

Manufacturing in Australia

Performance benchmark report 2024

Ai Group Research & Economics
April 2024

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Manufacturing in Australia

Key industry trends

- Manufacturing performance **has strongly rebounded during and following the pandemic** – with material increases in value-add, employment, exports, financial performance and capex.
- Australian manufacturing is **consolidating into more competitive sub-industries**. Food & beverages and metals production have grown, while petrochemicals, machinery and other manufacturing have declined.
- Manufacturing has **faced tough cost pressures** during the recent period of inflation but has also enjoyed buoyant sales price growth. Manufacturer margins have improved since the pandemic.
- **Labour supply is the most acute pressure** on Australian manufacturing today. Job vacancies are at record rates, job turnover is growing, and wages growth is at a 16-year high.
- Manufacturing has been very successful in **reducing its gender pay gap**, which has fallen from 16.8% to 11.2% in a decade. However, workforce gender composition is proving slow to change.

Key industry numbers for 2023

In 2023, Australian manufacturing saw a:

2.8%

Real output growth

-1.5%

Employment growth

2.8%

Gross operating profits growth

Industrial performance indicators

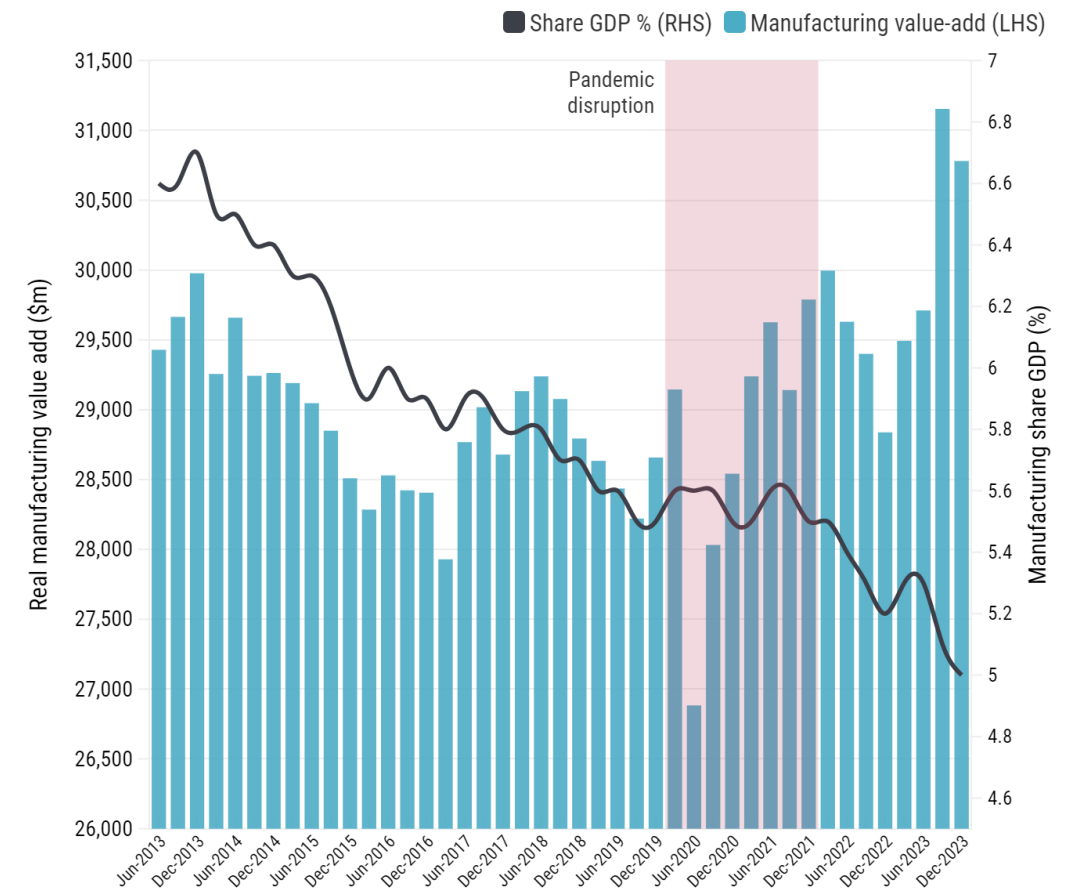


Manufacturing value-add: Strong growth in output post-pandemic

- The manufacturing industry contributed \$30.8 billion of value-add to the Australian economy in 2023.
- Manufacturing has recovered strongly in the years since the pandemic.
- The industry posted a 2.8% real growth rate in 2023, and output is currently higher than at any point in the last decade.
- Post-pandemic growth has been supported by strong national economic growth, as well as supply chain disruptions that have increased demand for locally manufactured goods.
- However, the manufacturing share of GDP has continued to decline - from 6.8% to 5.0% - over the last decade.

