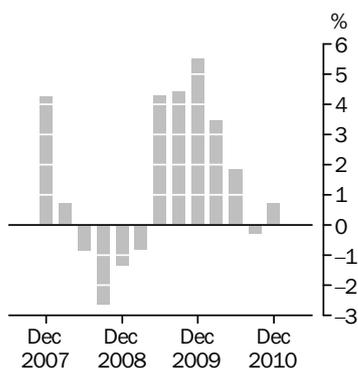


HOUSE PRICE INDEXES: EIGHT CAPITAL CITIES

EMBARGO: 11.30AM (CANBERRA TIME) TUES 1 FEB 2011

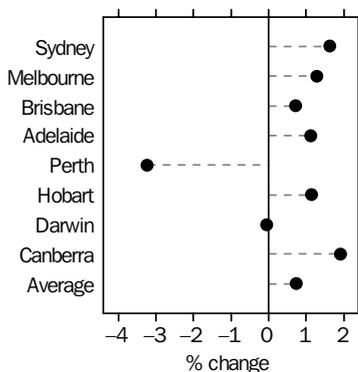
Established house prices

Weighted average of eight capital cities
Quarterly % change



Established house prices

Quarterly % change
December 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

	Sep Qtr 10 to Dec Qtr 10 % change	Dec Qtr 09 to Dec Qtr 10 % change
Weighted average of eight capital cities	0.7	5.8
Sydney	1.6	7.4
Melbourne	1.3	10.8
Brisbane	0.7	0.7
Adelaide	1.1	3.5
Perth	-3.2	-2.0
Hobart	1.1	1.0
Darwin	0.0	1.7
Canberra	1.9	6.5

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 0.7% in the December quarter 2010.
- The capital city indexes increased in Sydney (+1.6%), Melbourne (+1.3%), Brisbane (+0.7%), Adelaide (+1.1%), Canberra (+1.9%) and Hobart (+1.1%), and decreased in Perth (-3.2%). There was no change in the index for Darwin.

ANNUAL CHANGES (DECEMBER QUARTER 2009 TO DECEMBER QUARTER 2010)

- Preliminary estimates show that the price index for established houses for the weighted average of the eight capital cities increased 5.8% in the year to December quarter 2010.
- Annually, house prices increased in Melbourne (+10.8%), Sydney (+7.4%), Canberra (+6.5%), Adelaide (+3.5%), Darwin (+1.7%), Hobart (+1.0%), and Brisbane (+0.7%), and decreased in Perth (-2.0%).

NOTES

FORTHCOMING ISSUES

<i>ISSUE (Quarter)</i>	<i>RELEASE DATE</i>
March 2011	2 May 2011
June 2011	2 August 2011
September 2011	1 November 2011
December 2011	1 February 2012



CHANGES IN THIS ISSUE

There are no changes in 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).

Data provision issues have been experienced in the December quarter 2010, which have impacted on September quarter 2010 revised estimates for Melbourne. Processes have been applied to minimise possible biases to the dataset; however, the estimate for Melbourne September quarter 2010 should be used with caution.

IMPACT OF FLOODS

Flooding in Queensland began in late December 2010. It is expected that the first significant economic impact of this and floods in other states will be reflected in the March quarter 2011 release of this publication. Price collection for the December quarter 2010 was not affected by the floods.



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

ANALYSIS

PRELIMINARY:

December quarter 2010
(+0.7%)

The preliminary price index for established houses for the weighted average of the eight capital cities increased 0.7% in the December quarter 2010. This result followed a fall in the revised index for September quarter 2010 (-0.3%). Through the year to December quarter 2010, the index increased 5.8%. This was the lowest through the year increase since September quarter 2008 (+1.4%).

The positive movement in the December quarter 2010 was the result of increases in Sydney (+1.6%), Melbourne (+1.3%), Brisbane (+0.7%), Adelaide (+1.1%), Canberra (+1.9%), and Hobart (+1.1%). These increases were offset by a decrease in Perth (-3.2%). Darwin (0.0%) recorded no change in the December quarter 2010.

