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February 2019

AUSTRALIAN Performance of Manufacturing Index

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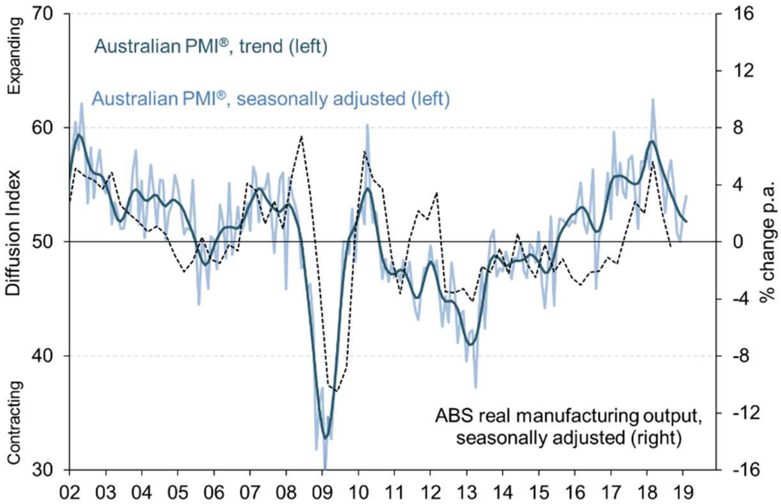
Manufacturing recovery picks up in February 2019

The Australian Industry Group Australian Performance of Manufacturing Index (Australian PMI®) recovered by a further 1.5 points to 54.0 points in February 2019 (seasonally adjusted). Results above 50 points indicate expansion with higher results indicating a stronger expansion. This was the best monthly result since October 2018. It signals a better month of recovery in February 2019, following an unseasonably slow summer, with weak growth in January and two flat months in November and December 2018. The Australian PMI has been stable or positive (50 points or higher) since August 2016 (30 consecutive months), but its trend has suggested slowing growth rates since its recent peak in March 2018.

Conditions appear to be diverging in 2019, across the larger manufacturing sectors and their main locations. Three of the six sectors in the Australian PMI® expanded in February, one was stable and two contracted (trend). Positive conditions in February stemmed from export orders, infrastructure, government contracts, defence and mining projects. Less positively, the downturn in housing construction is already affecting some sectors, as is the uncertainty of impending elections. Ongoing drought is detracting from trading conditions for manufacturers in NSW, South Australia and parts of Queensland.

Australian PMI® (seasonally adjusted and trend)



Results above 50 points indicate expansion with higher results indicating a stronger expansion.

AUSTRALIAN PMI®	FOOD & BEVERAGES	MACHINERY & EQUIPMENT	METAL PRODUCTS
54.0	54.7	50.7	46.5
↑ 1.5 POINTS (seasonally adjusted)	↓ 0.5 POINTS (trend)	↓ 0.3 POINTS (trend)	↓ 1.6 POINTS (trend)

AUSTRALIAN PMI®	CHEMICALS	BUILDING MATERIALS, WOOD, FURNITURE & OTHER	TCF, PAPER & PRINTING
51.8	54.2	48.0	51.8
↓ 0.2 POINTS (trend)	↑ 1.0 POINTS (trend)	↓ 2.9 POINTS (trend)	↓ 0.5 POINTS (trend)

Australian PMI® summary

Manufacturing sectors: three of the six sectors in the Australian PMI® expanded in January, one was stable and two indicated a mild contraction (trend). Food and beverages is the largest sector in the Australian PMI and continues to perform well, with only a marginal deceleration in February (-0.5 points to 54.7 points). The small 'TCF, paper and printing products' sector and the 'chemicals & related products' sector also expanded in January 2019. Machinery and equipment was flat, while metal products and the 'building, wood and furniture' sector experienced a worsening contraction in February (trend).

Manufacturing wages and prices: The input price index rose to 71.0 points in February, but remains below the recent peaks in late 2018. Input prices remain elevated for energy-intensive sectors, reflecting their ongoing problems with high input costs for gas and electricity. The average wage index moderated further, to 59.5 points in January, which is around the long-run average for this series (59.2 points). The selling prices index indicated mild price rises in February (up 1.4 points to 51.6 points), after a flat month in January and price falls in December. Businesses' margins remain tight, as wage and input costs continue to grow at a stronger pace than selling prices. Higher costs are difficult to pass on to customers.