Australian manufacturing value-added

Manufacturing output recovers post-pandemic but falls as share of GDP

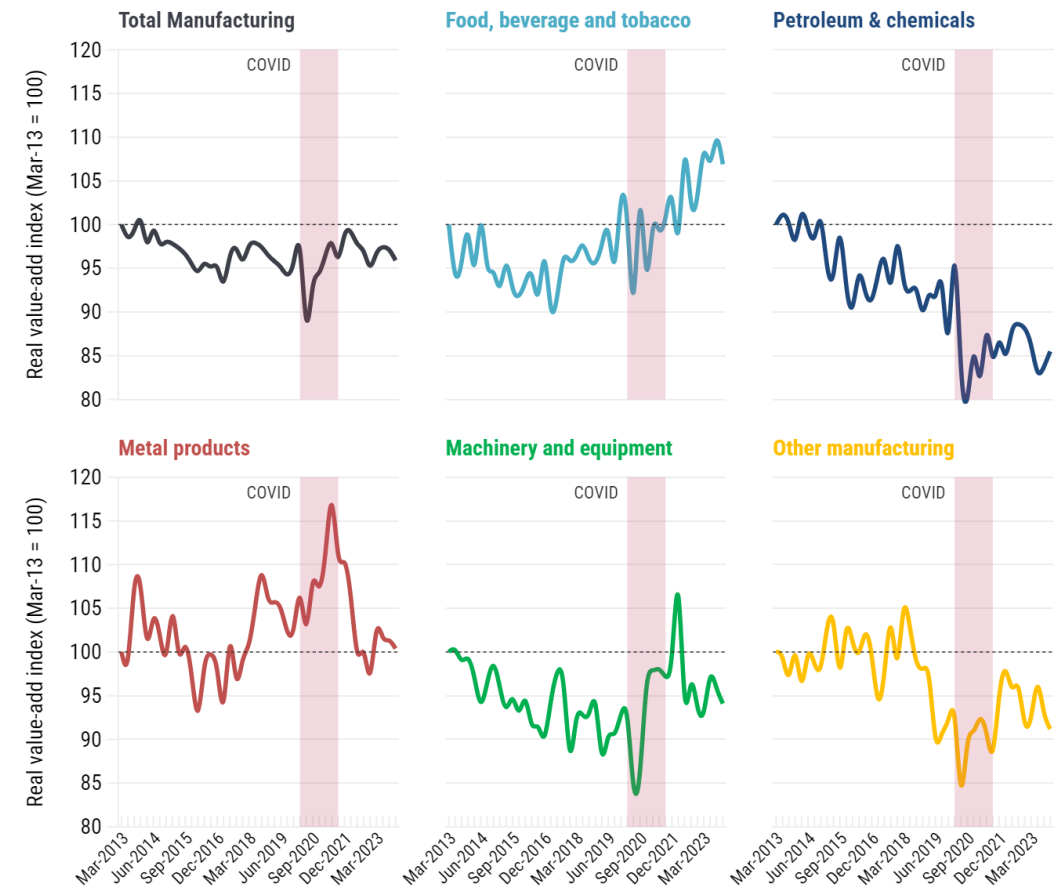


Value-add by sub-industry: Consolidation into value-adding of primary products

- The composition of Australian manufacturing has shifted over the last decade toward the value-adding of primary products.
- In real terms, over the last decade petrochemicals output has declined 13%, machinery & equipment 5%, and other manufacturing 8%.
- However, this has been compensated by significant growth in the manufacture of food products and metal products.
- This shift towards food and metals reflects a consolidation towards subindustries in which Australia has comparative advantage to value-add to primary products.

Manufacturing value-add by subindustry

Shifting from petrochemicals and machinery to foods and metals



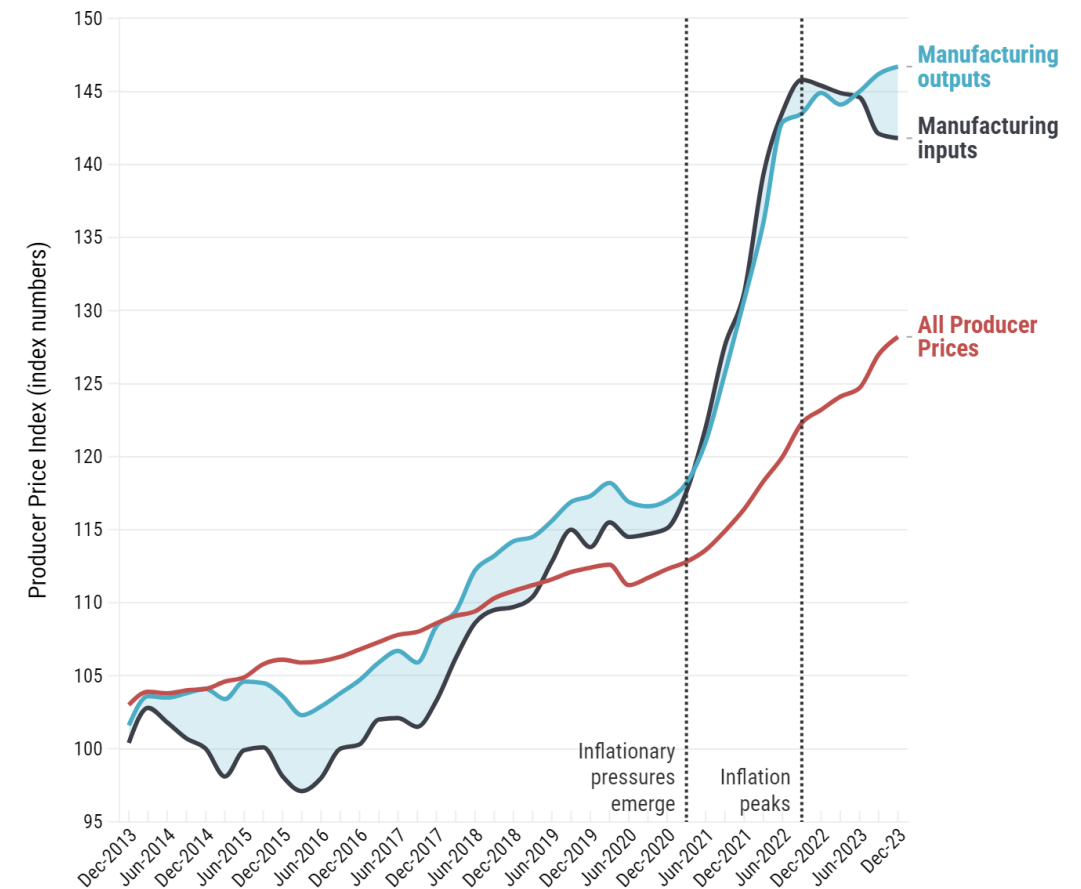
Source: ABS Australian National Accounts • Ai Group Research & Economics

Manufacturing prices: Very high input price inflation, mostly passed through

- During the recent period of inflation, Australian manufacturing prices have risen rapidly.
- Since 2020, manufacturing input prices have risen by 22.7%, and output prices by 24.1%.
- Increases in manufacturing prices have far outpaced other producer prices, which only grew by 13.8% since 2020.
- After two years of extraordinary growth, manufacturing input prices began to decline in 2023 as global supply chain pressures eased.
- Output prices have kept pace – and during 2023 outgrew – input prices. Manufacturers have in aggregate been able to pass price rises through.