The preliminary estimate for Sydney (+1.6%) was the lowest quarterly rate of increase since December 2006 quarter (+0.4%). Across the price range in December quarter 2010, median prices in some clusters increased while others decreased. Most of the positive contributions to the capital city quarterly increase were concentrated in clusters with median prices of \$1 500 000 and above, and \$400 000 and below. The movement for Sydney through the year to December quarter 2010 (+7.4%) was the lowest through the year increase since September quarter 2009 (+6.1%).

The preliminary estimate for Melbourne (+1.3%) was the seventh consecutive quarter of increases in the index. Across the price range, median prices in some clusters increased while others decreased. Most of the positive contributions to the capital city increase were concentrated in clusters with median prices above \$900 000 and below \$460 000. The movement through the year to December quarter 2010 (+10.8%) was a return to the rate of through the year increase in September 2009 quarter (+10.9%), and followed four quarters of through the year increases greater than 15%.

The preliminary estimate for Perth (-3.2%) was the largest quarterly decrease in the series which commenced in 2002. This was the third consecutive quarter of decreases in the established house price index for Perth, following the revision to the September quarter 2010 result (-1.8%). Median prices decreased across almost all clusters in Perth this quarter, with the index movement driven by clusters with median prices below \$1 000 000. The index decreased 2.0% through the year to December quarter 2010. This was the first through the year decrease since June quarter 2009 (-2.9%).

REVISED:

September Quarter 2010
(-0.3%)

The price index for established houses for the weighted average of the eight capital cities decreased 0.3% in the September quarter 2010. This was revised from a preliminary estimated increase of 0.1%. The through the year movement has been revised from an estimated increase of 11.5% to an estimated increase of 10.8%.

The revision to the preliminary estimates for Melbourne and Perth were the main contributors to the revision of the weighted average of the eight capital cities preliminary estimate. The quarterly movement in the price index for Melbourne was revised from a preliminary estimate of +2.7% to a preliminary estimate of +1.0%. Preliminary estimates are based on a combination of mortgage lenders' data and valuers-general data available at that point in time. Data provision issues have been experienced in the December quarter 2010, which have impacted on September quarter 2010 revised estimates. Processes have been applied to minimise possible biases to the dataset; however, the estimate for Melbourne September quarter 2010 should be used with caution.

ANALYSIS *continued*

September Quarter 2010
(-0.3%) *continued*

The quarterly movement in the price index for Perth was revised from a preliminary estimate of +0.4% to a preliminary estimate of -1.8%. As more data became available, the additional observations for the September quarter 2010 resulted in larger median price falls or lower median price increases across most clusters.

Perth (-1.8%, revised from +0.4%), Brisbane (-1.6%, revised from -2.1%), and Sydney (-0.3%, revised from -0.9%) were the largest contributors to the eight capital cities result in the September quarter 2010. Adelaide (-0.9%, revised from -1.4%) and, to a lesser extent, Darwin (-0.5%, revised from +0.3%) also made negative contributions. Melbourne (+1.0%, revised from +2.7%), Canberra (+0.2%, revised from -0.4%) and Hobart (+0.3%, revised from -1.4%) made positive contributions to the eight capital cities result.

FINAL:
June Quarter 2010
(+1.8%)

The change in the established house price index for the weighted average of the eight capital cities for the June quarter 2010 was revised from a second estimate of +2.0% to a final estimate of +1.8%. The movement in the index through the year to June quarter 2010 was revised from an estimated increase of 16.3% to an increase of 16.0%.

Sydney (+2.7%, revised from +2.8%) and Melbourne (+2.9%, revised from +3.2%) were the largest contributors to the eight capital cities result. Adelaide (+1.9%, revised from +2.5%), Brisbane (+0.3%, unrevised), and Darwin (+1.5%, unrevised) also made positive contributions. These increases were offset by decreases in Hobart (-2.4%, unrevised), Perth (-0.2%, unrevised), and Canberra (-0.4%, revised from -0.1%).

ABS HOUSE PRICE INDEX
METHODOLOGY

The ABS uses a stratification approach to control for compositional change in the sample of houses used to compile the House Price Indexes each quarter. This approach stratifies (clusters) houses according to two characteristics: the long-term level of prices for the suburb in which the house is located, and the neighbourhood characteristics of the suburb, as represented by the ABS Socio-Economic Indexes for Areas (SEIFA).

