change between average price levels during one financial year and average price levels during the next financial year)
- movements between corresponding quarters of consecutive years
- movements between consecutive quarters.

### RELATED PUBLICATIONS

**18** Users may also wish to refer to the following publications which are available on request:

- *Australian National Accounts: National Income, Expenditure and Product*, cat. no. 5206.0—issued quarterly
- *Building Activity, Australia*, cat. no. 8752.0—issued quarterly
- *Building Approvals, Australia*, cat. no. 8731.0—issued monthly
- *Consumer Price Index Australia*, cat. no. 6401.0—issued quarterly
- *Housing Finance for Owner Occupation, Australia*, cat. no. 5609.0—issued monthly
- *Producer Price Indexes, Australia*, cat. no. 6427.0—issued quarterly.

**19** Current publications and other products by the ABS are listed in the *Catalogue of Publications and Products* (cat. no. 1101.0). The Catalogue is available from any ABS office or the ABS web site <<http://www.abs.gov.au>>. The ABS also issues a daily Release Advice on the web site which details products to be released in the week ahead.

## FOR MORE INFORMATION . . .

- INTERNET* **www.abs.gov.au** the ABS web site is the best place to start for access to summary data from our latest publications, information about the ABS, advice about upcoming releases, our catalogue, and Australia Now—a statistical profile.
- LIBRARY* A range of ABS publications is available from public and tertiary libraries Australia-wide. Contact your nearest library to determine whether it has the ABS statistics you require, or visit our web site for a list of libraries.
- CPI INFOLINE* For current and historical Consumer Price Index data, call 1902 981 074 (call cost 77c per minute).
- DIAL-A-STATISTIC* For the latest figures for National Accounts, Balance of Payments, Labour Force, Average Weekly Earnings, Estimated Resident Population and the Consumer Price Index call 1900 986 400 (call cost 77c per minute).

## INFORMATION SERVICE

Data already published that can be provided within five minutes will be free of charge. Our information consultants can also help you to access the full range of ABS information—ABS user pays services can be tailored to your needs, time frame and budget. Publications may be purchased. Specialists are on hand to help you with analytical or methodological advice.

- PHONE* 1300 135 070
- EMAIL* client.services@abs.gov.au
- FAX* 1300 135 211
- POST* Client Services, ABS, GPO Box 796, Sydney NSW 2001

## WHY NOT SUBSCRIBE?

ABS subscription services provide regular, convenient and prompt deliveries of ABS publications and products as they are released. Email delivery of monthly and quarterly publications is available.

- PHONE* 1300 366 323
- EMAIL* subscriptions@abs.gov.au
- FAX* (03) 9615 7848
- POST* Subscription Services, ABS, GPO Box 2796Y, Melbourne Vic 3001



2641600012031

ISSN 1034 1897

RRP \$19.00