

6.1 MANUFACTURING

OVERVIEW

The manufacturing sector expanded by 5.1 per cent year-on-year in the fourth quarter, driven largely by output expansions in the biomedical manufacturing, transport engineering and electronics clusters.

For the whole of 2018, the manufacturing sector grew by 7.2 per cent, extending the 10 per cent expansion in the previous year. Growth was supported by output increases in all clusters, with the electronics, transport engineering and biomedical manufacturing clusters contributing the most to growth.

OVERALL MANUFACTURING PERFORMANCE

In the fourth quarter, manufacturing output increased by 5.1 per cent year-on-year, underpinned by output expansions across all clusters, with the exception of the precision engineering and general manufacturing clusters (Exhibit 6.1).

For the whole of 2018, the manufacturing sector expanded by 7.2 per cent, extending the robust growth of 10 per cent in 2017. The healthy performance of the sector was driven mainly by the electronics, transport engineering and biomedical manufacturing clusters, which collectively accounted for around 86 per cent of the sector's overall expansion in 2018 (Exhibit 6.2).

Exhibit 6.1: Manufacturing Growth Rates

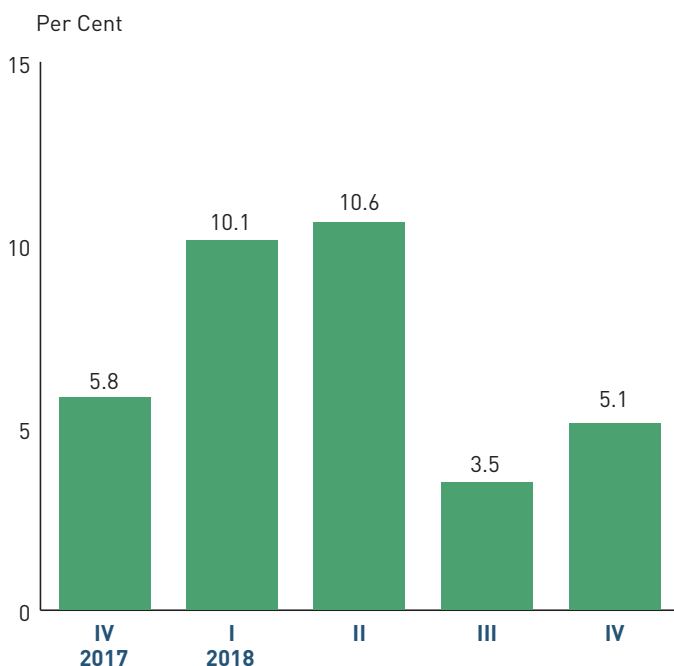
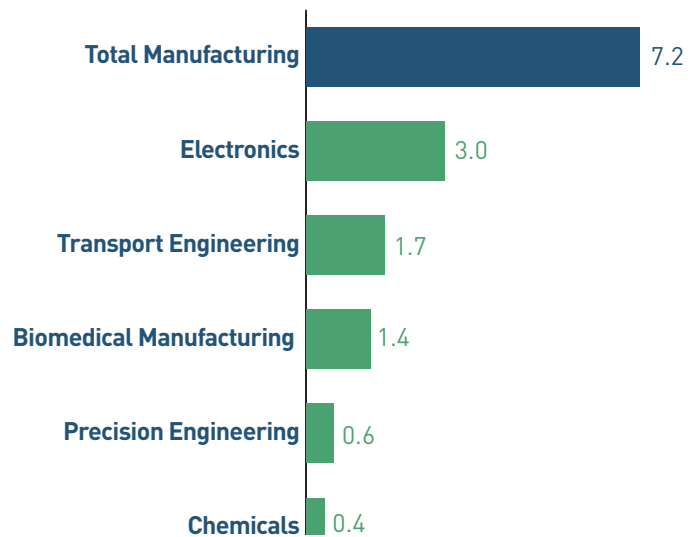


