

6.1

MANUFACTURING

OVERVIEW

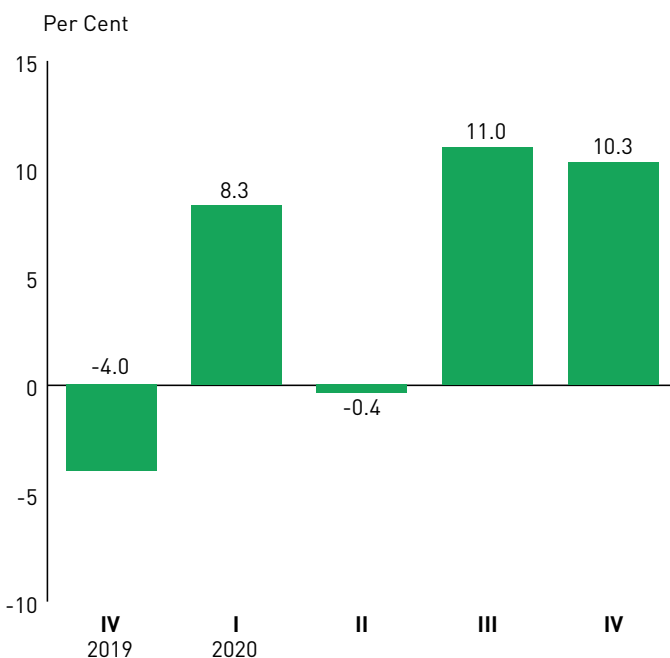
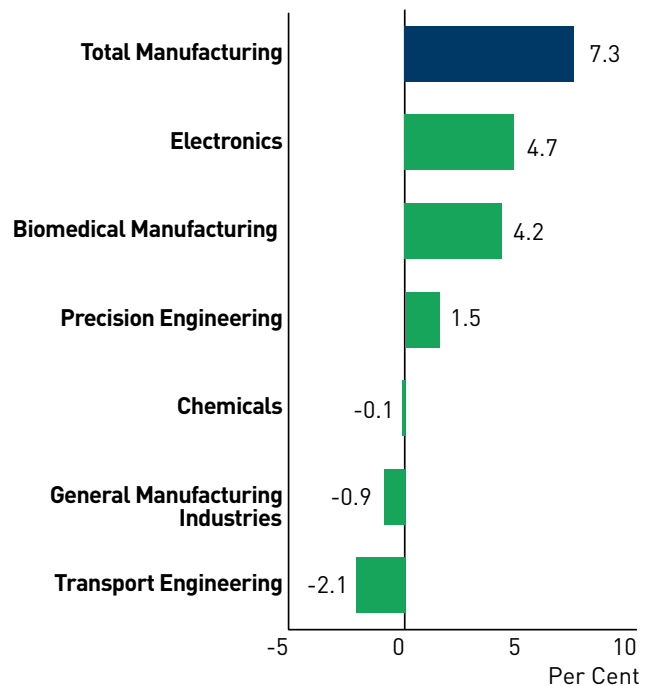
The manufacturing sector expanded by 10 per cent year-on-year in the fourth quarter of 2020, extending the 11 per cent growth in the preceding quarter. Growth in the sector was supported by output expansions in the electronics, biomedical manufacturing, precision engineering and chemicals clusters.

For the whole of 2020, the manufacturing sector grew by 7.3 per cent, reversing the 1.5 per cent decline in the previous year, on the back of output growth in the electronics, biomedical manufacturing and precision engineering clusters.

OVERALL MANUFACTURING PERFORMANCE

In the fourth quarter, manufacturing output grew by 10 per cent on account of output expansions in the electronics, biomedical manufacturing, precision engineering and chemicals clusters. On the other hand, output declined in the transport engineering and general manufacturing clusters (Exhibit 6.1).

