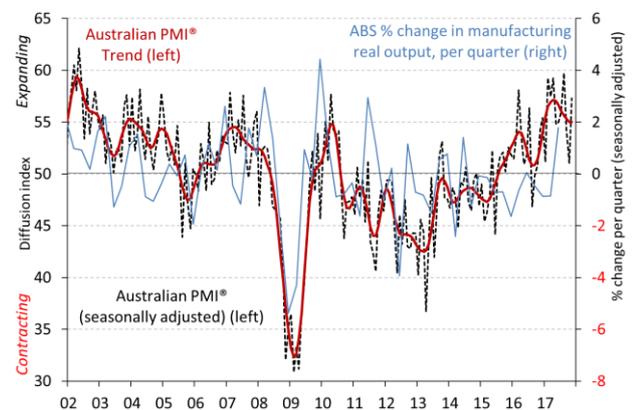


MANUFACTURING JUMPS AHEAD IN NOVEMBER

Australian PMI® Nov 2017: 57.3 ↑	US Flash PMI Nov 2017: 53.8 ↓	Eurozone Flash PMI Nov 2017: 60.0 ↑	UK IHS PMI Oct 2017: 56.3 ↑	Japan Flash PMI Nov 2017: 53.8 ↑	China Caixin PMI Oct 2017: 51.0 --
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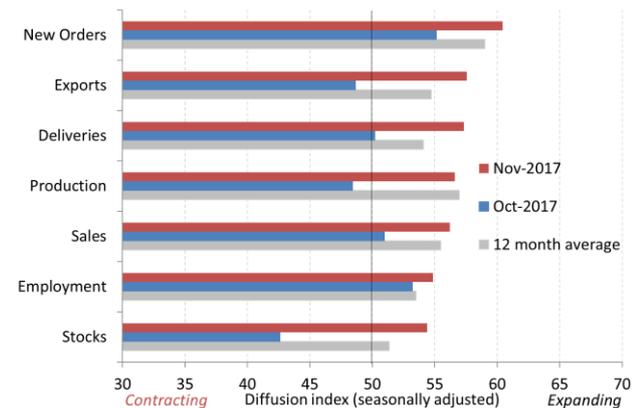
KEY FINDINGS

- The Australian Industry Group Australian Performance of Manufacturing Index (**Australian PMI®**) jumped 6.2 points higher to 57.3 points in November (seasonally adjusted). Results above 50 points indicate expansion with higher results indicating a stronger expansion.
- November marked a fourteenth month of expanding or stable conditions for the **Australian PMI®** and the longest run of expansion since 2005. November signaled a stronger pace of growth, after two months of relatively slower growth in September and October (coinciding with the final closure of automotive assembly and a slightly higher Australian dollar in Q3).
- The **Australian PMI®** has now been growing or stable in all but two months (Aug and Sep 2016) since July 2015. Historically, the longest run of continuously positive results in the **Australian PMI®** was from July 2001 to July 2005 inclusive (50 months).
- All seven activity sub-indexes in the **Australian PMI®** expanded in November. New orders and exports were especially strong in November, which bodes well for growth in 2018.
- Five of the eight sub-sectors in the **Australian PMI®** expanded in November (trend). The very large food and beverages sub-sector strengthened further, but non-metallic minerals weakened, following a strong period of demand for building products earlier in 2017.
- Input prices and wages both rose sharply in November, with manufacturers across several sub-sectors noting that soaring energy costs are damaging their profitability.
- Participants in the **Australian PMI®** said demand from residential construction was tailing off in November. Other participants noted stronger demand for equipment, machinery and other inputs or Government projects and procurement, agriculture, renewable energy projects and the local leisure market (e.g. caravans, trailers and camping equipment).



