# ACCI–Westpac Survey of Industrial Trends

## Australian Chamber of Commerce and Industry & Westpac Banking Corporation

### 249th report December 2023 (survey conducted from 6 November to 4 December 2023)

- The Westpac-ACCI Actual Composite remains at its lowest level since 2014, excluding the pandemic shock, moving sideways into year-end at 51.2 in December from 51.3 in September.
- With a reading around the break-even mark of 50, for a third consecutive quarter, this indicates that conditions are near stalling. The December quarter survey reported tepid growth in new orders, a decline in output, and broadly flat employment and overtime.
- As reported three months ago and confirmed in this update, the key message and the number one concern of manufacturers is weak new orders. New orders have been near flat for three consecutive quarters, at an average net +2%, together the weakest outcomes since 2013, excluding the pandemic slump in 2020.
- The stalling of manufacturing new orders mirrors the flat-lining of household demand across the Australian economy which is driving the slowdown. Real household disposable income contracted a sharp 4.3% over the year, squeezed by high inflation, higher interest rates and additional tax obligations.
- The outlook heading into 2024 is downbeat. The Expected Composite printed a soft 52.4, in line with the average for 2023, but down from 54.0 in September. With the impact of interest rate rises still materialising, the soft trend is likely to continue.
- The mood of manufacturers has darkened. A net 41% expect the general business situation to worsen over the next six months, down from a net 35% last quarter and the weakest reading since the GFC.
- Equipment investment intentions have been marked down from those in 2022. A net 10% of respondents intend to increase spending in the next 12 months, down from a net 19% over the second half of 2022, but a little above the long-run average of a net 6%, with capacity utilisation levels still elevated.
- Cost pressures re-emerged, after moderating in the September quarter. The combination of falling output in the December quarter and still rising costs triggered a sharp jump in average unit costs. A net 66% of firms reported a rise, in line with the June reading of 67%, after dipping to 37% in September.
- Manufacturers are facing cost pressures, both non-labour (a rebound in commodity prices) and labour. Official data reports that manufacturing annual wages growth is running at a brisk 4.4%, a 15 year high and only a touch below the 2008 peak of 4.6%. Wage pressures look set to extend into 2024 the survey reports, a net 42% of respondents expect their next enterprise wage agreement to deliver an outcome above their last.
- Profit expectations slipped further into negative territory in the December quarter, with a net 4% of manufacturers anticipating profits will decline in the coming year, well below the long-run average for the survey of a net 19% expecting an increase.

# Contents



The Survey of Industrial Trends produced by the Australian Chamber of Commerce and Industry & Westpac Banking Corporation is a quarterly publication.

It is Australia's longest running business survey dating from 1966, providing a timely update on manufacturing and insights into economy-wide trends.


**Enquiries**
Economics, Westpac Banking Corporation, (email: economics@westpac.com.au)
Miranda Herron, Senior Consultant, Australian Chamber of Commerce and Industry

**Editors**
Ryan Wells, Economist, Westpac Banking Corporation
Andrew Hanlan, Senior Economist, Westpac Banking Corporation
Miranda Herron, Senior Consultant, Australian Chamber of Commerce and Industry


Net response or "balance" is calculated by the proportion of "ups" less "downs" on individual questions, thereby yielding the net balance. A positive balance indicates a net upward or improving trend and a minus balance a net downward or deteriorating trend.

The 249th consecutive survey was closed on 4 December 2023.

A total of **317** responses were received, and provided a reasonable cross-section of Australian manufacturing in respect of industry groups and size of operation.

The next survey will be conducted over February and March 2024.

# Key survey results

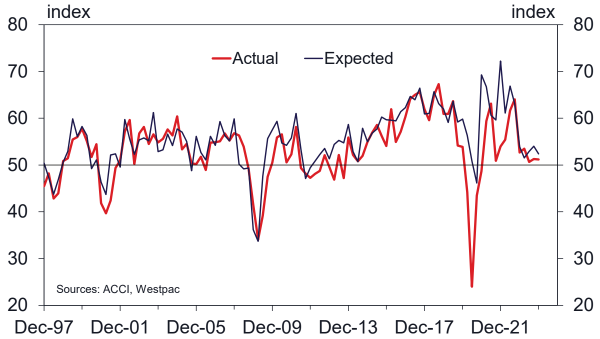
## Westpac–ACCI Composites (seasonally adjusted)

| | Q3 2023 | Q4 2023 |
|---|---|---|
| Actual – composite index | 51.3 | 51.2 |
| Expected – composite index | 54.0 | 52.4 |

- The Westpac-ACCI Actual Composite moved sideways into year-end, at 51.2 in December following 51.3 in September. The index is at the lowest level since 2014, excluding the pandemic shock.
- With a reading around the breakeven threshold of 50, for a third consecutive quarter, this indicates that conditions are near stalling. The survey reported tepid growth in new orders, a decline in output, and broadly flat employment and overtime.
- The Expected Composite printed a soft 52.4, in line with the average for 2023, but down from 54.0 in September. With the impact of interest rate rises still materialising, the soft trend is likely to continue.

