

HOUSE PRICE INDEXES: EIGHT CAPITAL CITIES

EMBARGO: 11.30AM (CANBERRA TIME) TUES 1 MAY 2012

KEY FIGURES

ESTABLISHED HOUSE Prices	Dec Qtr 11 to Mar Qtr 12 % change	Mar Qtr 11 to Mar Qtr 12 % change
Weighted average of eight capital cities	-1.1	-4.5
Sydney	-1.8	-4.6
Melbourne	-2.2	-6.6
Brisbane	0.4	-3.7
Adelaide	-0.9	-3.8
Perth	1.1	-1.7
Hobart	-2.7	-6.7
Darwin	4.4	3.5
Canberra	1.2	-0.5

KEY POINTS

ESTABLISHED HOUSE PRICES

QUARTERLY CHANGES

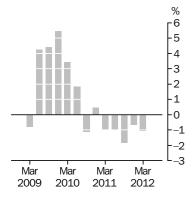
- Preliminary estimates show the price index for established houses for the weighted average of the eight capital cities fell 1.1% in the March quarter 2012.
- The capital city indexes fell in Melbourne (-2.2%), Sydney (-1.8%), Adelaide (-0.9%) and Hobart (-2.7%) and rose in Perth (+1.1%), Brisbane (+0.4%), Canberra (+1.2%) and Darwin (+4.4%).

ANNUAL CHANGES (MARCH QUARTER 2011 TO MARCH QUARTER 2012)

- Preliminary estimates show that the price index for established houses for the weighted average of the eight capital cities fell 4.5% in the year to the March quarter 2012.
- Annually, house prices fell in Hobart (-6.7%), Melbourne (-6.6%), Sydney (-4.6%), Adelaide (-3.8%), Brisbane (-3.7%), Perth (-1.7%), and Canberra (-0.5%) and rose in Darwin (+3.5%).

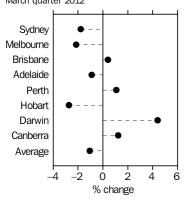
Established house prices

Weighted average of eight capital cities Quarterly % change



Established house prices

Quarterly % change March guarter 2012



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.

NOTES

	ISSUE (Quartar)	RELEASE DATE
FORTHCOMING ISSUES	ISSUE (Quarter)	
	June 2012	1 August 2012
	September 2012	6 November 2012
	December 2012	5 February 2013
	March 2013	7 May 2013
CHANGES IN THE NEXT	The established house p	price index currently covers detached houses in the eight capital
ISSUE	cities. Since 2010, work	has been underway to develop a price index for other dwellings
	in the capital cities. The	June quarter 2012 issue of this publication will include a feature
	article which provides se	ome information about the development of this new
	experimental price inde	x. A data cube will be provided with a time series of the other
	dwellings price index an	d a total measure of detached houses and other dwellings: the
	All dwellings price index	Χ.
REVISIONS		ost recent quarters of the HPI series are preliminary and subject
	to revision (see paragrap	phs 15 to 19 of the Explanatory Notes).
	The series for the media	an price of established house transfers (unstratified) and the
	number of established h	nouse transfers (published in Tables 7 and 8 respectively) are also
	subject to revision as the	e ABS receives more data from the Valuers-General. This quarter,
	the completion of a revi	ew of ABS processes has led to a change in the practice of
	revising Tables 7 and 8.	In the past, these tables were revised as necessary throughout
	the whole time series. F	rom the March quarter 2012 onwards (with the exception of
	revisions for Canberra),	the usual practice will be to update only the most recent eight
	quarters of published fig	gures. For the March quarter 2012, however, the review has also
	led to revisions to Canb	erra beyond the most recent eight quarters.
	• • • • • • • • • • • •	
ABBREVIATIONS	ABS Australian Bur	eau of Statistics
	ASGC Australian Star	ndard Geographical Classification
	ASGS Australian Stat	istical Geography Standard
	CPI Consumer Price	ze Index
	GCCSA Greater Capita	l City Statistical Area
	HPI House Price In	ıdex
	SD statistical divis	ion
	SEIFA Socio-Econom	ic Indexes for Areas
	VGs Valuers-Gener	al

