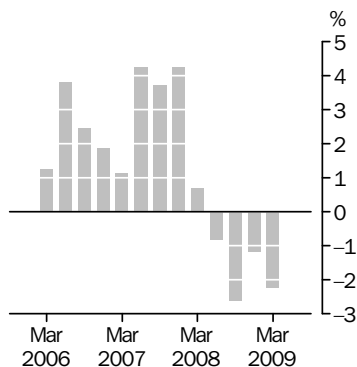


# HOUSE PRICE INDEXES: EIGHT CAPITAL CITIES

EMBARGO: 11.30AM (CANBERRA TIME) MON 4 MAY 2009

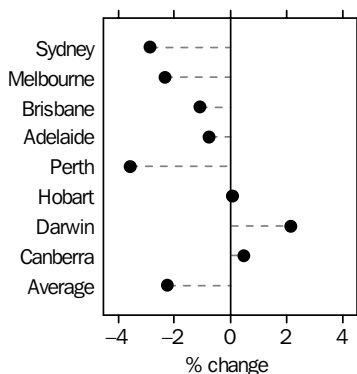
## Established house prices

Weighted average of eight capital cities  
Quarterly % change



## Established house prices

Quarterly % change  
March quarter 2009



## INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Mark Dubner on Sydney (02) 9268 4448.

## KEY FIGURES

### ESTABLISHED HOUSE PRICES

	Dec Qtr 08 to Mar Qtr 09 % change	Mar Qtr 08 to Mar Qtr 09 % change
<b>Weighted average of eight capital cities</b>	<b>-2.2</b>	<b>-6.7</b>
Sydney	-2.9	-7.3
Melbourne	-2.3	-6.7
Brisbane	-1.1	-6.3
Adelaide	-0.8	-1.9
Perth	-3.6	-10.1
Hobart	0.1	0.6
Darwin	2.2	10.8
Canberra	0.5	-5.1

## KEY POINTS

### ESTABLISHED HOUSE PRICES

#### QUARTERLY CHANGES

- Preliminary estimates show the price index for established houses for the weighted average of the eight capital cities decreased 2.2% in the March quarter 2009.
- The main contributors to the decrease were Sydney (-2.9%), Melbourne (-2.3%), Perth (-3.6%), Brisbane (-1.1%) and Adelaide (-0.8%). These decreases were partially offset by increases in Darwin (+2.2%), Canberra (+0.5%) and Hobart (+0.1%).
- The movement in the preliminary established house price index between September and December quarters 2008 has been revised from an estimated decrease of 0.8% to an estimated decrease of 1.2%.

#### ANNUAL CHANGES (MARCH QUARTER 2008 TO MARCH QUARTER 2009)

- Over the year to March 2009, preliminary estimates show that the price index for established houses for the weighted average of the eight capital cities decreased 6.7%.
- Annually, house prices rose in Darwin (+10.8%) and Hobart (+0.6%), and fell in Perth (-10.1%), Sydney (-7.3%), Melbourne (-6.7%), Brisbane (-6.3%), Canberra (-5.1%), and Adelaide (-1.9%).
- The movement in the preliminary established house price index between December quarters 2008 and 2009 has been revised from an estimated decrease of 3.3% to an estimated decrease of 3.9%.

# NOTES

## FORTHCOMING ISSUES

<i>ISSUE (Quarter)</i>	<i>RELEASE DATE</i>
June 2009	4 August 2009
September 2009	2 November 2009
December 2009	1 February 2010
March 2010	3 May 2010



## CHANGES IN THIS ISSUE

There are no changes in this issue.

## CHANGES TO TIME SERIES SPREADSHEETS

From this issue onwards, Table 9, Revisions to established house price index series, is presented in time series spreadsheet format on the ABS website, rather than as a data cube.

## REVISIONS

Estimates for the two most recent quarters of the established house price index series are preliminary and are subject to revision (see paragraphs 12 and 13 of the Explanatory Notes).

Brian Pink  
Australian Statistician

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### ADDITIONAL TABLE AVAILABLE ON ABS WEB SITE

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## ESTABLISHED HOUSE PRICE INDEX NUMBERS (a)(b)