Manufacturing activity: Six of the seven activity indexes in the Australian PMI® indicated expansion in February (i.e. above 50 points). Only finished stocks (inventories) indicated a contraction. Production and employment strengthened markedly in February, with both indexes indicating a relatively strong pace of expansion after a lull in Q4 2018. The exports and sales indexes accelerated in February. The indexes for new orders and deliveries from suppliers stayed positive but moderated.

Manufacturing highlights: Trading conditions in January and February appear to have been more favourable in Victoria than elsewhere. Growth is coming from export orders, infrastructure, government contracts, defence and mining projects.

Manufacturing concerns: The downturn in housing construction is crimping demand in building-related manufacturing sectors. Ongoing drought is detracting from trading conditions for manufacturers in NSW, South Australia and parts of Queensland. A small number of respondents in NSW are concerned that impending Federal and state elections are dampening consumer confidence and hence their forward orders. Businesses in all states remain very concerned about mitigating their energy costs and about growing skill shortages for experienced, technical and specialist tasks.

AUSTRALIAN PMI® KEY NUMBERS	**Index this month**	**Change from last month**	**12-month average**		**Index this month**	**Change from last month**	**12-month average**
seasonally adjusted				*trend*			
Australian PMI®	**54.0**	**1.5**	**55.1**	**Australian PMI®**	**51.8**	**-0.2**	**54.8**
Production	57.9	3.9	56.0	Food & beverages	54.7	-0.5	57.9
Employment	57.7	6.6	53.3	Machinery & equipment	50.7	-0.3	54.2
New Orders	52.0	-0.3	56.0	Metals products	46.5	-1.6	53.0
Supplier Deliveries	52.9	-2.7	56.4	Petroleum, coal, chemicals			
Finished stocks	44.5	-3.2	51.7	& rubber products	54.2	1.0	56.3
Exports	55.2	3.1	53.8	Building, wood, furniture			
Sales	54.4	2.5	54.6	& other products	48.0	-2.9	56.5
Input Prices	71.0	0.7	70.9	Textiles, clothing, footwear,			
Selling Prices	51.6	1.4	52.6	paper & printing	51.8	-0.5	47.6
Average Wages	59.5	-2.3	61.7				
Capacity Utilisation (%)	76.5	-1.0	77.1				

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, %**
Latest ABS data, seasonally adjusted	$bn	%	%	%
Real value-added output, $bn, year to Sep 2018	105.1	-0.1	2.3	5.8% of total GDP
Nominal sales, $bn, year to Sep 2018	351.9	1.0	1.1	12.5% of non-farm business sales
Nominal export earnings, $bn, year to Nov 2018 *(original)*	116.7	2.7	9.9	27.0% of total export earnings
Nominal company profits (GOP), $bn, year to Sep 2018	32.9	1.8	8.2	9.5% of non-farm company profits (GOP)
Nominal investment (CAPEX), $bn, year to Sep 2018	9.6	1.7	5.1	8.1% of non-farm private sector CAPEX
Nominal aggregate wages, $bn, year to Sep 2018	52.8	1.0	2.8	6.7% of total wages (COE)
Number of employed persons, '000, Nov 2018	916.3	-5.2	3.1	7.2% of total employed persons

ABS data sources: *Australian National Accounts; Australian Business Indicators; CAPEX; International Trade; Labour Force Quarterly Detail.*

For more detail about the Ai Group Australian PMI® visit: www.aigroup.com.au/policy-and-research/economics/

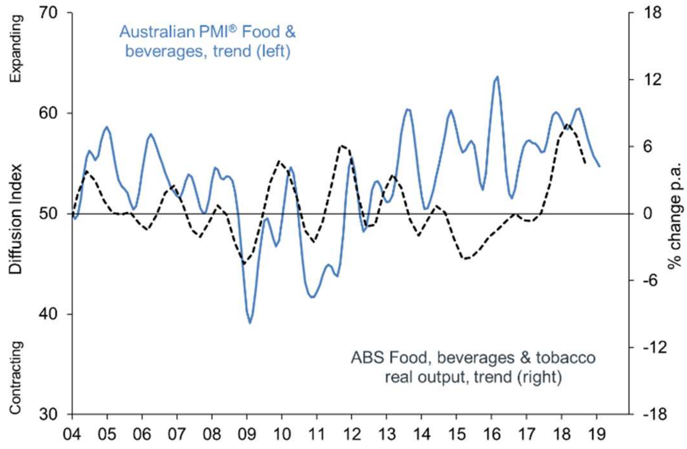
Australian PMI® sectors

Food & beverages

The food, beverages & tobacco sector produced $27.2bn in real value-added output in the year to Q3 2018 (26% of manufacturing real value-added output). It employed 251,800 people in November 2018 (27% of manufacturing employment).