Brian Pink Australian Statistician

ANALYSIS

The preliminary price index for established houses for the weighted average of the eight capital cities fell 1.1% in the March quarter 2012. The index fell 4.5% through the year to the March quarter 2012.
The negative movement in the March quarter 2012 was the result of falls in Melbourne (-2.2%) , Sydney (-1.8%) , Adelaide (-0.9%) and Hobart (-2.7%) . This was partially offset by rises in Perth $(+1.1\%)$, Brisbane $(+0.4\%)$, Canberra $(+1.2\%)$ and Darwin $(+4.4\%)$.
The preliminary estimate for Melbourne (-2.2%) follows falls in the preceding four quarters (-1.4% , -1.1% , -2.0% and -1.4% in the March, June, September and December quarters 2011 respectively). Clusters across the range of median price levels contributed to the March quarter 2012 fall, however there were offsetting rises in some clusters at the lower end of the price range. The index fell 6.6% through the year to the March quarter 2012, one of the largest annual falls published for Melbourne (a larger through the year fall of 6.7% was published for the first preliminary and second estimates of March quarter 2009, however it was subsequently revised to a fall of 5.1%).
The preliminary estimate for Perth $(+1.1\%)$ follows a smaller rise in the previous quarter $(+0.9\%)$, revised from $+0.5\%$). Prior to that, the last rise was in the March quarter 2010. Clusters at the lower end of the range of median price levels contributed most to the March quarter 2012 rise. The movement for Perth through the year to the March quarter 2012 (-1.7%) continues the trend of decreasing through the year falls since the June quarter 2011 (-6.6%) .
The preliminary estimate for Brisbane (+0.4%) was the first rise in the index since the June quarter 2010. Across the price range in the March quarter 2012, median prices in some clusters rose while others fell. Most of the positive contributions to the Brisbane quarterly rise were concentrated in clusters with median prices below \$500 000. Brisbane fell 3.7% through the year to the March quarter 2012, the fifth consecutive through the year fall, but smaller than the falls recorded for the previous three quarters.
The preliminary price index for established houses for the weighted average of the eight capital cities fell 0.7% in the December quarter 2011. This was revised from a preliminary estimated fall of 1.0%. The through the year movement has been revised from an estimated fall of 4.8% to an estimated fall of 4.5%.
The negative movement in the December quarter 2011 was the result of falls in Melbourne (-1.4% , revised from -1.6%), Sydney (-1.2% , revised from -1.0%), Brisbane (-0.3% , revised from -1.3%) and Adelaide (-0.1% , revised from -1.6%). This was partially offset by rises in Perth ($+0.9\%$, revised from $+0.5\%$), Canberra ($+2.0\%$, revised from $+0.7\%$), Hobart ($+1.7\%$, revised from $+0.8\%$) and Darwin ($+1.6\%$, revised from -1.4%).
The revision to the preliminary estimate for Adelaide (from -1.6% to -0.1%) was the main contributor to the revision to the weighted average of the eight capital cities. Clusters in Adelaide with median prices between \$350 000 and \$600 000 contributed the most to the fall in the December quarter 2011 with partially offsetting rises in some of the clusters with higher and lower median prices. Adelaide fell 4.5% through the year to the December quarter 2011, revised from a fall of 6.4%.

ANALYSIS continued

December Quarter 2011 (-0.7%) continued	The revision to the preliminary estimate for Brisbane (from -1.3% to -0.3%) also contributed to the revision to the weighted average of the eight capital cities. The movement through the year to the December quarter 2011 was revised from a fall of 6.7% to a fall of 5.9%.
FINAL: September Quarter 2011 (-1.9%)	The final price index for established houses for the weighted average of the eight capital cities fell 1.9% in the September quarter 2011. There was no revision from the second preliminary estimate published last quarter. Through the year to the September quarter 2011 the index fell 3.4%, also with no revision from the second preliminary estimate.
	The movement in the September quarter 2011 was the result of falls in Sydney (-1.9% , revised from -1.6%), Melbourne (-2.0% , revised from -2.1%), Brisbane (-2.8% , unchanged), Canberra (-3.7% , revised from -3.1%), Perth (-0.6% , revised from -1.4%), Adelaide (-0.7% , revised from -1.1%) and Hobart (-2.3% , revised from -0.7%). These falls were partially offset by a rise in Darwin ($+0.7\%$, unchanged).
	The revision to the second estimate for Sydney (from -1.6% to -1.9%) was almost completely offset by the revision to Perth (from -1.4% to -0.6%). Smaller offsetting revisions to the other cities contributed to the unrevised quarterly movement of the weighted average of the eight capital cities second estimate.
ABS HOUSE PRICE 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 <i>Information Paper: House Price Indexes: Concepts, Sources and Methods</i> (cat. no. 6464.0).