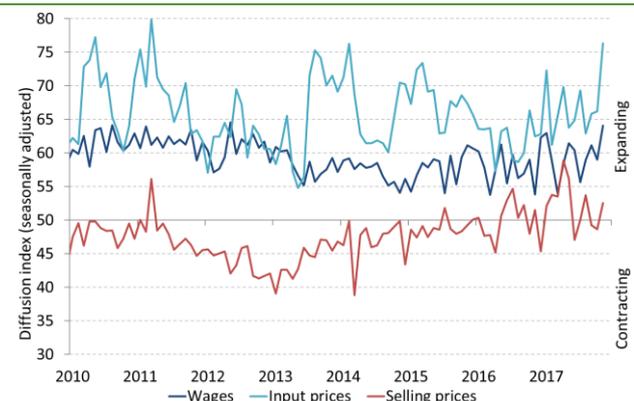
ACTIVITY SUB-INDEXES

- The production sub-index recovered 8.2 points to 56.6 points in November, reversing last month's plunge to 48.4 points and a mild contraction in October (seasonally adjusted).
- The new orders sub-index rose by 5.3 points to 60.4 points in November, indicating fourteen months of expansion and a faster pace of growth. New orders were strongest in food & beverages, petroleum, coal & chemicals and machinery & equipment in November.
- The sales sub-index improved by 5.2 points to 56.2 points in November, reflecting a pickup in local end-of-year sales.
- The exports sub-index recovered 8.9 points to 57.6 points in November, reversing October's mild contraction (48.7 points). This sub-index has been volatile of late, probably reflecting changes in export orders in response to the fluctuating Australian dollar.
- The employment sub-index strengthened a further 1.7 points to 54.9 points in November, indicating further recovery in manufacturing employment, mainly in food & beverages.
- Supplier deliveries jumped 7.2 points to 57.3 points, indicating a pickup in deliveries after two very stable months. This relates to increased production for end-of-year orders.
- Stocks (inventories) were rebuilt in November, with this sub-index rising 11.8 points to 57.3 points, after last month's sharp fall (42.6 points). This probably relates to stocks that will be needed to cover summer seasonal shut-downs and/or for forward orders.
- Capacity utilisation across manufacturing was broadly unchanged at 74.9% of available capacity in November, which is below the average of 76.1% over the past 12 months.



WAGES AND PRICES SUB-INDEXES

- The input prices sub-index spiked significantly higher, at 76.4 points, in November 2017. This was the highest monthly result for this sub-index since March 2011 (which was related to high commodity prices at that time). This latest input price spike is mainly due to rises in energy input costs, but might also reflect rising prices for imported inputs as the Australian dollar moved lower again in November. Several participants in the **Australian PMI®** stated that significantly higher energy costs are eating into their margins and straining profitability (which had begun to recover across manufacturing in 2017 but remains under pressure).
- The wages sub-index jumped to 64.1 points in November, its highest monthly result since May 2012. A handful of participants in the **Australian PMI®** noted difficulties in obtaining skilled metals tradespeople this month, but skill shortages do not appear to be widespread.
- The manufacturing selling price sub-index ticked up by 4 points to 52.2 points in November, signalling that some manufacturers are passing on these cost increases to their customers. This comes after strong downward pressure on prices in the previous two months.

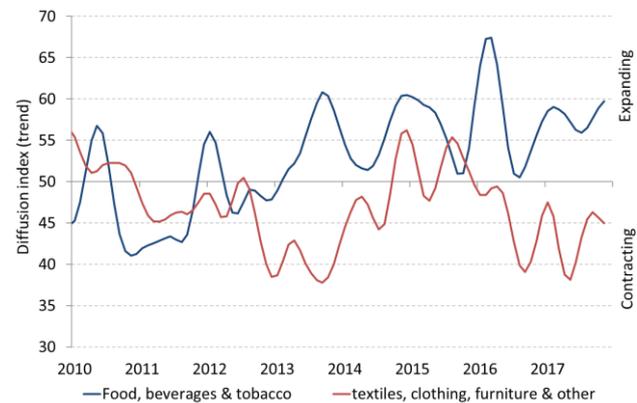


FOOD & BEVERAGES*

- The index for the largest manufacturing sub-sector, food and beverages, rose to 59.7 points in November (trend) its highest monthly result since April 2016. Production, new orders and exports were especially strong in this sub-sector this month. Agricultural supplier deliveries were also strong, with good harvests and livestock numbers providing bigger quantities to food processors. Rising energy and gas price are eating into margins in this sub-sector however, and some respondents reported price rises for their customers as a result of these input cost pressures.

TEXTILES, CLOTHING, FURNITURE & OTHER*

- The small, diverse textiles, clothing, furniture and other manufacturing sub-sector remained in contraction at 45.0 points in November. This sub-sector has contracted in every month since November 2015 (trend). Bright spots had been evident in furniture and related homewares manufacturing due to demand flow-ons from residential housing construction, but these might be fading also as residential construction comes off its peak.

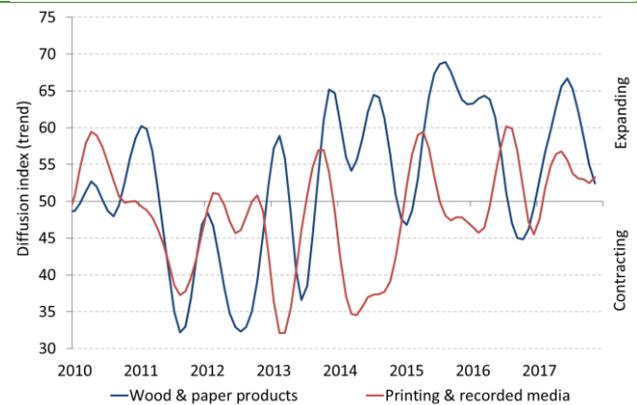


WOOD & PAPER*

- The small wood and paper products sub-sector's index expanded at a slower pace in November (52.5 points), after relatively strong results over the past few months (trend). Manufacturers in this sub-sector are benefitting from growth in food processing (generating excellent growth in food packaging) but orders from residential building appear to be tailing off. New orders remained positive in November, suggesting further modest growth in 2018.

PRINTING & RECORDED MEDIA*

- The recovery in the very small printing and recorded media sub-sector continued at about the same rate in November, with its index rising slightly to 53.2 points (trend). This sub-sector has expanded in every month since January 2017 (trend) after a protracted period of technology-related contraction. In 2017 steady demand has been coming through to printing and packaging services from the food, beverages and groceries sectors.