<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>2005-06</b>	93.3	106.4	108.2	111.2	145.7	119.7	138.8	103.5	105.1
<b>2006-07</b>	95.5	117.2	119.2	119.7	192.8	131.1	160.7	113.5	115.5
<b>2007-08</b>	101.9	139.9	141.8	143.4	194.8	142.2	175.2	127.1	129.0
<b>2005</b>									
September	92.7	103.4	105.6	108.2	127.7	114.8	128.5	100.2	101.7
December	93.5	105.4	107.8	110.7	137.3	118.5	135.3	102.8	104.0
<b>2006</b>									
March	92.5	106.9	108.6	112.2	148.2	120.8	141.1	104.0	105.3
June	94.3	110.0	110.9	113.8	169.6	124.6	150.3	107.0	109.3
September	94.4	112.0	112.7	114.5	188.4	127.1	152.3	110.0	112.0
December	94.8	114.8	115.6	117.6	194.8	129.2	159.7	111.8	114.1
<b>2007</b>									
March	94.6	116.7	120.4	119.7	195.8	132.8	164.5	113.5	115.4
June	98.2	125.1	128.1	126.9	192.1	135.4	166.3	118.5	120.3
September	100.7	131.5	134.3	134.6	195.5	139.0	170.8	124.5	124.8
December	103.1	141.3	141.3	143.7	197.6	144.8	177.3	128.2	130.1
<b>2008</b>									
March	102.5	143.6	145.4	148.2	195.3	141.9	174.8	129.1	131.0
June	101.1	143.2	146.1	147.0	190.8	143.1	177.7	126.7	129.9
September	r98.8	r138.5	r140.5	r146.9	r186.6	r139.7	r181.9	r122.3	r126.5
December	p97.8	p137.2	p137.8	p146.5	p182.0	p142.7	p189.6	p121.9	p125.0
<b>2009</b>									
March	p95.0	p134.0	p136.3	p145.4	p175.5	p142.8	p193.7	p122.5	p122.2

p preliminary figure or series subject to revision

r revised

(a) Reference base of each index: 2003-04 = 100.0.

(b) Estimates for the two most recent quarters are experimental (see paragraphs 12 and 13 of the Explanatory Notes).

## ESTABLISHED HOUSE PRICE INDEXES(a), 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>2005-06</b>	-2.9	4.4	3.8	4.4	27.4	7.1	19.8	3.6	3.9
<b>2006-07</b>	2.4	10.2	10.2	7.6	32.3	9.5	15.8	9.7	9.9
<b>2007-08</b>	6.7	19.4	19.0	19.8	1.0	8.5	9.0	12.0	11.7
PERCENTAGE CHANGE (from corresponding quarter of previous year)									
<b>2005</b>									
September	-4.5	3.7	2.9	3.5	19.5	5.7	18.8	1.5	1.7
December	-4.2	2.9	3.7	3.9	22.8	6.4	20.1	2.5	2.3
<b>2006</b>									
March	-3.1	4.8	3.6	4.9	27.4	7.4	17.5	3.4	3.9
June	0.1	6.4	5.1	5.6	38.4	8.8	22.6	7.0	7.3
September	1.8	8.3	6.7	5.8	47.5	10.7	18.5	9.8	10.1
December	1.4	8.9	7.2	6.2	41.9	9.0	18.0	8.8	9.7
<b>2007</b>									
March	2.3	9.2	10.9	6.7	32.1	9.9	16.6	9.1	9.6
June	4.1	13.7	15.5	11.5	13.3	8.7	10.6	10.7	10.1
September	6.7	17.4	19.2	17.6	3.8	9.4	12.1	13.2	11.4
December	8.8	23.1	22.2	22.2	1.4	12.1	11.0	14.7	14.0
<b>2008</b>									
March	8.4	23.1	20.8	23.8	-0.3	6.9	6.3	13.7	13.5
June	3.0	14.5	14.1	15.8	-0.7	5.7	6.9	6.9	8.0
September	r-1.9	r5.3	r4.6	r9.1	r-4.6	r0.5	r6.5	r-1.8	r1.4
December	p-5.1	p-2.9	p-2.5	p1.9	p-7.9	p-1.5	p6.9	p-4.9	p-3.9
<b>2009</b>									
March	p-7.3	p-6.7	p-6.3	p-1.9	p-10.1	p0.6	p10.8	p-5.1	p-6.7
PERCENTAGE CHANGE (from previous quarter)									
<b>2005</b>									
September	-1.6	0.0	0.1	0.4	4.2	0.3	4.8	0.2	-0.2
December	0.9	1.9	2.1	2.3	7.5	3.2	5.3	2.6	2.3
<b>2006</b>									
March	-1.1	1.4	0.7	1.4	7.9	1.9	4.3	1.2	1.3
June	1.9	2.9	2.1	1.4	14.4	3.1	6.5	2.9	3.8
September	0.1	1.8	1.6	0.6	11.1	2.0	1.3	2.8	2.5
December	0.4	2.5	2.6	2.7	3.4	1.7	4.9	1.6	1.9
<b>2007</b>									
March	-0.2	1.7	4.2	1.8	0.5	2.8	3.0	1.5	1.1
June	3.8	7.2	6.4	6.0	-1.9	2.0	1.1	4.4	4.2
September	2.5	5.1	4.8	6.1	1.8	2.7	2.7	5.1	3.7
December	2.4	7.5	5.2	6.8	1.1	4.2	3.8	3.0	4.2
<b>2008</b>									
March	-0.6	1.6	2.9	3.1	-1.2	-2.0	-1.4	0.7	0.7
June	-1.4	-0.3	0.5	-0.8	-2.3	0.8	1.7	-1.9	-0.8
September	r-2.3	r-3.3	r-3.8	r-0.1	r-2.2	r-2.4	r2.4	r-3.5	r-2.6
December	p-1.0	p-0.9	p-1.9	p-0.3	p-2.5	p2.1	p4.2	p-0.3	p-1.2
<b>2009</b>									
March	p-2.9	p-2.3	p-1.1	p-0.8	p-3.6	p0.1	p2.2	p0.5	p-2.2

