



25 November 2025

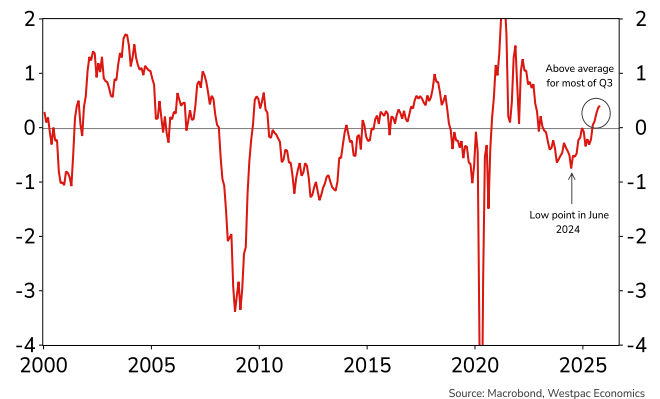
# WESTPAC NOWCAST: THE UPSWING ACCELERATES

## Key points

- We introduce the Westpac Nowcast (Westpac-Now) measure of current activity in the Australian economy. It shows activity strengthened through late 2024, with growth firming into September 2025. Westpac-Now points to growth of around 0.7%qtr in Q3 (with a range of 0.5%qtr to 0.9%qtr) while also suggesting the soggy Q1 2025 outcome of 0.3%qtr was more noise than signal.
- Westpac-Now combines more than 60 high frequency economic and financial variables with advanced statistical techniques to provide a real-time pulse check of the economy. It is the first Australian model to use internal banking data, adding to the measure's predictive power. It also has several advanced features designed to improve its accuracy. The Westpac-Now measure outperforms other, simpler approaches to forecasting in the post-pandemic period.

### Westpac Monthly Activity Index

Index. Axis truncated for covid.



- In the months ahead we will further leverage de-identified internal banking data and extend Westpac-Now to also provide nowcasts of the major components of activity (such as household consumption, business investment and government spending).

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.

# Growth Firming into September 2025



**Pat Bustamante**  
Senior Economist

The emergence of big data and AI has sharply increased the number of data releases hitting the market. In theory, this should make it 'easier' for economists and analysts to assess economic conditions. In practice, though, it can be harder to distinguish between sometimes-conflicting signals and look through the noise.

The ABS National Accounts provides confirmation of current activity once a quarter, but it is published with a lag of at least eight weeks. Given this, it could take up to six months before the National Accounts confirms the economy has changed direction and entered an upswing or downswing phase. To address this gap, Westpac Economics has invested heavily to leverage internal banking data and provide a real-time read on the consumer ([see here](#) and [here](#)) and the SME sector ([see here](#)).

The Westpac Nowcast (Westpac-Now) measure of current activity will help assess whether available data, including Westpac's internal indicators, provide a signal or just noise. By extracting a 'common factor' from many high frequency indicators, we can see whether a data 'surprise' is consistent with the economy reaching a turning point or is just noise conflicting with the wider set of indicators. And we will be able to do this every time data is released.

## Australia's Economic Pulse in One Factor

We derive this 'common factor,' or the Westpac Monthly Activity Indicator (Westpac-MAI), using advanced statistical techniques in line with the Kalman filtering approach outlined in Poncela.P, Ruiz, E and Miranda, K (2021) and Commonwealth Treasury (2018). These methods allow us to update constantly for incoming data (Appendix A has further details on the methodology).

We start with 64 economic and financial variables which are released at least on a monthly basis (Appendix B has a list of variables with further details). These include 'hard' (partial measures of activity such as the change in employment levels), 'soft' (indirect measures of activity including confidence and surveyed investment intentions) and 'financial market' (such as interest rates and financial market spreads) indicators. To boost timeliness and add to our model's predictive power we also include internal banking data, including the change in the total number of transactions by Westpac customers (consumers and businesses) and the Westpac Card Tracker.

