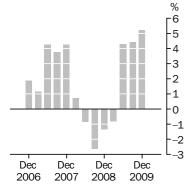


HOUSE PRICE INDEXES: EIGHT CAPITAL CITIES

EMBARGO: 11.30AM (CANBERRA TIME) MON 1 FEB 2010

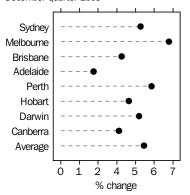
Established house prices

Weighted average of eight capital cities Quarterly % change



Established house prices

Quarterly % change December 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	Sep Qtr 09 to Dec Qtr 09 % change	Dec Qtr 08 to Dec Qtr 09 % change
Weighted average of eight capital cities	5.2	13.6
Sydney	5.0	12.8
Melbourne	6.8	19.7
Brisbane	3.8	10.9
Adelaide	2.1	5.1
Perth	5.7	11.5
Hobart	4.3	11.0
Darwin	4.9	13.6
Canberra	3.6	12.4

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 5.2% in the December quarter 2009.
- The main contributors to the weighted average of the eight capital cities were Melbourne (+6.8%), Sydney (+5.0%), and Perth (+5.7%). There were also positive contributions from Brisbane (+3.8%), Adelaide (+2.1%), Canberra (+3.6%), Hobart (+4.3%) and Darwin (+4.9%).
- The movement in the preliminary established house price index between June quarter 2009 and September quarter 2009 has been revised from an estimated increase of 4.2% to an estimated increase of 4.4%.

ANNUAL CHANGES (DECEMBER QUARTER 2008 TO DECEMBER QUARTER 2009)

- Over the year to December 2009, preliminary estimates show that the price index for established houses for the weighted average of the eight capital cities increased 13.6%.
- Annually, house prices rose in Melbourne (+19.7%), Darwin (+13.6%), Sydney (+12.8%), Canberra (+12.4%), Perth (+11.5%), Hobart (+11.0%), Brisbane (+10.9%), and Adelaide (+5.1%).
- The movement in the preliminary established house price index between September quarters 2008 and 2009 has been revised from an estimated increase of 6.2% to an estimated increase of 6.6%.

NOTES

FORTHCOMING ISSUES

 ISSUE (Quarter)
 RELEASE DATE

 March 2010
 3 May 2010

 June 2010
 4 August 2010

 September 2010
 1 November 2010

December 2010 1 February 2011

CHANGES IN THIS ISSUE

There have been some changes this quarter to improve the price sample used to calculate the established house price index (HPI), the median price of established house transfers (unstratified) and the number of established house transfers for Perth. The derivation of the HPI benchmark for June quarter 2009 and following quarters are based on a larger set of Valuer General sales records.

REVISIONS

Estimates for the two most recent quarters of the HPI series are preliminary and subject to revision (see paragraphs 13 and 14 of the Explanatory notes). This issue, revisions to Perth and the eight capital cities aggregate for June and September quarters 2009 also reflect changes to the price sample for Perth. The impact of these changes on the HPI benchmarks for June quarter 2009 for Perth and the eight capital cities aggregate, and consequent revisions from the figures previously published for that quarter are minimal.

The series for median price of established house transfers (unstratified) and number of established house transfers (published in Tables 7 and 8 respectively) are also subject to revision. In addition to the usual reason for revisions outlined in paragraph 33 of the Explanatory Notes, in this issue there are revisions to Perth for all quarters from March quarter 2006 resulting from changes to the price sample.

RECENT RELEASES

The *Information Paper House Price Indexes: Concepts, Sources and Methods, Australia, 2009* (cat. no. 6464.0) was published on 14 December 2009. It replaces the last publication of this type: *A Guide to House Price Indexes, Australia, 2006* (cat. no. 6464.0). The Concepts, Sources and Methods publication contains updated information on the stratification method and weights used in the HPI. It also provides more information on how the HPI is calculated and on price index concepts in general.