Select Australian industrial price indicators

Rapid manufacturing input price rises have been passed through



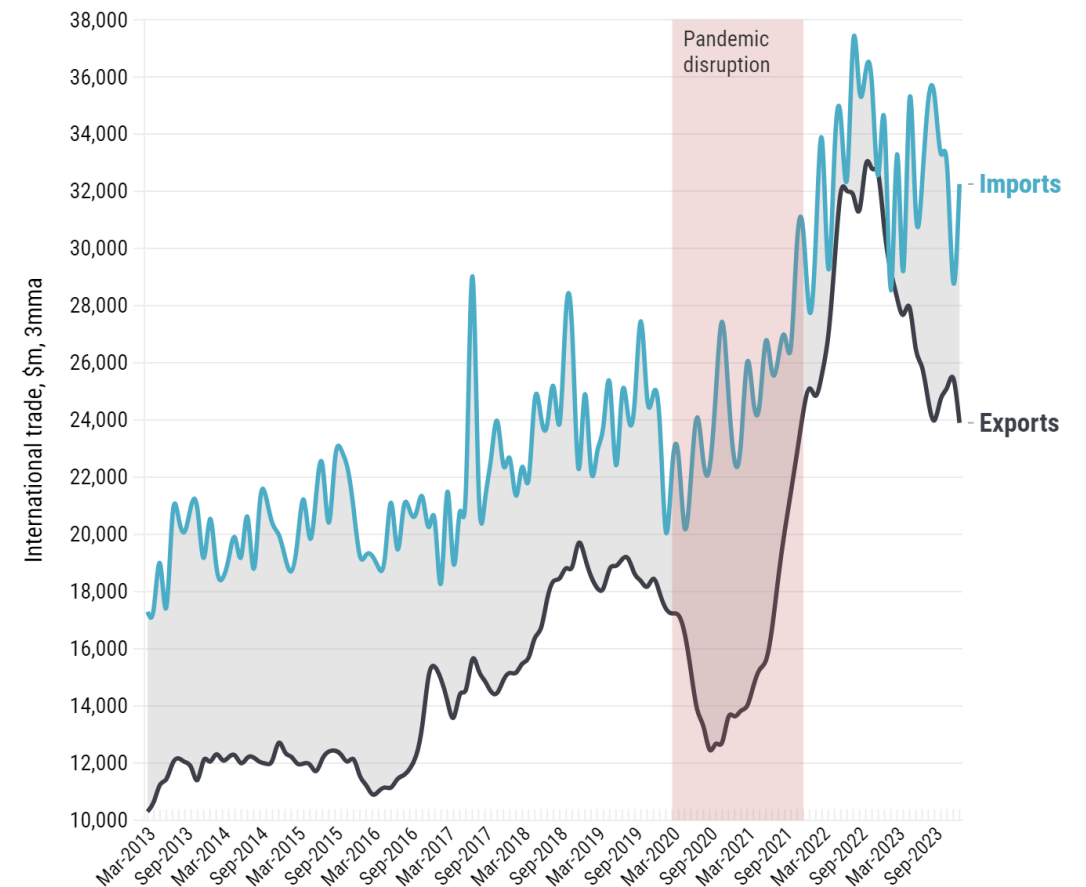
Source: ABS Producer Price Indices

Trade in manufactures: Significant growth during and after pandemic

- Australia's trade in manufactured goods – both imports and exports – grew significantly during and after the pandemic.
- Supply-side constraints for industrial goods during the pandemic drove both imports and exports of manufactures higher.
- The value of manufactured imports rose ~60% between 2020 and 2022. Manufacturing exports roughly doubled, the fastest growth on record.
- This closed Australia's trade deficit in manufactures, which returned to balance in mid-2022.
- In 2023, however, while manufactured imports remained high exports fell by around a fifth. This saw the Australia's manufacturing trade deficit reopen.

Australian trade in manufactured goods

Trade deficit narrowed post pandemic, but exports have fallen in 2023



Financial performance: Manufacturer margins strongly improve post-pandemic

- Manufacturing margins have been improving over the last decade in Australia.
- Margins declined significantly in the five years following the GFC, associated with the exit of the auto industry.
- They recovered from 2015 to return to near the all-industry level, reflecting the consolidation into more competitive manufacturing subindustries.
- Since the pandemic manufacturing margins have grown strongly (from ~9% to ~11%), and exceed the all-industry rate for the first time since 2007
- Supply chain disruptions and shortages have supported recent margin improvement for manufacturers

Manufacturing margins in Australia

Strong margin recovery since the pandemic, exceeds all-industry again

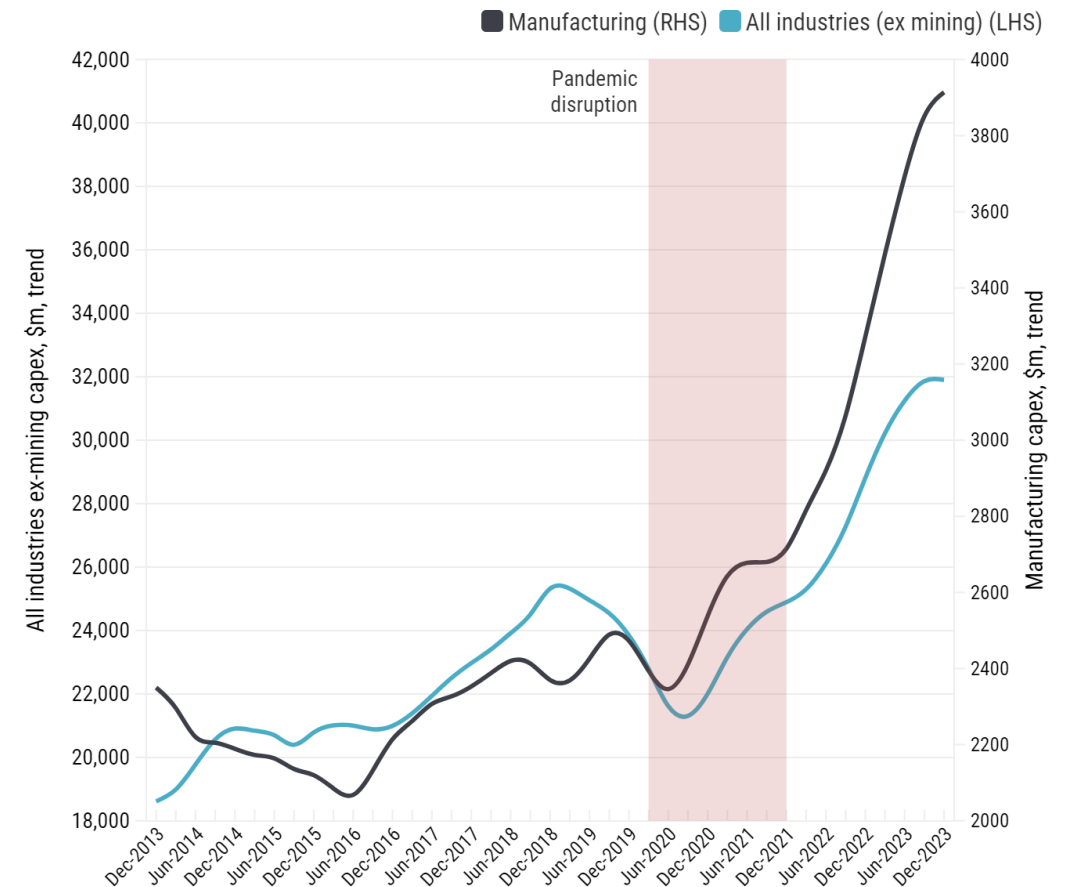


Source: ABS Business Indicators, Ai Group Research & Economics
"Operating margin" is estimated as operating profit before tax as share of sales income.

