

Manufacturing stable in September

Key findings

- Manufacturing was broadly stable in September, the second month of even results since February. Activity contracted in all sectors but chemicals and machinery & equipment.
- New orders and sales grew in September, and the pace of growth improved from August.
- The employment index has fallen rapidly, which reflects labour shortage pressures. The wages index remains very high..
- Labour challenges remain an ongoing constraint and supply chain disruption continues to be a key concern for manufacturing similar to previous months.

The Australian Industry Group Australian Performance of Manufacturing Index (**Australian PMI®**) rose 0.9 points to 50.2 points in September 2022, indicating stable conditions (seas. adj.). This is the second month of broadly stable conditions, following positive results since February 2022. Results above 50 points indicate expansion, with higher results indicating a faster rate of expansion.

September 2022

MEDIA CONTACT

Tony Melville
Australian Industry Group
Tel: 0419 190 347

Australian PMI®

▲ 0.9 points
(seasonally adjusted)

50.2

Australian PMI®

▼ -1.1 points (trend)

49.9

Food & beverages

▲ 3.5 points
(seasonally adjusted)

48.6

Machinery & equipment

▲ 10.5 points
(seasonally adjusted)

55.4

Metal products

▲ 2.0 points
(seasonally adjusted)

44.4

Chemicals

▼ -5.2 points
(seasonally adjusted)

56.9

Building materials, wood & other

▲ 1.3 points
(seasonally adjusted)

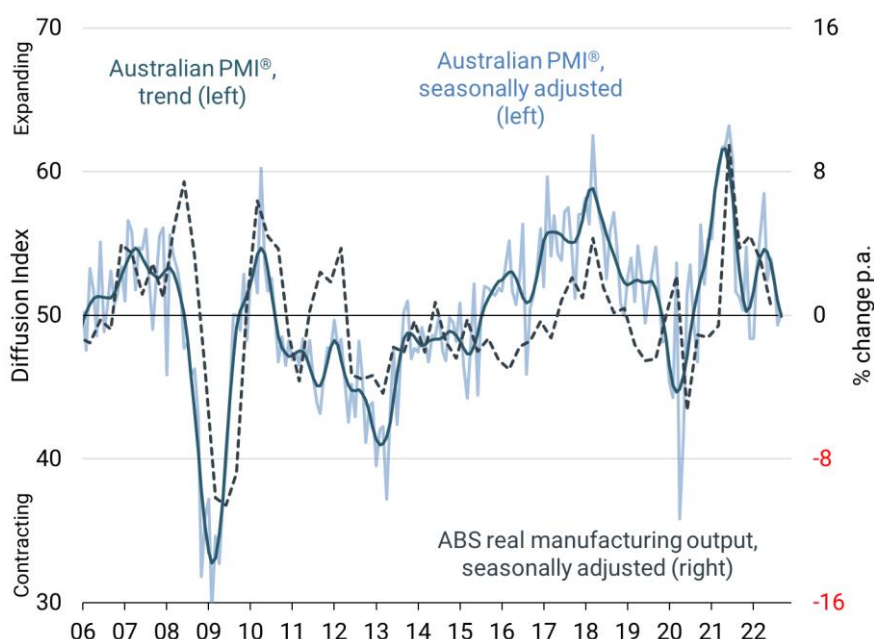
44.6

TCF, paper & printing

▼ 18.6 points
(seasonally adjusted)

39.9

Australian PMI® (seasonally adjusted)



Manufacturing sectors: Four of the six manufacturing sectors in the **Australian PMI®** contracted in September 2022. The index for the machinery & equipment sector rebounded from the low results reported in August. Manufacturers in this sector reported positive new orders and sales, but exports were weak. The chemical products sector expanded but at a decelerating pace with sales, new orders and employment all weaker than August (seasonally adjusted).

Manufacturing wages and prices: The **Australian PMI®** input price index accelerated in September and remains relatively elevated as it has been across 2021 and 2022 (seasonally adjusted). Manufacturers' selling prices increased as more businesses passed through higher input costs. The **Australian PMI®** average wages index reached a series high in September, wages have been trending above long term averages for most of 2022.

Manufacturing activity: Two of the seven activity indexes contracted in September (results below 50 points). Production and employment were the only indicators to contract; employment fell sharply in the month. Inventories were stable. New orders indicated strong growth, while sales, deliveries and exports were mildly positive (seasonally adjusted).

