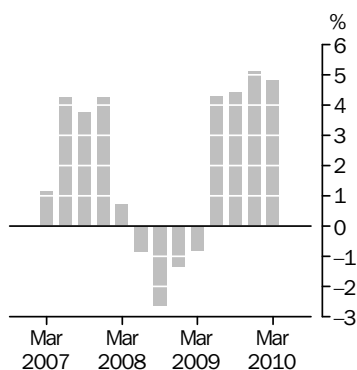


# HOUSE PRICE INDEXES: EIGHT CAPITAL CITIES

EMBARGO: 11.30AM (CANBERRA TIME) MON 3 MAY 2010

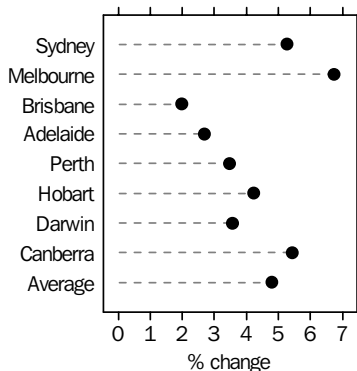
## Established house prices

Weighted average of eight capital cities  
Quarterly % change



## Established house prices

Quarterly % change  
March quarter 2010



## INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Toni Graham on Sydney (02) 9268 4163.

## KEY FIGURES

### ESTABLISHED HOUSE PRICES

	Dec Qtr 09 to Mar Qtr 10 % change	Mar Qtr 09 to Mar Qtr 10 % change
<b>Weighted average of eight capital cities</b>	<b>4.8</b>	<b>20.0</b>
Sydney	5.3	21.0
Melbourne	6.7	27.7
Brisbane	2.0	12.1
Adelaide	2.7	10.8
Perth	3.5	15.0
Hobart	4.2	14.1
Darwin	3.6	17.5
Canberra	5.4	20.6

## 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 increased 4.8% in the March quarter 2010.
- The main contributors to the weighted average of the eight capital cities were Melbourne (+6.7%) and Sydney (+5.3%). The strongest growth in these two cities came from established houses with relatively high prices. There were also positive contributions from Perth (+3.5%), Brisbane (+2.0%), Adelaide (+2.7%), Canberra (+5.4%), Hobart (+4.2%) and Darwin (+3.6%).
- The movement in the preliminary established house price index for the weighted average of the eight capital cities between September quarter 2009 and December quarter 2009 has been revised from an estimated increase of 5.2% to an estimated increase of 5.1%.

#### ANNUAL CHANGES (MARCH QUARTER 2009 TO MARCH QUARTER 2010)

- Preliminary estimates show that the price index for established houses for the weighted average of the eight capital cities increased 20.0% in the year to March quarter 2010. This preliminary result is the largest annual increase since the series commenced in March quarter 2002.
- Annually, house prices rose in Melbourne (+27.7%), Sydney (+21.0%), Canberra (+20.6%), Darwin (17.5%), Perth (+15.0%), Hobart (+14.1%), Brisbane (+12.1%), and Adelaide (+10.8%).
- The movement in the preliminary established house price index for the weighted average of the eight capital cities between December quarters 2008 and 2009 has been revised from an estimated increase of 13.6% to an estimated increase of 13.5%.

# NOTES

## FORTHCOMING ISSUES

<i>ISSUE (Quarter)</i>	<i>RELEASE DATE</i>
June 2010	4 August 2010
September 2010	1 November 2010
December 2010	1 February 2011
March 2011	2 May 2011

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## CHANGES IN THIS ISSUE

There are no changes this issue.

## REVISIONS

Estimates for the two most recent quarters of the HPI series are preliminary and subject to revision (see paragraphs 13 to 17 of the Explanatory notes).

.....

## ABBREVIATIONS

ABS	Australian Bureau of Statistics
CPI	consumer price index
HPI	House Price Index
SEIFA	Socio-Economic Indexes for Areas
VGs	Valuers-General

