



Consumer Price Index, December quarter 2018

Headline CPI rose by 0.5 per cent in the December quarter 2018 to be 1.8 per cent higher through the year, down from growth of 1.9 per cent recorded through the year to the September quarter. The quarterly outcome was slightly above the median market expectation (median: 0.4 per cent; range: 0.3 per cent to 0.6 per cent). Price rises for tobacco and domestic holiday travel and accommodation were the largest positive contributors to CPI growth in the quarter, while a fall in automotive fuel prices was the most significant negative contributor.

The trimmed mean, a measure of underlying inflation, rose by 0.4 per cent in the quarter to remain 1.8 per cent higher through the year.

Through-the-year growth in headline CPI was within the range of market expectations (median: 1.7 per cent, range: 1.5 per cent to 1.9 per cent).

The trimmed mean rose by 0.4 per cent in the quarter, which was within the range of median market expectation (median: 0.4 per cent; range: 0.3 per cent to 0.6 per cent).

Through-the-year growth in both headline CPI and the trimmed mean remains subdued. Housing, the largest group in the CPI, continues to record modest price growth (up by 0.2 per cent in the quarter to be 1.5 per cent higher through the year). Clothing and footwear price growth also remains low (down by 0.2 per cent in the quarter to be 0.7 per cent lower through the year), reflecting ongoing retail competition. In seasonally adjusted terms, the CPI rose by 0.4 per cent in the quarter to be 1.8 per cent high through the year.

Tradable prices fell by 0.3 per cent in the quarter, owing to falls in automotive fuel and audio, visual and computing equipment prices, to be 0.6 per cent higher in through-the-year terms. Non-tradable prices rose by 0.9 per cent in the quarter to be 2.4 per cent higher through the year, reflecting higher tobacco prices.

Table 1: Headline CPI and underlying measures of inflation

(Per cent change)	Quarter		Through the year	
	Sep-18	Dec-18	Sep-18	Dec-18
Headline	0.4	0.5	1.9	1.8
Underlying	0.4	0.4	1.8	1.8
Weighted median	0.4	0.4	1.8	1.7
Trimmed mean	0.4	0.4	1.8	1.8

Note: Underlying inflation is the average of the trimmed mean and weighted median measures.

Source: Tables 1 and 8.

Chart 1: Headline CPI



Source: Table 1.

Major price movements

Alcohol and tobacco prices rose by 3.2 per cent in the quarter to be 6.8 per cent higher through the year. The main contributor to the rise was **tobacco**, which rose by 9.4 per cent. The rise in tobacco prices is in part due to the increase in federal excise tax that became effective on 1 September 2018.

Recreation and culture prices rose by 1.1 per cent in the quarter to be 1.7 per cent higher through the year. The main contributor to the rise was **domestic holiday travel and accommodation**, which rose by 6.2 per cent. The rise in domestic travel prices is related to increases in airfare prices in the peak summer holiday period.

Food and non-alcoholic beverages prices rose by 0.9 per cent in the quarter, driven by seasonal increases in fruit prices which were up by 5.0 per cent.

Table 2: CPI Groups

	(per cent change)		Cont. to CPI
	Quarter	TTY	
Food and non-alcoholic beverages	0.9	1.5	0.2
Alcohol and tobacco	3.2	6.8	0.3
Clothing and footwear	-0.2	-0.7	0.0
Housing	0.2	1.5	0.1
Furnishings, household equip. & services	0.5	-0.8	0.1
Health	-0.4	3.3	0.0
Transport	-0.7	2.8	-0.1
Communication	-1.3	-4.3	0.0
Recreation and culture	1.1	1.7	0.2
Education	0.0	2.7	0.0
Insurance and financial services	0.3	1.5	0.0
All Groups	0.5	1.8	-

Source: Tables 1 and 2.

Automotive fuel prices fell by 2.5 per cent in the quarter, owing to falls in global oil prices. The depreciation of the Australian dollar in the quarter is likely to have had some offsetting effect on retail fuel prices.

Communication prices fell by 1.3 per cent in the quarter to be 4.3 per cent lower through the year. The main contributor to the fall was **telecommunication equipment and services prices**, which fell by 1.5 per cent in the quarter.