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HOUSE PRICE INDEXES

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ADDITIONAL TABLE AVAILABLE ON ABS WEBSITE

10 Established house price index numbers, pre-September quarter 2005 methodology

Period	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	Weighted average of eight capita cities
2008–09	98.0	139.0	139.8	146.9	184.0	141.4	190.1	123.2	126.1
2009–10	111.7	166.7	151.7	158.0	202.5	155.3	216.6	141.6	143.5
2010–11	116.7	174.3	150.2	160.8	200.2	158.5	219.9	147.6	147.5
2008									
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.
June	100.3	144.3	142.2	149.0	185.3	145.0	197.5	126.4	129.
September	104.8	153.6	146.7	151.8	191.0	147.9	204.2	131.9	134.
December	110.6	163.7	151.9	157.6	202.0	156.8	218.5	140.6	142.
2010									
March	114.2	172.2	153.8	159.7	208.7	160.1	220.2	147.2	147.
June	117.3	177.2	154.3	162.8	208.3	156.2	223.6	146.6	149.
September	117.0	174.0	152.0	162.3	202.8	156.4	222.4	147.0	148.
December	116.7	176.6	151.9	163.3	202.7	161.7	223.8	148.0	148.
2011									
March	116.4	174.2	149.1	160.6	200.6	160.6	220.2	147.8	147.
June	116.6	172.2	147.7	157.1	194.5	155.1	213.2	147.7	145.
September	r114.4	r168.7	143.5	r156.0	r193.3	r151.5	214.7	r142.3	143.
December	p113.0	p166.3	p143.0	p155.9	p195.1	p154.1	p218.2	p145.2	p142.
2012									
March	p111.0	p162.7	p143.6	p154.5	p197.2	p149.9	p227.8	p147.0	p140.

