

3 November 2022

## Deeper insights from September quarter CPI Core inflation hits a 31 year high while the breadth of inflationary pressures is the greatest seen in 33 years.

- CPI 1.8% vs. 1.1% forecast; Trimmed Mean 1.8% vs. 1.5% forecast. It was a broad based upside surprise that has led to upward revisions to our near term inflation forecasts.
- The 1.8% lift in the September quarter was significantly greater than Westpac's 1.1% forecast and the market's 1.6% forecast. The main difference between our forecast and the print was the +3.2% jump in electricity prices; Westpac had forecast a -17% fall due to the state government rebates. Not only did we overestimate the impact of the rebates but we underestimated the 25% increase in Sydney power bills.
- The ABS estimates that excluding the rebates electricity prices would have risen 15.6% in the quarter.
- The annual pace lifted from 6.1% to 7.3%, the fastest pace since June 1990 (7.7%yr) and significantly faster than the 5.0%yr pace at the peak of the mining boom (September 2008).
- The most significant rises were for food (3.2% vs. 2.3% WBC), dwellings (3.7% vs. 4.0% WBC), utilities (4.8% vs. WBC -8.6%) and household contents & services (2.8% vs. WBC 2.4%).
- A broad inflationary pulse was captured by a 1.8% gain in the Trimmed Mean; the largest quarterly increase since December 1990 (RBA historical data). Both Westpac and market forecasts was 1.5%.
- The June quarter Trimmed Mean was also revised from 1.5% to 1.6%. The annual pace lifted from 4.9%yr to 6.1%yr, the fastest pace since December 1990 (6.7%yr).
- Just how widespread the inflationary pulse is was further emphasised by the rise in the share of components of the CPI running faster than a 2.5%yr pace. From a low of 32.2% in December 2021 the share lifted to 65.5% in March 2022, 72.4% in June then 89.7% in September, the largest share since September 1989 when it was 90.9%.
- At 8.4%yr, non-discretionary inflation is running at a faster pace than the CPI (7.3%yr) and a bit less than twice the rate of discretionary inflation (5.5%yr).
- Following the September quarter CPI we have updated our inflation profile. It is now peaking at 7.9%yr at end 2022 (was 7.7%) before easing back to around 4.1%yr by end 2023 (was 3.5%). While underlying inflationary pressures are stronger than expected, the peak remains at December 2022 and it is falling auto fuel prices that prevents the annual pace from breaching 8%yr.
- The Trimmed Mean is now forecast to peak at 6.8%yr in December 2022 (was 5.8%yr) before easing back to 3.8%yr by end 2023 (was 3.2%yr). A combination of a moderation in goods and dwelling price inflation is driving this moderation.

### June Quarter 2022 CPI

Item	Sep 2022 actual		Sep 2022 f/c	
	% qtr	contrib	% qtr	contrib
<b>Food</b>	3.2	0.56	2.3	0.39
of which, fruit & vegetables	4.5	0.11	4.9	0.12
<b>Alcohol &amp; tobacco</b>	1.2	0.11	1.8	0.17
of which, tobacco	0.9	0.04	1.9	0.07
<b>Clothing &amp; footwear</b>	-0.2	-0.01	-0.7	-0.02
<b>Housing</b>	3.2	0.75	0.5	0.12
of which, rents	1.3	0.09	1.0	0.07
of which, house purchases	3.7	0.31	4.0	0.33
of which, utilities	4.8	0.22	-8.6	-0.39
<b>H/hold contents &amp; services</b>	2.8	0.25	2.4	0.22
<b>Health</b>	0.3	0.02	0.3	0.02
of which, pharmaceuticals	-1.9	-0.02	-0.9	-0.01
<b>Transportation</b>	-0.4	-0.04	-0.5	-0.05
of which, car prices	0.5	0.01	2.1	0.05
of which, auto fuel	-4.3	-0.15	-4.7	-0.17
<b>Communication</b>	1.4	0.03	-0.7	-0.02
<b>Recreation</b>	1.3	0.12	3.3	0.28
of which, audio vis & comp	0.6	0.01	0.7	0.01
of which, holiday travel	4.0	0.09	9.8	0.21
<b>Education</b>	0.0	0.00	0.0	0.00
<b>Financial &amp; insurance services</b>	1.3	0.07	0.6	0.03
CPI: All groups	1.82	-	1.11	-
CPI: All groups % year	7.3	-	6.5	-

Sources: ABS, RBA, Westpac Banking Corporation.