Brian Pink

Australian Statistician

LIST OF TABLES

methodology

	page
HOUSE PRICE INDEXES	
1	Established house price index numbers
2	Established house price indexes, percentage changes
3	Project home price index numbers 6
4	Project home price indexes, percentage changes
5	Selected housing price index numbers, Australia
6	Selected housing price index numbers, Australia, percentage changes 9
7	Median price of established house transfers (unstratified) 10
8	Number of established house transfers
9	Revisions to established house price index series, weighted average of
	eight capital cities
ADDITIONAL TABLE AVAILABLE ON	ABS WEBSITE
10	Established house price index numbers, pre-September quarter 2005

ESTABLISHED HOUSE PRICE INDEX NUMBERS(a)

									Weighted average of eight capital
Period	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	cities
• • • • • • • • • •	• • • • • •	• • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •
2006–07	95.5	117.2	119.2	119.7	192.8	131.1	160.7	113.5	115.5
2007–08	101.9	139.9	141.8	143.4	194.8	142.2	175.2	127.1	129.0
2008–09	98.0	r139.0	r139.8	r146.9	r184.0	r141.4	190.1	123.2	r126.1
2006									
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
2007									
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
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	r144.3	r142.2	r149.0	r185.3	r145.0	197.5	126.4	r129.1
September	p104.4	p153.6	p147.5	p151.0	p192.4	p150.1	p204.2	p132.2	p134.8
December	p109.6	p164.0	p153.1	p154.1	p203.3	p156.5	p214.2	p137.0	p141.8

p preliminary figure or series subject to revision

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

r revised

Period	Sydney		Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	Weighted average of eight capital cities
	• • • • • •	PERCENTAG		GE (from					• • • • • • •
2006-07	2.4	10.2	10.2	7.6	32.3	9.5	15.8	9.7	9.9
2007-08	6.7	19.4	19.0	19.8	1.0	8.5	9.0	12.0	11.7
2008-09	-3.8	r-0.6	r-1.4	r2.4	r-5.5	-0.6	8.5	-3.1	r-2.2
PE	ERCENT	AGE CHANG	GE (from	ncorresp	onding q	uarter of	previou	s year)	
2006									
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
2007									
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
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	r0.8	-2.7	r1.4	r-2.9	r1.3	11.1	-0.2	r-0.6
September	p5.7	p10.9	p5.0	p2.8	p3.1	p7.4	p12.3	p8.1	p6.6
December	p12.8	p19.7	p10.9	p5.1	p11.5	p11.0	p13.6	p12.4	p13.6
• • • • • • • • • •			• • • • • •	• • • • • • • •		• • • • • • • •	• • • • • • •	• • • • • • •	
		PERCENT	TAGE CH	HANGE (fr	om previ	ious quar	ter)		
2006									
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
2007									
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
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	r5.9	r2.8	r2.7	r2.0	r3.6	2.5	3.4	r4.3
September	p4.1	p6.4	p3.7	p1.3	p3.8	p3.5	p3.4	p4.6	p4.4
December	p5.0	p6.8	p3.8	p2.1	p5.7	p4.3	p4.9	p3.6	p5.2

p preliminary figure or series subject to revision r revised

									Weighted average of eight capital
Period	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	cities
2006-07	108.1	105.9	111.9	108.4	144.1	120.3	135.6	108.4	113.3
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
2006									
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
2007									
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
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

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

Period	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	Weighted average of eight capital cities
• • • • • • • • •	i	PERCENTA			previous			• • • • • • • •	• • • • • • •
2006-07	0.4	0.0	4.2	2.1	10.6	3.0	13.2	2.8	2.7
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
		• • • • • • • •							• • • • • • •
P	ERCENT	AGE CHAN	IGE (from	n corresp	onding q	uarter of	previou	s year)	
2006									
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
2007	0.0	4.4	F 0	4.4	0.0	0.0	40.0	0.0	2.0
March	0.6	1.1	5.8	1.4 2.5	9.0 6.1	2.0 3.6	13.8	2.6 2.1	3.0 2.9
June September	0.8 2.2	1.1 3.8	6.2 7.2	3.2	3.9	5.0 5.1	10.1 9.4	3.1	3.8
December	3.1	4.3	10.0	3.2	3.5	6.2	6.1	3.5	3.6 4.6
2008	3.1	4.3	10.0	3.9	3.3	0.2	0.1	3.3	4.0
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
		PERCEN	ITAGE CH	HANGE (fr	om previ	ous quar	ter)		
2006									
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
2007									
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
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



SELECTED HOUSING PRICE INDEX NUMBERS(a), Australia

Period	Established houses(b)	Project homes(b)	Materials used in house building(c)	Construction industry total hourly rates of pay(d)	National accounts private housing investment(b)
2006–07	115.5	113.3	109.5	115.9	r114.4
2007-08	129.0	118.8	113.3	121.1	r120.0
2007-08	r126.1	123.2	120.7	126.7	r125.2
	1120.1	125.2	120.1	120.7	1123.2
2006					
June	109.3	111.7	106.9	113.2	112.0
September	112.0	111.9	108.5	114.1	r113.0
December	114.1	112.6	109.3	115.4	r113.6
2007					
March	115.4	113.7	109.8	116.5	114.7
June	120.3	114.9	110.5	117.7	r116.1
September	124.8	116.2	111.4	119.3	117.4
December	130.1	117.8	112.4	120.5	r119.0
2008					
March	131.0	119.9	113.8	121.3	r121.0
June	129.9	121.1	115.5	123.2	r122.7
September	126.5	122.8	118.6	124.9	r124.2
December	124.8	123.1	120.1	125.9	r125.4
2009					
March	123.8	122.5	121.7	127.2	r125.4
June	r129.1	124.3	122.2	128.7	r125.9
September	p134.8	125.9	121.3	129.4	127.3
December	p141.8	126.6	121.3	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.