p preliminary figure or series subject to revision

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

r revised

Period	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	Weighted average of eight capital cities
	F	PERCENTA	GE CHAN		previous				
2008–09	-3.8	-0.6	-1.4	2.4	-5.5	-0.6	8.5	-3.1	-2.2
2009–10	14.0	19.9	8.5	7.6	10.1	9.8	13.9	14.9	13.8
2010–11	4.5	4.6	-1.0	1.8	-1.1	2.1	1.5	4.2	2.8
• • • • • • • • • • • • • • • • • • •		AGE CHAN							
2008								, , , , , , , , , , , , , , , , , , ,	
September	_1 9	5.3	4.6	9.1	-4.6	0.5	6.5	-1.8	1.4
	-5.7	-3.0	-2.3	2.0	-7.7	-2.6	6.3	-4.9	-4.1
2009	-5.7	-5.0	-2.5	2.0	-1.1	2.0	0.5	-4.9	- 4 .1
March	-6.7	-5.1	-4.9	-2.1	-7.0	-1.3	10.2	-5.3	-5.5
June	-0.7	-5.1	-4.9 -2.7	-2.1	-2.9	-1.3 1.3	10.2		-0.6
September		0.8 10.9	-2.7 4.4	1.4 3.3	-2.9 2.4	1.3 5.9	11.1	-0.2 7.8	-0.6 6.6
December		10.9	4.4 10.1	3.3 7.5	2.4 10.7	5.9 11.2	12.3	7.8 15.3	13.9
2010	13.6	19.0	10.1	1.5	10.7	11.2	10.9	10.5	13.8
March	19.5	26.3	11.2	10.1	14.9	14.4	14.3	20.5	18.8
June			8.5	9.3	14.9	7.7	14.3	20.5 16.0	
	16.9 11.6	22.8 13.3	8.5 3.6	9.3 6.9	6.2	5.7	8.9	10.0	16.0 9.9
September December		7.9	0.0	0.9 3.6	0.2	3.1	8.9 2.4	5.3	9.9 4.6
	5.5	1.9	0.0	5.0	0.5	5.1	2.4	5.5	4.0
2011 March	1.0	1.0	2.1	0.6	2.0	0.2	0.0	0.4	0.1
	1.9	1.2		0.6	-3.9		0.0		0.1
June	-0.6	-2.8	-4.3	-3.5	-6.6	-0.7	-4.7		-2.7
September		r–3.0	-5.6	r–3.9		r-3.1	–3.5 p–2.5		-3.4
December 2012	p-3.2	p–5.8	p–5.9	p-4.5	p-3.7	p-4.7	p-2.5	p-1.9	p–4.5
March	p-4.6	p–6.6	p–3.7	p–3.8	p-1.7	p–6.7	p3.5	p-0.5	p–4.5
	• • • • • •				rom previ			• • • • • • • • •	
2008							,		
September	-2.3	-3.3	-3.8	-0.1	-2.2	-2.4	2.4	-3.5	-2.6
December		-3.3	-3.8 -1.8	-0.1	-2.2	-2.4	2.4 3.6	-3.5	-2.0
2009	-1.0	-1.1	-1.0	-0.2	-2.5	0.5	5.0	-0.3	-1.0
March	-1.6	-0.5	0.2	-1.0	-0.4	-0.7	2.2	0.2	-0.8
June	4.9	-0.5	2.8	2.7	2.0	3.6	2.2		4.3
September	4.9	5.9 6.4	3.2	1.9	3.1	2.0	3.4	3.4 4.4	4.3
December	4.5 5.5	0.4 6.6	3.2	3.8	5.8	2.0 6.0	3.4 7.0	4.4 6.6	4.4
2010	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
March	3.3	5.2	1.3	1.3	3.3	2.1	0.8	4.7	3.4
June	3.3 2.7	2.9	0.3	1.3	-0.2	-2.4	0.8 1.5	-0.4	1.8
September	-0.3	-1.8	-1.5	-0.3	-0.2 -2.6	-2.4	-0.5	-0.4 0.3	-1.1
December	-0.3 -0.3	-1.8 1.5	-1.5 -0.1	_0.3 0.6	-2.6	0.1 3.4	-0.5 0.6	0.3	-1.1 0.5
2011	-0.3	1.5	-0.1	0.0	0.0	3.4	0.0	0.7	0.5
March	-0.3	-1.4	-1.8	-1.7	-1.0	-0.7	-1.6	-0.1	-1.0
June		-1.4 -1.1		-1.7 -2.2	-1.0 -3.0	-0.7 -3.4		-0.1 -0.1	-1.0 -1.0
	0.2 r–1.9	-1.1 r-2.0	-0.9 -2.8	–2.2 r–0.7	-3.0 r-0.6	–3.4 r–2.3	-3.2 0.7	-0.1 r-3.7	-1.0 -1.9
September December						r-2.3 p1.7			
	p-1.2	p-1.4	p–0.3	p-0.1	p0.9	рт. <i>1</i>	p1.6	p2.0	p–0.7
2012 Marah	n 1 0	F 0 0	r0 1	n 0.0	n 1 1	n 0 7	r 1 1	-10	- 1 4
March	p-1.8	p–2.2	p0.4	p–0.9	p1.1	p–2.7	p4.4	p1.2	p-1.1
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p preliminary figure or series subject to revision

r revised

Period	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	Weighteo average of eight capita cities
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
2010–11	124.9	122.3	132.8	125.4	159.9	140.4	162.5	124.6	130.7
2008									
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
2011									
March	125.6	123.2	133.2	126.0	160.0	140.5	163.3	125.1	131.3
June	127.0	123.7	134.1	125.7	160.6	140.6	163.9	125.1	132.1
September	126.7	124.2	132.0	124.4	161.7	140.8	163.7	125.1	131.8
December	127.6	123.8	132.0	124.5	162.4	140.8	163.9	125.1	132.1
2012									
March	127.8	123.6	131.7	124.1	163.3	141.1	165.6	124.5	132.1