p preliminary figure or series subject to revision  
r revised

(a) Estimates for the two most recent quarters are experimental (see paragraphs 12 and 13 of the Explanatory Notes).

## 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>2005-06</b>	107.7	105.9	107.4	106.2	130.3	116.8	119.8	105.4	110.3
<b>2006-07</b>	108.1	105.9	111.9	108.4	144.1	120.3	135.6	108.4	113.3
<b>2007-08</b>	112.3	111.2	121.2	113.8	148.7	126.7	144.7	112.4	118.8
<b>2005</b>									
September	107.4	106.2	106.3	105.2	122.7	115.4	114.7	103.7	109.1
December	107.7	106.3	107.2	105.7	127.8	115.4	117.3	104.9	110.0
<b>2006</b>									
March	107.5	105.3	107.2	106.4	132.7	117.7	121.0	105.9	110.4
June	108.0	105.9	108.8	107.3	137.9	118.8	126.0	106.9	111.7
September	107.9	104.2	109.0	107.9	142.0	119.1	130.3	107.6	111.9
December	107.6	105.8	109.6	107.9	143.3	119.1	135.8	108.3	112.6
<b>2007</b>									
March	108.1	106.5	113.4	107.9	144.7	120.0	137.7	108.7	113.7
June	108.9	107.1	115.5	110.0	146.3	123.1	138.7	109.1	114.9
September	110.3	108.2	116.9	111.4	147.6	125.2	142.6	110.9	116.2
December	110.9	110.4	120.6	112.1	148.3	126.5	144.1	112.1	117.8
<b>2008</b>									
March	113.2	112.9	122.8	114.9	148.8	126.7	145.4	112.5	119.9
June	114.8	113.3	124.6	116.6	150.0	128.4	146.7	113.9	121.1
September	115.9	114.0	127.5	119.0	152.5	129.7	149.2	118.3	122.8
December	116.7	112.4	128.9	120.6	154.0	129.7	151.9	118.2	123.1
<b>2009</b>									
March	116.7	111.1	127.9	120.7	153.4	129.7	154.2	118.2	122.5