The index for the largest manufacturing sector, food and beverages, fell by 0.5 points to 54.7 points in February (trend), indicating a further (but very slight) moderation in growth compared to 2018. Export sales continue to be the key driver of growth at present. Food and beverages exports bounced back in January after declining in December and November. Food product manufacturers are concerned about their energy costs and the effects of widespread ongoing drought on their raw material costs.

Food & beverages

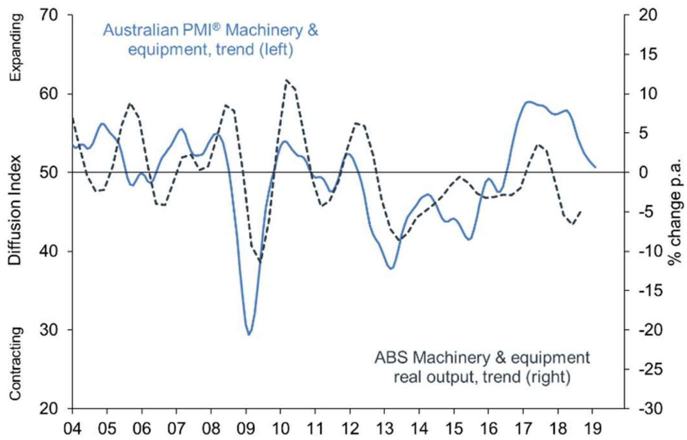


Machinery & equipment

The machinery & equipment sector produced $19.1bn in real value-added output in the year to Q3 2018 (18% of manufacturing real value-added output). It employed 190,600 people in November 2018 (20% of manufacturing employment).

The index for the machinery & equipment sector fell by 0.3 points to 50.7 in February, indicating slower conditions in recent months (trend). This sector makes equipment for mining, agriculture, other manufacturers, construction, healthcare and transport. Mining, defence and government transport contracts were strong sources of demand for machinery and equipment in February, but worsening drought conditions are detracting from agricultural and business sales in NSW, South Australia and elsewhere. Energy costs and specialist skills are major concerns for producers in this sector nationwide.

Machinery & equipment

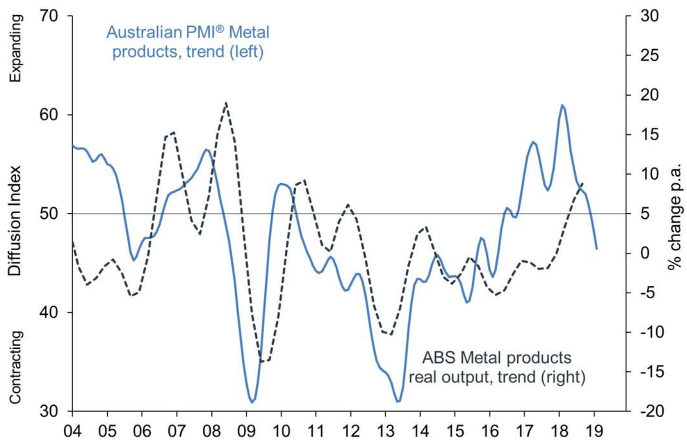


Metal products

The metal products sector produced $16.7bn in real value-added output in the year to Q3 2018 (16% of manufacturing real value-added output) and employed 133,100 people in November 2018 (14% of manufacturing employment).

The large metals sector contracted again and at a faster pace in February (down 1.6 points to 46.5 points, trend). The sector's strong recovery in 2018 appears to have come to an end in 2019, with respondents reporting that orders from residential construction customers are now slowing sharply.