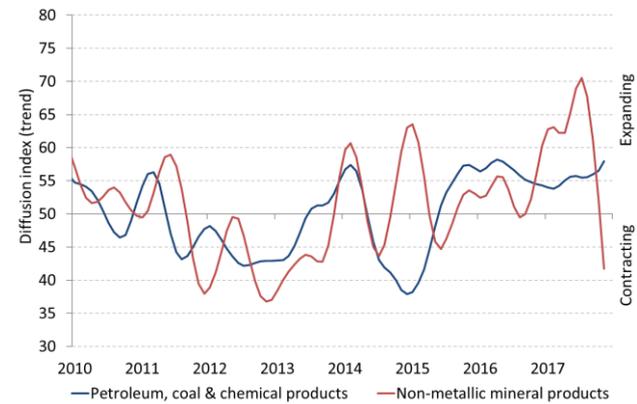


PETROLEUM, COAL & CHEMICALS*

- Growth in the large petroleum, coal, chemicals and rubber products sub-sector accelerated a touch to 58.0 points in November (trend). This sub-sector has been growing continuously and fairly steadily since mid-2015. This extremely diverse sub-sector includes fertilisers, pharmaceuticals, toiletries and health supplements, as well as construction-related products such as paints, adhesives and surface treatments. Exports and new orders were stronger in November, which might reflect a beneficial boost from the lower Australian dollar in recent months.

NON-METALLIC MINERALS*

- The non-metallic mineral products sub-sector's index (mainly building materials) plunged into contraction, at 41.7 points in November, after expanding strongly through much of 2017. This decline is in line with lower forward orders for this sub-sector in recent months and was not unexpected. Demand from residential construction has slowed from recent peaks, although Government and other construction projects are filling some of the gaps.

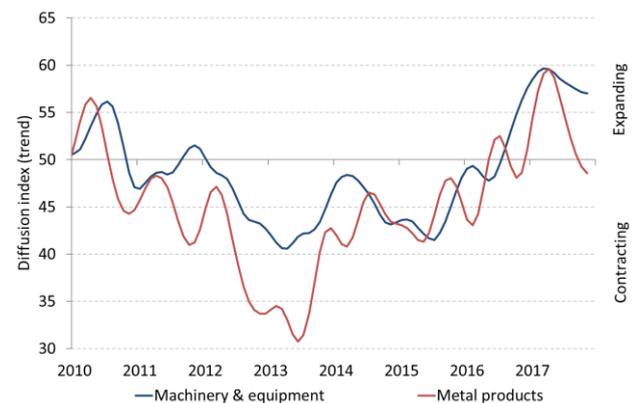


METAL PRODUCTS*

- The large metal products sub-sector's index fell to 48.6 points in November, indicating a second month of contraction after a strong recovery earlier in 2017 (trend). This sub-sector's recent recovery is now cooling, but it is still benefiting from engineering activity, as well as mining, defence, utilities and agricultural projects. Energy costs are an urgent concern for this sub-sector. Some participants reported shortages of skilled metal trades people in November, which might be putting upward pressure on wages for skilled workers.

MACHINERY & EQUIPMENT*

- The large machinery and equipment sub-sector's index slowed to 57.0 points in November, indicating a slower but relatively healthy rate of recovery. This recovery is occurring for businesses outside of automotive assembly, which is included in this sub-sector but has withdrawn production from Australia as of October. Non-automotive respondents from this sub-sector in the **Australian PMI**[®] noted increased demand for specialist equipment from food processing, agriculture, mining, transport, utilities and construction customers. Energy costs are their main concern at present.



Seasonally adjusted	Index this month	Change from last month	12 month average		Index this month	Change from last month	12 month average
Australian PMI [®]	57.3	6.2	55.9	Exports	57.6	8.9	54.7
Production	56.6	8.2	57.0	Sales	56.2	5.2	55.5
New Orders	60.4	5.3	59.0	Input Prices	76.4	10.2	66.7
Employment	54.9	1.7	53.5	Selling Prices	52.6	4.0	51.8
Inventories	54.4	11.8	51.3	Average Wages	64.1	5.1	59.8
Supplier Deliveries	57.3	7.1	54.1	Capacity Utilisation (%)	74.9	0.2	76.1

* All sub-sector indexes in the **Australian PMI**[®] are reported in trend terms (Henderson 13-month filter) so as to better identify the trends in these volatile monthly data.

What is the Australian PMI? The Australian Industry Group **Australian Performance of Manufacturing Index (Australian PMI)**[®] is a seasonally adjusted national composite index based on the diffusion index 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. Survey results are based on a rotating sample of around 200 manufacturing companies each month. Seasonal adjustment and trend calculations follow standard statistical methodology. The current industry classifications commence from May 2009, based on the ANZSIC 2006 coding system and ABS 2011-12 industry weights.

For further economic analysis and information from the Australian Industry Group, visit <http://www.aigroup.com.au/economics>.

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