Capital expenditure (Capex): Strong capex growth, outperforms all-industry

- The Australian manufacturing sector undertook \$3,382 million of capex in 2022-23
- Manufacturing capex has grown rapidly since the start of the pandemic.
- Capex levels in 2023 were 30% higher than in 2018-19.
- Manufacturing has outperformed the national average, with all industries (ex-mining) capex growth of 4% during the same period.
- High manufacturing capex reflects new investment driven by strong Australian industrial growth, alongside opportunities created by supply chain disruptions.

Capital expenditure in Australian manufacturing
Manufacturing outperforms all-industry capex since pandemic



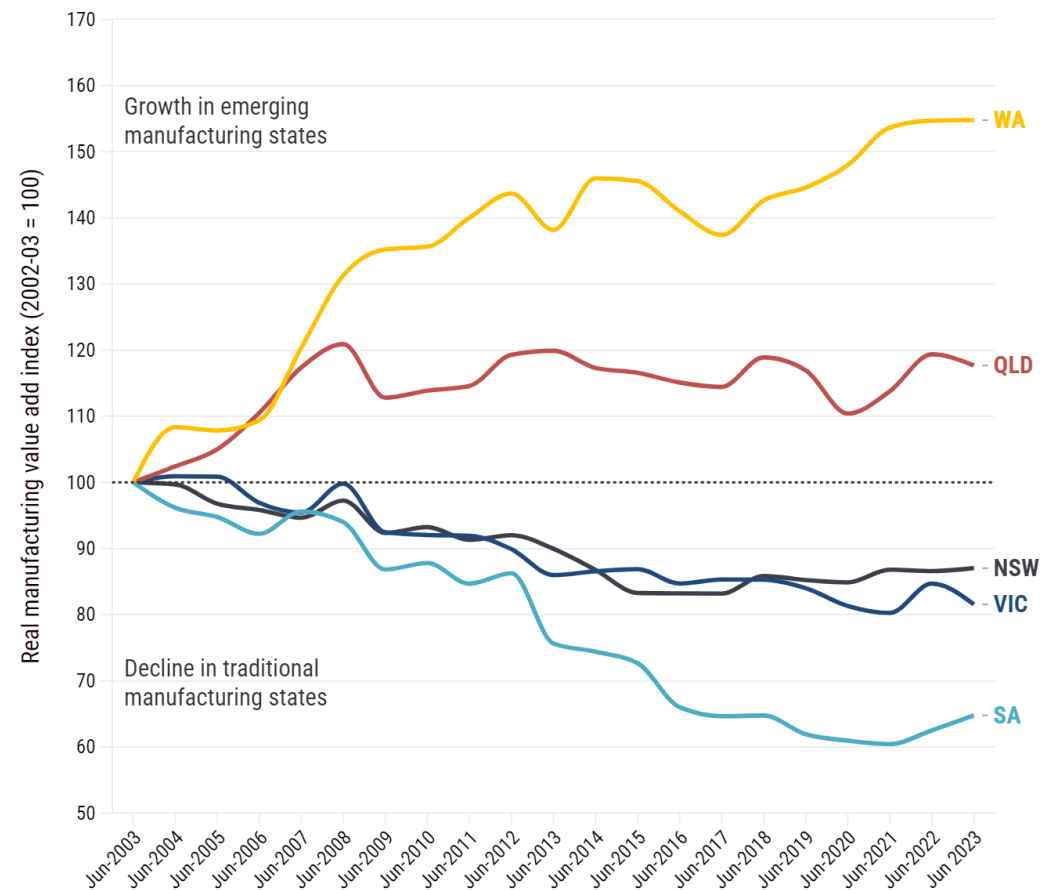
Source: ABS Private New Capital Expenditure and Expected Expenditure, Australia, Table 5, Ai Group Research & Economics

State manufacturing performance: A shift from traditional to emerging states

- Australian manufacturing has shifted away from traditional towards emerging states
- Over the last two decades, real manufacturing value-add has grown in QLD (16%) and WA (60%).
- This trend reflects growing demand in these states' industrial ecosystems, driven by the resource sector and population growth.
- However, manufacturing value-add has declined in NSW and VIC by ~15%, and in SA by ~40%.
- SA's manufacturing decline coincided with the exit of the auto industry following the GFC.