(a) Reference base of each index: 2003-04 = 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>2005-06</b>	2.3	2.5	1.8	2.5	16.4	4.7	9.4	3.3	4.0
<b>2006-07</b>	0.4	0.0	4.2	2.1	10.6	3.0	13.2	2.8	2.7
<b>2007-08</b>	3.9	5.0	8.3	5.0	3.2	5.3	6.7	3.7	4.9
PERCENTAGE CHANGE (from corresponding quarter of previous year)									
<b>2005</b>									
September	4.2	3.7	2.4	2.9	16.1	9.0	7.3	2.1	5.3
December	2.8	3.5	1.5	1.8	16.7	3.5	9.0	3.2	4.4
<b>2006</b>									
March	1.3	1.2	1.1	2.2	16.2	3.2	9.9	4.0	3.1
June	0.9	1.8	2.2	2.8	16.6	3.2	11.3	3.9	3.2
September	0.5	-1.9	2.5	2.6	15.7	3.2	13.6	3.8	2.6
December	-0.1	-0.5	2.2	2.1	12.1	3.2	15.8	3.2	2.4
<b>2007</b>									
March	0.6	1.1	5.8	1.4	9.0	2.0	13.8	2.6	3.0
June	0.8	1.1	6.2	2.5	6.1	3.6	10.1	2.1	2.9
September	2.2	3.8	7.2	3.2	3.9	5.1	9.4	3.1	3.8
December	3.1	4.3	10.0	3.9	3.5	6.2	6.1	3.5	4.6
<b>2008</b>									
March	4.7	6.0	8.3	6.5	2.8	5.6	5.6	3.5	5.5
June	5.4	5.8	7.9	6.0	2.5	4.3	5.8	4.4	5.4
September	5.1	5.4	9.1	6.8	3.3	3.6	4.6	6.7	5.7
December	5.2	1.8	6.9	7.6	3.8	2.5	5.4	5.4	4.5
<b>2009</b>									
March	3.1	-1.6	4.2	5.0	3.1	2.4	6.1	5.1	2.2
PERCENTAGE CHANGE (from previous quarter)									
<b>2005</b>									
September	0.4	2.1	-0.2	0.8	3.7	0.3	1.3	0.8	0.8
December	0.3	0.1	0.8	0.5	4.2	0.0	2.3	1.2	0.8
<b>2006</b>									
March	-0.2	-0.9	0.0	0.7	3.8	2.0	3.2	1.0	0.4
June	0.5	0.6	1.5	0.8	3.9	0.9	4.1	0.9	1.2
September	-0.1	-1.6	0.2	0.6	3.0	0.3	3.4	0.7	0.2
December	-0.3	1.5	0.6	0.0	0.9	0.0	4.2	0.7	0.6
<b>2007</b>									
March	0.5	0.7	3.5	0.0	1.0	0.8	1.4	0.4	1.0
June	0.7	0.6	1.9	1.9	1.1	2.6	0.7	0.4	1.1
September	1.3	1.0	1.2	1.3	0.9	1.7	2.8	1.6	1.1
December	0.5	2.0	3.2	0.6	0.5	1.0	1.1	1.1	1.4
<b>2008</b>									
March	2.1	2.3	1.8	2.5	0.3	0.2	0.9	0.4	1.8
June	1.4	0.4	1.5	1.5	0.8	1.3	0.9	1.2	1.0
September	1.0	0.6	2.3	2.1	1.7	1.0	1.7	3.9	1.4
December	0.7	-1.4	1.1	1.3	1.0	0.0	1.8	-0.1	0.2
<b>2009</b>									
March	0.0	-1.2	-0.8	0.1	-0.4	0.0	1.5	0.0	-0.5

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

<i>Period</i>	<i>Established houses(b)(c)</i>	<i>Project homes(c)</i>	<i>Materials used in house building(d)</i>	<i>Construction industry total hourly rates of pay</i>	<i>National accounts private housing investment</i>
<b>2005-06</b>	105.1	110.3	105.8	110.3	110.6
<b>2006-07</b>	115.5	113.3	109.5	115.5	114.3
<b>2007-08</b>	129.0	118.8	113.3	120.8	120.2
<b>2005</b>					
September	101.7	109.1	105.0	108.1	109.0
December	104.0	110.0	105.4	109.3	110.2
<b>2006</b>					
March	105.3	110.4	105.8	111.2	111.0
June	109.3	111.7	106.9	112.6	112.0
September	112.0	111.9	108.5	113.5	112.9
December	114.1	112.6	109.3	114.9	113.5
<b>2007</b>					
March	115.4	113.7	109.8	116.2	114.7
June	120.3	114.9	110.5	117.4	116.0
September	124.8	116.2	111.4	119.0	117.4
December	130.1	117.8	112.4	120.2	119.3
<b>2008</b>					
March	131.0	119.9	113.8	121.1	121.3
June	129.9	121.1	115.5	122.9	122.6
September	r126.5	122.8	118.6	124.5	124.4
December	p125.0	123.1	120.1	125.5	124.8
<b>2009</b>					
March	p122.2	122.5	121.7	nya	nya

nya not yet available

p preliminary figure or series subject to revision

r revised

(a) Reference base of each index: 2003-04 = 100.0.

(b) Estimates for the two most recent quarters are experimental (see paragraphs 12 and 13 of the Explanatory Notes)

(c) Weighted average of eight capital cities.

(d) Weighted average of six capital cities.



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

<i>Period</i>	<i>Established houses(a) (b)</i>	<i>Project homes(b)</i>	<i>Materials used in house building(c)</i>	<i>Construction industry total hourly rates of pay</i>	<i>National accounts private housing investment</i>
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## PERCENTAGE CHANGE (from previous financial year)

<b>2005-06</b>	3.9	4.0	2.3	4.9	4.5
<b>2006-07</b>	9.9	2.7	3.5	4.7	3.3
<b>2007-08</b>	11.7	4.9	3.5	4.6	5.2