Brian Pink  
Australian Statistician

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### HOUSE PRICE INDEXES

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### ADDITIONAL TABLE AVAILABLE ON ABS WEBSITE

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## 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>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>2008-09</b>	98.0	139.0	139.8	146.9	184.0	141.4	190.1	123.2	126.1
<b>2006</b>									
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	98.8	138.5	140.5	146.9	186.6	139.7	181.9	122.3	126.5
December	97.2	137.0	138.0	146.6	182.4	141.0	188.5	121.9	124.8
<b>2009</b>									
March	95.6	136.3	138.3	145.1	181.6	140.0	192.6	122.2	123.8
June	100.3	144.3	142.2	149.0	185.3	145.0	197.5	126.4	129.1
September	r104.8	153.6	r146.7	r151.8	r191.0	r147.9	204.2	r131.9	134.8
December	p109.9	p163.1	p152.1	p156.6	p201.8	p153.3	p218.5	p139.8	p141.7
<b>2010</b>									
March	p115.7	p174.1	p155.1	p160.8	p208.8	p159.8	p226.3	p147.4	p148.5

p preliminary figure or series subject to revision  
r revised

(a) Reference base of each index: 2003-04 = 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>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
<b>2008-09</b>	-3.8	-0.6	-1.4	2.4	-5.5	-0.6	8.5	-3.1	-2.2
PERCENTAGE CHANGE (from corresponding quarter of previous year)									
<b>2006</b>									
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	-1.9	5.3	4.6	9.1	-4.6	0.5	6.5	-1.8	1.4
December	-5.7	-3.0	-2.3	2.0	-7.7	-2.6	6.3	-4.9	-4.1
<b>2009</b>									
March	-6.7	-5.1	-4.9	-2.1	-7.0	-1.3	10.2	-5.3	-5.5
June	-0.8	0.8	-2.7	1.4	-2.9	1.3	11.1	-0.2	-0.6
September	r6.1	10.9	r4.4	r3.3	r2.4	r5.9	12.3	r7.8	6.6
December	p13.1	p19.1	p10.2	p6.8	p10.6	p8.7	p15.9	p14.7	p13.5
<b>2010</b>									
March	p21.0	p27.7	p12.1	p10.8	p15.0	p14.1	p17.5	p20.6	p20.0
PERCENTAGE CHANGE (from previous quarter)									
<b>2006</b>									
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	-2.3	-3.3	-3.8	-0.1	-2.2	-2.4	2.4	-3.5	-2.6
December	-1.6	-1.1	-1.8	-0.2	-2.3	0.9	3.6	-0.3	-1.3
<b>2009</b>									
March	-1.6	-0.5	0.2	-1.0	-0.4	-0.7	2.2	0.2	-0.8
June	4.9	5.9	2.8	2.7	2.0	3.6	2.5	3.4	4.3
September	r4.5	6.4	r3.2	r1.9	r3.1	r2.0	3.4	r4.4	4.4
December	p4.9	p6.2	p3.7	p3.2	p5.7	p3.7	p7.0	p6.0	p5.1
<b>2010</b>									
March	p5.3	p6.7	p2.0	p2.7	p3.5	p4.2	p3.6	p5.4	p4.8

p preliminary figure or series subject to revision

r revised

## 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>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>2008-09</b>	117.1	112.8	128.4	120.4	153.4	129.9	152.8	118.6	123.2
<b>2006</b>									
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
June	119.1	113.5	129.1	121.3	153.6	130.4	155.9	119.6	124.3
September	119.9	117.2	129.2	122.3	154.1	135.2	156.2	120.8	125.9
December	120.9	118.3	129.2	122.7	154.5	135.4	156.6	120.8	126.6
<b>2010</b>									
March	122.1	118.9	130.3	123.8	156.5	136.3	158.3	121.2	127.7

(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>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
<b>2008-09</b>	4.3	1.4	5.9	5.8	3.2	2.5	5.6	5.5	3.7
PERCENTAGE CHANGE (from corresponding quarter of previous year)									
<b>2006</b>									
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
June	3.7	0.2	3.6	4.0	2.4	1.6	6.3	5.0	2.6
September	3.5	2.8	1.3	2.8	1.0	4.2	4.7	2.1	2.5
December	3.6	5.2	0.2	1.7	0.3	4.4	3.1	2.2	2.8
<b>2010</b>									
March	4.6	7.0	1.9	2.6	2.0	5.1	2.7	2.5	4.2
PERCENTAGE CHANGE (from previous quarter)									
<b>2006</b>									
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
June	2.1	2.2	0.9	0.5	0.1	0.5	1.1	1.2	1.5
September	0.7	3.3	0.1	0.8	0.3	3.7	0.2	1.0	1.3
December	0.8	0.9	0.0	0.3	0.3	0.1	0.3	0.0	0.6
<b>2010</b>									
March	1.0	0.5	0.9	0.9	1.3	0.7	1.1	0.3	0.9