## Westpac-ACCI Composite indexes

Actual & expected, sa

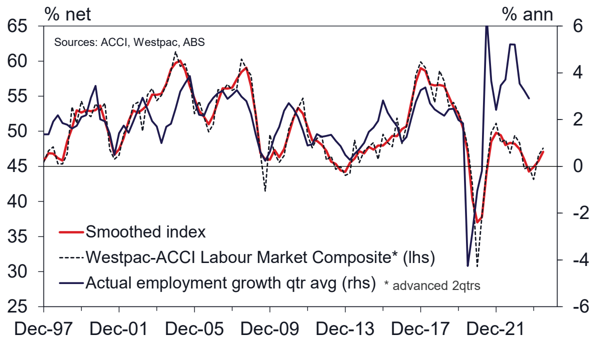



## Westpac–ACCI Labour Market Composite

| | Q3 2023 | Q4 2023 |
|---|---|---|
| Composite index | 46.6 | 47.6 |

- The survey provides insights into economy-wide employment growth. This highlights the key linkages between manufacturing and the labour market.
- In this update, the Labour Market Composite improved slightly, from 46.6 in Q3 to 47.6 in Q4, to remain in fragile territory – reflective of the weakness in both actual and expected employment outcomes in the manufacturing sector over the past year.
- Nationally, employment trends are surprising to the high side. Jobs grew 2.9% in the year to Q3, eclipsing national output growth of 2.1%. The overhang of job vacancies which emerged during the pandemic is now winding back, as the jump in annual population growth to 2.4% enables jobs to be filled.

## Labour Composite and employment trends



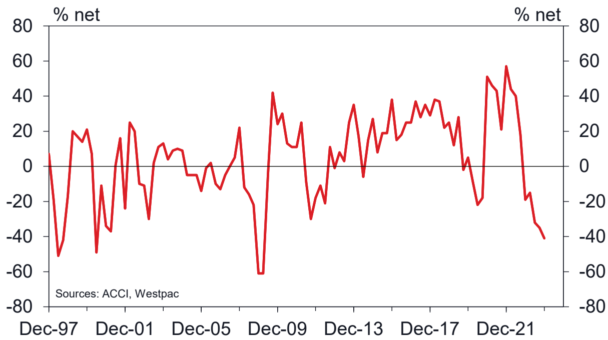

## General business situation

| | Q3 2023 | Q4 2023 |
|---|---|---|
| Net balance | –35 | –41 |

- Manufacturing sentiment about the general business outlook has deteriorated rapidly over the past two years, as manufacturers were hit with a cost crisis and rapid interest rate rises.
- In the December quarter, sentiment continued to slide further into deeply pessimistic territory. A net 41% of respondents expect the general business situation to worsen over the next six months, weaker than pandemic-era observations and the weakest reading since the GFC.
- The subdued demand outlook, a consequence of elevated inflation and the RBA's tightening cycle, points to lasting weakness in business sentiment into 2024.

## General business situation

Next six months



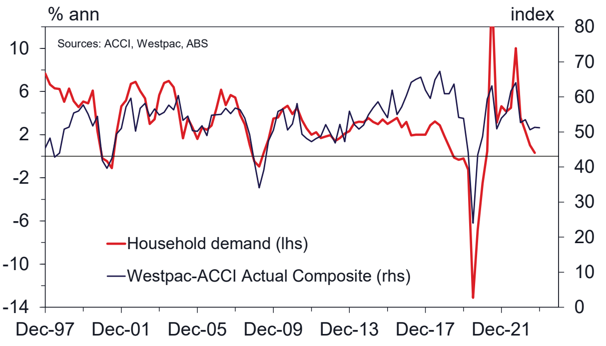
# The business cycle & economic outlook

## Manufacturing & the business cycle

- The Westpac-ACCI Actual Composite index has a solid track record of predicting near-term domestic economic conditions and identifying turning points in the cycle.
- Over the course of this year, there has been a stalling of conditions in the manufacturing sector. This mirrors the flat-lining of household spending, which is driving a broader economic slowdown. Real household disposable income contracted a sharp 4.3% over the year, squeezed by high inflation, higher interest rates and additional tax obligations. The outlook is challenging with the RBA hiking rates further in November.
- Compounding those issues, manufacturers were hit with a spike in unit costs and critical labour shortages. Those labour shortages have recently eased with the jump in population growth.

### Manufacturing and the business cycle

Westpac-ACCI Composite & household demand

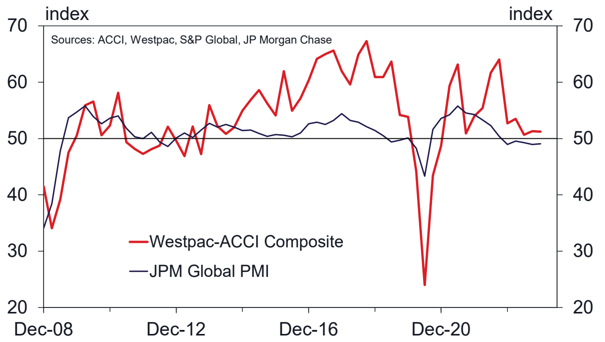



## Australian & World manufacturing surveys

- Global and Australian manufacturing cycles tend to be synchronised, especially at major turning points. Historically, the Westpac-ACCI Actual Composite has moved broadly in line with global manufacturing conditions.
- Over 2023, the global manufacturing sector has held broadly in weak territory, as central banks tightened policy and global demand began to soften.
- In the US, the ISM manufacturing PMI has held in contractionary territory since late 2022 and at 46.7 as of November, it is well below the five-year pre-pandemic average (54.0). Similarly in the Eurozone, the HCOB manufacturing PMI is at very weak levels (45.9 at November).
- In China, the NBS PMI is only modestly below the breakeven threshold (49.4 at November) and is not far below its five-year pre-pandemic average (50.5).