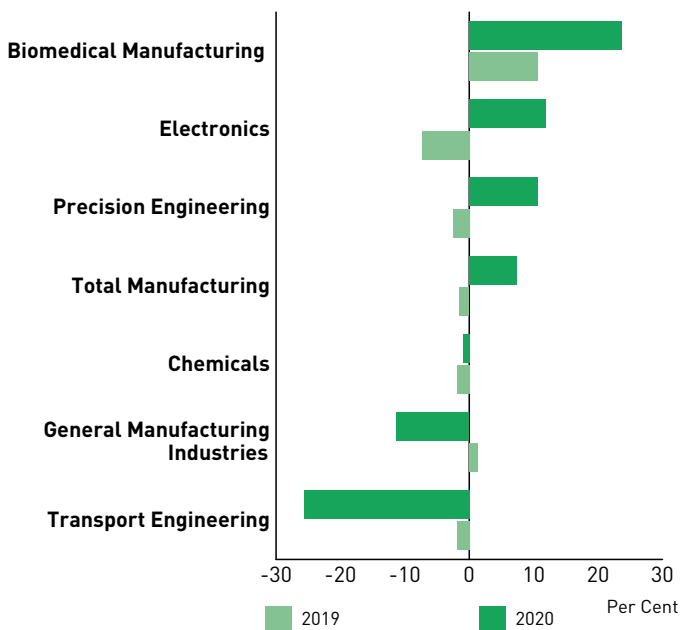
For the whole of 2020, the manufacturing sector expanded by 7.3 per cent, a rebound from the 1.5 per cent decline in 2019. The strong performance of the sector was driven by output growth in the electronics, biomedical manufacturing and precision engineering clusters (Exhibit 6.2).

Exhibit 6.1: Manufacturing Growth Rates**Exhibit 6.2: Percentage-Point Contribution to Manufacturing Sector's Growth in 2020**

PERFORMANCE OF CLUSTERS

The electronics cluster grew by 23 per cent in the fourth quarter, bolstered by output expansions in the semiconductors (26 per cent), computer peripherals & data storage (11 per cent) and other electronic modules & components (1.8 per cent) segments. In particular, the semiconductors segment was supported by strong demand for semiconductor chips from 5G markets. On the other hand, the infocomms & consumer electronics segment contracted by 6.0 per cent. For 2020 as a whole, the electronics cluster expanded by 12 per cent on account of robust global semiconductor demand (Exhibit 6.3).

Exhibit 6.3: Manufacturing Clusters' Growth



Output in the biomedical manufacturing cluster rose by 13 per cent in the fourth quarter, supported by growth in both the pharmaceuticals and medical technology segments. The pharmaceuticals segment expanded by 11 per cent due to a higher level of production of active pharmaceutical ingredients (APIs) and biological products. Similarly, output in the medical technology segment increased by 16 per cent on the back of higher export demand for medical devices. For the full year, output in the biomedical manufacturing cluster rose by 24 per cent, supported by expansions in both segments.

The precision engineering cluster expanded by 9.7 per cent in the fourth quarter, supported by output expansions in both the machinery & systems (M&S) and precision modules & components (PMC) segments. In particular, the M&S segment grew by 13 per cent on account of a higher level of production of semiconductor equipment. Meanwhile, the PMC segment rose by 1.8 per cent on the back of output increases for optical instruments and metal precision components. For the whole of 2020, the precision engineering cluster grew by 11 per cent.

Growth in the chemicals cluster came in at 7.3 per cent in the fourth quarter, supported by output expansions in all segments except for the petroleum segment. The petrochemicals segment expanded by 15 per cent from a low base, due to plant maintenance shutdowns in the same period a year ago. Likewise, output in the specialty chemicals segment increased by 12 per cent on the back of a rise in the output of industrial gases and mineral oil additives. At the same time, the other chemicals segment grew by 0.5 per cent, supported by a higher level of production of fragrances. Conversely, the petroleum segment contracted by 31 per cent as demand for transportation fuel was weak amidst the international and domestic travel restrictions caused by the COVID-19 pandemic in economies around the world. For 2020 as a whole, the chemicals cluster contracted by 1.0 per cent.

Output in the general manufacturing cluster fell by 6.9 per cent in the fourth quarter, with all segments recording declines. Specifically, the miscellaneous industries segment contracted by 6.9 per cent due to the weak demand for construction-related products, while the food, beverages & tobacco segment recorded a 5.8 per cent contraction on the back of a fall in the production of beverage products and milk powder. Meanwhile, output in the printing segment fell by 12 per cent. For the whole of 2020, the general manufacturing cluster contracted by 11 per cent.

Output in the transport engineering cluster declined by 30 per cent in the fourth quarter, weighed down by the aerospace and marine & offshore engineering (M&OE) segments. In particular, output in the aerospace segment plunged by 39 per cent due to a fall in repair and maintenance work from commercial airlines amidst global travel restrictions and weak air travel demand. Likewise, output in the M&OE segment slumped by 33 per cent as work in shipyards was weighed down by the requirement to implement safe management measures as well as weak order books. By contrast, the land transport segment expanded by 15 per cent on account of an increase in the output of parts and accessories for motor vehicles. For the whole of 2020, the transport engineering cluster shrank by 26 per cent.