

Box 3**Industrial production in the euro area**

Output developments in the services and industrial sectors of the euro area have been divergent during the past year. Whereas activity in the services sector has remained comparatively robust, industrial production has slowed down in connection with the adverse impact of the weaker external environment. Such a divergence between sectors of the economy is not unusual as the main factors determining sectoral developments may differ. In particular, industrial production is more export-oriented, and thus more sensitive to global developments. Against this background, industrial production also tends to be more cyclically sensitive than output in services and total GDP. Although it is estimated to account for no more than around a third of overall activity in the euro area, it is generally responsible for a large part of the cyclical variation in total output. Industrial production is thus a particularly important short-term economic indicator (see also the article in the April issue of the ECB Monthly Bulletin entitled "The role of short-term economic indicators in the analysis of price developments in the euro area"). Therefore, it is worth looking at its recent development in more detail.

Industrial production data are published by Eurostat on a monthly basis for all Member States. Although the data are not fully harmonised, they are, nevertheless, useful for analytical purposes. Improvements are expected in the context of the Council Regulation (EC) No. 1165/98 concerning short-term statistics, in particular in terms of the timeliness and comparability of the underlying national data.

Measured on the basis of the 1995 value added weights, manufacturing is estimated to account for around 75% of total euro area industrial production, with the remainder comprising construction (14½%), electricity, gas and water supply (8½%) and mining and quarrying (2%). In the ECB Monthly Bulletin reference is made to,

Sectoral breakdown of manufacturing in the euro area

(annual percentage changes, unless otherwise indicated)

	weight (%) ¹⁾	1997	1998	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
				Apr.	May	June	Apr.	May	June	Feb.	Mar.	Apr.	May
					month-on-month			3-month moving averages					
Manufacturing	100.0	5.0	4.5	-0.9	-0.9	0.4	-0.8	0.6	0.3	0.1	-0.1	0.4	0.0
Food, beverages, tobacco	11.1	3.2	1.2	0.7	1.0	2.4	-1.1	0.5	0.5	1.1	0.4	0.9	0.4
Textiles and textile products	4.9	1.4	-1.6	-7.0	-8.5	-5.6	-1.2	-0.5	0.1	-0.2	-0.5	-0.7	-2.0
Leather and leather products	1.0	0.5	-4.3	-3.8	-5.0	-6.8	-1.3	0.3	-4.5	1.3	-0.1	-0.3	-2.6
Wood and wood products	1.9	4.4	4.1	0.9	3.1	3.8	2.2	1.3	-0.4	1.3	0.2	1.4	2.2
Pulp, paper, publishing	8.3	7.1	1.7	0.3	0.8	3.3	-0.2	1.0	-0.1	0.9	0.8	0.8	0.6
Coke, refined petroleum products, nuclear fuel	1.3	2.3	2.8	-7.5	-5.2	-6.4	-1.0	0.5	-1.1	-3.6	-2.6	-1.7	-1.3
Chemicals, chemical products, man-made fibres	11.6	6.8	2.5	0.5	0.9	0.8	-1.7	0.4	0.4	1.0	1.9	2.8	1.0
Rubber and plastic products	4.6	6.3	4.8	1.1	1.2	1.4	-1.3	2.3	-0.1	0.1	0.1	1.5	0.9
Non-metallic mineral products	5.1	2.2	2.5	-0.1	-1.4	-0.2	-0.6	-1.1	0.5	3.2	0.9	0.0	-1.4
Basic metals, metal products	12.9	5.9	4.8	-4.3	-5.0	-2.8	-0.7	0.5	0.4	-1.2	-0.3	0.4	0.1
Machinery and equipment	11.1	3.7	3.2	-3.6	-3.5	-2.1	0.0	-0.6	-0.1	-1.0	-1.1	-1.1	-0.9
Electrical, optical equipment	12.5	6.7	8.8	3.7	.	.	-0.6	.	.	0.9	0.1	.	.
Transport equipment	10.8	7.7	10.5	1.9	1.9	3.2	-0.3	1.4	0.9	-1.7	-0.4	0.2	1.0
Other manufacturing	3.0	0.1	4.7	-2.7	-0.2	0.6	-1.5	1.9	-0.1	-0.1	-1.0	0.0	-0.3

Sources: Eurostat and ECB calculations.

Note: Annual percentage changes are calculated by using data adjusted for variations in the number of working days; percentage changes on the previous month and three-month centred moving averages against the corresponding average three months earlier are calculated using seasonally and working day adjusted data.

1) Weights are based on value added in 1995.