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

<i>Period</i>	<i>Established houses(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(b)</i>
<b>2006-07</b>	115.5	113.3	109.5	115.9	114.4
<b>2007-08</b>	129.0	118.8	113.3	121.1	120.0
<b>2008-09</b>	126.1	123.2	120.7	126.7	125.2
<b>2006</b>					
September	112.0	111.9	108.5	114.1	113.0
December	114.1	112.6	109.3	115.4	113.6
<b>2007</b>					
March	115.4	113.7	109.8	116.5	114.7
June	120.3	114.9	110.5	117.7	116.1
September	124.8	116.2	111.4	119.3	117.4
December	130.1	117.8	112.4	120.5	119.0
<b>2008</b>					
March	131.0	119.9	113.8	121.3	121.0
June	129.9	121.1	115.5	123.2	122.7
September	126.5	122.8	118.6	124.9	124.2
December	124.8	123.1	120.1	125.9	125.4
<b>2009</b>					
March	123.8	122.5	121.7	127.2	125.4
June	129.1	124.3	122.2	128.7	125.9
September	134.8	125.9	121.3	129.4	127.3
December	p141.7	126.6	121.3	130.2	128.3
<b>2010</b>					
March	p148.5	127.7	121.7	nya	nya

nya not yet available

p preliminary figure or series subject to revision

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

(b) Weighted average of eight capital cities.

(c) Weighted average of six capital cities.



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

<i>Period</i>	<i>Established houses(a)</i>	<i>Project homes(a)</i>	<i>Materials used in house building(b)</i>	<i>Construction industry total hourly rates of pay</i>	<i>National accounts private housing investment(a)</i>
PERCENTAGE CHANGE (from previous financial year)					
<b>2006–07</b>	9.9	2.7	3.5	4.8	3.4
<b>2007–08</b>	11.7	4.9	3.5	4.5	4.9
<b>2008–09</b>	-2.2	3.7	6.5	4.6	4.3
PERCENTAGE CHANGE (from corresponding quarter of previous year)					
<b>2006</b>					
September	10.1	2.6	3.3	5.5	3.7
December	9.7	2.4	3.7	5.7	3.1
<b>2007</b>					
March	9.6	3.0	3.8	4.2	3.3
June	10.1	2.9	3.4	4.0	3.7
September	11.4	3.8	2.7	4.6	3.9
December	14.0	4.6	2.8	4.4	4.8
<b>2008</b>					
March	13.5	5.5	3.6	4.1	5.5
June	8.0	5.4	4.5	4.7	5.7
September	1.4	5.7	6.5	4.7	5.8
December	-4.1	4.5	6.9	4.5	5.4
<b>2009</b>					
March	-5.5	2.2	6.9	4.9	3.6
June	-0.6	2.6	5.8	4.5	2.6
September	6.6	2.5	2.3	3.6	2.5
December	p13.5	2.8	1.0	3.4	2.3
<b>2010</b>					
March	p20.0	4.2	—	nya	nya
PERCENTAGE CHANGE (from previous quarter)					
<b>2006</b>					
September	2.5	0.2	1.5	0.8	0.9
December	1.9	0.6	0.7	1.1	0.5
<b>2007</b>					
March	1.1	1.0	0.5	1.0	1.0
June	4.2	1.1	0.6	1.0	1.2
September	3.7	1.1	0.8	1.4	1.1
December	4.2	1.4	0.9	1.0	1.4
<b>2008</b>					
March	0.7	1.8	1.2	0.7	1.7
June	-0.8	1.0	1.5	1.6	1.4
September	-2.6	1.4	2.7	1.4	1.2
December	-1.3	0.2	1.3	0.8	1.0
<b>2009</b>					
March	-0.8	-0.5	1.3	1.0	—
June	4.3	1.5	0.4	1.2	0.4
September	4.4	1.3	-0.7	0.5	1.1
December	p5.1	0.6	—	0.6	0.8
<b>2010</b>					
March	p4.8	0.9	0.3	nya	nya

— nil or rounded to zero (including null cells)  
nya not yet available  
p preliminary figure or series subject to revision  
(a) Weighted average of eight capital cities.  
(b) 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>2006</b>								
September	483.0	347.0	r334.0	290.0	450.0	270.0	360.0	413.0
December	500.0	360.0	342.0	300.0	470.0	278.0	380.0	420.5
<b>2007</b>								
March	482.0	345.0	r350.5	305.0	475.0	280.0	389.5	430.0
June	513.4	362.0	r372.0	317.0	465.0	291.3	395.0	445.0
September	515.0	370.0	389.0	335.0	475.0	285.0	400.0	460.0
December	r542.0	412.0	412.0	360.0	480.0	310.0	418.5	r468.5
<b>2008</b>								
March	499.0	385.0	r425.0	360.0	470.0	308.0	420.0	470.0
June	r517.7	400.0	425.0	365.0	455.0	305.0	422.3	r474.5
September	482.0	385.0	410.0	360.0	440.0	r294.0	430.0	r447.0
December	r468.0	385.0	398.0	355.0	425.0	300.0	445.0	r450.0
<b>2009</b>								
March	448.0	375.0	400.0	r353.5	439.0	r296.5	455.0	460.0
June	r490.3	r405.0	420.0	r362.3	455.0	r310.0	465.0	r465.0
September	500.0	430.0	429.0	370.0	474.0	310.0	490.0	486.0
December	nya	nya	nya	nya	nya	nya	nya	nya
<b>2010</b>								
March	nya	nya	nya	nya	nya	nya	nya	nya