## PERCENTAGE CHANGE (from corresponding quarter of previous year)

<b>2005</b>					
September	1.7	5.3	2.7	4.7	5.2
December	2.3	4.4	2.3	4.5	5.0
<b>2006</b>					
March	3.9	3.1	1.9	5.0	4.1
June	7.3	3.2	2.1	5.5	3.9
September	10.1	2.6	3.3	5.0	3.6
December	9.7	2.4	3.7	5.1	3.0
<b>2007</b>					
March	9.6	3.0	3.8	4.5	3.3
June	10.1	2.9	3.4	4.3	3.6
September	11.4	3.8	2.7	4.8	4.0
December	14.0	4.6	2.8	4.6	5.1
<b>2008</b>					
March	13.5	5.5	3.6	4.2	5.8
June	8.0	5.4	4.5	4.7	5.7
September	r1.4	5.7	6.5	4.6	6.0
December	p-3.9	4.5	6.9	4.4	4.6
<b>2009</b>					
March	p-6.7	2.2	6.9	nya	nya

## PERCENTAGE CHANGE (from previous quarter)

<b>2005</b>					
September	-0.2	0.8	0.3	1.3	1.1
December	2.3	0.8	0.4	1.1	1.1
<b>2006</b>					
March	1.3	0.4	0.4	1.7	0.7
June	3.8	1.2	1.0	1.3	0.9
September	2.5	0.2	1.5	0.8	0.8
December	1.9	0.6	0.7	1.2	0.5
<b>2007</b>					
March	1.1	1.0	0.5	1.1	1.1
June	4.2	1.1	0.6	1.0	1.1
September	3.7	1.1	0.8	1.4	1.2
December	4.2	1.4	0.9	1.0	1.6
<b>2008</b>					
March	0.7	1.8	1.2	0.7	1.7
June	-0.8	1.0	1.5	1.5	1.1
September	r-2.6	1.4	2.7	1.3	1.5
December	p-1.2	0.2	1.3	0.8	0.3
<b>2009</b>					
March	p-2.2	-0.5	1.3	nya	nya

nya not yet available

p preliminary figure or series subject to revision

r revised

(a) Estimates for the two most recent quarters are experimental (see paragraphs 12 and 13 of the Explanatory Notes).

(b) Weighted average of eight capital cities.

(c) Weighted average of six capital cities.

MEDIAN PRICE OF ESTABLISHED HOUSE TRANSFERS (UNSTRATIFIED) (a)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra
<i>Period</i>	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<b>2005</b>								
September	490.0	320.0	314.0	275.0	315.0	245.0	295.0	365.0
December	500.0	333.0	320.0	280.0	340.0	252.0	320.0	387.0
<b>2006</b>								
March	471.0	330.0	325.0	280.0	365.0	260.0	341.5	385.0
June	496.0	345.0	330.0	285.1	408.0	270.0	349.5	399.5
September	483.0	346.8	333.0	290.0	443.5	270.0	360.0	413.0
December	500.0	360.0	342.0	300.0	456.0	278.0	380.0	420.5
<b>2007</b>								
March	482.0	345.0	350.0	305.0	465.0	280.0	389.5	430.0
June	r514.0	r362.0	r370.5	315.0	455.0	291.5	395.0	445.0
September	515.0	370.0	389.0	335.0	465.0	285.0	400.0	460.0
December	540.0	412.0	412.0	r360.0	470.0	310.0	418.5	r470.0
<b>2008</b>								
March	499.0	r385.0	r424.9	360.0	455.0	r307.5	420.0	470.0
June	r516.0	r400.0	425.0	365.0	445.0	r305.0	422.3	r478.5
September	480.0	385.0	410.0	360.0	431.5	294.0	430.0	448.5
December	nya	nya	nya	nya	nya	nya	nya	nya
<b>2009</b>								
March	nya	nya	nya	nya	nya	nya	nya	nya

nya not yet available  
r revised

(a) See paragraphs 27 and 28 of the Explanatory Notes.