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



PROJECT HOME PRICE INDEXES, Percentage Changes

Period	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	Weighted average of eight capital cities
		PERCENTA	GE CHAN		previous				
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
2010–11	2.9	3.1	2.2	1.7	2.5	3.3	3.4	2.6	2.8
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Р	ERCENT	FAGE CHAN	IGE (fron	n corresp	onding q	uarter of	previou	s year)	
2008									
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		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
2011 March	2.0	2.6	2.2	1.0	2.2	2.1	2 5	2.0	0.0
	2.9	3.6	2.2	1.8	2.2	3.1	3.5	3.2	2.8
June September	3.6 3.2	3.0 2.9	2.5 0.5	1.1 -0.3	1.3 1.6	2.8 0.4	3.5 2.2	1.8 0.8	2.7 2.0
December	2.7	1.8	-0.4	-0.3 -0.5	1.0	0.4	0.8	0.8	2.0 1.5
2012	2.1	1.0	-0.4	-0.5	1.0	0.4	0.0	0.0	1.5
March	1.8	0.3	-1.1	-1.5	2.1	0.4	1.4	-0.5	0.6
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		FLRCL	IAGL CI	IANGL (II	om previ	ous quai	(er)		
2008									
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		1.0		0.1	0.4	0.0	4 -		0.5
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 December	0.7	3.3	0.1	0.8 0.3	0.3	3.7 0.1	0.2	1.0	1.3
2010	0.8	0.9	0.0	0.3	0.3	0.1	0.3	0.0	0.6
March	1.0	0.5	0.9	0.9	1.4	0.7	0.8	0.3	0.9
June	0.4	1.0	0.9	0.9	1.4	0.7	0.8	0.3 1.4	0.9
September	0.4	0.5	0.4	0.4	0.4	0.4 2.6	0.3	1.4	0.7
December	1.2	0.5	0.4	0.4	0.4	0.0	1.6	0.0	0.8
2011	1.2	0.1	0.0	0.2	0.0	0.0	1.0	0.0	0.0
March	1.0	1.3	0.5	0.7	0.3	0.1	0.4	0.8	0.8
June	1.1	0.4	0.7	-0.2	0.4	0.1	0.4	0.0	0.6
September	-0.2	0.4	-1.6	-1.0	0.7	0.1	-0.1	0.0	-0.2
December	0.2	-0.3	0.0	0.1	0.4	0.0	0.1	0.0	0.2
2012									
March	0.2	-0.2	-0.2	-0.3	0.6	0.2	1.0	-0.5	0.0

Period	Established houses(b)	Project homes(b)	Materials used in house building(c)	Construction industry total hourly rates of pay	National accounts private housing investment(b)
• • • • • • • • • • •	•••••		• • • • • • • • • •	•••••	• • • • • • • • • •
2008–09 2009–10 2010–11	126.1 143.5 147.5	123.2 127.2 130.7	120.7 121.9 124.5	126.7 130.8 135.9	125.3 128.9 132.5
2008 September December 2009	126.5 124.8	122.8 123.1	118.6 120.1	124.9 125.9	124.3 125.4
March June September December	123.8 129.1 134.8 142.2	122.5 124.3 125.9 126.6	121.7 122.2 121.3 121.3	127.2 128.7 129.4 130.2	125.4 125.9 127.3 128.4
2010	142.2	120.0	121.5	130.2	120.4
March June September December	147.1 149.8 148.1 148.8	127.7 128.6 129.2 130.2	121.7 123.1 123.5 124.2	131.0 132.4 134.1 135.4	129.4 130.4 131.2 132.0
2011					
March June September December 2012	147.3 145.8 143.1 p142.1	131.3 132.1 131.8 132.1	124.3 125.8 126.0 126.1	136.5 137.6 139.3 140.8	133.0 133.9 134.2 134.2
March	p140.6	132.1	126.0	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