### Consumer Price Index analytical series

		Dec-21	Mar-22	Jun-22	Sep-22
CPI	(index)	119.7	123.9	126.1	128.4
	(%qtr)	0.8	2.1	1.8	1.8
	(%yr)	3.0	5.1	6.1	7.3
CPI sa	(%qtr)	0.8	2.1	1.8	1.8
	(%yr)	3.0	5.2	6.2	7.3
Trimmed mean#	(%qtr)	0.7	1.5	1.6	1.8
	(%ann)	2.1	3.8	4.9	6.1
Weighted median#	(%qtr)	0.73	1.16	1.41	1.39
	(%ann)	2.0	3.2	4.3	5.0
Tradables	(%ann)	3.1	6.8	8.0	8.7
Non-tradables	(%ann)	3.2	4.2	5.3	6.5

### Inflation forecasts

		Dec-22	Mar-23	Jun-23	Sep-23
CPI	(index)	130.9	132.5	133.7	135.4
	(%qtr)	1.9	1.2	0.9	1.3
	(%yr)	7.9	6.9	6.0	5.5
Trimmed mean#	(%qtr)	1.8	1.2	1.0	0.8
	(%yr)	6.8	6.5	5.9	4.8

Past performance is not a reliable indicator of future performance. The forecasts given above are predictive in character. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The results ultimately achieved may differ substantially from these forecasts.

**Revisions continue to boost core inflation while the breadth of price gains continues to widen**

With revisions core inflation has now been accelerating faster than we first thought. Back in June, the March quarter print for the Trimmed Mean was revised up from 1.4%qtr to 1.5%qtr and then matched by a 1.5%qtr rise in June. In September, the June quarter was revised up to 1.6%qtr with a 1.8% print for the September quarter. Given the details outlined below, we now expect that momentum in core inflation to be maintained into the December quarter and have revised up our forecast to 1.8%qtr from 1.3%qtr and now see a peak of 6.8%yr rather than 5.8%yr.

The ABS reports the September 1.8% gain as the largest quarterly increase since they started calculating the Trimmed Mean in 2002. However, the RBA was estimating the Trimmed Mean and Weighted Median before the ABS and compared to their historical series the 1.8% increase was the largest quarterly rise since December 1990 (1.8%). The annual pace lifted from 4.9%yr to 6.1%yr, also the fastest pace since December 1990 (6.3%yr).

*The core measures use seasonally adjusted inputs so the percentage changes reported in the following analysis could vary significantly from what is reported in the headline CPI.*

As you can see in the chart over, the distribution of seasonally adjusted changes in the components of the CPI is skewed to the high side. The trimming of the bottom 15% starts at a quite high 0.3% so there are no negatives in the core measure. The negatives trimmed are; auto fuel (-4.3%), games, toys & hobbies (-3.4%), footwear for women (-1.7%), other recreational & sporting services (-1.1%), lamb & goat (-0.9%), household textiles (-0.9%), footwear for men (-0.7%), audio visual & computing equipment (-0.6%), deposit & loan facilities (-0.3%), garments for women (-0.1%), wine (-0.1%), pharmaceutical products (0.0%), books (0.1%), electrical appliances (0.2%), tertiary education (0.2%), and accessories (0.3%).

There is a significant clustering of weighted changes around 1.4% with a meaningful clustering to 3.4%. The core sample stretches out to 3.7%. Trimmed off the top are; furniture (3.7%), new dwellings (3.7%), ice cream (3.8%), breakfast cereals (4.0%), carpets & floor coverings (4.1%), snacks & confectionery (4.1%), jams, honey & spreads (4.4%), cheese (4.6%), eggs (5.3%), urban transport (5.9%), fruit (7.3%), oils & fat (7.6%), gas & household fuels (10%), milk (10.7%) and international holiday travel (12.3%).

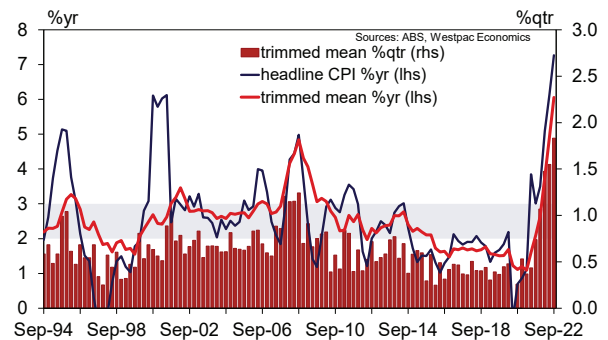
Distribution analysis highlights how widespread core inflation pressures are and while you can identify some that might be transitory, such as food prices due to floods and other seasonal factors, that the price gains are broad spread raises the possibility it could have a meaningful impact on inflationary expectations, flowing through to wages, thus increasing the risk of a higher than expected inflationary profile.

Just how widespread the inflationary pulse is can be further emphasised by the rise in the share of components running faster than 2.5%yr. From a low of 32.2% in December 2021 it lifted to 65.5% in March 2022, 72.4% in June then to 89.7% in September, the largest share since September 1989 when it was 90.9%.