### Australian & World manufacturing surveys

Westpac-ACCI & Global PMI indexes

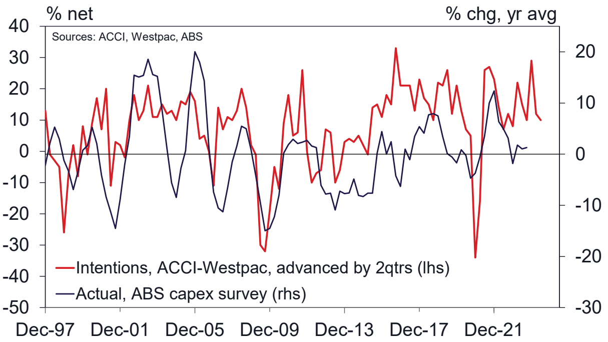



## Manufacturing & business investment

- The ACCI-Westpac survey broadly tracks equipment investment trends in the manufacturing sector.
- The survey finds that equipment investment intentions have been marked down from those in 2022. A net 10% of respondents intend to increase equipment spending in the next 12 months. That is a little above the long-run average of a net 6% but down from a net 19% over the second half of 2022.
- Official ABS data reports that manufacturing equipment spending expanded in 2020/21, up by 3.6%, and increased further in 2021/22, up another 5%. As at the September quarter 2023, the level of spending for the year was a little above that for the previous four quarters, edging 1.3% higher - albeit volatile quarter-to-quarter.

### Manufacturing equipment investment

Intentions (survey) vs actuals (ABS data)




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.

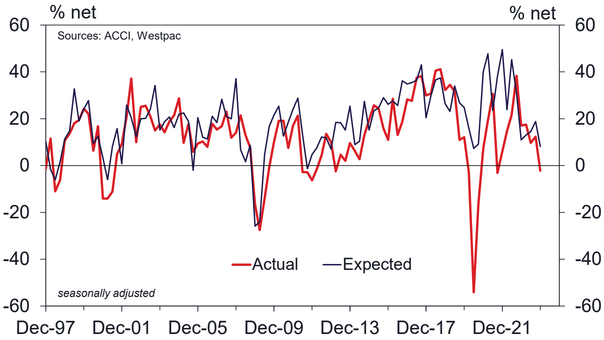
# Activity & orders

## Output (seasonally adjusted)

| | Q3 2023 | Q4 2023 |
|---|---|---|
| Actual – net balance | 12 | –2 |
| Expected – net balance | 19 | 8 |

- The survey indicates that momentum in output growth buckled in December, with a net 2% of firms reporting a decline in the period. Outside the pandemic shock, that is the weakest result since 2013.
- That outcome is consistent with recent dynamics – three consecutive quarters of flat-to-tepid new orders growth and weakening employment – as the impacts of high inflation and higher interest rates materialised.
- Expectations, which were overly optimistic over the past half year, moderated to a subdued net 8% of firms expecting output to rise next quarter. With ongoing weak consumer spending and the RBA lifting rates further in November there is the risk that manufacturing output begins 2024 on a soft note.

### Output growth
Actual & expected

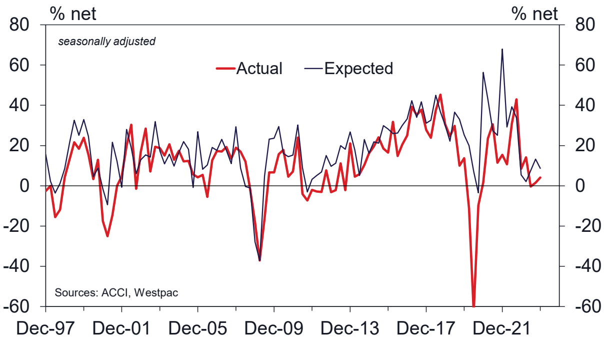



## New orders (seasonally adjusted)

| | Q3 2023 | Q4 2023 |
|---|---|---|
| Actual – net balance | 2 | 4 |
| Expected – net balance | 13 | 9 |

- New orders over the past three quarters are the weakest since 2013, ex the pandemic slump in 2020.
- New orders were little-changed in Q4, with a net 4% of manufacturers reporting an increase. That follows a flat outcome in June and a tepid +2% in September.
- The economic outlook remains gloomy, as the full impact of higher interest rates continues to materialise, curbing demand. The impacts are uneven, however, with the household sector bearing the brunt of the downturn. Public investment and business construction is proving to be more resilient, for now.
- Expectations softened, with a net 9% anticipating a rise in the period ahead, down from a net 13% in Q3.

### New orders
Actual & expected

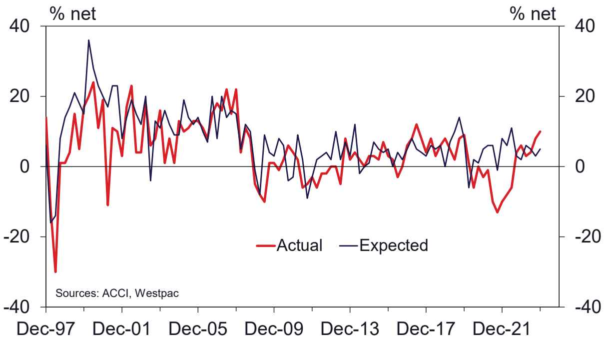



## Exports

| | Q3 2023 | Q4 2023 |
|---|---|---|
| Actual – net balance | 8 | 10 |
| Expected – net balance | 3 | 5 |

- Export conditions continued to improve, the survey reports.
- Exports rose over the December quarter, with a net 10% of firms reporting an increase, eclipsing the result of December 2019 (9%) – just prior to the onset of COVID-19 – and is the highest since June 2017 (12%).
- Consistent with official data, export deliveries have found support from fewer instances of domestic disruptions and lower freight costs, as well as a competitive Australian dollar.
- Expectations were little-changed over 2023, holding in mildly positive territory. In December, a net 5% of firms anticipate an increase in exports over the next three months.

### Export deliveries
Actual & expected




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.