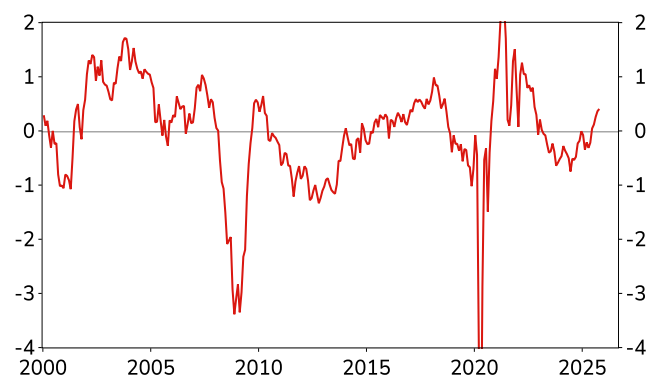
In addition to this unconstrained list of indicators, we also use a more streamlined model where variables are selected based on how well they can predict quarterly movements in GDP. Several selection tests are used, including 'hard thresholding' as used by the RBA (2024) which removes weak predictors. The more streamlined model helps reduce the risks that a less-relevant variable distorts the forecast.

The Westpac Card Tracker was found to have the greatest predictive power for GDP, followed by a set of 'hard' and 'soft' indicators including Seek Job Ads, total business credit and business conditions (see Appendix C). The outperformance of the Westpac Card Tracker was not overly surprising; consumption is a large fraction of overall GDP and the significant share of Australian households who bank with Westpac are likely to be broadly representative of all households. However, it also has some (reduced) power for predicting the non-consumption part of GDP, as does Westpac's broader internal total transactions data.

We then scaled this streamlined model indicator to match the variance of quarterly growth in GDP, producing the Westpac-MAI (Monthly Activity Indicator). It shows that after an extended period of weakness, activity picked up in the second half of 2024 and gained momentum over the two quarters to September 2025.

## Westpac Monthly Activity Index

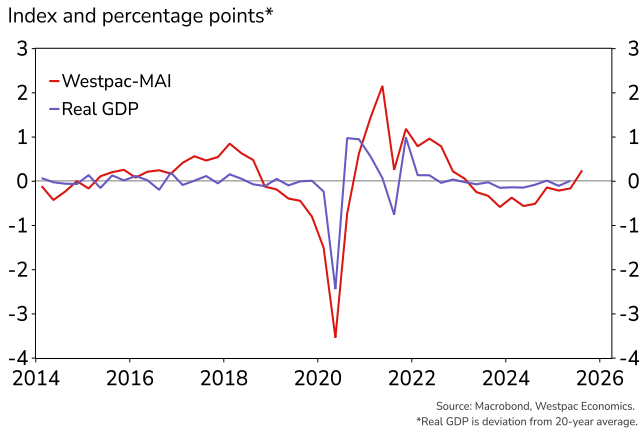
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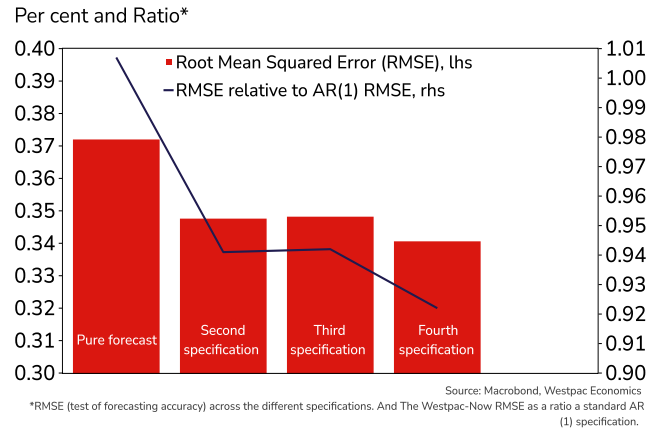
Source: Macrobond, Westpac Economics