Period	Established houses(a)	Project homes(a)	used in house building(b)	industry total hourly rates of pay	account private housin investment(a
	ENTAGE CH				
2008-09	-2.2	3.7	6.5	4.6	4.
2009-10	13.8	3.2	1.0	3.2	2.
2010–11	2.8	2.8	2.1	3.9	2.
	• • • • • • • • • • •				
PERCENTA	GE CHANGE	E (from cor yea		quarter o	f previous
2008		,	,		
September	1.4	5.7	6.5	4.7	5.
December	-4.1	4.5	6.9	4.5	5.
2009					
March	-5.5	2.2	6.9	4.9	3.
June	-0.6	2.6	5.8	4.5	2.
September	6.6	2.5	2.3	3.6	2.
December	13.9	2.8	1.0	3.4	2.
2010	10.0	2.0	1.0	0.4	2.
March	18.8	4.2	0.0	3.0	3.
June	16.0	3.5	0.0	2.9	3.
September	9.9	2.6	1.8	3.6	3.
•					
December	4.6	2.8	2.4	4.0	2.
2011	0.4		0.4	1.0	0
March	0.1	2.8	2.1	4.2	2.
June	-2.7	2.7	2.2	3.9	2.
September	-3.4	2.0	2.0	3.9	2.
December	p-4.5	1.5	1.5	4.0	1.
2012					
March	p-4.5	0.6	1.4	nya	ny
	• • • • • • • • • • •	• • • • • • • • • •		• • • • • • • • • • •	• • • • • • • • • •
PI	ERCENTAGE	CHANGE (1	from previ	ous quarte	r)
2008	-2.6		0.7		4
September		1.4	2.7	1.4	1.
December	-1.3	0.2	1.3	0.8	0.
2009 March	0.0	0.5	1.2	1.0	0.1
	-0.8	-0.5	1.3	1.0	0.0
June	4.3	1.5	0.4	1.2	0.
September	4.4	1.3	-0.7	0.5	1.
December	5.5	0.6	0.0	0.6	0.9
2010	~ .	~ ~			-
March	3.4	0.9	0.3	0.6	0.
June	1.8	0.7	1.2	1.1	0.
September	-1.1	0.5	0.3	1.3	0.
December	0.5	0.8	0.6	1.0	0.
2011					
March	-1.0	0.8	0.1	0.8	0.
June	-1.0	0.6	1.2	0.8	0.
September	-1.9	-0.2	0.2	1.2	0.
December	p–0.7	0.2	0.1	1.1	0.
2012					
March	p-1.1	0.0	-0.1	nya	ny

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.

Sydney Melbourne Brisbane Adelaide Perth Hobart Darwin Canberra Period \$'000 \$'000 \$'000 \$'000 \$'000 \$'000 \$'000 \$'000 . 2008 September 482.0 385.0 410.0 360.0 440.0 292.5 430.0 447.0 300.0 December 468.0 385.0 399.0 355.0 425.0 445.0 r450.0 2009 March 448.0 375.0 400.0 353.5 439.0 296.5 455.0 r459.5 June 490.0 400.0 420.0 363.0 455.0 310.0 465.0 r455.0 September 500.0 422.0 430.0 370.0 473.0 310.1 490.0 r456.0 December 595.0 r477.5 455.0 r398.8 505.0 350.0 520.0 r509.0 2010 March 582.5 468.0 460.0 403.0 r518.0 350.5 529.0 r530.0 June 612.0 500.0 465.0 410.0 510.0 r344.4 530.0 r527.6 September 595.0 r487.5 460.0 400.0 500.0 340.0 535.0 r535.0 December 620.0 520.0 460.0 410.0 500.0 345.0 545.0 r537.8 2011 575.0 400.0 March 485.0 450.0 500.0 340.0 510.0 r530.0 June 595.0 r501.0 442.0 395.0 r485.4 330.0 500.0 r540.0 387.0 r535.0 September 563.3 480.0 433.5 470.0 335.0 507.8 December nya nya nya nya nya nya nya nya 2012 March nya nya nya nya nya nya nya nya . nya not yet available

(a) See paragraphs 32 to 35 of the Explanatory Notes.

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NUMBER OF ESTABLISHED HOUSE TRANSFERS(a)

Sydney Melbourne Brisbane Adelaide Perth Hobart Darwin Canberra Period no. no. no. no. no. no. no. no. 3 743 2008-09 48 470 54 617 32 176 17 853 22 338 1 792 r4 429 2009-10 r51 286 r62 536 r25 800 r3 770 r4 789 r31 410 r16 878 1 448 2010-11 r43 820 r48 689 r25 048 r15 469 r20 874 r3 192 1 1 4 0 r4 425 2008 September 10 653 13 119 7 103 4 166 5 020 782 439 r1 000 December 11 240 13 092 6 938 4 2 2 5 4 254 860 459 r988 2009 March 12 259 13 091 9 3 2 9 4 585 5 916 1 100 425 r1 122 June 14 318 15 315 8 806 4 877 7 148 1 001 469 r1 319 September 14 816 16 313 9 068 4 473 7 701 1 033 436 r1 381 December r12 786 r16 586 r7 844 r4 234 6 635 921 363 r1 297 2010 r7 638 March r11 084 r14 103 r3 990 r6 401 976 339 r971 June r12 600 r15 534 r6 860 r4 181 5 063 r840 310 r1 140 r11 285 r833 September r13 477 r6 926 r4 118 5 128 278 r1 019 December r11 664 r12 810 r6 367 r3 999 r4 957 r833 277 r1 296 2011 r5 857 r3 703 March r9 855 r10 338 5 656 r837 270 r977 June r11 016 r12 064 r5 898 r3 649 r5 133 r689 315 r1 133 September 10 812 6 299 3 544 649 945 10 677 5 398 326 December nya nya nya nya nya nya nya nya 2012 March nya nya nya nya nya nya nya na