Metals products



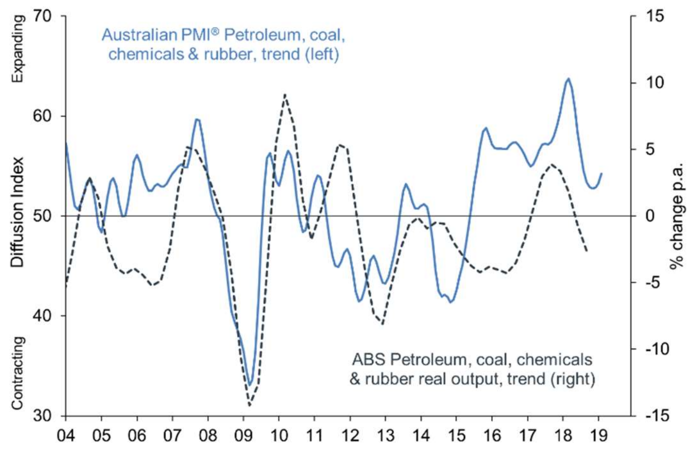
Australian PMI® sectors

Petroleum, coal, chemicals & rubber products

The 'petroleum, coal, chemicals & rubber' sector produced $19.3bn in real value-added output in the year to Q3 2018 (18% of manufacturing real value-added output). It employed 99,800 people in November 2018 (11% of manufacturing employment).

The chemicals sector's index rose by 1.0 points to 54.2 points in February (trend), indicating a mild improvement in the month. Even so, conditions have decelerated since early 2018, with weaker production and employment. A pickup in exports and new orders in February suggests activity might improve over the next few months. This diverse sector produces chemicals, fertilisers, toiletries, pharmaceuticals, health supplements, rubber items, as well as paints, adhesives and surface treatments.

Petroleum, coal, chemicals & rubber products

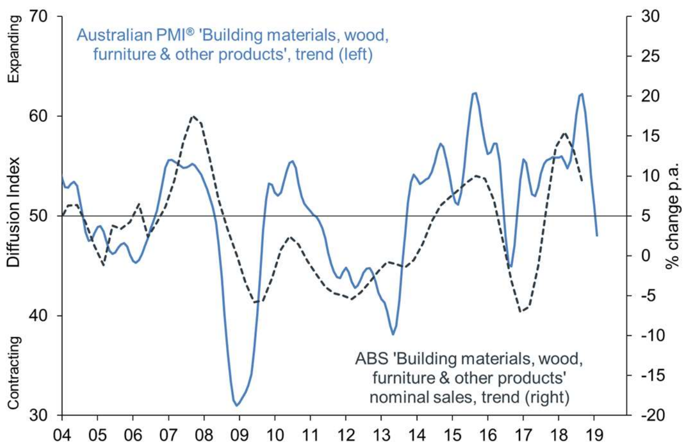


Building materials, wood, furniture & other manufacturing products

The building materials, wood, furniture & other manufacturing products sector employed 166,900 people in November 2018 (18% of manufacturing employment).

The index for the building materials, wood, furniture and other manufacturing products (mainly building-related products such as glass, bricks, cement, tiles, porcelain, timber, furniture, furnishings and other products) dropped by 2.9 points to 48.0 points in February (trend). Demand for building-related products and furnishings has dropped sharply compared to mid-2018. Recent falls in monthly building approvals are reflected in lower forward orders for this sector, suggesting a slower year ahead in 2019.

Building materials, wood, furniture & other manufacturing products

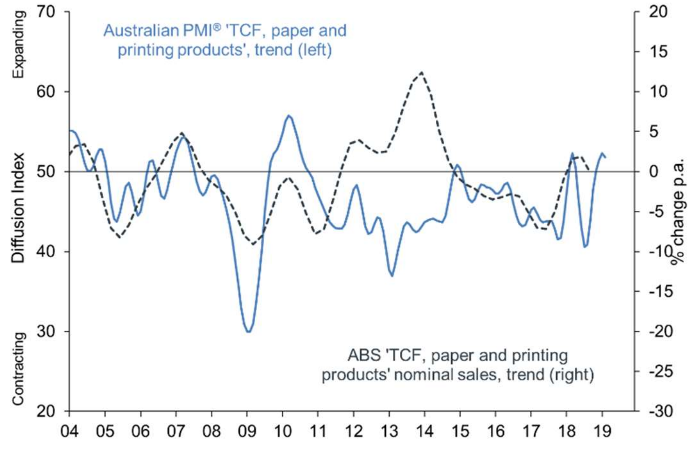


TCF, paper & printing products

The TCF, paper & printing products sector employed 91,600 people in November 2018 (10% of manufacturing employment).