## NUMBER OF ESTABLISHED HOUSE TRANSFERS (a)

	<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>Period</i>	no.	no.	no.	no.	no.	no.	no.	no.
<b>2005-06</b>	r43 112	r56 765	36 534	r18 780	32 991	r4 369	2 220	r4 677
<b>2006-07</b>	r48 328	r61 989	r42 750	r20 958	r18 430	r4 333	1 976	r5 021
<b>2007-08</b>	r46 515	r61 498	r36 439	r19 853	r16 181	r3 881	1 620	r4 529
<b>2005</b>								
September	r10 861	r14 114	8 943	r4 519	8 948	979	586	r1 037
December	r9 804	r15 790	8 421	r4 510	9 152	1 021	566	1 205
<b>2006</b>								
March	10 527	r12 849	9 989	r4 833	8 445	1 244	554	1 141
June	11 920	r14 012	9 181	4 918	6 446	r1 125	514	1 294
September	11 094	r14 338	r9 813	r4 780	5 195	955	535	r1 137
December	11 472	r15 048	9 420	r4 968	r4 165	970	495	1 319
<b>2007</b>								
March	r11 723	r15 206	r12 082	r5 418	4 664	1 211	496	1 307
June	r14 039	r17 397	r11 435	r5 792	r4 406	r1 197	450	r1 258
September	r13 132	r17 155	r11 590	5 482	r4 450	r1 062	464	r1 256
December	r13 134	r17 916	r10 169	r5 373	r4 586	r1 094	411	r1 329
<b>2008</b>								
March	r9 700	r12 843	r8 232	r4 580	r3 991	r933	357	r955
June	r10 549	r13 584	r6 448	r4 418	r3 154	r792	388	r989
September	10 531	12 433	6 895	4 127	3 638	764	439	980
December	nya	nya	nya	nya	nya	nya	nya	nya
<b>2009</b>								
March	nya	nya	nya	nya	nya	nya	nya	nya

nya not yet available

r revised

(a) See paragraph 29 of the Explanatory Notes.

REVISIONS TO ESTABLISHED HOUSE PRICE INDEX SERIES, Weighted average of eight capital cities(a)(b)(c)(d)

Period	1st estimate	2nd estimate	Final estimate	DIFFERENCE BETWEEN FINAL ESTIMATE AND:	
				1st estimate	2nd estimate
INDEX NUMBER (a)			INDEX POINTS		
<b>2007</b>					
March	114.4	115.7	115.4	1.0	-0.3
June	119.4	119.7	120.3	0.9	0.6
September	123.9	124.1	124.8	0.9	0.7
December	128.1	129.9	130.1	2.0	0.2
<b>2008</b>					
March	131.3	130.6	131.0	-0.3	0.4
June	130.2	130.7	129.9	-0.3	-0.8
September	128.3	126.8	126.5	-1.8	-0.3
December	125.8	125.0	nya	nya	nya
<b>2009</b>					
March	122.2	nya	nya	nya	nya
ANNUAL PERCENTAGE CHANGE (b)			PERCENTAGE POINTS		
<b>2007</b>					
March	8.6	9.9	9.6	1.0	-0.3
June	9.2	9.5	10.1	0.9	0.6
September	10.6	10.8	11.4	0.8	0.6
December	12.3	13.8	14.0	1.7	0.2
<b>2008</b>					
March	13.8	13.2	13.5	-0.3	0.3
June	8.2	8.6	8.0	-0.2	-0.6
September	2.8	1.6	1.4	-1.4	-0.2
December	-3.3	-3.9	nya	nya	nya
<b>2009</b>					
March	-6.7	nya	nya	nya	nya
QUARTERLY PERCENTAGE CHANGE (c)			PERCENTAGE POINTS		
<b>2007</b>					
March	1.1	1.4	1.1	0.0	-0.3
June	3.2	3.7	4.2	1.0	0.5
September	3.5	3.2	3.7	0.2	0.5
December	3.2	4.1	4.2	1.0	0.1
<b>2008</b>					
March	1.1	0.4	0.7	-0.4	0.3
June	-0.3	-0.2	-0.8	-0.5	-0.6
September	-1.8	-2.4	-2.6	-0.8	-0.2
December	-0.8	-1.2	nya	nya	nya
<b>2009</b>					
March	-2.2	nya	nya	nya	nya

nya not yet available

(a) Reference base of each index: 2003-04 = 100.0.

(b) Percentage change from corresponding quarter of previous year.

(c) Percentage change from previous quarter.

(d) Revisions to September quarter 2008 also reflect updates to the weighting pattern and stratification method.

For more information see paragraph 14 of the Appendix to the December quarter 2008 issue of this publication.

## 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 2003–04 = 100.0 for each of the eight capital cities as well as a weighted average of them. 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 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 prices.

**3** To assist in the analysis of housing price movements at the national level, aggregated series have also been compiled and are presented in tables 5 and 6 along with series for prices of materials used in house building, construction industry hourly rates of pay and private housing investment. For information on the derivation of series in these tables see paragraphs 20–26.

**4** Table 7 presents a city-wide median price (unstratified) of house sales data available from the State/Territory Land Titles Office or Valuers-General (VGs) Office in each capital city. These median prices are ‘raw’ medians from the available data set and quarterly changes in them will not concord with the published Established House Price Indexes for each city which are compiled in strata and weighted by the value of housing stock. Numbers of established house transfers recorded each quarter by the VGs are presented in Table 8.