Manufacturing output of Australian states

Manufacturing output declines in traditional states, grows in emerging ones



Source: ABS State Accounts, Ai Group Research & Economics 14

Employment and workforce indicators

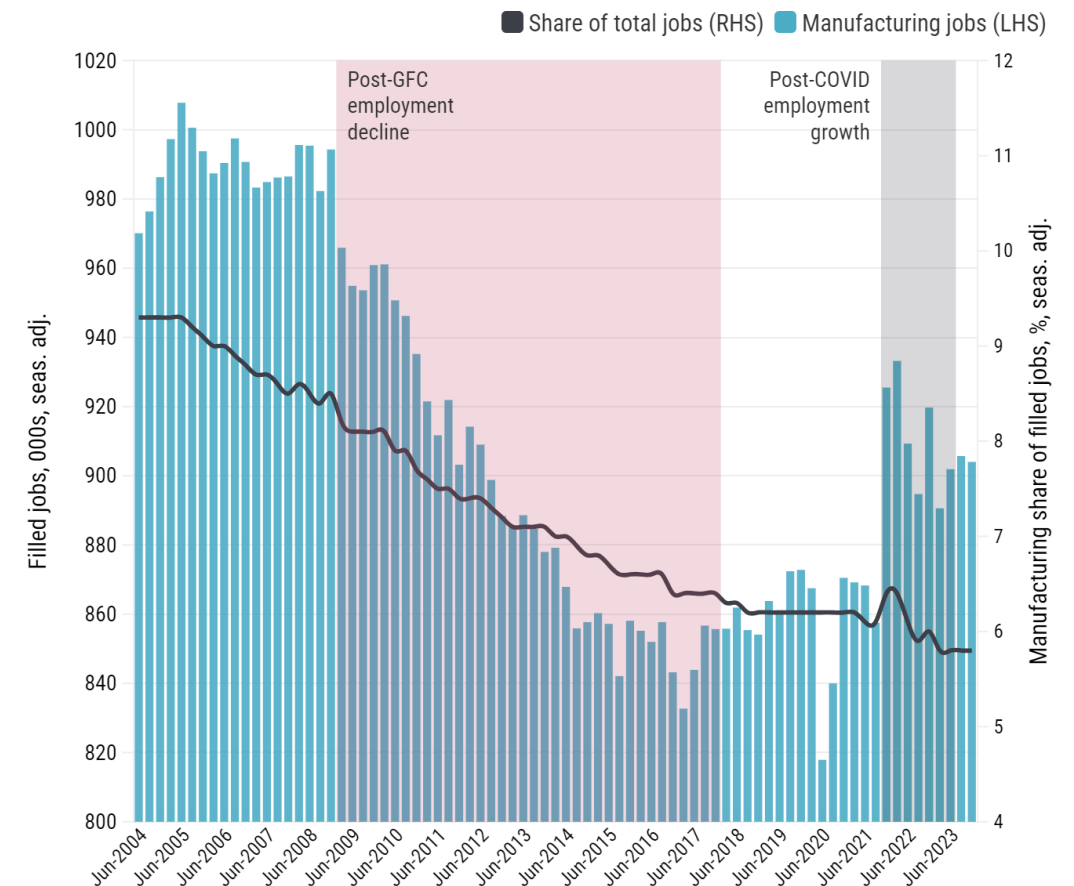


Manufacturing jobs: Post-COVID growth partially recovers a post-GFC decline

- There were 904,00 manufacturing jobs in Australia in the December quarter of 2023.
- There has been a 5% increase in manufacturing jobs since the pandemic, reflecting recent growth in the industry.
- However, post-pandemic growth only partially recovers a 15% decline in jobs which occurred in the years following the GFC.
- The manufacturing share of total Australian jobs declined from around 10% two decades ago to 6% by 2018.
- The share of Australian jobs in manufacturing has been broadly stable at 6% since then.

Australian manufacturing employment

Post-COVID employment boost partially reverses post-GFC decline



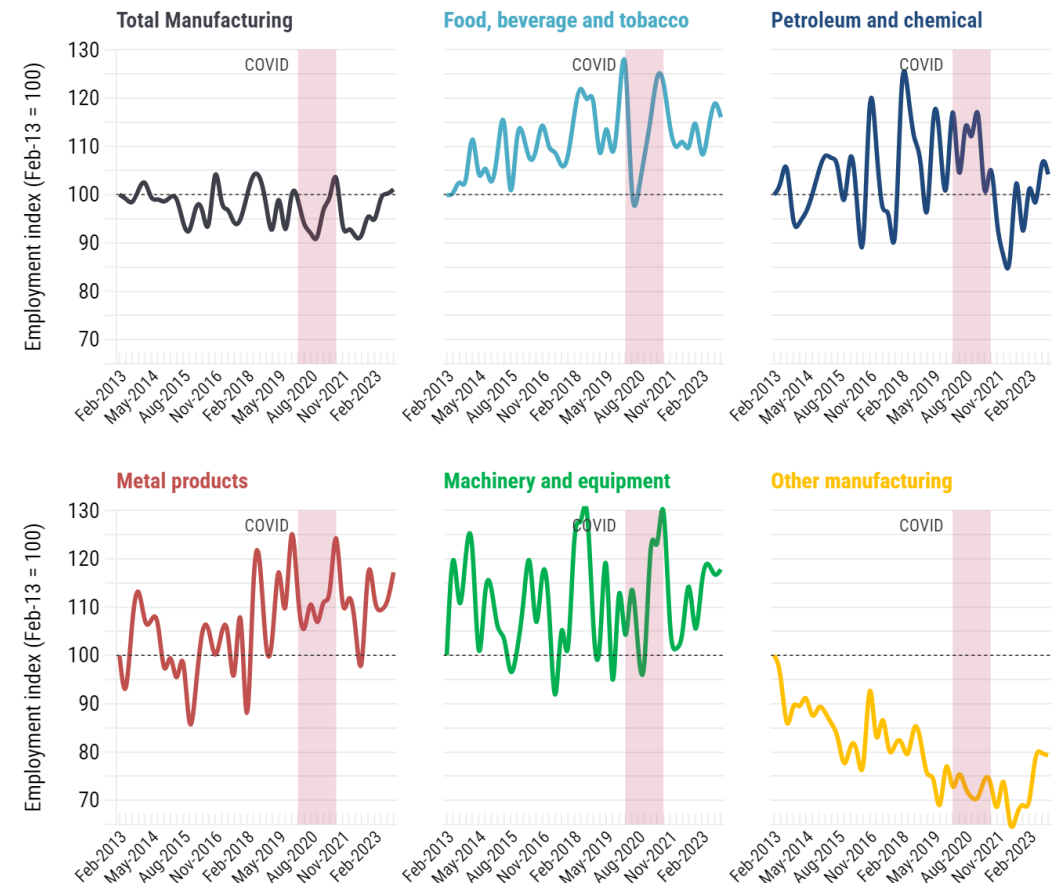
Source: ABS Labour Accounts, Table 1 & 4, Ai Group Research & Economics

Employment by subindustry: Consolidation into the core sub-industries

- The manufacturing industry employed 910,600 people in February 2024, approximately the same level as a decade ago.
- However, the Australian manufacturing workforce has consolidated into core subindustries.
- The workforce in the food, metals and machinery manufacturing subindustries is around 10-15% higher than a decade earlier.
- But the smaller branches of manufacturing – including TCFs, wood and timber products, and other consumer durables – have recorded a workforce decline of around 20%.
- This workforce consolidation reflects the broader Australian trend towards growth in higher value-add manufacturing subsectors.