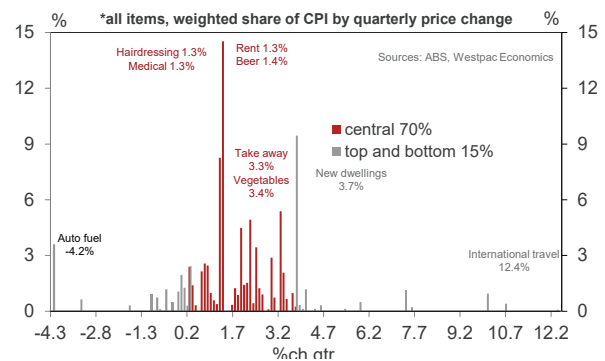
**Non-discretionary inflation running hot**

At 8.4%yr non-discretionary inflation is running at a faster pace than the CPI (7.3%yr) and a bit less than twice the rate of discretionary inflation (5.5%yr) though it should be noted that the quarterly rate of increase for non-discretionary moderated from the 3.0% gain in March to a 1.8% lift in June followed by a 2.0% gain in September. But we also note that the September

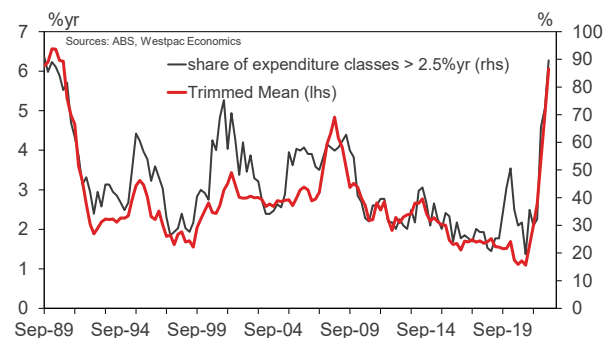
**Inflation; headline and core**



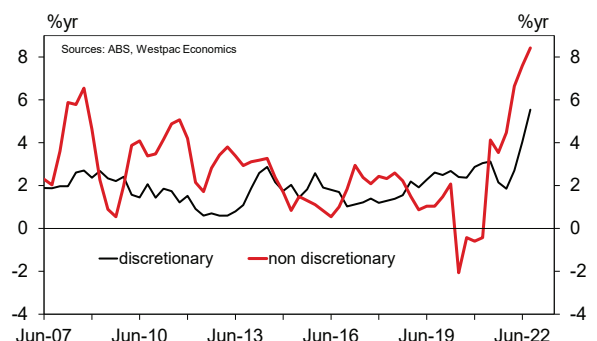
**Distribution of seasonally adjusted Q3 CPI**



**Inflationary pressures are broadening**



**Non discretionary inflation accelerating**



Past performance is not a reliable indicator of future performance. The forecasts given above are predictive in character. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The results ultimately achieved may differ substantially from these forecasts.

increase includes the 3.6% gain in electricity prices which were held back from a measured 15.6% gain by the state energy/cost of living rebates. Westpac is forecasting a 15% increase in power bills in December.

Discretionary prices lifted 1.7%qtr in September, matching the June increase which was up from 0.8% gain in March. The June increase was the strongest rise in the history of the series which starts at September 2005.

**Surging construction costs pushing dwelling prices higher**

Since June 2021 the unwinding of the grants have been a significant factor, but not the main story, behind the burst in dwelling price inflation. Fewer payments of government construction grants compared to the previous quarter also contributed to the rise this quarter. These grants have the effect of reducing out-of-pocket expenses for new dwelling purchases.

We are, however, surprised to that see that the grants are still holding the level down below measured prices in September. The ABS estimates that the impact of the unwinding of the grants was worth just 0.1ppt of the 3.7% rise in dwelling prices. As such, the level of dwelling prices in the CPI are still 1.2% below the level of dwelling prices before grants and as such, there is still a 1.2% rise in dwelling prices to come from just the ending of the use of these grants. We expect this to occur from December 2022 through to June 2023.

The more important story is that robust construction activity and ongoing shortages of labour and materials are driving new dwelling prices higher. Although the quarterly rate of growth has eased somewhat, 3.7% compared to a record 5.7% in March and a comparable 5.6% in June, in September the annual pace recorded hit a record high of 20.7%; new dwelling prices entered the CPI in June 1999. Dwelling prices excluding grants lifted 3.6% in September following a 5.6% increase in June, 4.4% in March, 3.6% in December 2021, 3.0% in September 2021 and a 1.8% rise in June 2021. Dwelling prices before grants are up 17.8%yr compared to a 20.7%yr increase in CPI new dwellings.

Dwelling price inflation has moderated as input costs inflation shows signs of peaking and the demand boost from government grants fades. House Construction PPI lifted 4.2% in September, 6.0% in June and 4.9% in March to be up 20.5%yr. This series looks as if it is nearing a peak when compared to 19.8%yr pace in June. The annual pace of House Construction Inputs PPI also look to be peaking at around a 13%yr pace, somewhat less than the rise in output prices. Interestingly, dwelling prices in the CPI (before rebates) have, over the past year, been more aligned with construction input prices than construction output prices.

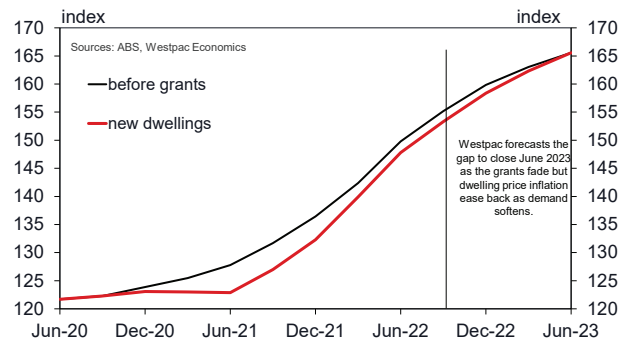
We expect dwellings price increases to continue moderating as we move through 2023 as contracting home sales, and falling established home prices, point to softer demand for new dwellings and thus a compression of developers margins.