na not available

nya not yet available

revised r

See paragraphs 32 to 35 of the Explanatory Notes. (a)

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capital cities(a)(b)(c)

2nd estimate NUMBER (a) .5 148.2 .8 150.2 .3 149.4 .5 149.3 .6 142.2	2 147.1 1 149.8 4 148.1 3 148.8 1 147.3 5 145.8	1st estimate INDEX POINTS -1.4 -3.0 -2.2 -1.7 0.5	5 -1.1 -0.3 -1.3 -0.5
NUMBER (a) .5 148.2 .8 150.2 .3 149.4 .5 149.3 .8 147.2 .0 146.5 .8 143.2	2 147.1 1 149.8 4 148.1 3 148.8 1 147.3 5 145.8	INDEX POINTS -1.4 -3.0 -2.2 -1.7 0.5	5 -1.1 -0.3 -1.3 -0.5
.5 148. .8 150. .3 149. .5 149. .8 147. .0 146. .8 143.	1 149.8 4 148.1 3 148.8 1 147.3 5 145.8	-3.0 -2.2 -1.7 0.5	-0.3 -1.3 -0.5
.8 150.: .3 149.4 .5 149.3 .8 147.: .0 146.! .8 143.:	1 149.8 4 148.1 3 148.8 1 147.3 5 145.8	-3.0 -2.2 -1.7 0.5	-0.3 -1.3 -0.5
.8 150.: .3 149.4 .5 149.3 .8 147.: .0 146.! .8 143.:	1 149.8 4 148.1 3 148.8 1 147.3 5 145.8	-3.0 -2.2 -1.7 0.5	-0.3 -1.3 -0.5
.3 149.4 .5 149.3 .8 147.3 .0 146.9 .8 143.3	4 148.1 3 148.8 1 147.3 5 145.8	-2.2 -1.7 0.5	-1.3 -0.5
.5 149.3 .8 147.3 .0 146.9 .8 143.3	3 148.8 1 147.3 5 145.8	-1.7 0.5	-0.5
.8 147.3 .0 146.9 .8 143.3	1 147.3 5 145.8		
.0 146.9 .8 143.1	5 145.8		
.0 146.9 .8 143.1	5 145.8		0.2
.8 143.2		-1.2	-0.7
	1 1-0.1	-1.2	-0.7
	1 nya	nya	nya
	i iiju	nyu	nyu
•			
.6 nya	a nya	nya	nya
	• • • • • • • • • • • •		
CENTAGE CH	HANGE(b)	PERCENTAGE F	OINTS
.0 19.		-1.2	-0.9
.4 16.3		-2.4	-0.3
5 10.8		-1.6	-0.9
.8 5.0	0 4.6	-1.2	-0.4
.2 0.0		0.3	0.1
9 –2.2		-0.8	-0.5
.2 -3.4		-1.2	0.0
.8 –4.9	5 nya	nya	nya
.5 nya	a nya	nya	nya
PERCENTAGE	CHANGE (c)	PERCENTAGE	POINTS
.8 4.2	2 3.4	-1.4	-0.8
.1 2.0	0 1.8	-1.3	-0.2
.1 -0.3	3 –1.1	-1.2	-0.8
.7 0.8	8 0.5	-0.2	-0.3
7 –1.:	1 –1.0	0.7	0.1
.1 -0.9	5 –1.0	-0.9	-0.5
.2 –1.9	9 –1.9	-0.7	0.0
0	7 nya	nya	nya
.0 –0.			
0 –0.	a nva	nva	nya
0 1	0.1 -0.1 1.2 -1.1 1.0 -0.7	0.1 -0.5 -1.0 1.2 -1.9 -1.9 1.0 -0.7 nya	0.1 -0.5 -1.0 -0.9 1.2 -1.9 -1.9 -0.7 1.0 -0.7 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 New dwelling purchase by owner-occupiers 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 25–31.	
	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 <i>Information Paper, House Price Indexes: Concepts, Sources and Methods, Australia, 2009</i> (cat. no. 6464.0).	
DEFINITIONS Capital City	6 Capital City Statistical Divisions (SDs) are predominantly urban in character and represent the State/Territory capital cities in the wider sense. A Capital City SD is defined to contain the anticipated urban development of a capital city and it delimits an area which is stable for general statistical purposes.	
	7 Currently, HPI capital city SDs are based on the <i>2006 Australian Standard</i> <i>Geographical Classification (ASGC)</i> (cat. no. 1216.0). The ASGC will be replaced by the <i>Australian Statistical Geography Standard (ASGS)</i> (Vol 1, cat. no. 1270.0.55.001) from July 2011. HPI geographic coverage will be defined by the ASGS Greater Capital City Statistical Areas (GCCSA) during the next index review in 2012. The December quarter 2013 HPI publication is expected to be the first release of the HPI series based on the ASGS.	
Established houses	8 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	9 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	10 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.	