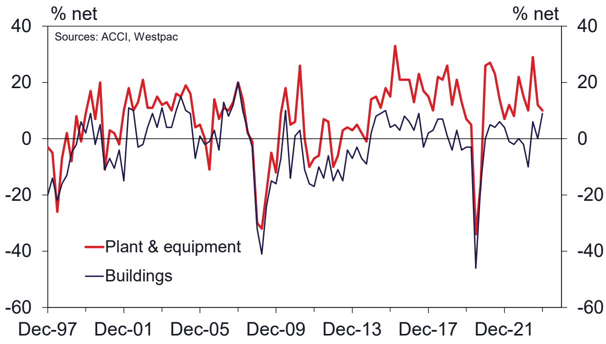
# Investment & profitability

## Investment intentions

| | Q3 2023 | Q4 2023 |
|---|---|---|
| Plant & Equipment – net balance | 12 | 10 |
| Building – net balance | 0 | 9 |

- Equipment investment intentions have been marked down from those in 2022.
- A net 10% of respondents intend to increase equipment spending in the next 12 months, down from a net 19% over the second half of 2022. That is a little above the long-run average of a net 6%, with capacity utilisation levels still elevated.
- A positive is that firms report that at year end, finance was not as "difficult to obtain" as it was mid-year, improving from 43% to 4%.
- Building projections for the year ahead also moved higher, with a net 9% of firms planning an increase.

### Investment intentions
**Next twelve months**

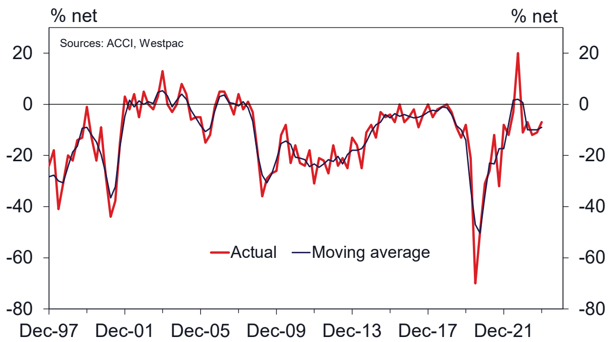



## Capacity utilisation

| | Q3 2023 | Q4 2023 |
|---|---|---|
| Net balance | -11 | -7 |

- The manufacturing sector and the national economy operated at very high levels of capacity as Australia reopened from the pandemic and demand surged.
- Recall that in the September quarter 2022, the survey reported that 31% of respondents were operating at above average capacity, for a net +20%.
- Subsequently, with demand flattening - but not declining outright - capacity utilisation has eased but is still elevated. Currently, 22% of respondents are operating above average capacity, while 29% are below, for a net -7% (well above the average of -19%).
- Easing of labour and material shortages should aid firms' ability to operate at normal levels of capacity. Looking ahead, trends in new orders will be key.

### Capacity utilisation

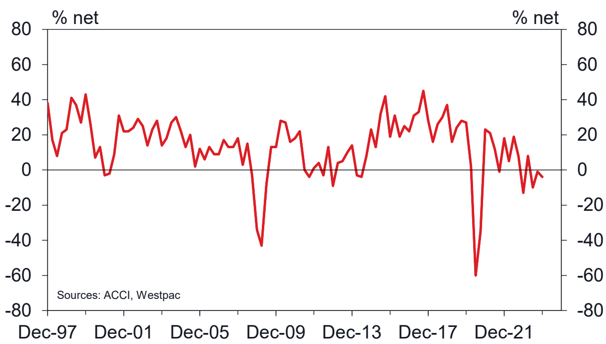



## Profit expectations

| | Q3 2023 | Q4 2023 |
|---|---|---|
| Net balance | -1 | -4 |

- Since the initial reopening from the pandemic, the profitability of the manufacturing sector has continued to trend lower.
- In the latest survey, profit expectations slipped further into negative territory, with a net 4% of manufacturers anticipating profits will decline in the coming year, well below the long-run average of a net 19% expecting an increase.
- Tepid growth in new orders and growing pessimism around the general business situation are having a significant bearing on profit expectations.
- Margins in the manufacturing sector also remain under pressure, as firms continue to report only a partial pass-through of unit cost pressures.

### Profit expectations
**Next twelve months**



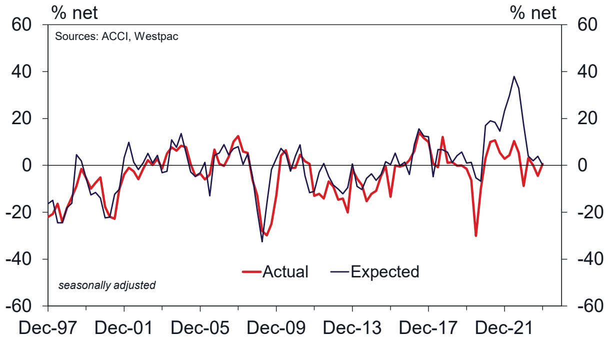
# The labour market

## Numbers employed (seasonally adjusted)

| | Q3 2023 | Q4 2023 |
|---|---|---|
| Actual – net balance | –5 | 1 |
| Expected – net balance | 4 | 0 |

- The December survey indicates that employment dynamics in the manufacturing sector remain lacklustre, with only a net 1% of firms reporting an increase in employment during the quarter.
- In the context of stalling demand and growing pessimism, the incentive for manufacturers to expand their workforce is fading, even as the difficulty in sourcing labour moderates.
- Employment expectations have shifted from strength over 2021 and 2022, to softness in 2023. On balance, firms are neither expecting to expand or reduce the size of their workforce in the next three months.