Each cluster of houses in a capital city contributes a proportion of the total value of the housing stock in that capital city. The proportion of the total value is referred to as the cluster's weight. Some clusters have a large weight; some have a small weight.

Each quarter, the clusters are re-valued by applying a price relative which is derived by comparing the current median price of the cluster to the previous median price of the cluster. The current period values of each cluster are then summed to derive the current value of the total housing stock in the capital city. Index numbers are subsequently derived from the total values.

Thus the movement of a particular index is determined by both the movements of the median prices of the clusters and the weights of the clusters in the index structure.

Low numbers of price observations can affect the reliability of the cluster medians, and therefore index movements.

For more detailed information, please refer to the Explanatory Notes in this issue, or to *Information Paper: House Price Indexes: Concepts, Sources and Methods* (cat. no. 6464.0).

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ADDITIONAL TABLE AVAILABLE ON ABS WEBSITE

10	Established house price index numbers, pre-September quarter 2005 methodology	
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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>
2007-08	101.9	139.9	141.8	143.4	194.8	142.2	175.2	127.1	129.0
2008-09	98.0	139.0	139.8	146.9	184.0	141.4	190.1	123.2	126.1
2009-10	r111.7	r166.7	151.7	r158.0	202.5	155.3	216.6	r141.6	r143.5
2007									
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
2008									
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
2009									
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	104.8	153.6	146.7	151.8	191.0	147.9	204.2	131.9	134.8
December	110.6	163.7	151.9	157.6	202.0	156.8	218.5	140.6	142.2
2010									
March	114.2	172.2	153.8	159.7	208.7	160.1	220.2	147.2	147.1
June	r117.3	r177.2	154.3	r162.8	r208.3	r156.2	223.6	r146.6	r149.8
September	p116.9	p179.0	p151.8	p161.3	p204.6	p156.6	p222.4	p146.9	p149.4
December	p118.8	p181.3	p152.9	p163.1	p198.0	p158.4	p222.3	p149.7	p150.5

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)									
2007-08	6.7	19.4	19.0	19.8	1.0	8.5	9.0	12.0	11.7
2008-09	-3.8	-0.6	-1.4	2.4	-5.5	-0.6	8.5	-3.1	-2.2
2009-10	r14.0	r19.9	8.5	r7.6	10.1	9.8	13.9	r14.9	r13.8
PERCENTAGE CHANGE (from corresponding quarter of previous year)									
2007									
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
2008									
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
2009									
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	6.1	10.9	4.4	3.3	2.4	5.9	12.3	7.8	6.6
December	13.8	19.5	10.1	7.5	10.7	11.2	15.9	15.3	13.9
2010									
March	19.5	26.3	11.2	10.1	14.9	14.4	14.3	20.5	18.8
June	r16.9	r22.8	8.5	r9.3	12.4	r7.7	13.2	r16.0	r16.0
September	p11.5	p16.5	p3.5	p6.3	p7.1	p5.9	p8.9	p11.4	p10.8
December	p7.4	p10.8	p0.7	p3.5	p-2.0	p1.0	p1.7	p6.5	p5.8
PERCENTAGE CHANGE (from previous quarter)									
2007									
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
2008									
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
2009									
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	4.5	6.4	3.2	1.9	3.1	2.0	3.4	4.4	4.4
December	5.5	6.6	3.5	3.8	5.8	6.0	7.0	6.6	5.5
2010									
March	3.3	5.2	1.3	1.3	3.3	2.1	0.8	4.7	3.4
June	r2.7	r2.9	0.3	r1.9	-0.2	-2.4	1.5	r-0.4	r1.8
September	p-0.3	p1.0	p-1.6	p-0.9	p-1.8	p0.3	p-0.5	p0.2	p-0.3
December	p1.6	p1.3	p0.7	p1.1	p-3.2	p1.1	p0.0	p1.9	p0.7

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>
2007-08	112.3	111.2	121.2	113.8	148.7	126.7	144.7	112.4	118.8
2008-09	117.1	112.8	128.4	120.4	153.4	129.9	152.8	118.6	123.2
2009-10	121.4	118.6	129.9	123.3	156.0	135.9	157.2	121.4	127.2
2007									
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
2008									
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
2009									
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
2010									
March	122.1	118.9	130.3	123.8	156.6	136.3	157.8	121.2	127.7
June	122.6	120.1	130.8	124.3	158.6	136.8	158.3	122.9	128.6
September	122.8	120.7	131.3	124.8	159.2	140.3	160.1	124.1	129.2
December	124.3	121.6	132.5	125.1	159.6	140.3	162.6	124.1	130.2