Abs \cdot house price indexes: eight capital cities \cdot 6416.0 \cdot mar qtr 2012 $\qquad 15$

PRICE INDEXES continued

11 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.

12 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**13** 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.

14 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 the March quarter 2008. Therefore, only the index numbers from the 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.

15 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.

16 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.

Benchmark and Leading Indicator series

16 ABS • HOUSE PRICE INDEXES: EIGHT CAPITAL CITIES • 6416.0 • MAR QTR 2012

Benchmark and Leading Indicator series continued	17 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.	
	18 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 the September quarter 2005, the first period for which preliminary data can be compared with final data is the June quarter 2005. No preliminary estimates exist prior to this period.	
	19 Revisions to the weighted average of the eight capital cities are included in this publication. Revisions made to each of the individual capital cities are available on the ABS website <htp: www.abs.gov.au=""> (refer to the time series spreadsheets under the 'Downloads' tab for <i>House Price Indexes: Eight Capital Cities</i> (cat. no. 6416.0)).</htp:>	
Available data	20 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.	
	21 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	22 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).	
	23 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.	
	24 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	25 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	26 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	

Established houses continued	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	27 The series for project homes is derived by weighting together the indexes for each of the eight capital cities. The city weights are derived from the value of net additions to the number of owner-occupier households, calculated by applying the average value of private dwelling completions from Building Activity statistics to quantity data calculated from Census 2006 counts of owner-occupied houses moved forward using data from <i>Household and Family Projections, Australia</i> (cat. no. 3236.0). 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.	
	28 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	29 The index for materials used in house building is that published for the weighted average of the six state capital cities in <i>Producer Price Indexes, Australia</i> (cat. no. 6427.0), re-referenced to 2003–04 = 100.0. For more information on this index refer to <i>Producer and International Trade Price Indexes: Concepts, Sources and Methods, 2006</i> (cat. no. 6429.0).	
Construction industry total hourly rates of pay	30 The index for the construction industry total hourly rates of pay excluding bonuses, private and public, is that published in <i>Labour Price Indexes, Australia</i> (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 <i>Labour Price Index: Concepts, Sources and Methods, 2004</i> (cat. no. 6351.0.55.001).	
Private Housing Investment	31 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 <i>Australian National Accounts: National Income, Expenditure and Product</i> (cat. no. 5206.0), referenced to 2003–04 = 100.0. For more information on this index refer to <i>Australian National Accounts: Concepts Sources and Methods, 2000</i> (cat. no. 5216.0).	
Established house transfer prices and counts	32 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.	
	33 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.	
	34 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.	

Established house transfer 35 As the ABS receives more VGs data, the median prices and numbers of house prices and counts continued transfers are revised as necessary. The usual practice is to update the most recent eight quarters of published figures. 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 **36** Each of the indexes presented in this publication is calculated on a quarterly basis INDEX NUMBERS 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. **37** 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. **38** 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 2012 163.3 (see table 3) *less* December Quarter 2011 162.4 (see table 3) *equals* change in index points 0.9 $0.9/162.4 \ge 100 = 0.6\%$ Percentage change **39** 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 **40** 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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