Housing prices continued to record modest increases in the quarter, rising by 0.2 per cent to be 1.5 per cent higher through the year. Increases in the housing group in the quarter reflected rises in new dwelling purchase by owner-occupiers (up by 0.4 per cent), electricity (up by 0.9 per cent) and rents (up by 0.2 per cent). A fall in gas and other household fuel prices (down by 1.4 per cent) partly offset the rise.

Analytical Series and CPI by State

In through-the-year terms, the trimmed mean increased by 1.8 per cent, while the weighted median increased by 1.7 per cent. The CPI excluding volatile items (automotive fuel, and fruit and vegetables) increased by 1.6 per cent through the year.

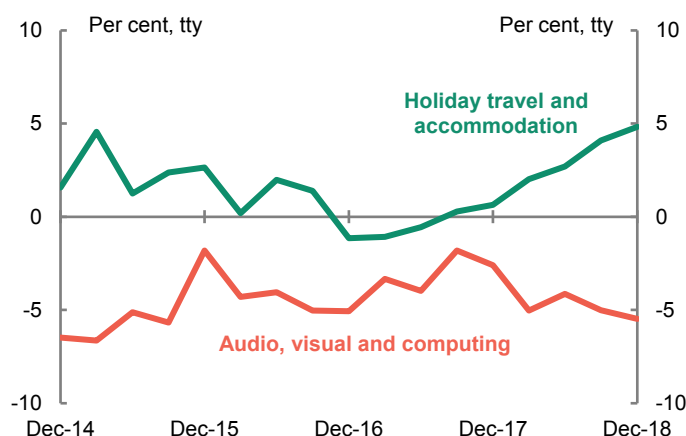
In quarterly terms, the trimmed mean and weighted median both increased by 0.4 per cent in the December quarter. The CPI excluding volatile items rose by 0.6 per cent in the quarter.

Table 3: Analytical measures of CPI

(per cent change)	Quarter		TTY	
	Sep	Dec	Sep	Dec
CPI	0.4	0.5	1.9	1.8
CPI seasonally adjusted	0.2	0.4	2.0	1.8
CPI ex. volatile items	0.4	0.6	1.2	1.6
Tradables	0.8	-0.3	1.4	0.6
Non-tradables	0.3	0.9	2.2	2.4
Underlying inflation	0.4	0.4	1.8	1.8
Weighted median	0.4	0.4	1.8	1.7
Trimmed mean	0.4	0.4	1.8	1.8

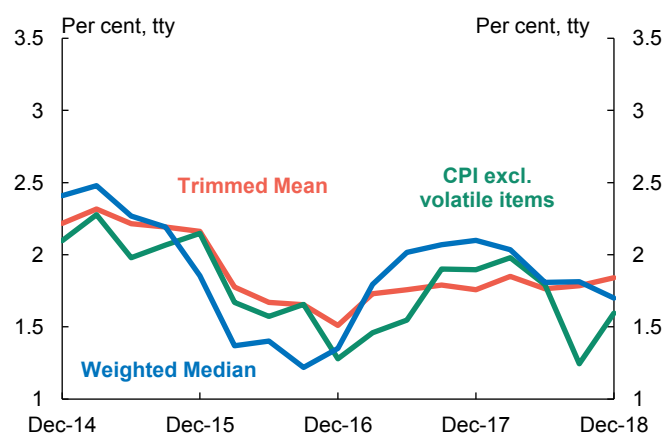
Source: Table 8.

Chart 2: Holiday travel and audio prices



Source: Table 7.

Chart 3: Measures of underlying inflation



Source: Table 8.

The **tradable** component of the CPI fell by 0.3 per cent in the December quarter to be 0.6 per cent higher in through-the-year terms. The main detractors from growth were fuel (down by 2.5 per cent) and audio, visual and computing equipment (down by 3.3 per cent).

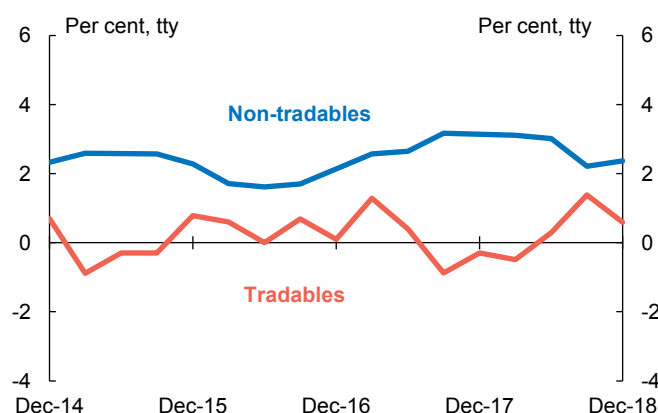
The **non-tradable** component of the CPI rose by 0.9 per cent in the September quarter to be 2.4 per cent higher through the year. The main contributors were in domestic holiday travel and accommodation (up by 6.2 per cent) and tobacco (up by 9.4 per cent).