Manufacturing highlights: Manufacturers indicated ongoing strong demand from longer-term infrastructure projects particularly in the defence, construction and agriculture sectors. More manufacturers were able to pass through some of their higher input costs to their customers. Some respondents reported stronger new orders from their larger customers.

Manufacturing concerns: Labour shortages remain a key concern for manufacturers as production levels are constrained by staff availability. Manufacturers reported reduced production due to an inability to source inputs while difficulties obtaining transport affected others. Export demand was volatile. Concerns around high energy prices and increased interest rates contributed to the flat conditions in September. Some manufacturers who had built inventories to manage supply disruption reported reducing inventories over the month and expect some customers to do the same.

AUSTRALIAN PMI® KEY NUMBERS	Index this month	Change from last month	Long-run average	AUSTRALIAN PMI® SECTORS	Index this month	Change from last month	Long-run average
<i>seasonally adjusted</i>				<i>Trend</i>			
Australian PMI®	50.2	0.9	50.9	Australian PMI®	49.9	-1.1	50.8
				<i>seasonally adjusted</i>			
Production	47.7	2.0	51.5	Food & beverages	48.6	3.5	53.6
Employment	39.8	-7.7	49.1	Machinery & equipment	55.4	10.5	50.5
New Orders	57.8	2.0	51.8	Metals products	44.4	2.0	47.7
Supplier Deliveries	52.8	5.7	50.8	Petroleum, coal, chemicals			
Finished stocks	50.0	4.1	50.0	& rubber products	56.9	-5.2	51.8
Exports	51.5	4.6	50.0	Building, wood, furniture			
Sales	51.4	6.2	49.7	& other products	44.6	1.3	50.3
Input Prices	84.8	3.1	68.5	Textiles, clothing, footwear,			
Selling Prices	70.2	1.1	50.2	paper & printing	39.9	-18.6	48.8
Average Wages	76.1	2.0	59.4				
Capacity Utilisation (%)	80.4	1.9	74.6				

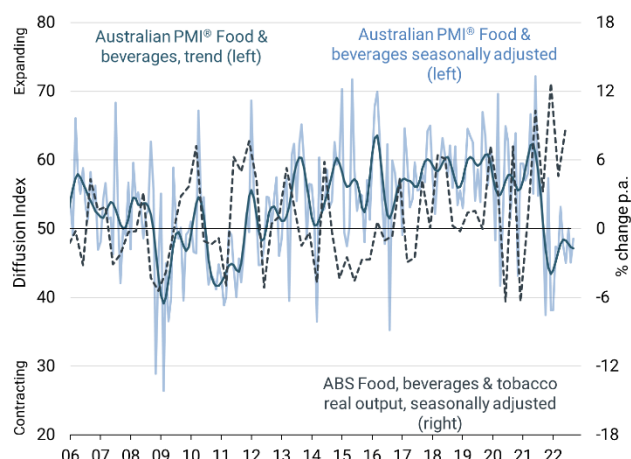
Results above 50 points indicate expansion. All indexes for sectors in the Australia PMI® are reported in trend terms (Henderson 13-month filter).

MANUFACTURING REPORT CARD: Latest ABS data		Level	change q/q	change y/y	Share of total
<i>Latest ABS data, seasonally adjusted</i>		\$bn	%	%	%
Real value-added output, \$bn, year to Mar 2022		116.8	0.8	5.1	5.6% of total GDP
Nominal sales, \$bn, year to Mar 2022		397.6	1.0	1.1	12.2% of non-farm business sales
Nominal export earnings, \$bn, year to Jun 2022		131.2	5.3	11.9	22.0% of total export earnings
Nominal company profits (GOP), \$bn, year to Mar 2022		43.7	4.7	14.3	8.6% of non-farm company profits
Real investment (CAPEX), \$bn, year to Mar 2022		10.5	-1.4	6.4	7.9% of non-farm private sector CAPEX
Nominal aggregate wages, \$bn, year to Mar 2022		57.4	0.7	3.4	9.3% of non-farm business wages
Manufacturing employed persons, May 2022, million		831	-2.2	-8.7	6.1% of employed persons
Manufacturing businesses with employees, 2020-21		49,058	N/A	5.0	4.9% of employing businesses

ABS sources: Australian National Accounts; Australian Business Indicators; CAPEX; International Trade; Labour Force Survey, Business Counts.