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### Westpac Monthly Activity Index Vs GDP



### Westpac-Now forecasting performance



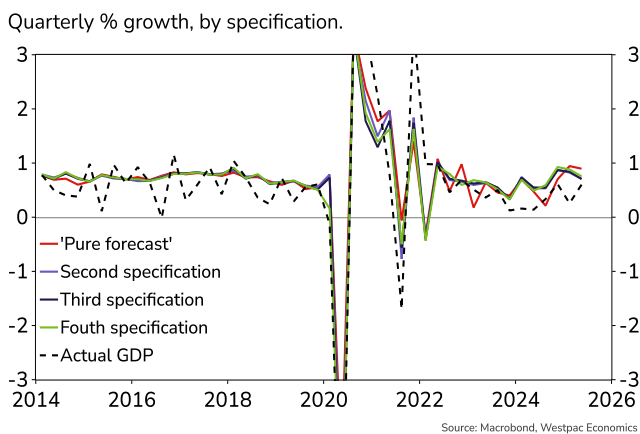
### From Westpac-MAI to Insights: Introducing Westpac-Now

We use the Westpac-MAI to then estimate quarterly growth in real GDP. The fit will not be perfect, given that GDP includes components that would not be captured in actual activity, such as imputed rents for dwelling owners and depreciation of buildings and equipment. We use a technique (MIDAS) that allows for mixed monthly and quarterly data when forecasting quarterly GDP growth. This technique also allows us to incorporate partial data for the current quarter.

The 'pure forecast' specification includes only data up to and including the final month of the quarter which precedes the forecast quarter (e.g. up to June for a September quarter nowcast). The second specification includes data up to and including the first month of the quarter we are trying to forecast (e.g. up to July for a September quarter nowcast), and so forth.

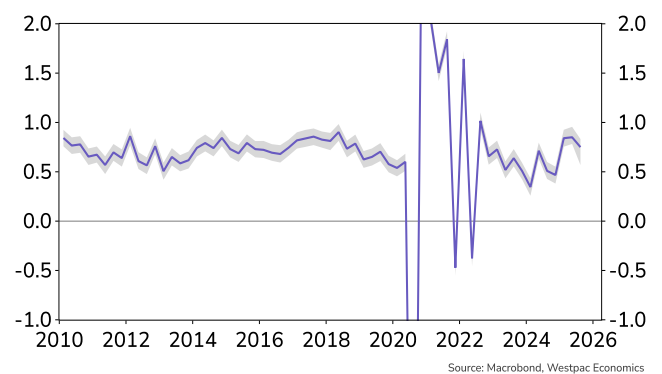
Instead of relying on one specification we combined all specifications in a way that minimises forecasting errors – this is our Westpac-NOW measure of current activity. Using bootstrapping techniques, we can also generate confidence intervals around this combined forecast, which are shown in the chart below. It shows that growth has stepped up and the surprise 0.6%qtr outcome in Q2 2025 was no fluke. If anything, it shows that the soggy outcome in Q1 2025, relative to changes in other key indicators, was more likely than not due to noise. \*RMSE (test of forecasting accuracy) across the different specifications. And The Westpac-Now RMSE as a ratio a standard AR(1) specification.

### Model outcomes Vs Actual GDP



### Westpac-Now

Quarterly % growth with 95% confidence intervals. Axis truncated for covid.



Including partial monthly data in this way generally improves forecasting accuracy, though not always. We assess this 'out-of-sample' by estimating the model using only past data and then include current partial data for the prediction of the current quarter's GDP. More broadly, these models improve significantly on simpler forecasting models such as predicting GDP using only its own history.

### What's next?

In the months ahead we will further leverage de-identified internal banking data and extend Westpac-Now to also provide nowcasts of the major components of activity (such as household consumption, business investment and government spending).