The ABS also noted that maintenance & repair of dwellings rose 1.3%, due to supply disruptions and higher material, labour and freight costs. We would expect these price pressures to remain at least through to the end of 2022 and while material and freight cost are likely to ease through 2023 it is likely that labour cost pressures will remain relatively elevated.

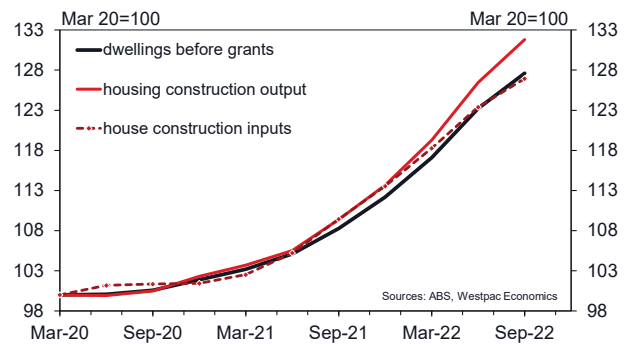
**Rentals under pressure as vacancy rates fall**

The rate of rental price growth in Sydney and Melbourne increased in September (1.3%qtr and 1.1%qtr respectively) following a period of subdued growth since the onset of the COVID-19 pandemic in 2020 (just 0.4%qtr and 0.2%qtr respectively in

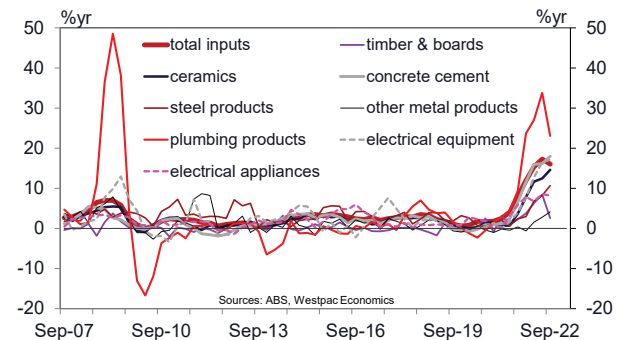
**As grants fade dwelling prices lift**



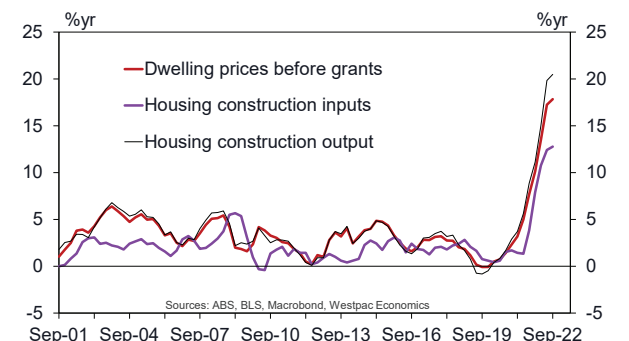
**Dwelling prices rising with input costs**



**Dwelling construction inputs**



**Dwelling prices lagging construction prices**



Past performance is not a reliable indicator of future performance. The forecasts given above are predictive in character. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The results ultimately achieved may differ substantially from these forecasts.



June). This is the third consecutive quarter of rises for these two capital cities which is a significant step from the previous trend and consistent with falling vacancy rates. Compared to Sydney and Melbourne, the remaining capital cities have recorded higher increases in rent prices reflecting historically low vacancy rates. We are expecting rents to make an increasingly larger contribution to inflation to at least through the first half of 2023 with rental inflation peaking at around 6%yr in June 2023.

**Electricity prices break north**

The main difference between our 1.1%qtr CPI forecast and the 1.8%qtr print was the 3.2% gain in electricity prices vs. our forecast for a -17% fall due to the state government rebates. Not only did we overestimate the impact of the rebates in Melbourne and Brisbane but we underestimated the 25% increase in Sydney power bills.

Utilities rose 4.8% in the quarter, driven by gas & other household fuels (+10.9%) and electricity (+3.2%). This is the strongest rise for gas and other household fuels since September 2012 (14.2%). Gas and electricity price rises reflect annual reviews with retailers across all capital cities passing through higher wholesale prices.

As noted earlier, the rise in electricity was partially offset by the introduction of electricity rebates including the \$400 household electricity credit introduced by the Western Australian Government, the \$175 Cost of Living rebate by the Queensland Government and the \$50 rebate for concession households by the ACT Government this quarter. The ABS estimates that excluding the effect of these schemes in WA, Queensland and ACT, electricity prices would have risen 15.6% in the quarter. All this has done is shift the timing of the increase in electricity to the December quarter, and possibly into the March quarter, as the rebates are used by households.