⁽d) From the September quarter 2009, indexes were presented to reflect the contemporary Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006. Indexes for previous periods have been reproduced on an ANZSIC 2006 basis. For more information refer to Information Paper: Update on ANZSIC 2006 Implementation for the Labour Price Index, 2009 (cat. no. 6345.0.55.001).



Period	Established houses(a)	Project homes(a)	Materials used in house building(b)	Construction industry total hourly rates of pay	National accounts private housing investment(a)				
PERC	PERCENTAGE CHANGE (from previous financial year)								
2006-07	9.9	2.7	3.5	4.8	r3.4				
2007-08	11.7	4.9	3.5	4.5	r4.9				
2008-09	r-2.2	3.7	6.5	4.6	r4.3				
PERCENTAGE CHANGE (from corresponding quarter of previous year)									
2006									
June	7.3	3.2	2.1	5.9	3.9				
September	10.1	2.6	3.3	5.5	r3.7				
December	9.7	2.4	3.7	5.7	r3.1				
2007									
March	9.6	3.0	3.8	4.2	3.3				
June	10.1	2.9	3.4	4.0	r3.7				
September	11.4	3.8	2.7	4.6	r3.9				
December	14.0	4.6	2.8	4.4	r4.8				
2008									
March	13.5	5.5	3.6	4.1	r5.5				
June	8.0	5.4	4.5	4.7	5.7				
September	1.4	5.7	6.5	4.7	r5.8				
December 2009	-4.1	4.5	6.9	4.5	r5.4				
March	-5.5	2.2	6.9	4.9	r3.6				
June	-5.5 r-0.6	2.6	5.8	4.9	r2.6				
September	p6.6	2.5	2.3	3.6	2.5				
December	p13.6	2.8	1.0	nya	nya				
	·			,	Í				
DE	RCENTAGE	CHANCE (f	rom provi	0110 G110 rt	~ · · · · · · · · · · · · · · · · · · ·				
PE	RCENTAGE	CHANGE (I	rom previ	ous quarte	31)				
2006									
June	3.8	1.2	1.0	1.3	0.9				
September	2.5	0.2	1.5	0.8	r0.9				
December	1.9	0.6	0.7	1.1	0.5				
2007 March	1.1	1.0	0.5	1.0	r1 O				
June	4.2	1.1	0.5	1.0	r1.0 r1.2				
September	3.7	1.1	0.8	1.4	r1.2				
December	4.2	1.4	0.9	1.0	r1.4				
2008			0.0	2.0					
March	0.7	1.8	1.2	0.7	1.7				
June	-0.8	1.0	1.5	1.6	r1.4				
September	-2.6	1.4	2.7	1.4	r1.2				
December	-1.3	0.2	1.3	0.8	r1.0				
2009									
March	-0.8	-0.5	1.3	1.0	r0.0				
June	r4.3	1.5	0.4	1.2	r0.4				
September	p4.4	1.3	-0.7	0.5	1.1				
December	p5.2	0.6	0.0	nya	nya				