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## Appendix A – Overview of methodology

Several public and private institutions have developed nowcasting frameworks for growth in real GDP, including the Commonwealth Treasury, Reserve Bank of Australia, Federal Reserve Banks of Atlanta and New York, the Bank of England, and the European Central Bank. Poncela, Ruiz, and Miranda (2021) provide a useful overview of these models and the main approaches to extracting a common factor. We adopt the second approach they describe—the Kalman filter method—which is preferred because it can adapt to structural changes in the economy, handle missing data, and update estimates recursively as new information arrives.

This appendix outlines the process used to derive estimates, assess forecasting performance, and define our Westpac Nowcast (Westpac-Now) measure of current activity.

### Getting the data ready

We began with an unconstrained set of 64 high-frequency economic and financial variables (see Appendix B). As is standard practice, these variables were transformed to achieve stationarity and normalised to have zero mean and unit variance.

The set was then reduced to around 30 variables to remove noisy series with little predictive power. Variable selection combined statistical screening and economic judgement, including the RBA's hard-thresholding procedure, which uses the Wald statistic from regressions of GDP on lagged monthly indicators to rank variables by predictive strength for quarterly GDP growth.

### Fitting the Dynamic Factor Model

A dynamic factor model (DFM) estimates a single underlying factor from many high-frequency indicators. The “dynamic” aspect means the weights used to combine these indicators are not fixed—they adjust as new data becomes available.

We specified our model in a state-space form, which defines how the common factor evolves over time. The factor is modelled as a stationary autoregressive process of order one, with a coefficient less than one. A Kalman filter is then applied to extract the signal from noisy data, updating the estimate step by step as new information arrives.

DFMs are powerful because they handle large datasets, accommodate missing data or “ragged edges” (since indicators are released at different times), and allow the factor to be projected forward for forecasting—as in our pure forecast specification.

### Mapping our monthly factor to growth in real GDP

In the past, forecasters often averaged high-frequency indicators (such as monthly or weekly data) to match the lower frequency of targets like quarterly GDP.

A more effective approach is Mixed Data Sampling (MIDAS) regression, which uses high-frequency data directly to forecast low-frequency outcomes.

Instead of averaging monthly data, MIDAS includes several monthly lags—such as six months, which we used in our setup—preserving the full information in the indicators. To avoid overfitting and degrees-of-freedom issues, MIDAS applies a smooth weighting function across these lags, allowing many regressors to be included without inflating the number of parameters.

By giving recent data more weight than older data, this weighting approach captures timing effects and preserves the information contained in the lag structure, ultimately improving forecast accuracy.

### Evaluating Nowcasting Performance

To assess the performance of Westpac-Now, we evaluated its out-of-sample forecasting accuracy. Out-of-sample testing is preferred over in-sample fit because it provides a more realistic measure of predictive capacity: it simulates real-time forecasting by comparing predictions against actual outcomes.

We benchmarked Westpac-Now against other popular data-driven approaches, including autoregressive models, using standard metrics such as Root Mean Squared Error (RMSE) and Mean Absolute Error (MAE). Using these metrics, Westpac-Now performed well, indicating strong predictive power and robustness.