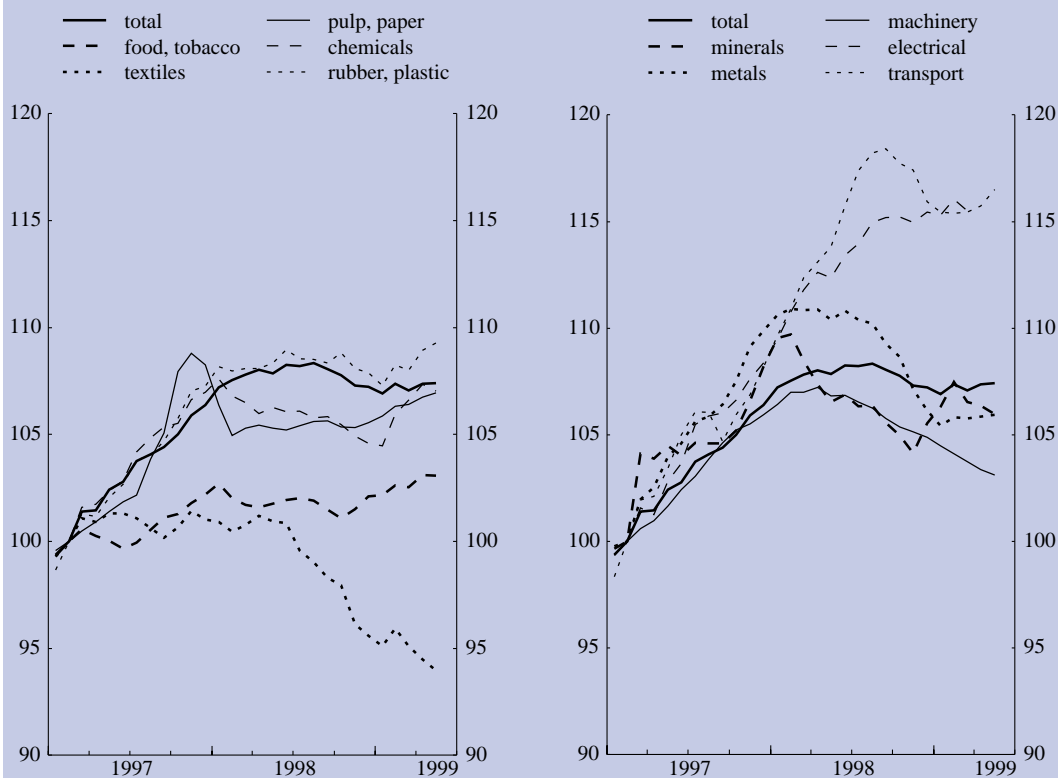
inter alia, the manufacturing sector and the main industrial groupings which are frequently used in economic analysis, namely capital goods, intermediate goods and consumer goods (with the latter sub-divided into durable and non-durable goods). A more detailed breakdown of the manufacturing sector (in accordance with the statistical classification of economic activities in the European Community, "NACE Rev. 1") is also available from Eurostat. For the euro area as a whole, the largest sectors (each with a weight in the total of over 10%) are basic metals and metal products; electrical and optical equipment; chemicals, chemical products and man-made fibres; food, beverages and tobacco; machinery and equipment; and transport equipment (see the table above).

A broadly based slowdown in 1998 and early 1999, but cyclical sensitivity varies across sectors

For manufacturing as a whole, production is estimated to have increased by 5% in 1997 and by 4.5% in 1998. However, the rate of growth of industrial production slowed sharply in the course of 1998 and production fell in the latter part of 1998 and early 1999 (see the chart below).¹ The downturn in production was broadly based, with either a slower rate of growth or a decline evident in almost all sectors. Nevertheless, the developments in individual sectors have been quite different. Notably, the production of textiles and leather products started to decline strongly after mid-1998, while the production of food, beverages and tobacco has been far less volatile than that of total manufacturing. By contrast, the production both of electrical and optical equipment and of transport equipment (mainly motor vehicles and trailers) has increased far more rapidly than total manufacturing in recent years; the production of transport equipment rose by 10.5% last year and that of electrical and optical equipment, which includes both computers and telecommunications, increased by close to 9%. However, both sectors were also affected by the slowdown in activity.

Manufacturing in the euro area

(index 1997 Q1 = 100; three-month centred moving averages; seasonally adjusted)



Sources: Eurostat and ECB calculations.

Note: For further information, see the table above.

¹ It should be noted that a full breakdown of industrial production by sector up to June 1999 is not yet available.

The pattern of sectoral developments reflects the fact that some sectors are more sensitive to the economic cycle than others, as well as, in some cases, the existence of different longer-term trends. Most of the sectors mentioned above are examples of the latter. A number of other sectors, including chemicals, metal products and rubber and plastic products – which, for the most part, are included within the intermediate goods sector – are all more sensitive to the economic cycle and, as such, have had a significant impact on overall manufacturing production.

Evidence of an upturn at the sectoral level

The level of total manufacturing production appears to have stabilised in recent months, after falling from July 1998 onwards. As shown in the chart above, production in several sectors weakened somewhat earlier than total manufacturing. Notably, production in the pulp, paper and publishing sector and in the chemicals sector started to decline from December 1997 onwards, i.e. around six months ahead of the aggregate series, while production in two further sectors, namely those of non-metallic minerals and basic metals and of metal products, peaked in March, also slightly in advance of the total series. Developments in these sectors may not necessarily precede every recovery in total industrial production. However, a rise has been evident in all of these sectors in recent months, providing some evidence of an improvement that underlies the development of total manufacturing. Indeed, looking at the breakdown of industrial production in the chart above, activity in most of the sectors has begun to pick up, with the strongest increase in production occurring in the chemicals sector.

Despite the rise in production in the chemicals sector and increases in several other sectors producing intermediate goods, such as rubber and rubber products, total output in the intermediate goods industry appears to have stabilised only recently. One reason for this is that the intermediate goods grouping also includes, for example, the production of textiles, which appears to have continued to decline in recent months. However, the subdued performance of total manufacturing output in recent months is also due to the continued decline in the production of machinery and equipment, which accounts for around 11% of overall manufacturing output.