This small but diverse sector makes textiles, clothing, footwear, paper, printed products and recorded media. Its index fell by 0.5 points to 51.8 points in February (trend). Mixed reports about sales and forward orders in February indicate another volatile year could lie ahead for this sector. Manufacturers in this sector have faced tough local and global trading conditions over an extended period, with intense competition, new technologies and falling consumer prices denting local activity.

TCF, paper & printing products



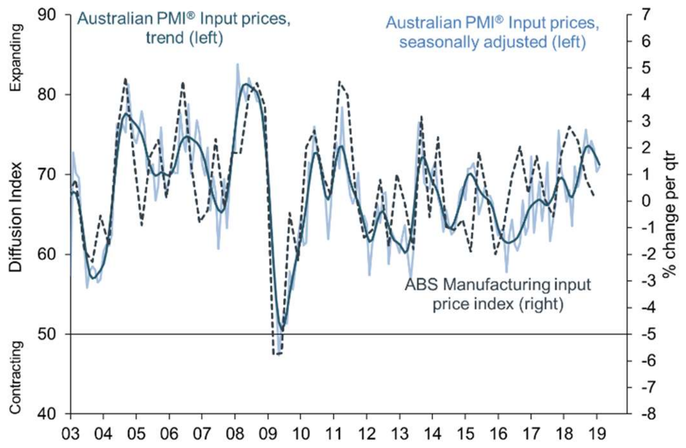
Australian PMI® prices and wages

Input prices

Manufacturing input prices rose by an average of 6.2% over the year in Q4 2018, according to the ABS Producer Price Index (PPI).

The input price index rose by 0.7 points to 71.0 points in February (seasonally adjusted). It remains relatively elevated compared to the long-run average for this data series (67.7 points). It has decelerated since reaching a recent peak of 75.6 points in September 2018 (seasonally adjusted revised data). Input prices remain elevated for energy-intensive sectors, reflecting their ongoing problems with high input costs for gas and electricity. Food and beverage manufacturers reported higher prices for some types of local raw materials due to ongoing drought.

Input prices

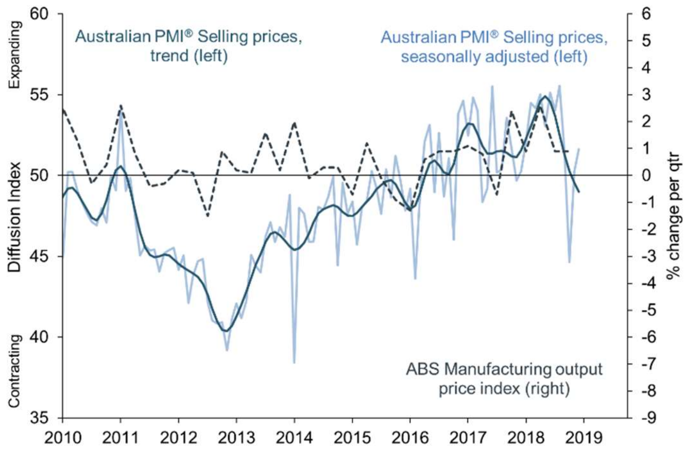


Selling prices

Manufacturing output prices rose by an average of 5.4% over the year in Q4 2018, according to the ABS Producer Price Index (PPI).

The manufacturing selling prices index rose by 1.4 points to 51.6 in February (seasonally adjusted). This indicates that prices for some manufactured goods are going up again, following price falls in December. This heightened pricing volatility appears to be related to swings in commodity prices (affecting metals manufacturers' pricing) and in food and beverage prices that have been affected by drought. Businesses' margins remain very tight this month, as wage and input costs continue to grow rise at a stronger pace than selling prices.