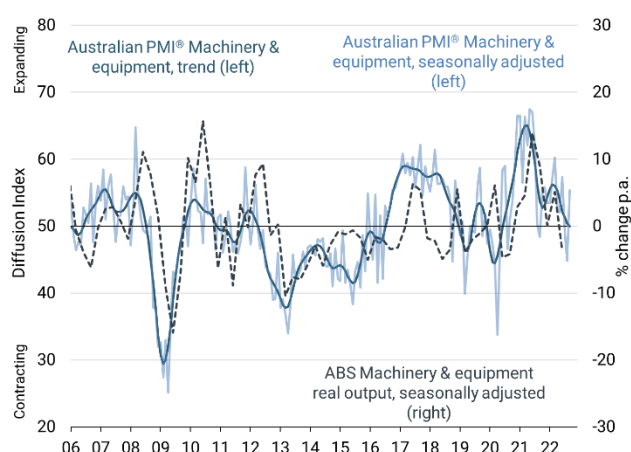
Food & Beverages

- The food and beverages (& tobacco) sector produced \$29.8bn in real value-added output in the year to Q1 2022 (25% of manufacturing real value-added output). It employed 240,000 people in May 2022 (27% of manufacturing employment, ABS data). It is Australia's largest manufacturing sector.
- The index for food and beverages contracted but the rates of decline eased by 3.5 points to 48.6 points in September, indicating weak conditions (seas. adj.).
- Some respondents noted an increase in sales and new orders but others reported lower employment amidst ongoing shortages of labour across skill levels. Some manufacturers indicated that they were running down inventories and focusing on revenue.



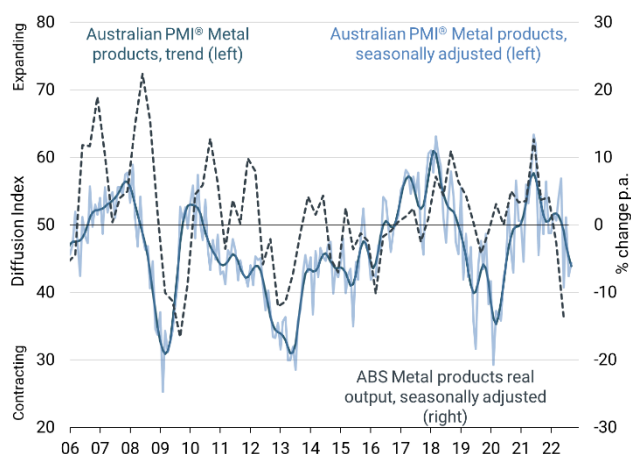
Machinery & Equipment

- The machinery & equipment sector produced \$25.9bn in real value-added output in the year to Q1 2022 (22% of manufacturing real value-added output). It employed 192,000 people in May 2022 (22% of manufacturing employment, ABS data).
- The index for the machinery & equipment sector rebounded by 10.5 points to 55.4 points in September indicating growth following a weak month in August (seas. adj.).
- Some respondents noted strong activity from defence, construction and agriculture sectors as sales, new orders and production improved in September. Tight labour supply and higher input costs were constraints on activity.



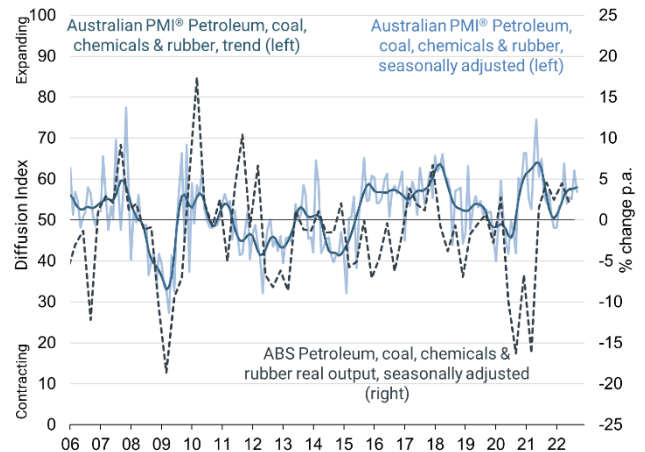
Metal Products

- The metal products sector produced \$19.4bn in real value-added output in the year to Q1 2022 (17% of manufacturing real value-added output). It employed 141,000 people in May 2022 (16% of manufacturing employment, ABS data).
- The contraction in the metal products index eased by 2.0 points to 44.4 points, indicating weak conditions in September (seas. adj.).
- Labour shortages and higher average wages, supply chain difficulties and higher energy prices inhibited activity for metal products in September. Uncertainty about future demand saw some orders cancelled or reduced. Some businesses saw improved sales as competitors reduced production.