## Appendix B - Unconstrained set of 64 high-frequency economic and financial variables

Number	Indicator	Source	Transformation
1	Westpac Card Tracker	Westpac	Log difference
2	Westpac business and consumer total transactions	Westpac	Log difference
3	WMI Consumer sentiment index	Westpac-Melbourne Institute	Unadjusted
4	WMI Consumer family finances last 12 months	Westpac-Melbourne Institute	Unadjusted
5	WMI Consumer family finances next 12 months	Westpac-Melbourne Institute	Unadjusted
6	WMI Time To Buy Major Household Items	Westpac-Melbourne Institute	Unadjusted
7	Total employment	ABS	Log difference
8	Full-time employment	ABS	Log difference
9	Part-time employment	ABS	Log difference
10	Employment to population ratio	ABS	First difference
11	Total unemployed	ABS	Log difference
12	Unemployment rate	ABS	First difference
13	Hours worked	ABS	Log difference
14	Job Advertisements	ANZ-Indeed	First difference
15	Job Advertisement Index	Seek	First difference
16	NAB Business confidence	NAB	Unadjusted
17	NAB Business conditions	NAB	Unadjusted
18	NAB Trading conditions	NAB	Unadjusted
19	NAB Profitability	NAB	Unadjusted
20	NAB Employment	NAB	Unadjusted
21	NAB Forward orders	NAB	Unadjusted
22	NAB Stocks	NAB	Unadjusted
23	NAB Capacity utilisation	NAB	Unadjusted
24	Household Spending Indicator (HIS)	ABS	Log difference
25	HIS for goods	ABS	Log difference
26	HIS for services	ABS	Log difference
27	HIS for discretionary	ABS	Log difference
28	HIS for non-discretionary	ABS	Log difference
29	Business Turnover Index	ABS	Log difference
30	Total growth in credit	RBA	Unadjusted growth rates
31	Growth in housing credit	RBA	Unadjusted growth rates
32	Growth in owner-occupied housing credit	RBA	Unadjusted growth rates
33	Growth in investor housing credit	RBA	Unadjusted growth rates
34	Growth in investor other personal credit	RBA	Unadjusted growth rates
35	Growth in business credit	RBA	Unadjusted growth rates
36	Building approvals – total, private	ABS	Log difference
37	Building approvals – total	ABS	Log difference
38	Building approvals – housing, total	ABS	Log difference
39	Building approvals – other dwellings, total	ABS	Log difference
40	JobSeeker Recipient	DSS	Log difference
41	Youth Allowance, Other	DSS	Log difference
42	Youth Allowance, Student & Apprentice	DSS	Log difference
43	Total goods export	ABS	Log difference
44	Total goods imports	ABS	Log difference
45	Index of commodity prices	RBA	Log difference
46	Index of commodity prices (With Bulk Commodities Spot Prices)	RBA	Log difference
47	Iron Ore exports (Lump)	ABS	Unadjusted growth rates

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## Appendix B - Unconstrained set of 64 high-frequency economic and financial variables

Number	Indicator	Source	Transformation
48	Iron Ore exports (Fines)	ABS	Unadjusted growth rates
49	Coal export volumes ( Hard Coking)	ABS	Unadjusted growth rates
50	Coal export volumes (Semi-Soft)	ABS	Unadjusted growth rates
51	Coal export volumes (Thermal)	ABS	Unadjusted growth rates
52	LNG export volumes	ABS	Unadjusted growth rates
53	Home value index	Cotality	Log difference
54	Cash rate	RBA	First difference
55	Yields on Australian government bonds – 3-years maturity	RBA	First difference
56	Yields on Australian government bonds – 5-years maturity	RBA	First difference
57	Yields on Australian government bonds – 10-years maturity	RBA	First difference
58	S&P/ASX 200	Bloomberg	Log difference
59	VIX Index	Bloomberg	Unadjusted
60	Chicago Fed National Activity Index	Bloomberg	Unadjusted
61	Vehicle sales	VFACTS	Log difference
62	Spread, AGS 3-years less cash rate	RBA	Unadjusted
63	Spread, AGS 5-years less cash rate	RBA	Unadjusted
64	Spread, AGS 10-years less cash rate	RBA	Unadjusted