Selling prices

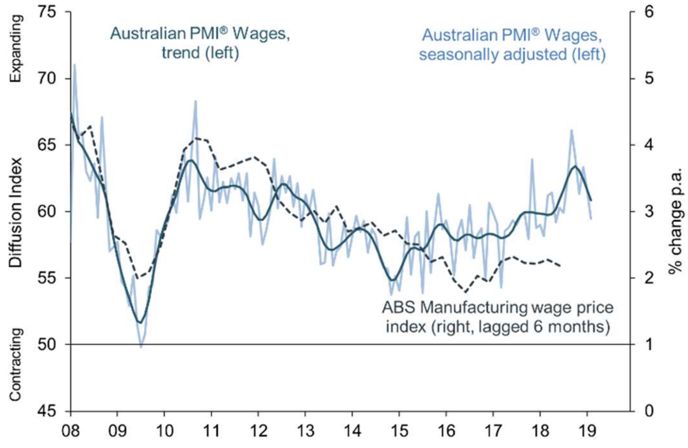


Average wages

Private sector wages across the manufacturing industry rose by an average of 2.2% over the year in Q4 2018, according to the ABS Wage Price Index (WPI).

The average wage index moderated by a further 2.3 points to 59.5 points (seasonally adjusted) in February. It This index is now sitting at around the long-run average for this series (59.2 points). This index has been trending lower since its recent peak in September 2018, indicating that fewer manufacturing businesses are now implementing wage rises, relative to Q3 of 2018.

Average wages



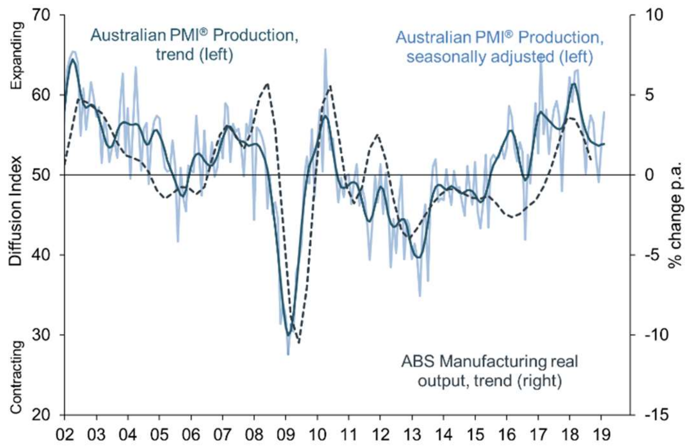
Australian PMI® activity

Production

The manufacturing industry produced $105.1bn in real value-added output in the year to Q3 2018 (5.8% of Gross Domestic Product, GDP). Manufacturers' value-added output fell by 0.1% through the quarter in Q3 2018 but remained 2.3% higher through the year.

The production index rose by a further 3.9 points to 57.9 points in February (seasonally adjusted), indicating a stronger recovery following a brief contraction in late 2018. Respondents reported strong activity in Victoria related to export orders, infrastructure and government transport equipment contracts. Production in Queensland was related to defence and mining maintenance projects. Food and beverages production remains expansionary nationally, despite drought-affected output in some states.

Production



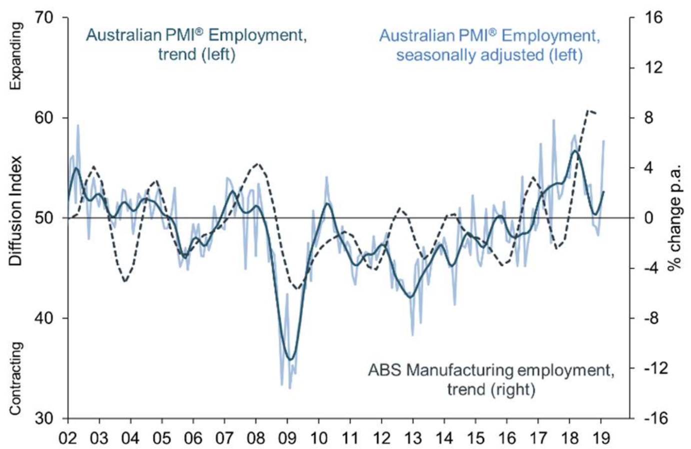
Employment

Manufacturing employed 916,300 people in November 2018 (7.2% of Australia's workforce, seasonally adjusted). Manufacturing employment grew by 3.1% p.a. to Nov. 2018 (seasonally adjusted) or 8.3% p.a. (trend).

The employment index jumped up by 6.6 points to 57.7 points in February indicating stronger growth again after a surprise fall in late 2018 (seasonally adjusted). This suggests businesses are now hiring again as they re-open for 2019 after their summer break.