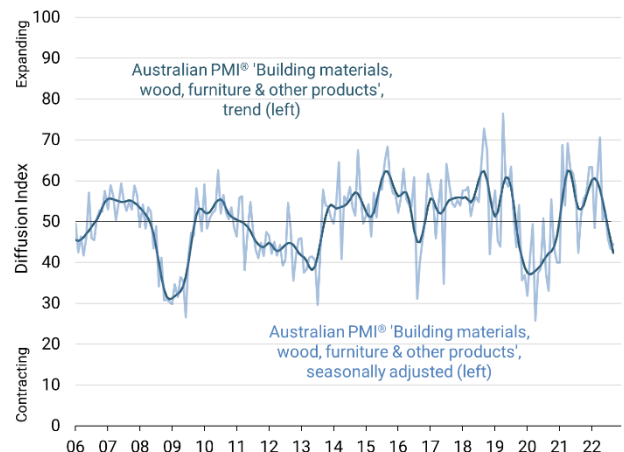
Petroleum, coal, chemicals & rubber

- The petroleum, coal, chemicals & rubber sector produced \$18.2bn in real value-added output in the year to Q1 2022 (16% of manufacturing real value-added output). It employed 81,000 people in May 2022 (9% of manufacturing employment, ABS data).
- The chemicals index eased by 5.2 points to 56.9 points in September, indicating expansion but at a slower pace (seasonally adjusted).
- Despite solid sales and new orders in September, global uncertainty and high freight costs weakened export activity. Staff shortages, high energy prices, and other input prices were key concerns for chemical products manufacturers in August.



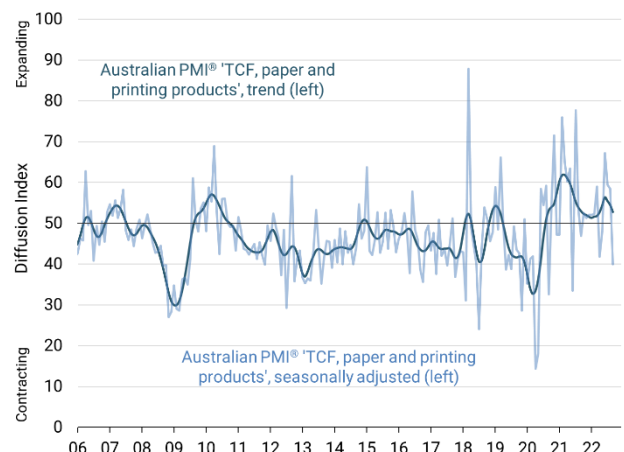
Building materials, wood, furniture & other manufacturing products

- The building materials, wood, furniture & other products sector employed 141,000 people in May 2022 (16% of manufacturing employment, ABS data).
- This sector includes building-related products such as glass, bricks, cement, tiles, porcelain, timber, furniture, furnishings, and other household products.
- The index for the 'building materials, furniture and other manufacturing' sector eased by 1.3 points to 44.6 points in September, indicating a slower rate of contraction (seasonally adjusted).
- Businesses reported a lack of orders, softer demand from construction businesses, staff shortages, higher costs of labour and shipping delays impacted conditions in September.