nya not yet available

r revised

(a) See paragraphs 30 to 33 of the Explanatory Notes.

## NUMBER OF ESTABLISHED HOUSE TRANSFERS (a)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra
<i>Period</i>	no.	no.	no.	no.	no.	no.	no.	no.
<b>2006-07</b>	r48 357	r62 090	r42 886	r21 042	25 731	r4 336	1 976	5 023
<b>2007-08</b>	r46 689	r62 376	r36 590	r20 021	22 308	r3 915	1 620	r4 615
<b>2008-09</b>	r48 359	r54 322	r31 603	r17 932	r22 269	r3 723	1 792	r4 283
<b>2006</b>								
September	r11 098	r14 354	r9 832	r4 794	7 184	r956	535	1 137
December	r11 478	r15 064	r9 444	r4 987	5 860	971	495	1 319
<b>2007</b>								
March	11 730	r15 228	r12 120	r5 434	6 548	1 211	496	1 308
June	14 051	r17 444	r11 490	r5 827	6 139	1 198	450	1 259
September	r13 147	r17 296	r11 624	r5 498	6 151	r1 065	464	r1 259
December	r13 171	r18 090	r10 210	r5 399	6 314	r1 097	411	r1 379
<b>2008</b>								
March	r9 742	r13 050	r8 270	r4 628	5 487	940	357	r959
June	r10 629	r13 940	r6 486	r4 496	4 356	r813	388	r1 018
September	r10 656	r13 036	r6 979	r4 198	5 010	r788	439	r997
December	r11 228	r13 571	r6 798	r4 269	r4 238	r856	459	r975
<b>2009</b>								
March	r12 243	r12 858	r9 181	r4 595	r5 892	r1 100	425	r1 104
June	r14 232	r14 857	r8 645	r4 870	r7 129	r979	469	r1 207
September	14 466	15 289	8 764	4 445	7 662	988	436	1 123
December	nya	nya	nya	nya	nya	nya	nya	nya
<b>2010</b>								
March	nya	nya	nya	nya	nya	nya	nya	nya

nya not yet available

r revised

(a) See paragraphs 30 to 33 of the Explanatory Notes.

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

Period	1st estimate	2nd estimate	Final estimate	DIFFERENCE BETWEEN FINAL ESTIMATE AND:	
				1st estimate	2nd estimate
INDEX NUMBER (a)			INDEX POINTS		
<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	124.8	-1.0	-0.2
<b>2009</b>					
March	122.2	122.9	123.8	1.6	0.9
June	128.1	129.0	129.1	1.0	0.1
September	134.4	134.8	134.8	0.4	—
December	141.8	141.7	nya	nya	nya
<b>2010</b>					
March	148.5	nya	nya	nya	nya
ANNUAL PERCENTAGE CHANGE (b)			PERCENTAGE POINTS		
<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	-4.1	-0.8	-0.2
<b>2009</b>					
March	-6.7	-6.2	-5.5	1.2	0.7
June	-1.4	-0.7	-0.6	0.8	0.1
September	6.2	6.6	6.6	0.4	—
December	13.6	13.5	nya	nya	nya
<b>2010</b>					
March	20.0	nya	nya	nya	nya
QUARTERLY PERCENTAGE CHANGE (c)			PERCENTAGE POINTS		
<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	-1.3	-0.5	-0.1
<b>2009</b>					
March	-2.2	-1.5	-0.8	1.4	0.7
June	4.2	4.2	4.3	0.1	0.1
September	4.2	4.4	4.4	0.2	—
December	5.2	5.1	nya	nya	nya
<b>2010</b>					
March	4.8	nya	nya	nya	nya

— nil or rounded to zero (including null cells)

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.

## 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 (referred to from now on as the HPI), 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 23–29.

**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 HPIs 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.

**5** For more detailed information on house price indexes than is provided in these explanatory notes refer to the ABS Information Paper, *House Price Indexes: Concepts, Sources and Methods, Australia, 2009* (cat. no. 6464.0).