Many respondents are concerned about skill shortages in specialist roles. Some are also concerned about attracting apprentices and trainees with suitable entry-level skills.

Employment

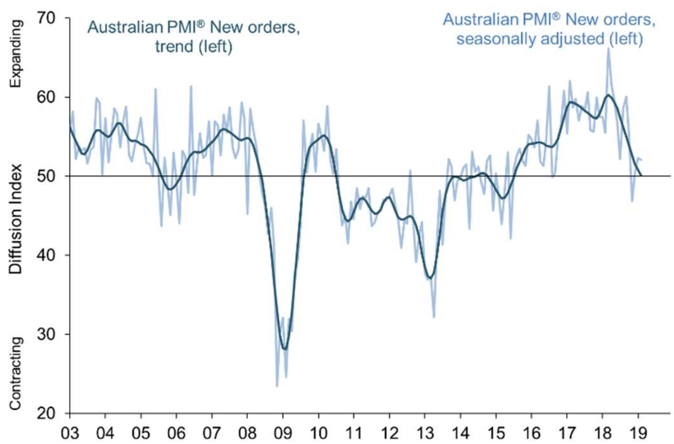


New orders

The new orders index dropped very slightly (-0.3 points) to 52.0 points in February, with orders recovering from their mild contraction in late 2018 (seasonally adjusted).

New orders remained expansionary in the food and beverages sector and recovered in the chemicals sector but were mixed elsewhere. Machinery and equipment respondents reported that local forward orders picked up from customers in mining, infrastructure and defence but were weaker in agriculture and residential construction. Some respondents in NSW blamed falls in their new orders on weak consumer confidence, the housing market downturn and forthcoming state and federal elections.

New orders



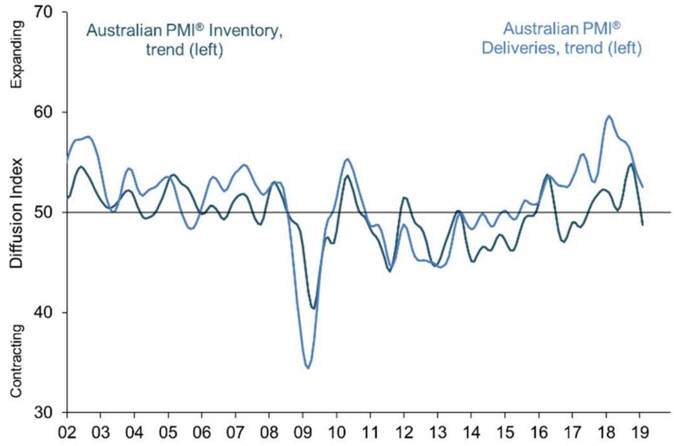
Australian PMI® activity

Supplier deliveries and finished stocks

The Australian PMI® deliveries index fell by 2.7 points to 52.9 points in February (seasonally adjusted), indicating a slower pace of orders flowing in from suppliers. This follows a lull in late 2018, with some disruptions to food-related supplies evident due to widespread drought and the recent floods in northern Queensland.

The Australian PMI® finished stocks (inventories) index dropped by a further 3.2 points to 44.5 points in February (seasonally adjusted), indicating that finished stocks are being depleted again this month, in order to meet demand. With slower forward orders coming in, producers might be reducing their stock levels in anticipation of a slower year.

Supplier deliveries and finished stocks



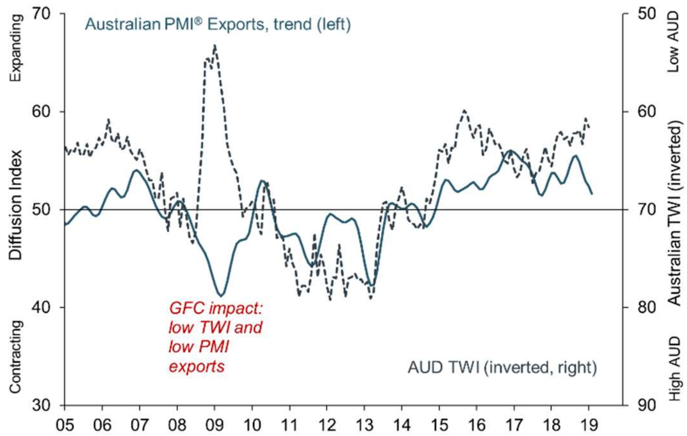
Exports

Nominal export earnings for Australian manufacturers were worth $116.7bn in the year to November 2018 (27.0% of total annual export earnings). Australia's exports of manufactured goods are mainly metal products, followed by food & beverages and machinery & equipment, according to ABS International Trade data.