**Groceries continue to surge**

Strong gains were seen across all food and non-food grocery products in Q3. These increases reflected a range of price pressures including supply chain disruptions, weather-related events, such as flooding, and increased transport and input costs. In the year to the September fruit & vegetables gained 16.2% while dairy products lifted 12.1%.

In the quarter, fruit & vegetables rose 4.5% (WBC 4.9%) due to the effects of heavy rainfall and flooding in key growing areas earlier in the year. Higher transport and fertiliser costs also contributed to the rise.

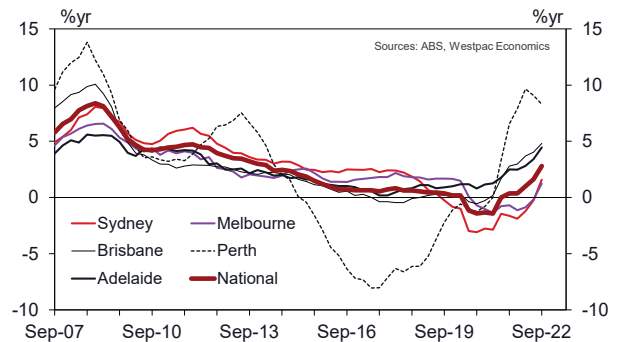
Meals out & take away foods gained 2.9% due to rising input costs and labour shortages, and an end to the Dine & Discover NSW program. The roll-out of the Victorian Dining & Entertainment Program partly offset the rise. Vouchers have the effect of reducing out of pocket costs for consumers. Excluding the impact of these voucher schemes, meals out & takeaway foods rose 3.1%.

Dairy and related products rose 6.8% due to higher milk prices.

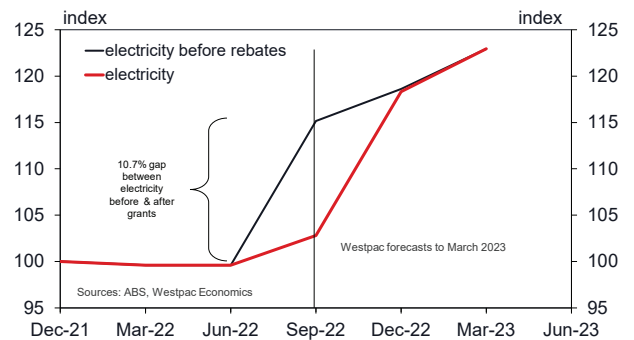
In seasonally adjusted terms, food prices rose 3.3% in September. Meals out & takeaway foods (+2.9%) and fruit & vegetables (+5.2%) were the main contributors.

All up, food lifted 3.2% compared to our 2.3% forecast. This upside surprise in food prices has lead us to upgrade our food price inflation profile through to early 2023.

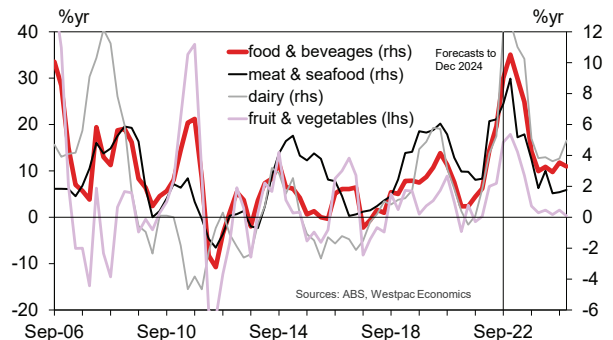
**Rental inflation**



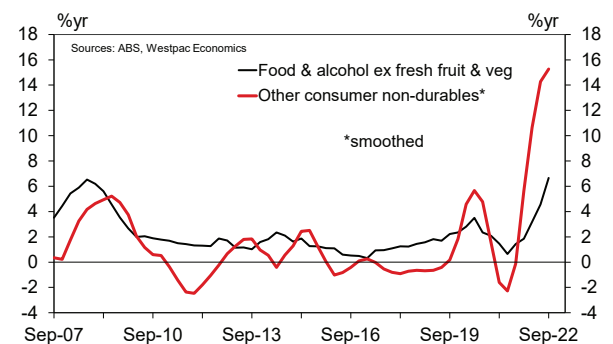
**Grants to supercharge electricity in Q4**



**Food inflation remains elevated**



**Non-durables inflation is not all about food**



Past performance is not a reliable indicator of future performance. The forecasts given above are predictive in character. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The results ultimately achieved may differ substantially from these forecasts.



**Clothing & footwear remain inflationary**

Clothing & footwear fell -0.2% in September, a bit stronger than our expectation for a -0.7% fall. The fall in footwear (-2.5%) was the main contributor. In the year to September this group lifted 5.3%yr. Garments for women, up +7.8%yr, was the main contributor. In seasonally adjusted terms the group recorded no change in the quarter.