### Numbers employed
#### Actual & expected

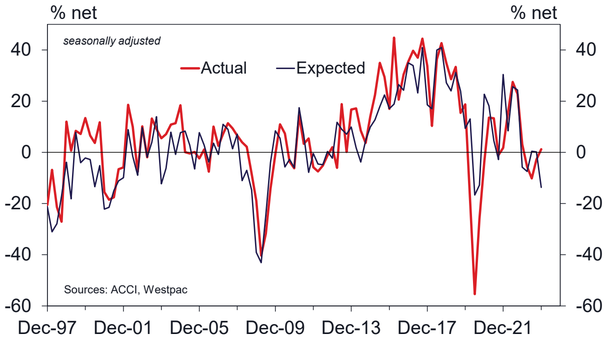



## Overtime worked (seasonally adjusted)

| | Q3 2023 | Q4 2023 |
|---|---|---|
| Actual – net balance | –3 | 1 |
| Expected – net balance | 0 | –14 |

- Over 2023, firms have reported reductions in overtime in response to the economic slowdown.
- Broadly in line with manufacturers' own expectations, a net 1% of firms increased overtime. That follows three consecutive declines since the start of 2023.
- Overtime expectations deteriorated materially in December, with a net 14% of respondents foreseeing a decrease in overtime over the coming months, consistent with the downbeat outlook for demand.
- The weakness in overtime expectations – in excess of employment expectations – highlights a preference to adjust work hours instead of the size of the workforce, at this stage of the downturn.

### Overtime worked
#### Actual & expected

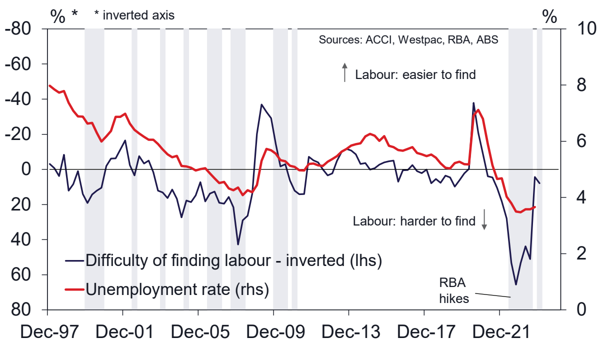



## Difficulty of finding labour (seasonally adjusted)

| | Q3 2023 | Q4 2023 |
|---|---|---|
| Net balance | 4.3 | 8.0 |

- The survey provides insights into the tone of the overall labour market. Firms' views on the difficulty of finding labour broadly tracks shifts in the unemployment rate for the Australian economy.
- In September, manufacturers reported a material improvement in labour availability, from a dire state over 2022 and the first half of 2023.
- This update extends these recent developments, with a net 8.0% of respondents indicating that labour was "harder to find" in December – well off the net 53.4% observed this time last year.
- Rapid growth in the size of the national labour force, up 3.4%yr, is bringing labour demand and supply more into balance, seeing the unemployment rate gradually move off its recent near 50 year low.

### Labour market tightness



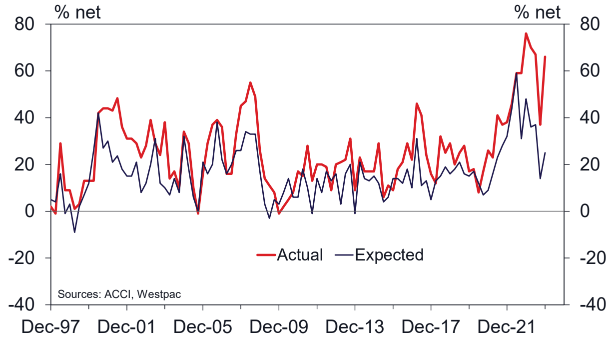
# Prices & inflation

## Average unit costs

| | Q3 2023 | Q4 2023 |
|---|---|---|
| Actual – net balance | 37 | 66 |
| Expected – net balance | 14 | 25 |

- In September, manufacturers reported a moderation in cost pressures from a historically elevated level.
- Move forward to December, the combination of falling output and still rising costs triggered a sharp jump in *average unit* costs - with a net 66% of firms reporting a rise. That is back in line with the June reading of 67%, after dipping to 37% in September.
- Manufacturers are facing cost pressures, both non-labour (a rebound in commodity prices) and labour.
- Expectations rose to a much milder extent, from a net 14% to a net 25%, consistent with a temporary lift in unit cost pressures. Uncertainty remains, given expectations undershot outcomes over the past year.

### Average unit costs
Actual & expected

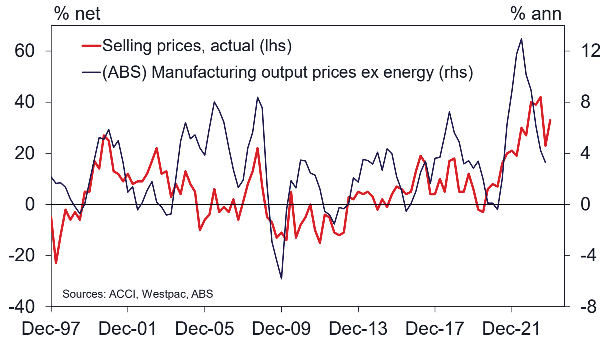



## Average selling prices

| | Q3 2023 | Q4 2023 |
|---|---|---|
| Actual – net balance | 23 | 33 |
| Expected – net balance | 6 | 13 |

- Following a rise in unit cost pressures, the proportion of firms reporting an increase in prices also rose, from a net 23% in September to a net 33% in December.
- That proportion is well below the net 66% reporting a rise in average unit costs over the same period.
- Selling prices continue to trail costs, as manufacturers only partially pass-through higher costs to consumers, squeezing margins in the sector.
- A net 13% of respondents expect selling prices to rise over the next three months. That is well down on the past 2½ years but it still trails cost pressures – implying some ongoing margin squeeze.