Manufacturing employment by subindustry

Workforce consolidates into core manufacturing subindustries

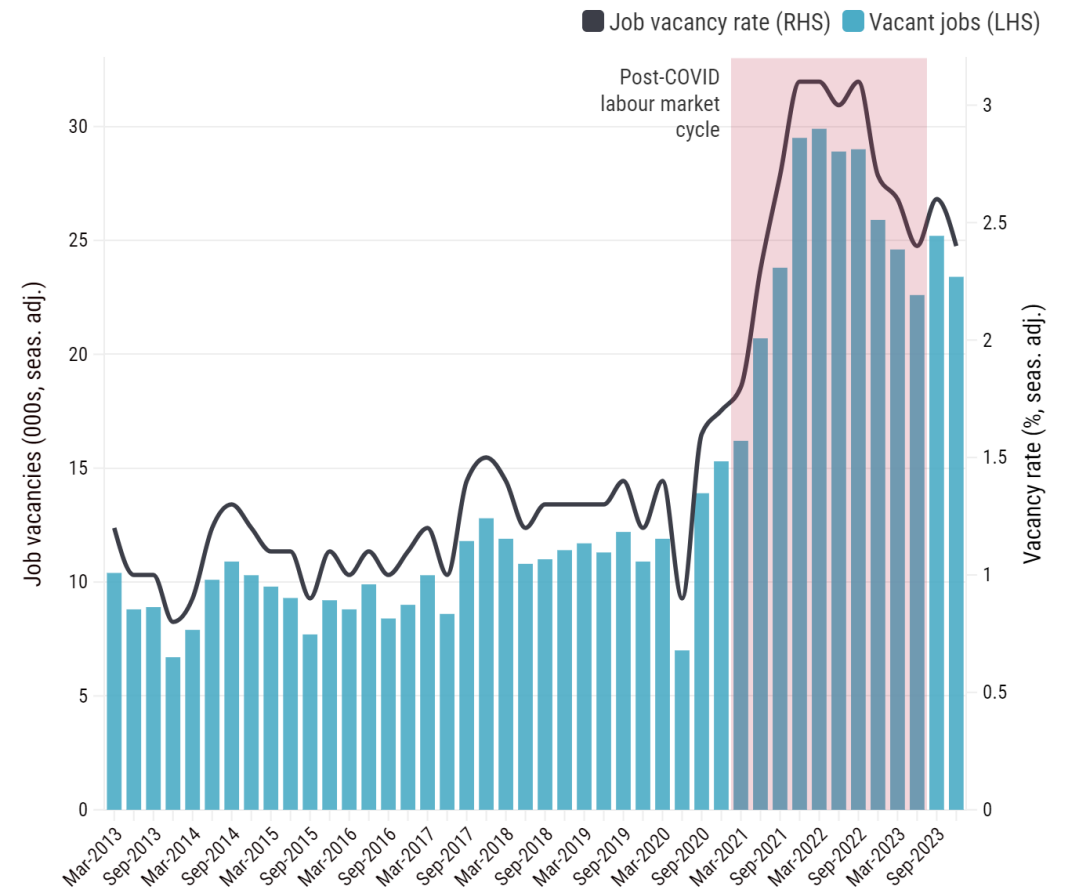


Job vacancies: Vacancies are easing, but remain double their long-run rates

- There were 23,400 job vacancies in Australian manufacturing in the December quarter of 2023.
- The tight labour market following the pandemic saw job vacancies in manufacturing dramatically increase.
- Vacancies peaked in the March quarter of 2022, and during 2023 have declined somewhat.
- The manufacturing vacancy rate currently sits at 2.4%. This is slightly lower than the national (2.7%) vacancy rate.
- However, manufacturing vacancies remain well-elevated over their long-run rate of 1.0-1.5%.
- 23.4% of manufacturing businesses reported active job vacancies in December 2023.

Australian manufacturing job vacancies

Despite easing in 2023 vacancies remain at double normal levels



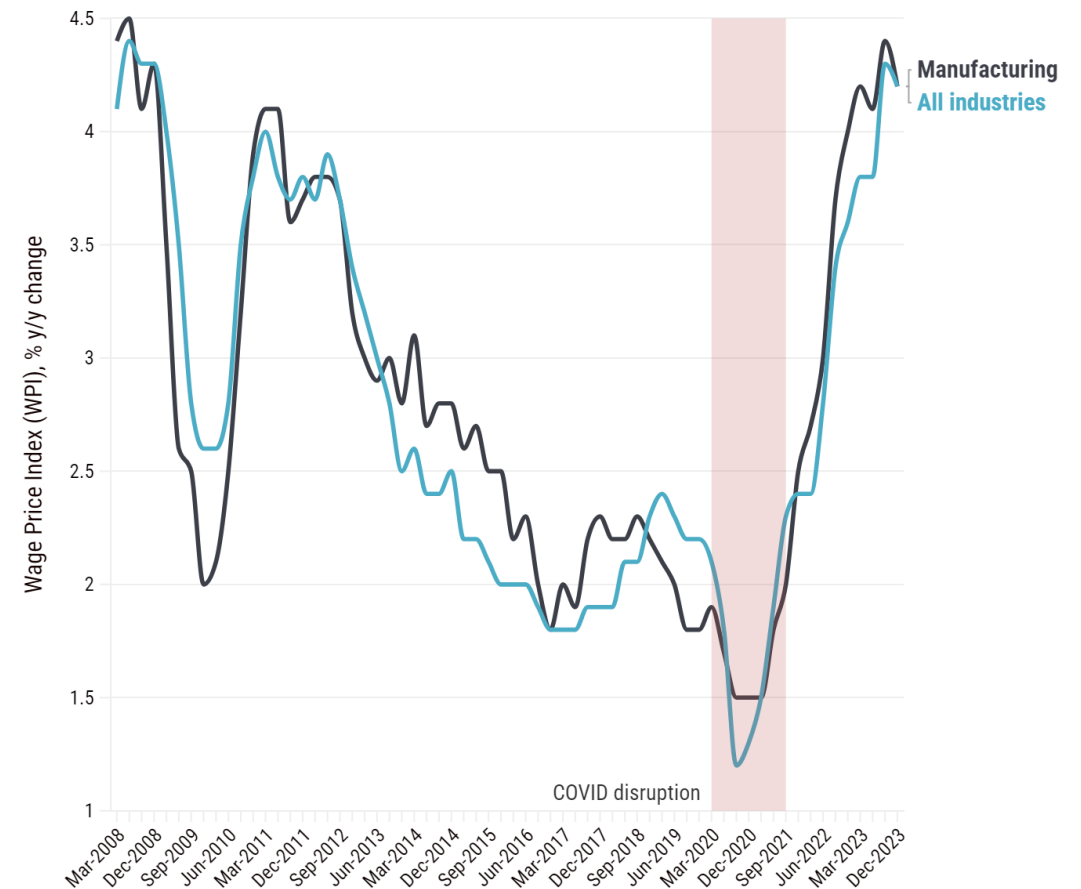
Source: ABS Labour Account, Table 4

Manufacturing wages: High growth similar to other industries

- Manufacturing wages increased at an annual rate of 4.2% in the December quarter of 2023.
- This is the fastest rate of growth for wages since 2007.
- Australian wages growth has increased dramatically in the tight post-pandemic labour market.
- Manufacturing wages are growing at a similar rate to those in all private sector industries, reflecting the economy-wide nature of current wage rises.