The Australian PMI® exports index improved by a further 3.1 points to 55.2 points in February (seasonally adjusted), indicating a stronger recovery following a flat period in late 2018.

Export growth remains strongest in the large food & beverage sector in 2019 to date.

Exports



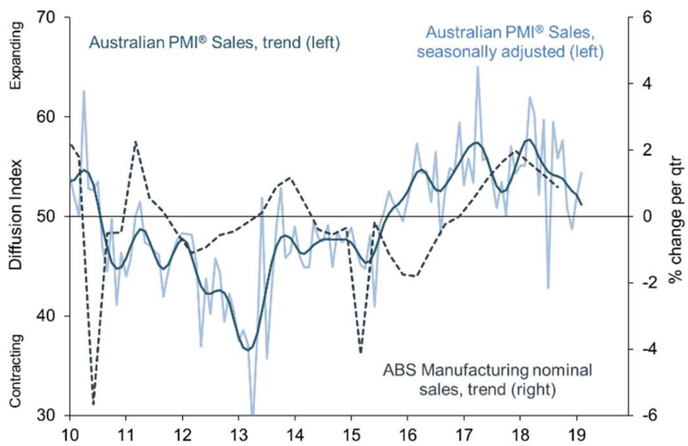
* AUD TWI = Australian dollar trade weighted index, monthly.

Sales

Australian manufacturers' nominal sales were worth $352bn in the year to Q3 2018. They grew by 1.0% through the quarter and 1.1% through the year to Q3 2018, according the latest ABS Business Indicators data.

The Australian PMI® sales index recovered by a further 2.5 points to 54.4 points in February, reversing a brief fall into contraction December (seasonally adjusted). Even after this recovery, the sales index continues to track lower after reaching a recent peak in Q1 of 2018. Sales reports are mixed across the sectors in 2019 to date, with stronger sales reported in Victoria than in the other states.

Sales



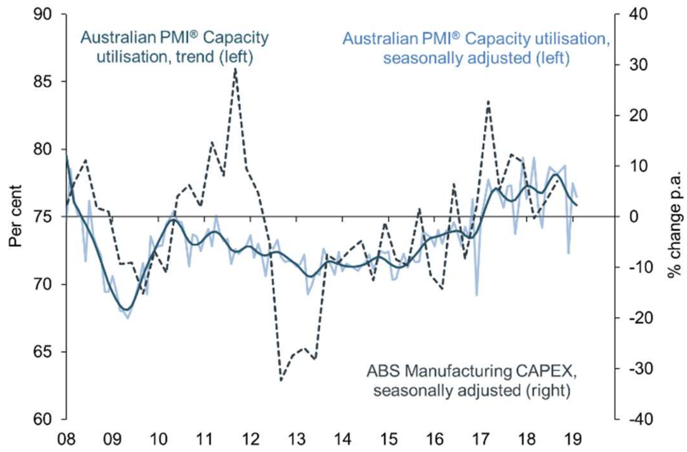
Australian PMI® activity

Capacity Utilisation

Australian manufacturers invested $9.6bn in capital expenditure (CAPEX) in the year to Q3 2018. Their CAPEX rose by 1.7% through the quarter and 5.1% through the year to Q3 2018, according to the latest ABS CAPEX data.

The Australian PMI® capacity utilisation indicator fell by 1.0 percentage points to 76.5% of available capacity in February, up from a recent low of 72.3 points in December (seasonally adjusted). This is well above this indicator's long-run average of 73.3% but it now appears to be trending lower. Higher rates of capacity utilization are generally associated with future rises in investment and/or employment, as businesses seek to expand their capacity in order to meet new orders and future demand.

Capacity Utilisation



For more information about the Ai Group Australian PMI®: www.aigroup.com.au/policy-and-research/economics/

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 and other manufacturing products including glass, ceramic, cement, lime, plaster, concrete, wood, logs, timber, furniture and 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 http://www.aigroup.com.au/policy-and-research/economics/economicindicators/.