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Performance of manufacturing industry: a quick guide

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As with many other Western countries, the relative importance of the manufacturing industry in Australia has been declining. Its contribution to total Australian output is less than half what it was four decades ago. This Quick Guide, which draws on the <u>Manufacturing performance report</u>, a monthly report produced by the Department of Industry, looks at a number of key economic indicators to provide an overview of what has been happening in the industry.

Industry output

As illustrated in Graph 1, the contribution of the manufacturing industry to the overall size of the Australian economy has been falling over many years. In 2013–14 its share of gross domestic product (GDP) was 6.5 per cent, which is less than half what it was four decades earlier. Moreover, the decline in the manufacturing industry shows no sign of abating, with the industry's share of GDP falling at a more or less constant rate over the entire period.

Graph 1: Manufacturing industry's share of GDP



Source: Australian Bureau of Statistics (ABS), Australian national accounts: national income expenditure and product, cat. no. 5206.0.

Profitability

A measure of the underlying profitability of manufacturing businesses can be obtained from the gross operating profit margin, which expresses the gross operating profit of manufacturing businesses as a percentage of the income from the sale of goods and services by the sector.

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As illustrated in Graph 2, since at least 2001–02, the profitability of manufacturing businesses has been consistently lower than that of all businesses. Moreover, while the gross operating profit margin for all businesses has increased from 10.9 to 12.7 per cent between 2001–02 and 2013–14, that of manufacturing businesses has fallen from 9.5 to 7.8 per cent. This has resulted in a widening gap in profitability between manufacturing and all businesses generally.



Graph 2: Gross operating profit margin-manufacturing

Investment expenditure

After peaking at \$14.4 billion in 2005–06, real (that is, after adjustment for inflation) investment in the manufacturing industry remained high at more than \$11 billion per annum for the next six years (see Graph 3). Between 2011–12 and 2012–13, however, real investment fell from \$13.2 billion to \$9.5 billion—the largest annual fall ever recorded. Real investment fell again in 2013–14 to \$8.8 billion, its lowest level in 12 years.

Graph 3: Real investment expenditure-manufacturing



Source: ABS, Private new capital expenditure and expected expenditure, Australia, cat. no. 5625.0.

Labour productivity

Labour productivity of the manufacturing industry is measured as real gross value added per hour worked in the industry. It reflects not only the contribution of labour to changes in production per hour worked, but also the contribution of capital and other factors such as managerial efficiency, economies of scale and cyclical factors.

Source: ABS, Business indicators, Australia, cat. no. 5676.0.

Although it levelled out between 2011–12 and 2012–13, labour productivity in manufacturing has been trending upwards over several years, as illustrated in Graph 4. Over the past 15 years, labour productivity in manufacturing has been growing at an annual average rate of 1.8 per cent, which is more than the corresponding rate for all industries of 1.5 per cent.



Graph 4: Labour productivity-manufacturing

Source: ABS, Australian system of national accounts, cat. no. 5204.0.

Employment

In 2013–14 there was an average of 929,600 persons employed in the manufacturing industry, the lowest number ever recorded in the industry. As with its share of GDP, the manufacturing industry's share of total employment has been falling over many years—from over 15 per cent in the latter half of the 1980s to 8.1 per cent in2013–14 (see Graph 5).

Graph 5: Employment-manufacturing



Source: ABS, Labour force, Australia, detailed, quarterly, cat. no. 6291.0.55.003.

Unemployment

Persons are defined as being unemployed from manufacturing industry if they were actively looking for work and they had worked for two weeks or more in the past two years in the manufacturing sector. If we call this number A, and the number of persons employed in the manufacturing industry B, then the unemployment rate of the manufacturing industry is A/(A+B)*100. As illustrated in Graph 6, for many years, the unemployment rate for the manufacturing industry has been higher than the corresponding rate for all industries. In 2013–14, the manufacturing industry had an unemployment rate of 4.5 per cent—the highest it has been in four years—and compares with a rate for all industries at this time of 3.6 per cent. (Note that the unemployment rate for all industries differs from the national unemployment rate, as the former excludes persons looking for work who had not previously been in a job.)



Graph 6: Unemployment rate-manufacturing

Source: ABS, Labour force, Australia, detailed, quarterly, cat. no. 6291.0.55.003.

Producer prices

The long-term trend has been for the price paid for inputs to the manufacturing industry to rise faster than the price received from outputs of the manufacturing industry. Over the 10 years to 2013—14, the annual average rate of growth of the input to manufacturing index was 4.2 per cent, while for the output of manufacturing index it was 3.0 per cent (see Graph 7). The combination of strong growth in input prices and weaker growth in output prices has resulted in a narrowing of profit margins, as indicated by the deterioration in the gross operating profit margin.





Source: ABS, Producer price indexes, Australia, cat. no. 6427.0.

Merchandise trade

Manufactured goods make up the bulk of Australia's imports, accounting for 87.2 per cent of the total value of merchandise imports in 2013–14. This is down slightly on the corresponding figure for 2005–06, which was

90.8 per cent. Manufactured goods as a share of total merchandise exports, however, have declined significantly, falling from 49.1 per cent in 2005–06 to 33.1 per cent in 2013–14 (see Graph 8).

Graph 8: Manufacturing industry's share of merchandise trade



Source: ABS, International trade in goods and services, Australia, cat. no. 5368.0.

Performance of manufacturing index

The performance of manufacturing index is compiled by the Australian Industry Group through surveys of firms conducted on a representative sample basis. An index value above 50 indicates that activity is expanding, while a reading below 50 indicates that activity is declining. The distance of the index above or below 50 indicates the strength of the increase or decrease.

As illustrated in Graph 9, the index shows that manufacturing activity has been contracting for six of the last 10 years, with the biggest contraction occurring in 2008–09 in response to the Global Financial Crisis. The manufacturing industry has contracted continually over the last four years, though the rate of contraction slowed somewhat in 2013–14.



Graph 9: Performance of manufacturing index

Source: Australian Industry Group, Australian performance of manufacturing index.

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