### Manufacturing upstream price pressures

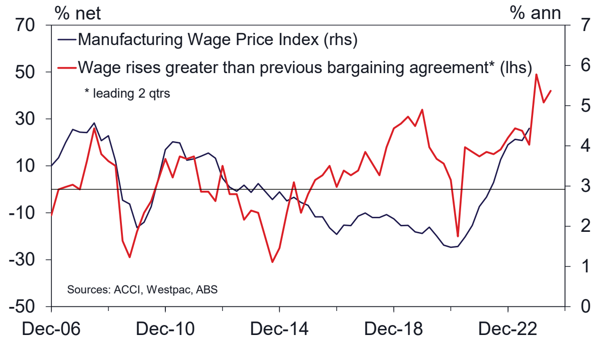



## Manufacturing wages

| | Q3 2023 | Q4 2023 |
|---|---|---|
| Net balance | 37 | 42 |

- Wage pressures are strong as the labour market remains tight, the survey finds. Firms expect further upward pressure in future bargaining agreements.
- In December, a net 42% of respondents expect their next enterprise wage agreement to deliver an outcome above their last – up a little from 37%.
- The tone of the survey is broadly consistent with official data on wage trends for the sector.
- Manufacturing annual wages growth is running at a brisk 4.4%, a 15 year high and only a touch below the 2008 peak of 4.6%. That is the strongest pace amongst all goods production and distribution sectors, only beaten by services-dominant sectors such as accommodation and food, health care and social assistance, and arts and recreation.

### Manufacturing wage growth



# Factors limiting production

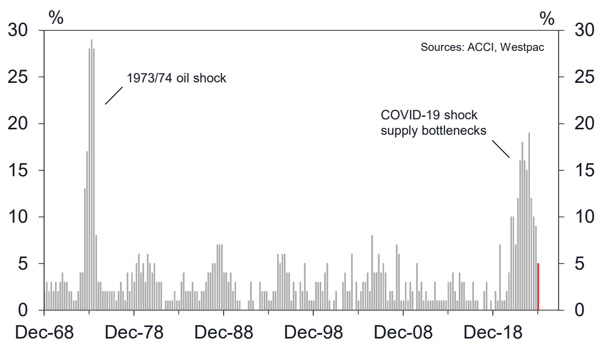
## Factors limiting production

- The latest survey confirms a continuation of the recent emerging trends around the relative limitations to production. Labour and material shortages are less intense, while order weakness is a growing concern.
- A lack of "orders" remains the number one concern, cited by 48% of respondents as the single factor most limiting production, up from 36% in June.
- "Labour" constraints have continued to moderate, albeit at a slower pace, from a March peak of 49% to 30% in December; however, that is still well above the ten-year pre-pandemic average of 3%.
- "Material" shortage concerns have eased over the past year, from a cycle peak of 19% in Q4 2022 to 5% in Q4 2023, slightly above the 2010-19 average of 2%.
- Respondents identifying "finance" as the single factor most limiting production remained at 0%, in-step with the moderation in the "difficulty of obtaining finance".

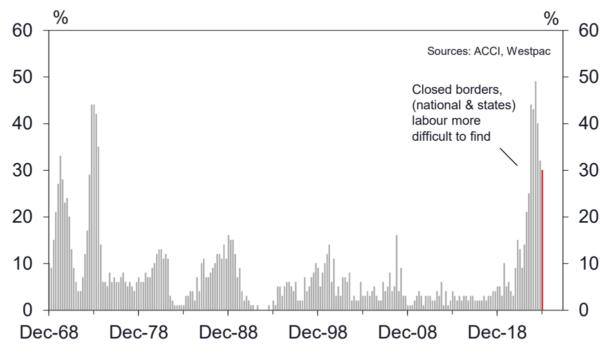
## Factors limiting production

| | Q2 2023 | Q3 2023 | Q4 2023 |
|---|---|---|---|
| Orders (%) | 36 | 44 | 48 |
| Capacity (%) | 6 | 8 | 4 |
| Labour (%) | 40 | 32 | 30 |
| Finance (%) | 5 | 0 | 0 |
| Materials (%) | 10 | 9 | 5 |
| Other (%) | 0 | 2 | 3 |
| None (%) | 3 | 5 | 10 |

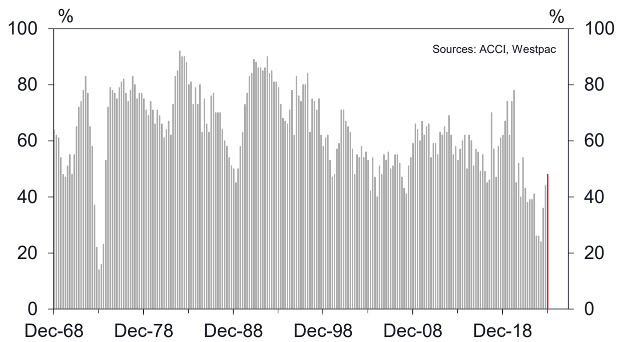
### Materials: "single factor" most limiting production




### Labour: "single factor" most limiting production

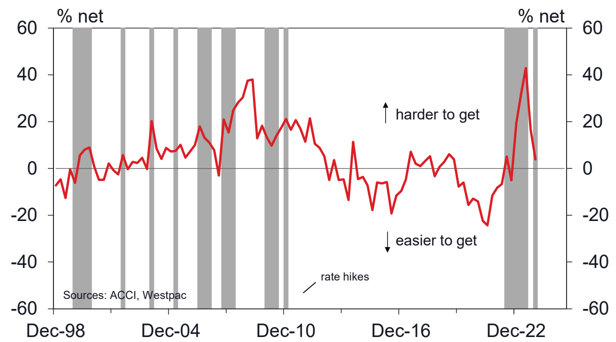



### Orders: "single factor" most limiting production




### Difficulty of obtaining finance

seasonally adjusted




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.