### DEFINITIONS

#### *Established houses*

**5** The price index for established houses covers transactions in 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*

**6** Project homes are dwellings available for construction on an existing block of land. Price changes relate only to the cost of constructing the dwelling (excluding land).

### PRICE INDEXES

**7** 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.

**8** 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 are obtained each quarter and the price movements for each model are 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.

**9** This standard procedure for constructing price indexes is not viable in the case of established houses as the observable prices in each period relate to different set of dwellings for each period. The challenge is how to utilise prices for a heterogeneous set of dwellings to construct measures of price change for characteristic or homogeneous dwellings. The ABS Publication: *A Guide to House Price Indexes* (cat. no. 6464.0) provides a more detailed background. (Note: The Guide will be updated in 2009 to

## EXPLANATORY NOTES *continued*

### PRICE INDEXES *continued*

#### *Controlling for the compositional change effect*

reflect the changes made in the December quarter 2008 to the stratification method - see paragraphs 10-11 below).

**10** The ABS uses stratification to control for this 'compositional' effect by grouping (or 'clustering') houses according to a set of price determining characteristics. The finer the level of stratification available, the more similar or homogenous the cluster of houses will be. However, the finer the level of stratification, the fewer the property sales in the period. Therefore, the clusters defined have to balance the homogeneity of housing characteristics and the number of observations required to produce a reliable median price. The lowest level geographical classification that is commonly available across data sets is the suburb. Therefore, suburbs are the building blocks on which the clusters are based.

**11** Analysis by the ABS has found that the most effective stratification approach uses two characteristics: the long term level of prices for the suburb in which the house is located, and neighbourhood characteristics of the suburb, as represented by the ABS produced Socio-Economic Indexes for Areas (SEIFA). A new set of clusters produced with this stratification method was introduced in the December quarter 2008 issue of 6416.0, together with updated housing stock weights derived using quantity data from the 2006 Census of Population and Housing. The link period for these changes is March quarter 2008. Therefore, only the index numbers from June quarter 2008 onwards reflect the new weights and stratification. The new approach is a refinement of the previous stratification method, which was based on structural attributes of dwellings within suburbs, the physical location of the dwelling, and neighbourhood characteristics of suburbs.

#### *'Leading Indicator'*

**12** The 'leading indicator' series are compiled for the most recent two quarters using early VGs data combined with mortgage lenders' data. These series are labelled with a 'p' indicating a preliminary estimate, and are initially considered 'experimental' until the ABS has sufficient historical data to fully analyse the relationship between these preliminary data and the benchmark series that they are being used to project.

**13** It is important to note that the price indexes, and therefore the percentage changes, for the two most recent quarters are subject to revision as more complete data sets are obtained from the VGs. These revisions are reported in Table 9, Revisions to Established House Price Index Series, Australia. This table displays, for each time period, the preliminary and final estimates, and the corresponding annual and quarterly percentage changes. The table also displays the size of the revisions made to preliminary estimates of house price index movements. Until greater experience has been gained with these data sets, the ABS is unable to provide any additional indication of the likely magnitudes or direction of the revisions.

**14** The columns titled 'Difference between final estimate and first and second estimate' are calculated by subtracting the initial estimates from the final estimate. Consequently, no revisions information will be available until a final estimate has been published. As this series was first published with respect to September quarter 2005, the first period for which preliminary data can be compared with final data is June quarter 2005. No preliminary estimates exist prior to this period.

**15** Revisions to the weighted average of eight capital cities are included in this publication. Revisions made to each of the individual capital cities are available on the ABS website <<http://www.abs.gov.au>> (refer to the time series spreadsheets under the 'Downloads' tab for *House Price Indexes: Eight Capital Cities* (cat. no. 6416.0)).

## EXPLANATORY NOTES *continued*

### *Available data*

**16** Price information for project homes is obtained each month from a sample of project home builders in each capital city. Sales prices of established houses are obtained from VGs and home mortgage lenders, and are based on the exchange date of the sales. The exchange date most closely approximates the time at which the market price is determined. Exchange date information is available for all cities except Adelaide and Darwin. For these cities, a modelled exchange date is used.

**17** The delivery of VGs data relating to exchange date is delayed by the normal contract settlement and reporting processes. It is only possible to publish reliable house price movements based solely on VGs data after approximately six months.

### LIMITATIONS OF HOUSE PRICE INDEXES

**18** 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 capital cities (Hobart, Darwin and Canberra).

**19** The series most affected by limited market scope is the Darwin established house price index. As can be seen from the data in Table 8, the series for Darwin is affected by a relatively low number of transactions in any quarter. Rather than suppress publication, the series are included here because it is believed that the long term trends are reliable. However, because of the limitations in the reliability of individual quarter-to-quarter movements, users are advised to exercise due care when analysing such movements.