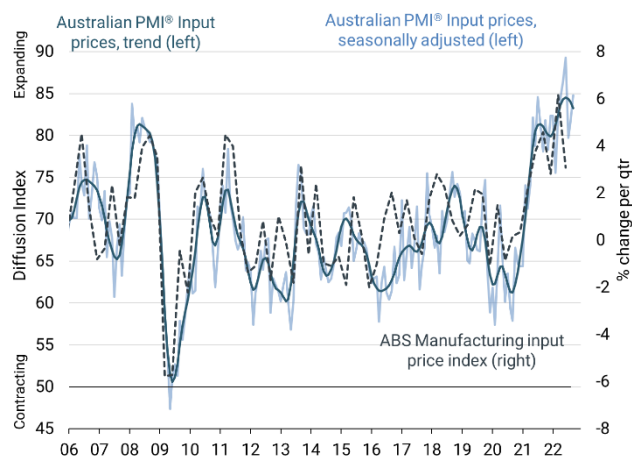
TCF, paper and printing products

- The textiles, clothing, footwear (TCF), paper & printing products sector employed 80,000 people in May 2022 (9% of manufacturing employment, ABS data).
- This sector makes textiles, clothing, footwear, paper, cardboard, packaging, printed products and recorded media.
- The index for this sector dropped by 18.6 points to 39.9 points, indicating a contraction in September compared to the previous month (seasonally adjusted).
- Higher interest rates and staff shortages were challenges. Some businesses are able to pass on higher input costs to customers. Government work increased but jobs from private businesses fell.



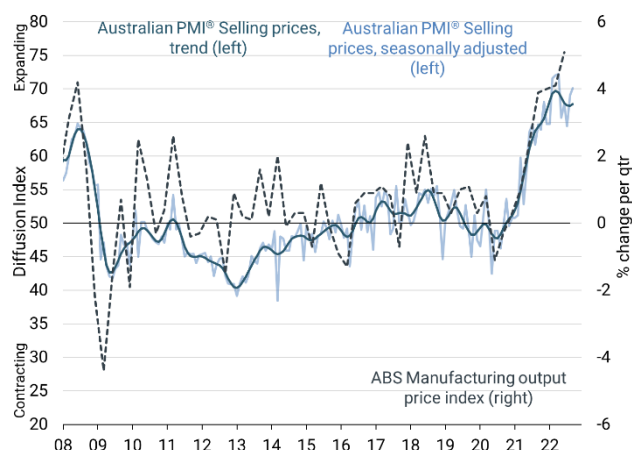
Input prices

- Manufacturers' input prices rose by an average of 18.5% over the quarter and 6.2% over the year to Q1 of 2022 (ABS, *Producer Price Index*).
- The **Australian PMI®** input price index rose by 3.1 points to 84.8 points in September (seasonally adjusted). Input prices have been elevated across 2021 and 2022 and are well above the long-run average of 68.4 points for this index (since 2003).
- Manufacturers across all segments reported price increases for raw materials, energy, imported inputs and components. Respondents noted that input cost pressures were impacting margins.
- Input prices were very elevated across all sectors particularly in TCF, paper and printing products.



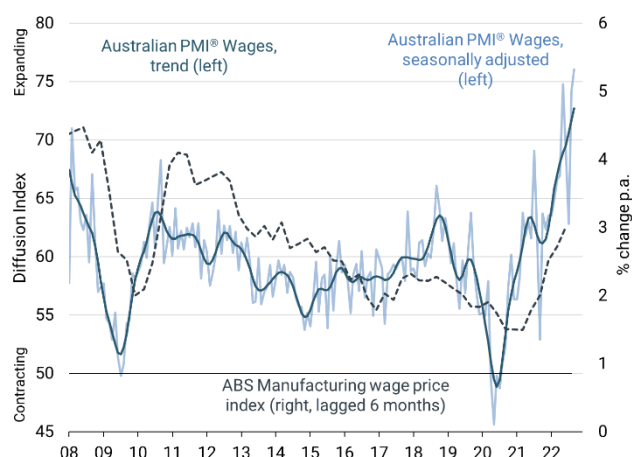
Selling prices

- Manufacturers' output (selling) prices rose by an average of 4.1% over the quarter and 15.1% over the year to Q1 of 2022 (ABS, *Producer Price Index*).
- The selling price index rose by 1.1 points to 70.2 points in September (seas. adj.). The higher selling price index indicates more manufacturers are able to pass on some of their increased costs to their customers.
- Respondents reported higher selling prices across all manufacturing sectors in September, they were particularly elevated in the building materials, 'TCF, paper & printing products' and food & beverage sectors.