Wages growth in Australian manufacturing

Similar to other industries, highest rate of wage growth in 16 years

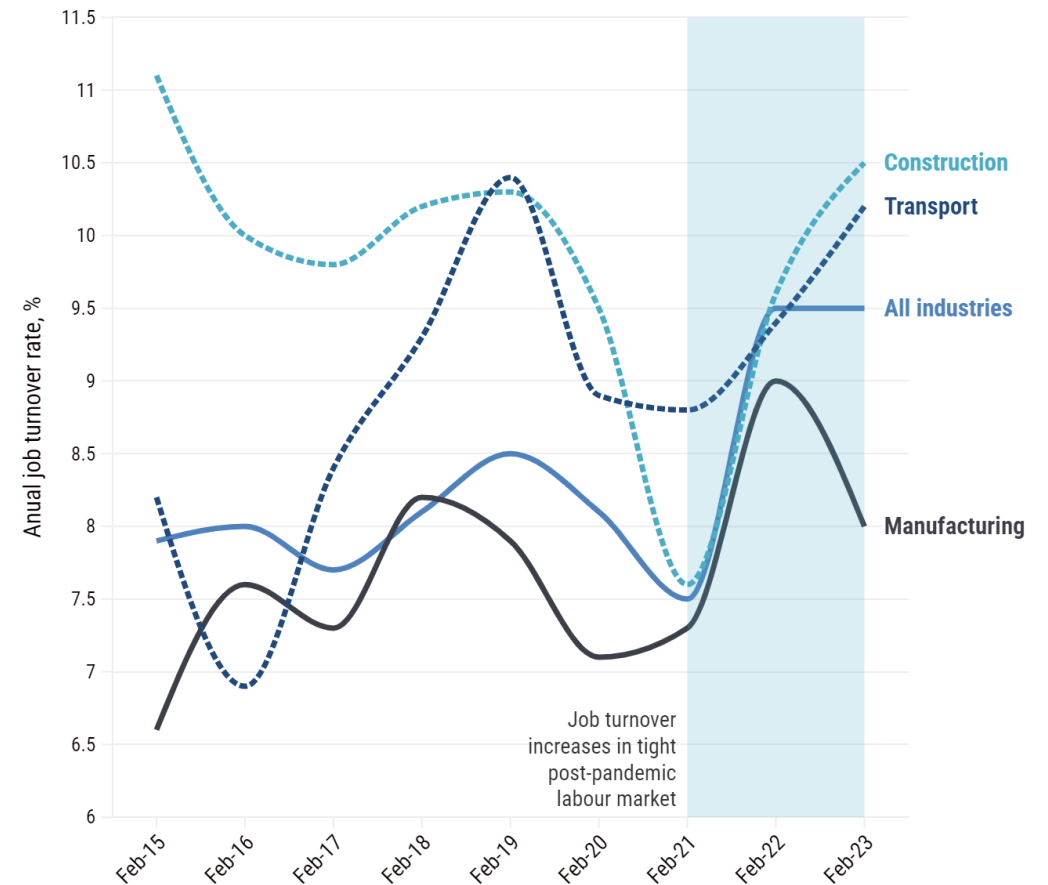


Job turnover: Increased post-pandemic but manufacturing lower than its peers

- 8.0% of the manufacturing workforce changed their jobs in the year to February 2023.
- This is down from 9.0% a year earlier, but above the long-run manufacturing turnover rate of ~7.5%.
- Job turnover has increased in Australia in the tight post-pandemic labour market.
- Manufacturing job turnover is lower than for all industries (9.5%) as well as peer industries such as construction (10.5%) and transport (10.2%)
- Lower job turnover enables manufacturers to retain business-specific skills, and reflects the closer nature of employment relationships within the industry.

Job turnover rates in select industries

Lower manufacturing job turnover than peer industrials



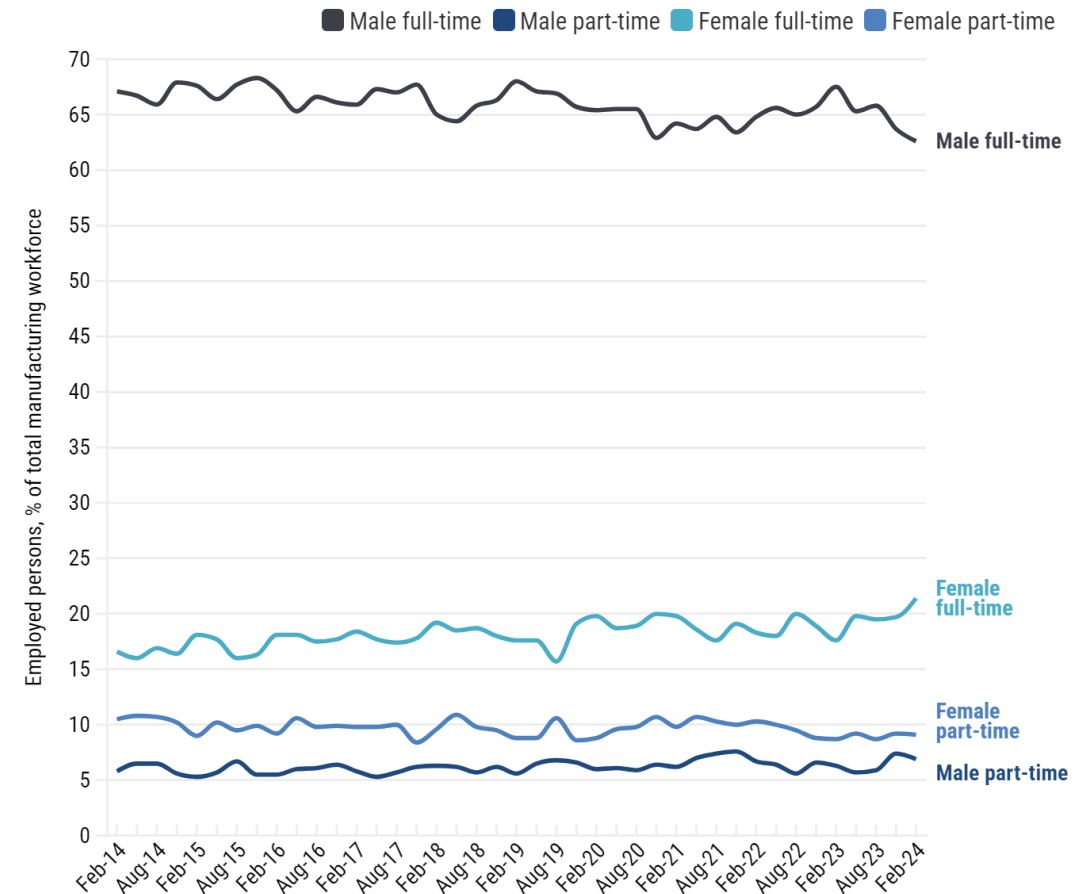
Source: ABS Job Mobility • Ai Group Research & Economics