(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)									
2007-08	3.9	5.0	8.3	5.0	3.2	5.3	6.7	3.7	4.9
2008-09	4.3	1.4	5.9	5.8	3.2	2.5	5.6	5.5	3.7
2009-10	3.7	5.1	1.2	2.4	1.7	4.6	2.9	2.4	3.2
PERCENTAGE CHANGE (from corresponding quarter of previous year)									
2007									
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
2008									
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
2009									
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
2010									
March	4.6	7.0	1.9	2.6	2.1	5.1	2.3	2.5	4.2
June	2.9	5.8	1.3	2.5	3.3	4.9	1.5	2.8	3.5
September	2.4	3.0	1.6	2.0	3.3	3.8	2.5	2.7	2.6
December	2.8	2.8	2.6	2.0	3.3	3.6	3.8	2.7	2.8
PERCENTAGE CHANGE (from previous quarter)									
2007									
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
2008									
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
2009									
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
2010									
March	1.0	0.5	0.9	0.9	1.4	0.7	0.8	0.3	0.9
June	0.4	1.0	0.4	0.4	1.3	0.4	0.3	1.4	0.7
September	0.2	0.5	0.4	0.4	0.4	2.6	1.1	1.0	0.5
December	1.2	0.7	0.9	0.2	0.3	0.0	1.6	0.0	0.8

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>
2007-08	129.0	118.8	113.3	121.1	120.0
2008-09	126.1	123.2	120.7	126.7	125.2
2009-10	r143.5	127.2	121.9	130.8	128.9
2007					
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
2008					
March	131.0	119.9	113.8	121.3	121.0
June	129.9	121.1	115.5	123.2	122.6
September	126.5	122.8	118.6	124.9	124.2
December	124.8	123.1	120.1	125.9	125.4
2009					
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	r127.3
December	142.2	126.6	121.3	130.2	128.4
2010					
March	147.1	127.7	121.7	131.0	129.3
June	r149.8	128.6	123.1	132.4	130.4
September	p149.4	129.2	123.5	134.1	131.2
December	p150.5	130.2	124.2	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) 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)

2007-08	11.7	4.9	3.5	4.5	4.9
2008-09	-2.2	3.7	6.5	4.6	4.3
2009-10	r13.8	3.2	1.0	3.2	3.0

PERCENTAGE CHANGE (from corresponding quarter of previous year)

2007					
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
2008					
March	13.5	5.5	3.6	4.1	5.5
June	8.0	5.4	4.5	4.7	5.6
September	1.4	5.7	6.5	4.7	5.8
December	-4.1	4.5	6.9	4.5	5.4
2009					
March	-5.5	2.2	6.9	4.9	3.6
June	-0.6	2.6	5.8	4.5	2.7
September	6.6	2.5	2.3	3.6	r2.5
December	13.9	2.8	1.0	3.4	2.4
2010					
March	18.8	4.2	0.0	3.0	3.1
June	r16.0	3.5	0.7	2.9	3.6
September	p10.8	2.6	1.8	3.6	3.1
December	p5.8	2.8	2.4	nya	nya

PERCENTAGE CHANGE (from previous quarter)

2007					
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
2008					
March	0.7	1.8	1.2	0.7	1.7
June	-0.8	1.0	1.5	1.6	1.3
September	-2.6	1.4	2.7	1.4	1.3
December	-1.3	0.2	1.3	0.8	1.0
2009					
March	-0.8	-0.5	1.3	1.0	0.0
June	4.3	1.5	0.4	1.2	0.4
September	4.4	1.3	-0.7	0.5	r1.1
December	5.5	0.6	0.0	0.6	r0.9
2010					
March	3.4	0.9	0.3	0.6	0.7
June	r1.8	0.7	1.2	1.1	0.9
September	p-0.3	0.5	0.3	1.3	0.6
December	p0.7	0.8	0.6	nya	nya