### Appendix C - Streamlined set of variables

Number	Selected Predictors	Source	Transformation
1	Westpac Card Tracker	Westpac	Log difference
2	Job Advertisement Index	Seek	First difference
3	Growth in business credit	RBA	Unadjusted growth rates
4	Chicago Fed National Activity Index	Bloomberg	Unadjusted
5	Total growth in credit	RBA	Unadjusted growth rates
6	Building approvals – housing, total	ABS	Log difference
7	Job Advertisements	ANZ-Indeed	First difference
8	Cash rate	RBA	First difference
9	NAB Business conditions	NAB	Unadjusted
10	NAB Profitability	NAB	Unadjusted
11	Youth Allowance, Other	DSS	Log difference
12	JobSeeker Recipient	DSS	Log difference
13	Growth in investor housing credit	RBA	Unadjusted growth rates
14	NAB Capacity utilisation	NAB	Unadjusted
15	Growth in housing credit	RBA	Unadjusted growth rates
16	Iron Ore exports (Fines)	ABS	Unadjusted growth rates
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20	NAB Trading conditions	NAB	Unadjusted
21	HIS for discretionary	ABS	Log difference
22	NAB Business confidence	NAB	Unadjusted
23	NAB Forward orders	NAB	Unadjusted
24	HIS for goods	ABS	Log difference
25	WMI Consumer family finances next 12 months	Westpac-Melbourne Institute	Unadjusted
26	NAB Employment	NAB	Unadjusted
27	Growth in owner-ccupier housing credit	RBA	Unadjusted growth rates



# Corporate Directory

## Westpac Economics / Australia

### Sydney

Level 19, 275 Kent Street  
Sydney NSW 2000  
Australia

E: [economics@westpac.com.au](mailto:economics@westpac.com.au)

### Luci Ellis

Chief Economist Westpac Group  
E: [luci.ellis@westpac.com.au](mailto:luci.ellis@westpac.com.au)

### Matthew Hassan

Head of Australian Macro-Forecasting  
E: [mhassan@westpac.com.au](mailto:mhassan@westpac.com.au)

### Elliot Clarke

Head of International Economics  
E: [eclarke@westpac.com.au](mailto:eclarke@westpac.com.au)

### Sian Fenner

Head of Business and Industry Economics  
E: [sian.fenner@westpac.com.au](mailto:sian.fenner@westpac.com.au)

### Justin Smirk

Senior Economist  
E: [jsmirk@westpac.com.au](mailto:jsmirk@westpac.com.au)

### Pat Bustamante

Senior Economist  
E: [pat.bustamante@westpac.com.au](mailto:pat.bustamante@westpac.com.au)

### Mantas Vanagas

Senior Economist  
E: [mantas.vanagas@westpac.com.au](mailto:mantas.vanagas@westpac.com.au)

### Illiana Jain

Economist  
E: [illiana.jain@westpac.com.au](mailto:illiana.jain@westpac.com.au)

### Neha Sharma

Economist  
E: [neha.sharma1@westpac.com.au](mailto:neha.sharma1@westpac.com.au)

### Ryan Wells

Economist  
E: [ryan.wells@westpac.com.au](mailto:ryan.wells@westpac.com.au)

## Westpac Economics / New Zealand

### Auckland

Takutai on the Square  
Level 8, 16 Takutai Square  
Auckland, New Zealand

E: [economics@westpac.co.nz](mailto:economics@westpac.co.nz)

### Kelly Eckhold

Chief Economist NZ  
E: [kelly.eckhold@westpac.co.nz](mailto:kelly.eckhold@westpac.co.nz)

### Michael Gordon

Senior Economist  
E: [michael.gordon@westpac.co.nz](mailto:michael.gordon@westpac.co.nz)

### Darren Gibbs

Senior Economist  
E: [darren.gibbs@westpac.co.nz](mailto:darren.gibbs@westpac.co.nz)

### Satish Ranchhod

Senior Economist  
E: [satish.ranchhod@westpac.co.nz](mailto:satish.ranchhod@westpac.co.nz)

### Paul Clark

Industry Economist  
E: [paul.clarke@westpac.co.nz](mailto:paul.clarke@westpac.co.nz)

## Westpac Economics / Fiji

### Suva

1 Thomson Street  
Suva, Fiji

### Shamal Chand

Senior Economist  
E: [shamal.chand@westpac.com.au](mailto:shamal.chand@westpac.com.au)



[westpaciq.com.au](https://westpaciq.com.au)



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