Gender composition of workforce: Limited change over the last decade

- The gender composition of the Australian manufacturing workforce has shifted slightly in the last decade.
- In the 10 years to November 2023, the female share of the manufacturing workforce rose from 26.4% to 28.9%.
- Full-time male employment remains the industry norm, accounting for 63.7% of the current workforce.
- The female workforce has a greater share of part-time employment, with one-in-three females working part-time.
- Limited change in gender patterns reflects a mix of structural and cultural factors affecting manufacturing employment.

Gender composition of manufacturing workforce

Limited change in gender patterns over last decade

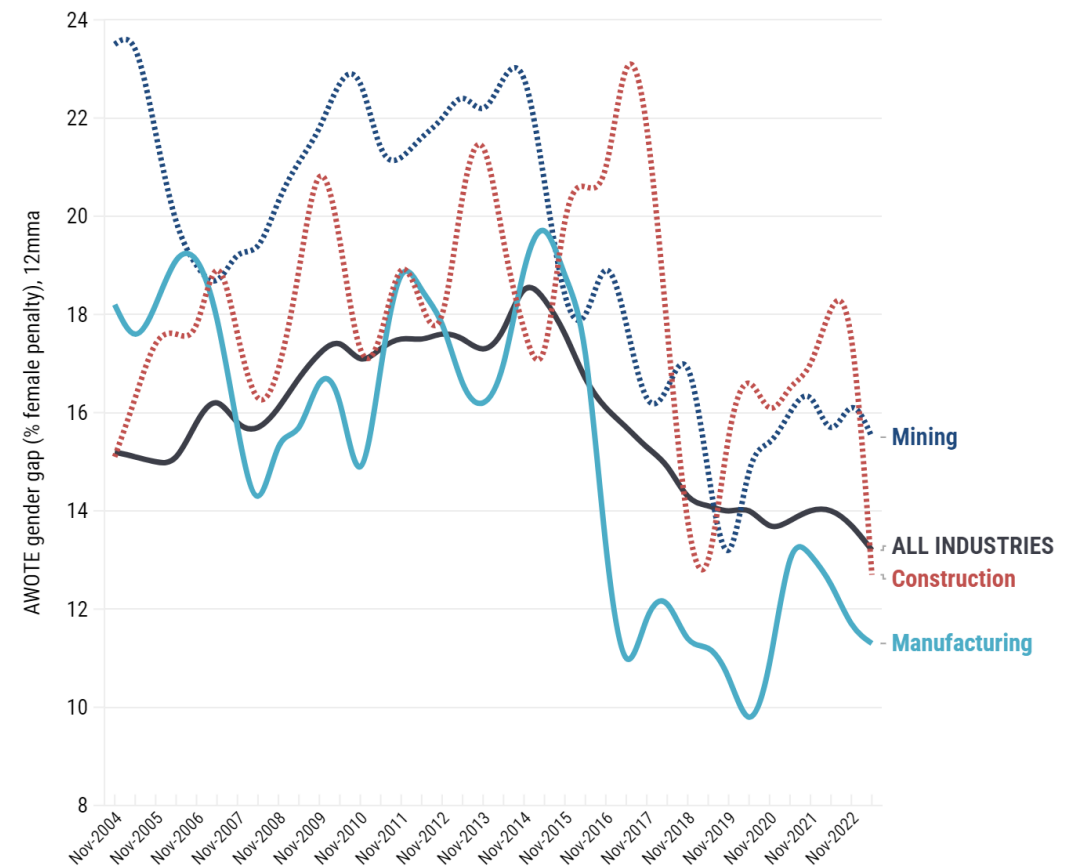


Gender pay gap: Strong improvement in manufacturing over last decade

- The gender pay gap – the difference between male and female earnings – has greatly improved in the manufacturing sector.
- In the decade to 2023, the manufacturing gender pay gap has fallen from 16.8% to 11.2%.
- Manufacturing has outperformed other industries in closing the gender pay gap.
- It has moved from being around the national average ten years ago to 1.8 points below today.
- Manufacturing now has a much lower gender pay gap than other traditionally male-dominated industrial sectors, such as mining and construction.

Gender pay gap in manufacturing and related industries

Manufacturing gender pay gap falls from 16.8% to 11.3% in a decade



Source: ABS Average Weekly Earnings • Ai Group Research & Economics
Measures the gender pay gap in terms of average weekly ordinary full-time earnings

Key manufacturing data

Key manufacturing statistics



Total Manufacturing	2023
GDP	\$30,781 million (5.0% of total)
Number of employees	933,500 (6.9% of total)
Number of employing businesses	49,058 (4.1% of total)
Export earnings	\$10,497 million (23.7% of total)
Manufacturing profits	\$11,531 million (8.2% of total*)
Manufacturing revenue	\$7,633 million (17.8% of total*)
Manufacturing wages bill	\$15,686 million (8.7% of total*)
Manufacturing investment	\$3,914 million (8.6% of total)
BERD (2021-22)	\$5,203 million (27.1% of total)

ABS, National Accounts, June 2023, JSA Labour Market Insights, ABS Business indicators, June 2023 • ABS Australian Industry, Research and Experimental Development, Businesses, 2021-22, ABS Private New Capital Expenditure and Expected Expenditure, Jun 2023, ABS International Trade in Goods and Services, Sep 2023

Manufacturing employment data, Feb 2024



	Employment ('000)	Share (%)
Manufacturing total	933.50	100.00
Food, beverage & tobacco products	245.40	26.30
Machinery & equipment w/ transport	77.60	8.30
Machinery and equipment	122.30	13.10
Metal products	148.30	15.90
Chemicals, petroleum and rubber	90.20	9.70
Building, wood, furniture & other	170.00	18.20
TCF, paper & printing products	78.40	8.40
Manufacturing nfd	1.40	0.10

Source: ABS, Labour Force Detailed Quarterly, Feb 2024

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