**Furnishings, household equipment & services**

This group lifted 2.8% in the quarter, a bit stronger than our expectation for a 2.4% gain. Furniture rose 6.6% due to ongoing supply chain issues, including higher freight and raw material costs. Non-durable household goods lifted 2.2% driven by rises in a range of products including toilet paper, tissues and hair care products. Household services rose 1.9% due to the minimum and award wage increase and higher operational costs for businesses. In the year to September this group lifted 7.7%. Other non-durable household products (+16.2%yr) and furniture (+11.4%yr) were the main contributors. Seasonally adjusted, this group gained 2.1%. Furniture (+3.7%) was the main contributor.

**Falling fuel prices contain transport costs**

Automotive fuel fell 4.3% due to global oil supply reaching levels not seen since the start of the pandemic. The ABS reports that fuel prices fell in July (-3.4%), August (-11.6%) and September (-1.8%). Offsetting this fall, maintenance & repair of motor vehicles gained 2.0% due to higher material and labour costs while urban transport lifted 6.6%, following the temporary periods of free public transport in Sydney and Hobart last quarter. Seasonally adjusted transport prices fell 0.6% with automotive fuel (-4.3%) the main contributor. In the year to September transport prices gained 9.2% with automotive fuel (+18.0%) being the main contributor.

The recent moderation in crude prices, and the squeeze in the margin for pump prices when the 22.2 cent excise was reinstated in late September, presents an unexpected downside risk to our CPI forecast up to the first half of 2023. So despite globally elevated refining margins, auto fuels are likely to remain deflationary for the near term.

**Forecast revisions post the update**

For the December quarter we have incorporated more momentum in food, clothing & footwear, household goods & services but moderated our petrol prices forecasts as crude prices are lower than we had expected and retail margins have been squeezed.

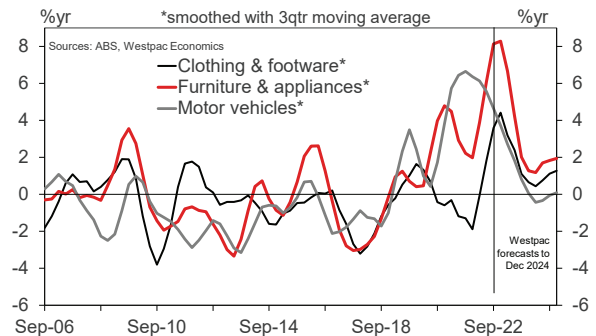
Fruit & vegetables have been surprising soft through the last few months, the Monthly CPI Indicator reported a -6.1% fall in September with market data pointing to a further decline in October. While we are still to get November & December data, the recent floods should place some upwards pressure, so for now there is not a lot for us to put a large rise in our forecasts.

We now have a 1.9%/7.9%yr increase in the December CPI (previously 2.5%qtr/7.7%yr) with the smaller increase due to the shifting in timing of the power bill increases (more in Q3, less in Q4), falling auto fuel (it had been expected to rise with the 22c increase in fuel excise) and softer fruit & veg prices.

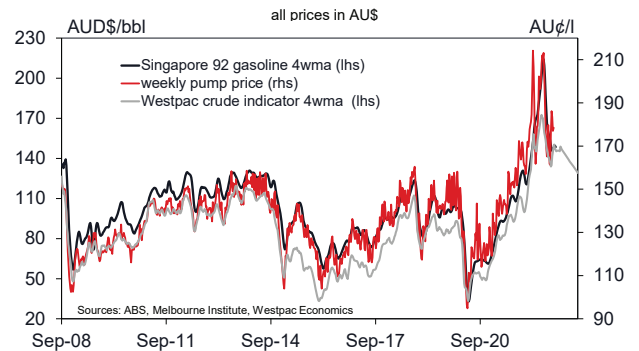
The December Trimmed Mean is now 1.8%, matching the September quarter rather than dropping back to 1.3%. It is in the Trimmed Mean that you can see broad-based inflationary pressures. Annual Trimmed Mean inflation is now forecast to peak at 6.8% in December 2022; previous peak was 5.8% in December.

**Justin Smirk**, Senior Economist, ph (61-2) 8254 9336

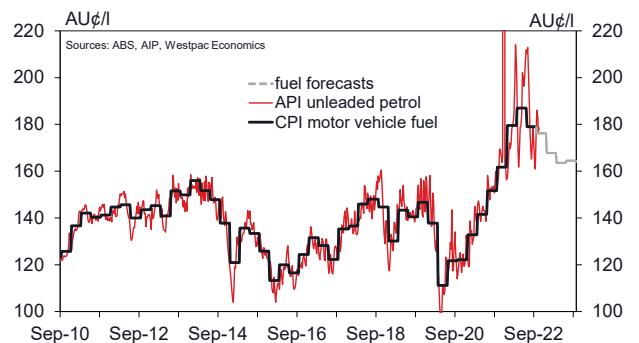
**Durable inflation has some strength**



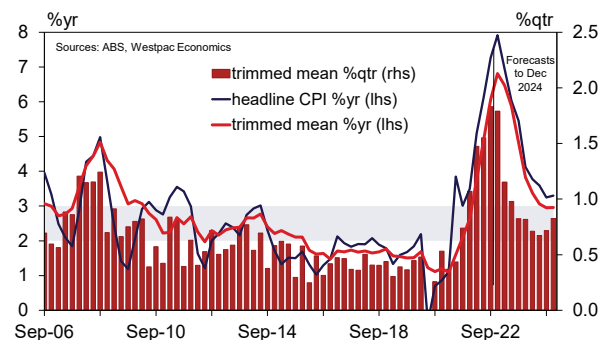
**Australian prices have a premium to crude**



**Weekly bowser price & CPI auto fuel**



**Inflation; headline and core**



Past performance is not a reliable indicator of future performance. The forecasts given above are predictive in character. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The results ultimately achieved may differ substantially from these forecasts.