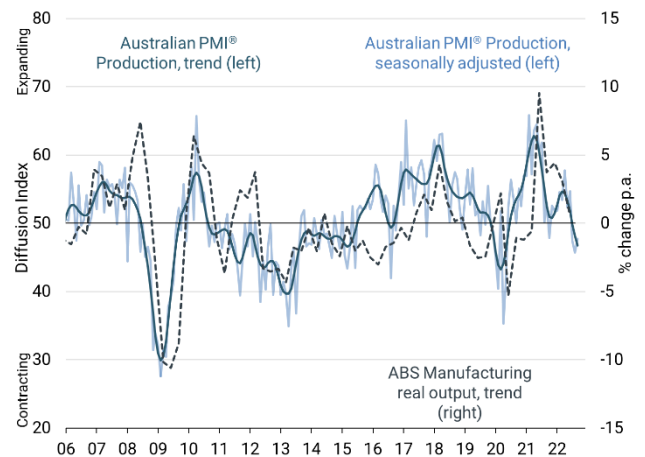
Average wages

- Private sector wages across the manufacturing industry rose by an average of 2.7% over the quarter and 0.6% over the year to Q1 of 2022 (ABS, *Wage Price Index*).
- The Australian PMI® average wages index increased by 2.0 points to 76.1 points (seas. adj.), indicating a faster increase in wages across the manufacturing sector, on average, compared to August. The index has been particularly volatile since April 2022.
- The average wages index indicated strong expansion in all sectors to reach a series high in September 2022.



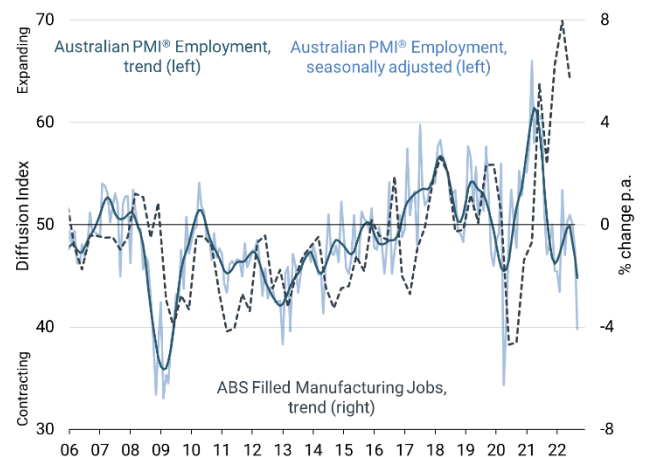
Production

- The manufacturing industry produced \$116.8bn in real value-added output in the year to Q1 2022 (5.6% of Gross Domestic Product, GDP). Manufacturers' value-added output rose by 0.8% over the quarter and 5.1% over the year to Q1 2022 (ABS data).
- The rate of contraction in the Australian PMI® production index eased by 2.0 points to 47.7 points in September, indicating a decline on average in production levels (seas. adj.).
- Results were mixed across the sub-sectors; production contracted strongly in 'TCF, paper & printing products' and shrank in metal products. There were improvements in other sectors. Some manufacturers reported staff shortages constrained production levels in September.



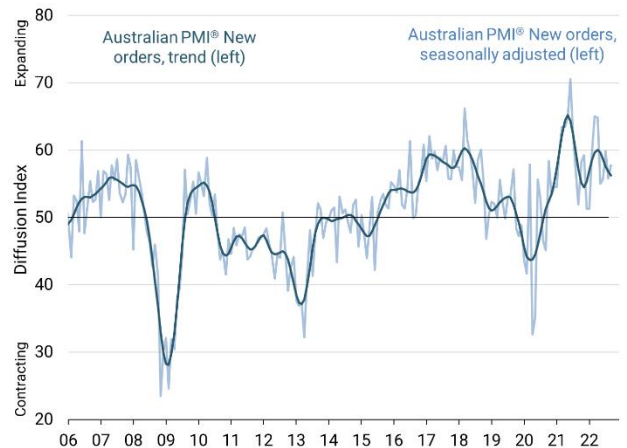
Employment

- There were 929,900 filled jobs in manufacturing in Q1 2022, accounting for 7.0% of all filled jobs in Australia (ABS *Labour Account*).
- The ABS *Labour Force Survey* identified 831,100 people working in manufacturing in May 2022, down 2.2% from February 2022 and 8.7% year on year respectively.
- The Australian PMI® employment index dropped 7.7 points to 39.8 points in September, indicating contracting conditions in manufacturing employment.
- Employment declined significantly in the very large food & beverage sector. Machinery & equipment and metal products were the only sectors to report growth in employment. Manufacturers reported different forms of labour constraints including staff absenteeism due to illnesses, low supply due to a tight labour market and higher labour costs.