# Summary of results (not seasonally adjusted)

**1.** Do you consider that the general business situation in Australia will improve, remain the same, or deteriorate in the next six months?

| Net balance | Improve | Same | Deteriorate |
|---|---|---|---|
| -41 | 8 | 43 | 49 |

**2.** At what level of capacity utilisation are you working?

| Net balance | Above Normal | Normal | Below Normal |
|---|---|---|---|
| -7 | 22 | 49 | 29 |

**3.** What single factor is most limiting your ability to increase production?

| | | | |
|---|---|---|---|
| **None** | 10 | **Orders** | 48 |
| **Materials** | 5 | **Finance** | 0 |
| **Labour** | 30 | **Capacity** | 4 |
| **Other** | 3 | | |

**4.** Do you find it is now harder, easier, or the same as it was three months ago to get:

| | | Net balance | Harder | Same | Easier |
|---|---|---|---|---|---|
| (a) | labour? | 11 | 26 | 59 | 15 |
| (b) | finance? | 12 | 13 | 86 | 1 |

**5.** Do you expect your company's capital expenditure during the next twelve month to be greater, the same, or less than the past year:

| | | Net balance | Greater | Same | Less |
|---|---|---|---|---|---|
| (a) | on buildings? | 9 | 23 | 63 | 14 |
| (b) | on plant & machinery? | 10 | 25 | 60 | 15 |

Excluding normal seasonal changes, what has been your company's experience over the past three months & what changes do you expect during the next three months in respect of:

| | *Change in position in the last three months* | | | | *Expected change during the next three months* | | | |
|---|---|---|---|---|---|---|---|---|
| | Net balance | Up | Same | Down | Net balance | Up | Same | Down |
| **6.** Numbers employed | 0 | 23 | 54 | 23 | -1 | 13 | 73 | 14 |
| **7.** Overtime worked | 5 | 24 | 57 | 19 | -15 | 4 | 77 | 19 |
| **8.** All new orders received | 11 | 30 | 51 | 19 | 2 | 14 | 74 | 12 |
| **9.** Orders accepted but not yet delivered | 9 | 16 | 77 | 7 | -3 | 4 | 89 | 7 |
| **10.** Output | 2 | 23 | 56 | 21 | 9 | 22 | 65 | 13 |
| **11.** Average costs per unit of output | 66 | 67 | 32 | 1 | 25 | 27 | 71 | 2 |
| **12.** Average selling prices | 33 | 41 | 51 | 8 | 13 | 16 | 81 | 3 |
| **13.** Export deliveries | 10 | 12 | 86 | 2 | 5 | 8 | 89 | 3 |
| **14.** Stock of raw materials | 0 | 9 | 82 | 9 | 0 | 7 | 86 | 7 |
| **15.** Stocks of finished goods | -8 | 5 | 82 | 13 | -2 | 5 | 88 | 7 |

# Summary of results (not seasonally adjusted)

**16.** Over the next twelve months do you expect your firm's profitability to:

| | |
|---|---|
| (a) Improve? | 16 |
| (b) Remain unchanged? | 64 |
| (c) Decline? | 20 |
| **Net balance** | **-4** |

**17.** Do you expect your firm's next wage enterprise deal will produce annual rises which vis-a-vis the previous deal are:

| | |
|---|---|
| (a) Greater? | 42 |
| (b) Same? | 58 |
| (c) Less? | 0 |
| **Net balance** | **42** |

**A.** Industry profile of survey:

| | (% of respondents) |
|---|---|
| Food, beverages, tobacco | 23 |
| Textiles, fabrics, floor coverings, felt, canvas, rope | 2 |
| Clothing, footwear | 2 |
| Wood, wood products, furniture | 5 |
| Paper, paper products, printing | 3 |
| Chemicals, paints, pharmaceuticals, soaps, cosmetics petroleum & coal products | 11 |
| Non-metallic mineral products: glass, pottery, cement bricks | 8 |
| Basic metal products: processing, smelting, refining, pipes & tubes | 3 |
| Fabricated metal products: structural & sheet metal, coating & finishing, wire, springs, hand tools | 11 |
| Transport equipment: motor vehicles & parts, excluding repairs, rail, ships, aircraft, including repairs | 10 |
| Other machinery & equipment: electrical, industrial scientific, photographic | 17 |
| Miscellaneous: including manufacturers of leather, plastic & rubber, sporting equipment, jewellery | 5 |

**B.** How many employees are covered by this return?

| 1-100 | 101-200 | 201-1000 | Over 1000 |
|---|---|---|---|
| 29 | 8 | 23 | 40 |

**C.** In which state is the main production to which this return relates?

| WA | SA | VIC | NSW/ACT | QLD | TAS |
|---|---|---|---|---|---|
| 13 | 14 | 25 | 28 | 17 | 3 |

## The Westpac-ACCI Composite Indices

The Westpac-ACCI Actual and Expected Composite indices are weighted averages of the activity measures in the survey. The weights are as follows: employment 20%; new orders 30%; output 25%; orders accepted but not delivered 15%; overtime 10%.

The Westpac-ACCI Labour Market Composite is a function of actual employment, with a weight of almost 50%, as well as: expected employment; expected overtime; new orders; order backlog; and expected order backlog.