### NATIONAL HOUSE PRICE AND OTHER INDEXES

**20** These series are presented to facilitate analysis of price movements at a national level. Although coverage is not strictly national in all cases, this does not significantly impair their usefulness. The derivation or source of each series is set out below.

### *Established houses*

**21** The series for established houses is derived by weighting together the indexes for each of the eight capital cities according to the relative value of housing stock in each capital city. From the June quarter 2008 onwards, the values were obtained by combining 2006 Population Census house counts with March quarter 2008 mean prices. Prior to this, the values were obtained by combining 2001 Population Census house counts with March quarter 2002 mean prices. It is important to understand that in the compilation of this index (and other fixed weighted indexes) it is not the housing stock values that are held constant from period to period. What is held constant is the quantity (eg. number of houses) underpinning these values.

### *Project homes*

**22** The series for project homes is derived by weighting together the indexes for each of the eight capital cities. In September quarter 2005, data on housing finance collected by the Australian Prudential Regulatory Authority was used to update the aggregate expenditure on secured finance commitments for the purchase of new dwellings by owner occupiers in 2004–05. The city weights were allocated using data from the Building Activity survey and census data. From June quarter 1996 to June quarter 2005 the value of commitments in 1994–95 was used. The source of weighting information was unpublished data from the ABS survey of Housing Finance for Owner Occupation. Between 1985–86 and June quarter 1996 the value of secured finance commitments to individuals in each of the states and territories for the construction of houses was used.

**23** 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 the 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.

## EXPLANATORY NOTES *continued*

*Project homes continued*

they include dwellings acquired from the government and business sectors and alterations and additions to existing dwellings).

*Materials used in house building*

**24** The index for materials used in house building is published for the weighted average of the six state capital cities in *Producer Price Indexes, Australia* (cat. no. 6427.0), re-referenced to 2003–04 = 100.0. For more information on this index refer to *Producer and International Trade Price Indexes: Concepts, Sources and Methods, 2006* (cat. no. 6429.0)

*Construction industry total hourly rates of pay*

**25** The index for the construction industry total hourly rates of pay excluding bonuses, private and public, is that published in *Labour Price Indexes, Australia* (cat. no. 6345.0). For more information on this index refer to *Labour Price Index: Concepts, Sources and Methods, 2004* (cat. no. 6351.0.55.001)

*Private Housing Investment*

**26** The index for private housing investment is the annually-reweighted chain Laspeyres price index for private capital expenditure on new and used dwellings, as used (but not separately published) in *Australian National Accounts: National Income, Expenditure and Product* (cat. no. 5206.0), referenced to 2003–04 = 100.0. For more information on this index refer to *Australian National Accounts: Concepts Sources and Methods, 2000* (cat. no. 5216.0)

*Established house transfer prices and counts*

**27** As well as the price indexes based on stratified weights for each city, the ABS publishes the median price of all established house transfers, and the number of established house transfers. Both these series are based on VGs house sales data, and are only available for those quarters for which final index estimates are available. As the ABS receives more data, these figures are revised as necessary.

**28** The median prices presented in Table 7 are calculated using all available VGs records for each city each quarter, with no stratification or weighting applied. These 'raw' medians will not correspond to the published index numbers and will not produce price movements that are consistent with those numbers.

**29** The number of transfers of established houses recorded each quarter by the VG in each capital city is presented in Table 8 to provide an indication of the level of sales activity for the capital city each quarter.

ANALYSIS OF CHANGES IN  
INDEX NUMBERS

**30** Each of the indexes presented in this publication is calculated on a quarterly basis with a reference base of 2003–04 = 100.0. In compiling these indexes quarterly, the objective is to measure the change in price levels between quarters.

**31** 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.

**32** 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:

Project Homes: Perth index numbers —	
March Quarter 2009	153.4 (see table 3)
<i>less</i> December Quarter 2008	154.0 (see table 3)
<i>equals</i> change in index points	–0.6
Percentage change	$-0.6/154.0 \times 100 = -0.4\%$

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



## EXPLANATORY NOTES *continued*

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### ANALYSIS OF CHANGES IN INDEX NUMBERS *continued*

- 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

**34** Users may also wish to refer to the following publications which are available from the ABS website:

- *A Guide to House Price Indexes*, cat. no. 6464.0
- *Information Paper: Renovating the Established House Price Index*, cat. no. 6417.0
- *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, Australia*, cat. no. 5609.0 – issued monthly
- *Producer Price Indexes, Australia*, cat. no. 6427.0 – issued quarterly.

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





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