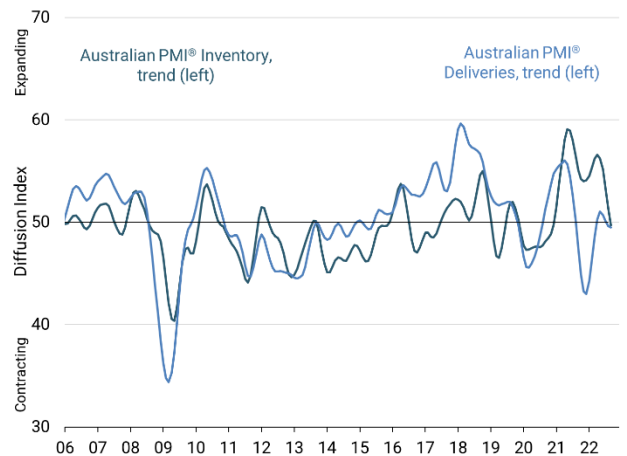
New orders

- The new orders index rose by 2.0 points to 57.8 points, indicating accelerating expansion in September (seasonally adjusted).
- The increase in new orders for Australian manufacturers suggests solid activity in production and sales in the last quarter of 2022.
- New orders increased in all sectors except metal products and building materials. Ongoing strong demand from large businesses and long-term orders for large projects lifted new orders across the month.



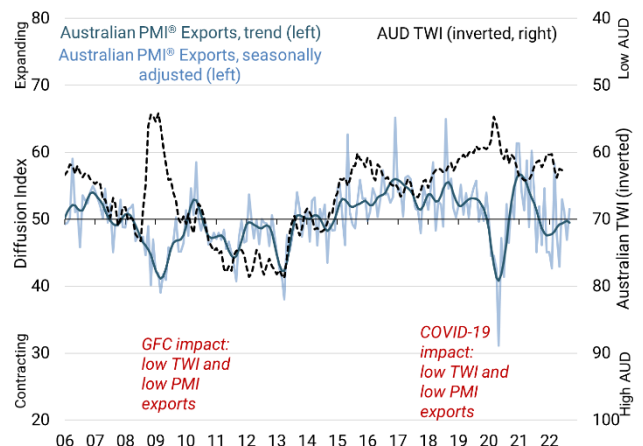
Supplier deliveries & finished stocks

- The supplier deliveries index increased by 5.7 points to 52.8 points in September, indicating an increase in the supply of raw materials ordered by manufacturers (seasonally adjusted). Respondents noted that delivery times for raw materials were increasing again.
- The stocks (inventories) index rose by 4.1 points to 50.0 points in September, indicating stability in inventories. Some respondents reported running down stock levels they had previously built up to buffer against supply disruption.



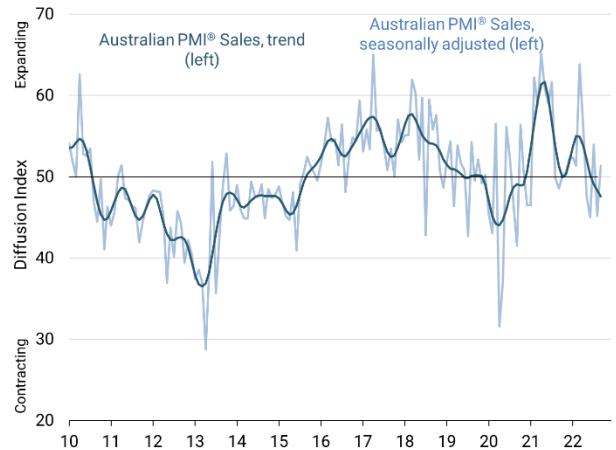
Exports

- Export earnings for Australian manufactured goods were worth \$131.2 bn in the year to June 2022 (22% of total annual export earnings, ABS data).
- The **Australian PMI®** exports index rose by 4.6 points to 51.1 points (seasonally adjusted). Manufacturing exports have been volatile across 2022.
- Export results were mixed across the sectors. There was strong improvement in building products and food & beverages, while chemicals indicated a solid drop. Manufacturers reported uncertainty and rising costs affecting demand in global markets as freight continued to be difficult and expensive to source.