This report was finalised on 12 December 2023
Publication enquiries, Economics, economics@westpac.com.au

## Disclaimer

This information has been prepared by the Westpac Institutional Bank and is intended for information purposes only. It is not intended to reflect any recommendation or financial advice and investment decisions should not be based on it. This information 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 into a legally binding contract. To the extent that this information contains any general advice, it has been prepared without taking into account your objectives, financial situation or needs and before acting on it you should consider the appropriateness of the advice. 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 information 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 this information is free from error, none of Westpac or its related entities warrants the accuracy, adequacy or completeness of this information, or otherwise endorses it in any way. Except where contrary to law, Westpac Group intend by this notice to exclude liability for this information. This information is subject to change without notice and none of Westpac or its related entities is under any obligation to update this information or correct any inaccuracy which may become apparent at a later date. This information may contain or incorporate by reference forward-looking statements. The words "believe", "anticipate", "expect", "intend", "plan", "predict", "continue", "assume", "positioned", "may", "will", "should", "shall", "risk" and other similar expressions that are predictions of or indicate future events and future trends identify forward-looking statements. These forward-looking statements include all matters that are not historical facts. Past performance is not a reliable indicator of future performance, nor are forecasts of future performance. Whilst every effort has been taken to ensure that the assumptions on which any 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 any forecasts.

Conflicts of Interest: In the normal course of offering banking products and services to its clients, the Westpac Group may act in several capacities (including issuer, market maker, underwriter, distributor, swap counterparty and calculation agent) simultaneously with respect to a financial instrument, giving rise to potential conflicts of interest which may impact the performance of a financial instrument. The Westpac Group may at any time transact or hold a position (including hedging and trading positions) for its own account or the account of a client in any financial instrument which may impact the performance of that financial instrument.

Author(s) disclaimer and declaration: The author(s) confirms that no part of his/her compensation was, is, or will be, directly or indirectly, related to any views or (if applicable) recommendations expressed in this material. The author(s) also confirms that this material accurately reflects his/her personal views about the financial products, companies or issuers (if applicable) and is based on sources reasonably believed to be reliable and accurate.

## Additional country disclosures

**Australia:** Westpac holds an Australian Financial Services Licence (No. 233714).

**Note:** Luci Ellis, Westpac Chief Economist is a member of the Australian Statistics Advisory Council (ASAC) which is a key advisory body to the Minister and the Australian Bureau of Statistics on statistical services. Luci does not have access to sensitive data/ reports in her capacity as a member of ASAC.

**New Zealand:** In New Zealand, Westpac Institutional Bank refers to the brand under which products and services are provided by either Westpac (NZ division) or Westpac New Zealand Limited (company number 1763882), the New Zealand incorporated subsidiary of Westpac ("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. WNZL is not an authorised deposit-taking institution for the purposes of Australian prudential standards. The current disclosure statements for the New Zealand branch of Westpac and WNZL can be obtained at the internet address www.westpac.co.nz.

**Singapore:** 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 of this material in Singapore 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.

**US:** 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. The services and products referenced above are not insured by the Federal Deposit Insurance Corporation ("FDIC"). 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. Transactions by U.S. customers of any securities referenced herein should be effected through WCM. 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. 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.

**Disclaimer continued overleaf**

**Disclaimer continued**

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 of WCM or any other U.S. broker-dealer 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.

**UK and EU:** The London branch of Westpac is authorised in the United Kingdom by the Prudential Regulation Authority (PRA) and is subject to regulation by the Financial Conduct Authority (FCA) and limited regulation by the PRA (Financial Services Register number: 124586). The London branch of Westpac is registered at Companies House as a branch established in the United Kingdom (Branch No. BR000106). Details about the extent of the regulation of Westpac's London branch by the PRA are available from us on request.

Westpac Europe GmbH ("WEG") is authorised in Germany by the Federal Financial Supervision Authority ('BaFin') and subject to its regulation. WEG's supervisory authorities are BaFin and the German Federal Bank ('Deutsche Bundesbank'). WEG is registered with the commercial register ('Handelsregister') of the local court of Frankfurt am Main under registration number HRB 118483. In accordance with APRA's Prudential Standard 222 'Association with Related Entities', Westpac does not stand behind WEG other than as provided for in certain legal agreements (a risk transfer, sub-participation and collateral agreement) between Westpac and WEG and obligations of WEG do not represent liabilities of Westpac.

This communication is not intended for distribution to, or use by any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation. This communication is not being made to or distributed to, and must not be passed on to, the general public in the United Kingdom. Rather, this communication is being made only to and is directed at (a) those persons falling within the definition of Investment Professionals (set out in Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order")); (b) those persons falling within the definition of high net worth companies, unincorporated associations etc. (set out in Article 49(2)of the Order; (c) other persons to whom it may lawfully be communicated in accordance with the Order or (d) any persons to whom it may otherwise lawfully be made (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. 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". Westpac expressly prohibits you from passing on the information in this communication to any third party.

This communication contains general commentary, research, and market colour. The communication does not constitute investment advice. The material may contain an 'investment recommendation' and/or 'information recommending or suggesting an investment', both as defined in Regulation (EU) No 596/2014 (including as applicable in the United Kingdom) ("MAR"). In accordance with the relevant provisions of MAR, reasonable care has been taken to ensure that the material has been objectively presented and that interests or conflicts of interest of the sender concerning the financial instruments to which that information relates have been disclosed.

Investment recommendations must be read alongside the specific disclosure which accompanies them and the general disclosure which can be found here: https://www.westpaciq.com.au/terms-and-conditions/investment-recommendation-disclosure. Such disclosure fulfils certain additional information requirements of MAR and associated delegated legislation and by accepting this communication you acknowledge that you are aware of the existence of such additional disclosure and its contents.

To the extent this communication comprises an investment recommendation it is classified as non-independent research. It has not been prepared in accordance with legal requirements designed to promote the independence of investment research and therefore constitutes a marketing communication. Further, this communication is not subject to any prohibition on dealing ahead of the dissemination of investment research.