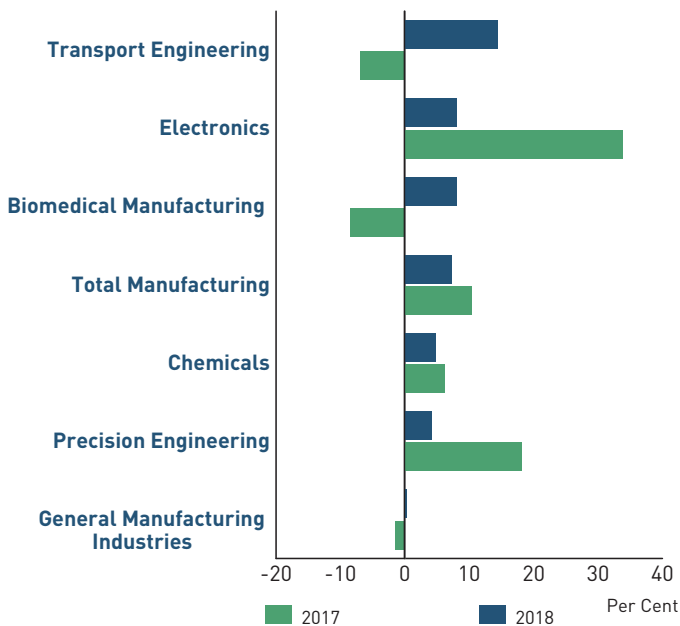
Exhibit 6.2: Percentage-Point Contribution to Manufacturing Sector's Growth in 2018



Performance Of Clusters

The electronics cluster grew by 1.1 per cent year-on-year in the fourth quarter, supported by the semiconductors (3.5 per cent), infocomms & consumer electronics (9.4 per cent) and other electronic modules & components (4.9 per cent) segments. By contrast, the computer peripherals and data storage segments registered output declines. For the full year, the electronics cluster expanded by 8.1 per cent on the back of healthy output growth in the semiconductors segment, which can in turn be attributed to buoyant global semiconductor demand (Exhibit 6.3).

Exhibit 6.3: Manufacturing Clusters' Growth



Output of the transport engineering cluster rose by 22 per cent year-on-year in the fourth quarter, with all segments recording expansions. In particular, the marine & offshore engineering (M&OE) segment grew by 36 per cent, supported by a higher level of work done in offshore projects, as well as a low base in the same period a year ago. At the same time, the aerospace segment expanded by 13 per cent on account of more repair and maintenance jobs from commercial airlines. For the whole of 2018, the transport engineering cluster grew by 14 per cent, supported by robust output expansions in both the M&OE and aerospace segments.

Output of the biomedical manufacturing cluster increased by 19 per cent year-on-year in the fourth quarter, supported by growth in both the pharmaceuticals and medical technology segments. In particular, the pharmaceuticals segment expanded by 24 per cent due to a higher level of production of active pharmaceutical ingredients (APIs) and biological products, while the medical technology segment grew by 7.5 per cent as a result of higher export demand for medical instruments. For the full year, the output of the biomedical manufacturing cluster rose by 8.1 per cent, supported by strong output expansions in both segments.

The precision engineering cluster contracted by 5.2 per cent year-on-year in the fourth quarter, due to output declines in both the precision modules & components (PMC) and machinery & systems (M&S) segments. The former shrank by 8.1 per cent due to a fall in the output of optical instruments, metal precision components, as well as dies, moulds, tools, jigs & fixtures. The latter recorded a 3.1 per cent decline in output on account of a lower production of industrial process control and semiconductor manufacturing equipment. For the whole of 2018, the precision engineering cluster expanded by 4.1 per cent, with both segments contributing positively to growth.

The chemicals cluster posted slight growth of 0.3 per cent year-on-year in the fourth quarter. Growth was supported by the other chemicals and specialties segments, which grew by 10 per cent and 5.1 per cent respectively. Specifically, the other chemicals segment expanded on the back of a higher level of production of fragrances, while the specialties segment produced more mineral oil additives and industrial gases. On the other hand, the petrochemicals and petroleum segments contracted by 12 per cent and 4.9 per cent respectively, due to plant maintenance shutdowns. For 2018 as a whole, the chemicals cluster grew by 4.8 per cent, with output expansions in all segments except for the petroleum segment.

Output of the general manufacturing cluster fell by 1.1 per cent year-on-year in the fourth quarter. The performance of the cluster was weighed down by the printing and food, beverages & tobacco (FBT) segments, which recorded a 7.9 per cent and 1.5 per cent decline in output respectively. On the other hand, the miscellaneous industries segment grew by 1.5 per cent. For the whole of 2018, the general manufacturing cluster expanded slightly by 0.3 per cent, as output expansions in the FBT segment outweighed output declines in the printing and miscellaneous industries segments.