Table 4: CPI by capital city

	(per cent change)	
	Quarter	TTY
Sydney	0.4	1.7
Melbourne	0.5	2.0
Brisbane	0.5	1.5
Perth	0.5	1.3
Adelaide	0.5	1.6
Hobart	1.2	3.0
Darwin	0.2	1.2
Canberra	0.7	2.5
Weighted average of 8 capital cities	0.5	1.8

Source: Table 5.

Chart 4: Tradable and non-tradable inflation



Source: Table 8.

Historical comparison of CPI and measures of underlying inflation

Table 5: Historical CPI and underlying inflation data

	Headline CPI (per cent change)		Weighted median (per cent change)		Trimmed mean (per cent change)		Underlying inflation (per cent change)	
	Quarter	TTY	Quarter	TTY	Quarter	TTY	Quarter	TTY
Dec-13	0.8	2.7	0.9	2.8	0.8	2.7	0.8	2.7
Mar-14	0.6	2.9	0.6	2.7	0.5	2.7	0.5	2.7
Jun-14	0.5	3.0	0.6	2.7	0.7	2.8	0.7	2.7
Sep-14	0.5	2.3	0.6	2.6	0.4	2.4	0.5	2.5
Dec-14	0.2	1.7	0.6	2.4	0.6	2.2	0.6	2.3
Mar-15	0.2	1.3	0.6	2.5	0.6	2.3	0.6	2.4
Jun-15	0.7	1.5	0.4	2.3	0.6	2.2	0.5	2.2
Sep-15	0.5	1.5	0.5	2.2	0.3	2.2	0.4	2.2
Dec-15	0.4	1.7	0.3	1.9	0.6	2.2	0.4	2.0
Mar-16	-0.2	1.3	0.1	1.4	0.3	1.8	0.2	1.6
Jun-16	0.4	1.0	0.5	1.4	0.5	1.7	0.5	1.5
Sep-16	0.7	1.3	0.3	1.2	0.3	1.7	0.3	1.4
Dec-16	0.5	1.5	0.4	1.4	0.4	1.5	0.4	1.4
Mar-17	0.5	2.1	0.6	1.8	0.5	1.7	0.5	1.8
Jun-17	0.2	1.9	0.7	2.0	0.5	1.8	0.6	1.9
Sep-17	0.6	1.8	0.3	2.1	0.4	1.8	0.4	1.9
Dec-17	0.6	1.9	0.5	2.1	0.4	1.8	0.4	1.9
Mar-18	0.4	1.9	0.5	2.0	0.6	1.8	0.5	1.9
Jun-18	0.4	2.1	0.5	1.8	0.4	1.8	0.5	1.8
Sep-18	0.4	1.9	0.4	1.8	0.4	1.8	0.4	1.8
Dec-18	0.5	1.8	0.4	1.7	0.4	1.8	0.4	1.8

Source: Tables 1 and 8.

The CPI is designed to provide a general measure of changes in prices of consumer goods and services purchased by Australian households. The CPI tracks the price change of a basket of goods consisting of 87 items, weighted to account for their relative importance in household spending patterns.

The ABS has used the Household Expenditure Survey (HES) to derive CPI weights at the published level (expenditure class level and above); these weights have been updated every six years. As part of a program to enhance the CPI, the ABS has begun with this release re-weighting the CPI annually using data from the National Accounts.

There are various ways of measuring underlying inflation from statistical measures to exclusion-based measures.

- The trimmed mean takes the weighted average of the middle 70 per cent (by weight) of the CPI basket that has experienced the least extreme price movement in the quarter by removing (by weight) the top 15 per cent and the bottom 15 per cent of price movements.
- The weighted median takes the price increase of the item exactly in the middle of the distribution of price changes.

These measures of underlying inflation seasonally adjust price changes for a number of items that have been identified as having seasonal patterns. As a result, revisions to seasonal factors mean that there may be revisions to these historical series. A combined version of these measures is the average of the trimmed mean and weighted median (reported as underlying inflation).