© Copyright 2022 Westpac Banking Corporation

## Things you should know.

Westpac Institutional Bank is a division of Westpac Banking Corporation ABN 33 007 457 141 ('Westpac').

### Disclaimer

This material contains general commentary only and is not intended to constitute or be relied upon as personal financial advice. To the extent that this material contains any general advice, it has been prepared without taking into account your objectives, financial situation or needs, and because of this, you should, before acting on it, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs, and, the disclosure documents (including any product disclosure statement) of any financial product you may consider. Certain types of transactions, including those involving futures, options and high yield securities give rise to substantial risk and are not suitable for all investors. We recommend that you seek your own independent legal or financial advice before proceeding with any investment decision. This material may contain material provided by third parties. While such material is published with the necessary permission none of Westpac or its related entities accepts any responsibility for the accuracy or completeness of any such material. Although we have made every effort to ensure the information is free from error, none of Westpac or its related entities warrants the accuracy, adequacy or completeness of the information, or otherwise endorses it in any way. Except where contrary to law, Westpac and its related entities intend by this notice to exclude liability for the information. The information is subject to change without notice and none of Westpac or its related entities is under any obligation to update the information or correct any inaccuracy which may become apparent at a later date. The information contained in this material does not constitute an offer, a solicitation of an offer, or an inducement to subscribe for, purchase or sell any financial instrument or to enter a legally binding contract. Past performance is not a reliable indicator of future performance. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The ultimate outcomes may differ substantially from these forecasts.

### Country disclosures

**Australia:** Westpac holds an Australian Financial Services Licence (No. 233714). This material is provided to you solely for your own use and in your capacity as a client of Westpac.

For XYLO Foreign Exchange clients: This information is provided to you solely for your own use and is not to be distributed to any third parties. XYLO Foreign Exchange is a division of Westpac Banking Corporation ABN 33 007 457 141 and Australian credit licence 233714. Information is current as at date shown on the publication. This information has been prepared without taking account of your objectives, financial situation or needs. Because of this you should, before acting on this information, consider its appropriateness, having regard to your objectives, financial situation or needs. XYLO Foreign Exchange's combined Financial Services Guide and Product Disclosure Statement can be obtained by calling XYLO Foreign Exchange on 1300 995 639, or by emailing [customer@xylo.com.au](mailto:customer@xylo.com.au).

**New Zealand:** In New Zealand, Westpac Institutional Bank refers to the brand under which products and services are provided by either Westpac or Westpac New Zealand Limited ("WNZL"). Any product or service made available by WNZL does not represent an offer from Westpac or any of its subsidiaries (other than WNZL). Neither Westpac nor its other subsidiaries guarantee or otherwise support the performance of WNZL in respect of any such product. The current disclosure statements for the New Zealand branch of Westpac and WNZL can be obtained at the internet address [www.westpac.co.nz](http://www.westpac.co.nz). For further information please refer to the Product Disclosure Statement (available from your Relationship Manager) for any product for which a Product Disclosure Statement is required, or applicable customer agreement. Download the Westpac NZ QFE Group Financial Advisers Act 2008 Disclosure Statement at [www.westpac.co.nz](http://www.westpac.co.nz).

**China, Hong Kong, Singapore and India:** This material has been prepared and issued for distribution in Singapore to institutional investors, accredited investors and expert investors (as defined in the applicable Singapore laws and regulations) only. Recipients in Singapore of this material should contact Westpac Singapore Branch in respect of any matters arising from, or in connection with, this material. Westpac Singapore Branch holds a wholesale banking licence and is subject to supervision by the Monetary Authority of Singapore. Westpac Hong Kong Branch holds a banking licence and is subject to supervision by the Hong Kong Monetary Authority. Westpac Hong Kong branch also holds a license issued by the Hong Kong Securities and Futures Commission (SFC) for Type 1 and Type 4 regulated activities. This material is intended only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance. Westpac Shanghai and Beijing Branches hold banking licenses and are subject to supervision by the China Banking and Insurance Regulatory Commission (CBIRC). Westpac Mumbai Branch holds a banking license from Reserve Bank of India (RBI) and subject to regulation and supervision by the RBI.