### DEFINITIONS

#### *Established houses*

**6** The HPI 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*

**7** Project homes are dwellings available for construction on an existing block of land. Price changes therefore relate only to the price of the dwelling (i.e. excluding land).

### PRICE INDEXES

**8** 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.

**9** 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.

## EXPLANATORY NOTES *continued*

### PRICE INDEXES *continued*

**10** 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 a 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.

### *Controlling for the compositional change effect*

**11** The ABS uses stratification to control for this 'compositional' effect by grouping (or 'clustering') houses according to a set of 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.

**12** 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 was 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.

### *Benchmark and Leading Indicator series*

**13** Though a complete coverage of property sales data can eventually be obtained from VGs, this data is not available on a timely basis for the most recent quarters. As a result, the ABS has adopted a two-stage approach to produce the HPI to allow the compilation and publication of a more timely estimate of price change. The first stage is to compile the benchmark series based on the complete, or near complete, VGs dataset for each quarter. This will be the third most recent quarter in any publication. The second stage, referred to as the leading indicator series, involves compiling price indexes for the two most recent quarters based on a combination of mortgage lenders' data and the VGs data available at that point in time. It should be noted that for Darwin, mortgage lenders' data is combined with VGs data for the most recent quarter only.

**14** The index numbers for the leading indicator series are preliminary estimates and are revised as more data are progressively received from VGs. These index numbers are labelled with a "p" indicating a preliminary estimate. The benchmark series (labelled with an "r" if it has been revised since the previous quarter's leading indicator estimate) are final estimates and will not be subject to further revision once published.

**15** The revisions to price indexes and percentage changes 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.

**16** 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 the HPI series was first published with respect to September quarter 2005, the first period for

## EXPLANATORY NOTES *continued*

*Benchmark and Leading  
Indicator series continued*

which preliminary data can be compared with final data is June quarter 2005. No preliminary estimates exist prior to this period.

**17** 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)).

*Available data*

**18** 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.

**19** 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

**20** 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 HPI. Although the HPI clusters have been defined to balance the homogeneity of housing characteristics and the number of observations required to produce a reliable median price, the number of price observations available depends on market activity in each quarter and there may be occasions when clusters have low numbers of price observations. This is most apparent in the established house price indexes for the smaller capital cities (Hobart, Darwin and Canberra).

**21** 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.

**22** It should be noted that when the number of price observations available for a cluster is nil or extremely low in a quarter, a price movement for the cluster is derived using imputation methods based on price movements of other clusters.

NATIONAL HOUSE PRICE AND  
OTHER INDEXES

**23** 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*

**24** 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 (e.g. number of houses) underpinning these values.

*Project homes*

**25** The series for project homes is derived by weighting together the indexes for each of the eight capital cities. The city weights are derived as the value of additions to the stock of houses in the city, calculated using average price data derived from the Building Activity survey and quantity data from house counts recorded in consecutive Population

## EXPLANATORY NOTES *continued*

### *Project homes continued*

Censuses. As extensions and renovations are conceptually part of the CPI expenditure class, their value is included in the calculation of the weights. No prices specifically relating to these activities are collected as their prices are assumed to move similarly to those of new houses.

**26** 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 published CPI series are not comparable to those published with the established house price index because the CPI for house purchase is a broader aggregate which also covers fixed appliances and an adjustment for government subsidies directly related to house purchase.

### *Materials used in house building*

**27** The index for materials used in house building is that 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*

**28** 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), re-referenced to 2003–04 = 100.0 for ease of comparison with other series. 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*

**29** 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*

**30** 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.

**31** 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.

**32** 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.

**33** As the ABS receives more VGs data, the median prices and numbers of house transfers are revised as necessary. This practice is distinct from the HPI which is not revised once published as a final benchmark estimate, even if additional data are available. Therefore, the HPI, the medians and the numbers of house transfers are calculated from the same set of price information only in the most recent quarter of HPI final benchmark estimates.

### ANALYSIS OF CHANGES IN INDEX NUMBERS

**34** 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.



## EXPLANATORY NOTES *continued*

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

**35** 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.

**36** 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 2010	156.5 (see table 3)
less December Quarter 2009	154.5 (see table 3)
<i>equals</i> change in index points	2.0
Percentage change	$2/154.5 \times 100 = 1.3\%$

**37** 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

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

- *Information Paper: House Price Indexes: Concepts, Sources and Methods, Australia, 2009*, cat. no. 6464.0
- *Information Paper: Renovating the Established House Price Index, Australia, November 2005*, 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.

**39** Current publications and other products released by the ABS are listed on 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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