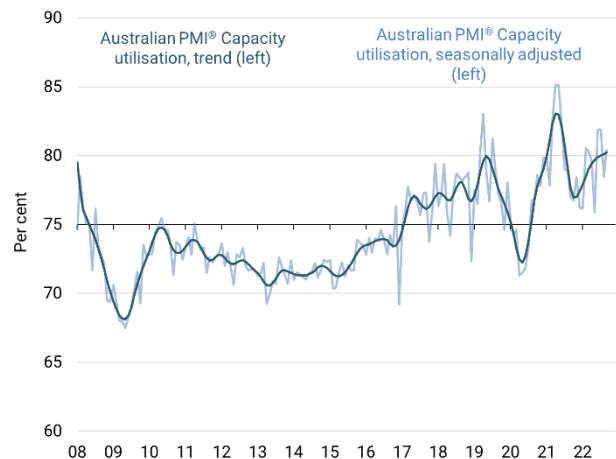
Sales

- The sales index rose by 6.2 points to 51.4 points in September (seasonally adjusted). This indicates an improvement in manufacturing sales compared to August 2022.
- This result is above the long-term average of 49.7 points for this index (since 2009).
- Sales only improved in chemicals and machinery & equipment, they were flat or contracted in all other sectors.
- Some manufacturers reported that several of their major customers had previously built up inventory and had run down stocks over the month.



Capacity utilisation

- Australia's manufacturers invested \$10.5bn in capital expenditure (CAPEX) over the year to Q1 2022 (real dollars).
- The **Australian PMI®** capacity utilisation index rose by 1.9 percentage points to 80.4% of available capacity in September (seasonally adjusted). It remains above the long-run average for this index of 74.6% (since 2007). This suggests that manufacturers will need to increase employment and investment to increase production in future.



Australian PMI® data definitions

The Australian PMI classifies each business according to their single main activity, using the industry data codes and definitions set out in the ANZSIC 2006. These classifications are comparable with all ABS data that use these same codes. For manufacturing in the Australian PMI, the definitions of the six sectors are:

1. Food & beverage products (ANZSIC codes 11 and 121).
2. Machinery & equipment manufacturing including motor vehicles, other transport equipment, professional and scientific equipment, electrical and electronic equipment, computers, domestic appliances, pumps, compressors, heating, cooling, ventilation, specialist equipment (ANZSIC codes 23 and 24).
3. Metal products including basic ferrous, non-ferrous, fabricated iron and steel, structural metals, metal containers, sheet metal and other metal products (ANZSIC codes 21 and 22).
4. Petroleum and coal-based products, basic chemicals, chemical products, fertilisers, pesticides, pharmaceuticals and medicinal products, cleaning compounds, toiletries, polymers and rubber products (ANZSIC codes 17, 18 and 19).
5. Building materials, wood, furniture & other manufacturing products including glass, ceramic, cement, lime, plaster, concrete, wood, logs, timber, furniture & other manufacturing products (ANZSIC codes 14, 20, 25).
6. TCF, paper and printing products including textiles, leather, clothing, footwear, pulp, paper, paperboard, converted paper products printing and the reproduction of recorded media (ANZSIC codes 13, 15, 16).



What is the Australian PMI®? The Australian Industry Group Australian Performance of Manufacturing Index (Australian PMI®) is a national composite index based on the diffusion indices for production, new orders, deliveries, inventories and employment with varying weights. An Australian PMI® reading above 50 points indicates that manufacturing is generally expanding; below 50, that it is declining. The distance from 50 indicates the strength of the expansion or decline. Australian PMI® results are based on responses from a national sample of manufacturers. The Australian PMI® uses the ANZSIC industry classifications for manufacturing sectors and sector weights derived from ABS industry output data. Seasonal adjustment and trend calculations follow ABS methodology. For further economic analysis and information from the Australian Industry Group, visit www.aigroup.com.au/resourcecentre/economics.

© The Australian Industry Group, 2022. This publication is copyright. Apart from any fair dealing for the purposes of private study or research permitted under applicable copyright legislation, no part to be reproduced by any process or means without the prior written permission of The Australian Industry Group.

Disclaimer: The Australian Industry Group provides information services to its members and others, including economic policy and information services. None of the information provided here is represented or implied to be legal, accounting, financial or investment advice and does not constitute financial product advice. The Australian Industry Group does not invite and does not expect any person to act or rely on any statement, opinion, representation or interference expressed or implied in this publication. All readers must make their own enquiries and obtain their own professional advice in relation to any issue or matter referred to herein before making any financial or other decision. The Australian Industry Group accepts no responsibility for any act or omission by any person relying in whole or in part upon the contents of this publication.