**UK:** The contents of this communication, which have been prepared by and are the sole responsibility of Westpac Banking Corporation London and Westpac Europe Limited. Westpac (a) has its principal place of business in the United Kingdom at Camomile Court, 23 Camomile Street, London EC3A 7LL, and is registered at Cardiff in the UK (as Branch No. BR00106), and (b) authorised and regulated by the Australian Prudential Regulation Authority in Australia. Westpac is authorised in the United Kingdom by the Prudential Regulation Authority. Westpac is subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Details about the extent of our regulation by the Prudential Regulation Authority are available from us on request. Westpac Europe Limited is a company registered in England (number 05660023) and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority.

This communication is being made only to and is directed at (a) persons who have professional experience in matters relating to investments who fall within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (b) high net worth entities, and other persons to whom it may otherwise lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). Any person who is not a relevant person should not act or rely on this communication or any of its contents. The investments to which this communication relates are only available to and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such investments will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely upon this communication or any of its contents. In the same way, the information contained in this communication is intended for "eligible counterparties" and "professional clients" as defined by the rules of the Financial Conduct Authority and is not intended for "retail clients". With this in mind, Westpac expressly prohibits you from passing on the information in this communication to any third party. In particular this communication and, in each case, any copies thereof may not be taken, transmitted or distributed, directly or indirectly into any restricted jurisdiction. This communication is made in compliance with the Market Abuse Regulation (Regulation(EU) 596/2014).

**Disclaimer continued overleaf**

## Disclaimer continued

### Investment Recommendations Disclosure

The material may contain investment recommendations, including information recommending an investment strategy. Reasonable steps have been taken to ensure that the material is presented in a clear, accurate and objective manner. Investment Recommendations for Financial Instruments covered by MAR are made in compliance with Article 20 MAR. Westpac does not apply MAR Investment Recommendation requirements to Spot Foreign Exchange which is out of scope for MAR.

Unless otherwise indicated, there are no planned updates to this Investment Recommendation at the time of publication. Westpac has no obligation to update, modify or amend this Investment Recommendation or to notify the recipients of this Investment Recommendation should any information, including opinion, forecast or estimate set out in this Investment Recommendation change or subsequently become inaccurate.

Westpac will from time to time dispose of and acquire financial instruments of companies covered in this Investment Recommendation as principal and act as a market maker or liquidity provider in such financial instruments.

Westpac does not have any proprietary positions in equity shares of issuers that are the subject of an investment recommendation.

Westpac may have provided investment banking services to the issuer in the course of the past 12 months.

Westpac does not permit any issuer to see or comment on any investment recommendation prior to its completion and distribution.

Individuals who produce investment recommendations are not permitted to undertake any transactions in any financial instruments or derivatives in relation to the issuers covered by the investment recommendations they produce.

Westpac has implemented policies and procedures, which are designed to ensure conflicts of interests are managed consistently and appropriately, and to treat clients fairly.

The following arrangements have been adopted for the avoidance and prevention of conflicts in interests associated with the provision of investment recommendations.

- I. Chinese Wall/Cell arrangements;
- II. physical separation of various Business/Support Units;
- III. Strict and well defined wall/cell crossing procedures;
- IV. a “need to know” policy;
- V. documented and well defined procedures for dealing with conflicts of interest;
- VI. reasonable steps by Compliance to ensure that the Chinese Wall/Cell arrangements remain effective and that such arrangements are adequately monitored.

**U.S.:** Westpac operates in the United States of America as a federally licensed branch, regulated by the Office of the Comptroller of the Currency. Westpac is also registered with the US Commodity Futures Trading Commission (“CFTC”) as a Swap Dealer, but is neither registered as, or affiliated with, a Futures Commission Merchant registered with the US CFTC. Westpac Capital Markets, LLC (“WCM”), a wholly-owned subsidiary of Westpac, is a broker-dealer registered under the U.S. Securities Exchange Act of 1934 (“the Exchange Act”) and member of the Financial Industry Regulatory Authority (“FINRA”). This communication is provided for distribution to U.S. institutional investors in reliance on the exemption from registration provided by Rule 15a-6 under the Exchange Act and is not subject to all of the independence and disclosure standards applicable to debt research reports prepared for retail investors in the United States. WCM is the U.S. distributor of this communication and accepts responsibility for the contents of this communication. All disclaimers set out with respect to Westpac apply equally to WCM. If you would like to speak to someone regarding any security mentioned herein, please contact WCM on +1 212 389 1269. All disclaimers set out with respect to Westpac apply equally to WCM.

Investing in any non-U.S. securities or related financial instruments mentioned in this communication may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to the regulations of, the SEC in the United States. Information on such non-U.S. securities or related financial instruments may be limited. Non-U.S. companies may not be subject to audit and reporting standards and regulatory requirements comparable to those in effect in the United States. The value of any investment or income from any securities or related derivative instruments denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related derivative instruments.

The author of this communication is employed by Westpac and is not registered or qualified as a research analyst, representative, or associated person under the rules of FINRA, any other U.S. self-regulatory organisation, or the laws, rules or regulations of any State. Unless otherwise specifically stated, the views expressed herein are solely those of the author and may differ from the information, views or analysis expressed by Westpac and/or its affiliates.