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
Period	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
• • • • • • • • • •	• • • • • •	• • • • • • •		• • • • • • •	• • • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •
2006								
June	497.0	345.0	330.0	286.0	r415.0	270.0	349.5	400.0
September	483.0	347.0	333.0	290.0	r450.0	270.0	360.0	413.0
December	500.0	360.0	342.0	300.0	r470.0	278.0	380.0	420.5
2007								
March	482.0	345.0	350.0	305.0	r475.0	280.0	389.5	430.0
June	r513.4	362.0	370.5	317.0	r465.0	291.3	395.0	445.0
September	515.0	370.0	389.0	335.0	r475.0	285.0	400.0	460.0
December	541.0	412.0	412.0	360.0	r480.0	310.0	418.5	r468.8
2008								
March	499.0	385.0	424.9	360.0	r470.0	308.0	420.0	470.0
June	517.5	400.0	425.0	365.0	r455.0	305.0	422.3	475.0
September	r482.0	385.0	410.0	360.0	r440.0	r295.0	430.0	r448.5
December	r467.8	385.0	398.0	355.0	r425.0	300.0	445.0	r451.0
2009								
March	r448.0	375.0	400.0	r353.3	r439.0	r299.5	455.0	r460.0
June	490.0	403.0	420.0	362.0	455.0	312.0	465.0	469.0
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)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra
Period	no.	no.	no.	no.	no.	no.	no.	no.
• • • • • • • • • •	• • • • • •	• • • • • • • •	• • • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • •	• • • • • •
2006–07 2007–08	r48 351 r46 670	r62 079 r62 286	r42 768 r36 492	r21 033 r20 001	r25 731 r22 308	r4 335 r3 911	1 976 1 620	5 023 r4 610
2007-08	48 074	53 394	31 395	17 829	22 237	3 680	1 792	4 217
2006								
June	11 923	r14 019	9 186	r4 933	r8 864	1 126	514	1 295
September	r11 096	r14 353	9 815	r4 792	r7 184	955	535	1 137
December	r11 474	r15 060	9 422	r4 985	r5 860	r971	495	1 319
2007								
March	r11 730	r15 225	12 087	r5 432	r6 548	1 211	496	1 308
June	r14 051	r17 441	r11 444	r5 824	r6 139	1 198	450	1 259
September	r13 145	r17 285	r11 599	r5 495	r6 151	r1 064	464	1 258
December	r13 162	r18 073	10 176	r5 394	r6 314	r1 096	411	r1 378
2008								
March	r9 739	r13 028	r8 250	r4 627	r5 487	940	357	958
June	r10 624	r13 900	r6 467	r4 485	r4 356	r811	388	r1 016
September	r10 655	r12 985	r6 955	r4 189	r5 010	r787	439	r996
December	r11 218	r13 474	r6 785	r4 228	r4 236	r851	459	r964
2009								
March	r12 175	r12 685	r9 138	r4 564	r5 881	r1 086	425	r1 094
June	14 026	14 250	8 517	4 848	7 110	956	469	1 163
September	nya	nya	nya	nya	nya	nya	nya	nya
December	nya	nya	nya	nya	nya	nya	nya	nya

nya not yet available

⁽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)

DIFFERENCE BETWEEN
FINAL ESTIMATE AND:

Period	1st estimate	2nd estimate	Final estimate	1st estimate	2nd estimate
• • • • • • • • •	INDEX NU		• • • • • • • • •	INDEX POIN	
2007					
December	128.1	129.9	130.1	2.0	0.2
2008					
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
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	nya	nya	nya
December	141.8	nya	nya	nya	nya
			NGF(b)	PERCENTAGE	POINTS
2007					
December	12.3	13.8	14.0	1.7	0.2
2008					
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
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	nya	nya	nya
December	13.6	nya	nya	nya	nya
		•	•	•	•
OLLAD	TEDLY DED			DEDOENTAGE	DOINTO
QUAR	CIERLY PER	CENTAGE	CHANGE (C)	PERCENTAGE	PUINIS
2007					
December	3.2	4.1	4.2	1.0	0.1
2008					
2008 March	1.1	0.4	0.7	-0.4	0.3
June	-0.3	-0.2	-0.8	-0.4 -0.5	-0.6
September	-0.3 -1.8	-0.2 -2.4	-0.8 -2.6	-0.5 -0.8	-0.0 -0.2
December	-0.8	-1.2	-1.3	-0.5	-0.1
	0.0	1.2	1.0	0.0	0.1
2009	2.5	4 -	0.0	4.4	c =
March	-2.2 4.2	-1.5 4.2	-0.8 4.3	1.4	0.7
June September	4.2 4.2	4.2		0.1	0.1
December	4.2 5.2	4.4 nya	nya nya	nya nya	nya nya
December	5.2	iiya	iiya	liya	liya

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).
- **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.
- **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).
- **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.

DEFINITIONS

Established houses

Project homes

PRICE INDEXES

PRICE INDEXES continued

Controlling for the compositional change effect

- **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.
- 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

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)).
- **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.
- 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.
- **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.
- 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.
- 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

Available data

LIMITATIONS OF HOUSE PRICE INDEXES

NATIONAL HOUSE PRICE AND OTHER INDEXES

Established houses

Project homes

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.

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 2009 154.5 (see table 3) less September Quarter 2009 154.1 (see table 3)

equals change in index points 0.4

Percentage change $0.4/154.1 \times 100 = 0.3\%$

- **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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