nya not yet available

p preliminary figure or series subject to revision

r revised

(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
2007								
June	513.2	362.0	375.0	317.0	465.0	291.3	395.0	445.0
September	515.0	370.0	390.0	335.0	475.0	285.0	400.0	460.0
December	542.5	412.0	415.0	360.0	480.0	310.0	418.5	468.3
2008								
March	499.0	385.0	425.0	360.0	470.0	308.0	420.0	470.0
June	518.0	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	294.0	430.0	447.0
December	468.0	385.0	399.0	355.0	425.0	300.0	445.0	453.0
2009								
March	448.0	375.0	400.0	r354.0	439.0	r296.0	455.0	460.0
June	490.0	r401.2	420.0	363.0	455.0	310.0	465.0	460.0
September	500.0	425.0	430.0	370.0	473.0	310.1	490.0	r470.0
December	595.0	480.0	455.0	r399.0	505.0	350.0	520.0	r521.0
2010								
March	r582.0	r470.0	460.0	r405.0	r517.5	r352.5	529.0	r540.0
June	610.0	500.5	465.0	410.0	510.0	349.8	530.0	545.6
September	nya	nya	nya	nya	nya	nya	nya	nya
December	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)

	<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.
2007-08	r46 710	r62 491	r37 304	r20 084	22 308	r3 918	1 620	r4 618
2008-09	r48 510	r55 155	r32 218	r18 044	r22 293	r3 759	1 792	r4 362
2009-10	50 749	61 276	31 257	16 873	25 692	3 700	1 448	4 399
2007								
June	14 052	r17 452	r11 715	r5 840	6 139	1 198	450	1 260
September	r13 149	r17 311	r11 853	r5 506	6 151	1 065	464	1 259
December	13 179	18 111	10 426	r5 409	6 314	1 099	411	1 380
2008								
March	9 747	r13 084	r8 409	r4 641	5 487	940	357	959
June	r10 635	r13 985	6 616	r4 528	4 356	r814	388	r1 020
September	10 663	r13 095	7 114	r4 208	r5 013	790	439	997
December	r11 239	r13 680	r6 944	r4 278	4 247	859	459	981
2009								
March	r12 263	r13 060	r9 345	r4 623	r5 897	r1 107	425	r1 114
June	r14 345	r15 320	r8 815	r4 935	r7 136	r1 003	469	r1 270
September	r14 799	r16 730	r9 062	r4 501	r7 692	r1 028	436	r1 274
December	r12 749	r16 242	r7 824	r4 243	r6 627	r917	363	r1 202
2010								
March	r10 957	r13 577	r7 593	r3 976	r6 363	r957	339	r909
June	12 244	14 727	6 778	4 153	5 010	798	310	1 014
September	nya	nya	nya	nya	nya	nya	nya	nya
December	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		
2008					
December	125.8	125.0	124.8	-1.0	-0.2
2009					
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	0.0
December	141.8	141.7	142.2	0.4	0.5
2010					
March	148.5	148.2	147.1	-1.4	-1.1
June	152.8	150.1	149.8	-3.0	-0.3
September	150.3	149.4	nya	nya	nya
December	150.5	nya	nya	nya	nya
ANNUAL PERCENTAGE CHANGE (b)			PERCENTAGE POINTS		
2008					
December	-3.3	-3.9	-4.1	-0.8	-0.2
2009					
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	0.0
December	13.6	13.5	13.9	0.3	0.4
2010					
March	20.0	19.7	18.8	-1.2	-0.9
June	18.4	16.3	16.0	-2.4	-0.3
September	11.5	10.8	nya	nya	nya
December	5.8	nya	nya	nya	nya
QUARTERLY PERCENTAGE CHANGE (c)			PERCENTAGE POINTS		
2008					
December	-0.8	-1.2	-1.3	-0.5	-0.1
2009					
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	0.0
December	5.2	5.1	5.5	0.3	0.4
2010					
March	4.8	4.2	3.4	-1.4	-0.8
June	3.1	2.0	1.8	-1.3	-0.2
September	0.1	-0.3	nya	nya	nya
December	0.7	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.

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 —	
December Quarter 2010	159.6 (see table 3)
less September Quarter 2010	159.2 (see table 3)
<i>equals</i> change in index points	0.4
Percentage change	$0.4/159.2 \times 100 = 0.3\%$

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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