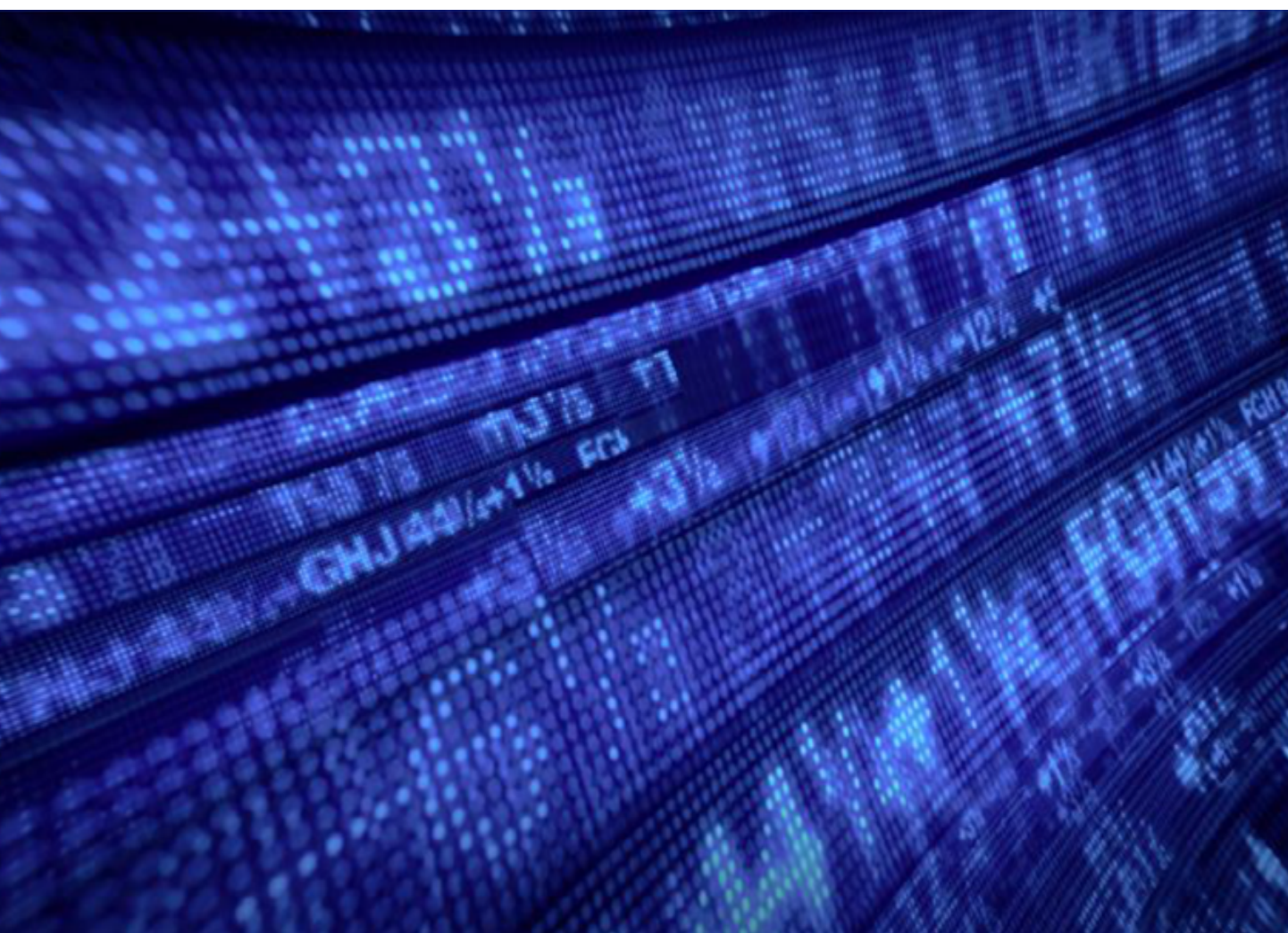




UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

World Manufacturing Production

Statistics for Quarter I, 2017



Report on world manufacturing production

This report presents the observed growth rates and growth estimates of world manufacturing production for the first quarter of 2017. The figures are based on the index numbers of industrial production (IIP) collected by UNIDO Statistics from national data sources.

IIP measures the growth of the volume of industrial production in real terms, free from price fluctuations. Users are advised to take note that while annual industrial growth rates generally refer to changes in manufacturing value added (MVA), i.e. output net of intermediate consumption, the quarterly indices reflect the growth of gross output. Given the temporal nature of estimates, output growth provides the best approximation of value added growth, assuming that the input-output relationship is relatively stable during the observation period.

UNIDO has been publishing quarterly reports on world manufacturing since 2011. The data compilation and presentation methods are regularly updated. Earlier reports included index figures for some countries which were not

seasonally adjusted or for which no information on seasonal adjustments was available. Since 2013, growth figures have been published based on seasonally adjusted index numbers. Since 2017, seasonal adjustments are made using the TRAMO/SEATS method¹ in the JDemetra+ software. The purpose of seasonal adjustment is to filter out any fluctuations or calendar effects within the time series shifts.

In 2013, UNIDO Statistics introduced new country groups, with economic territories being classified based on their stage of industrialization. This grouping is implemented in all of UNIDO's statistical publications. The grouping is particularly useful for presenting aggregated growth estimates by country group at different levels of industrialization. In the aftermath of the economic crisis, the pattern of growth, particularly in industrialized and developing countries, differed considerably. A comparative picture of growth trends in different parts of the world was provided to users. The full list of economies used in the country groupings is avail-

¹TRAMO stands for Time series Regression with ARIMA noise, Missing values and Outliers, and SEATS for Signal Extraction in ARIMA Time Series. ARIMA is the abbreviation of Autoregressive Integrated Moving Average, a widely applied statistical method for time series analyses.

²<http://www.unido.org/resources/publications/flagship-publications/international-yearbook-of-industrial-statistics.html>

able in the International Yearbook of Industrial Statistics².

The present report implements Revision 4 of the International Standard for Industrial Classification of All Economic Activities (ISIC Rev 4)³ in the quarterly data. For countries that publish monthly/quarterly index numbers based on ISIC Rev 4, national data are used in their original form. For countries that still produce index numbers based on ISIC Rev 3, growth figures are estimated at the 2-digit level of Rev 4 using the corresponding tables. In both cases, data on index numbers are derived from national statistical sources. In case of missing data, UNIDO conducts imputations or projections, where appropriate. These estimates are generally replaced as soon as the officially reported values become available in national statistical publications.

Growth rates are calculated from the na-

tional index numbers which are aggregated to the given country group or world region using weights based on the country's contribution to world manufacturing value added 2010. The country grouping is based on economic territories rather than on political boundaries. This report presents growth figures for country groups by stage of industrial development and by geographic region.

Users can find further information on the methodology of index numbers, estimation procedure or compilation of country groups' indices in a methodological document, which is available on the statistical pages of UNIDO's website, together with indices themselves published in UNIDO's Quarterly IIP database, available at UNIDO Statistics Data Portal⁴.

This report presents estimates for the first quarter of 2017 as well as revised estimates for the fourth quarter of 2016.

³http://unstats.un.org/unsd/publication/seriesM/seriesm_4rev4e.pdf

⁴<http://stat.unido.org/>

World manufacturing growth

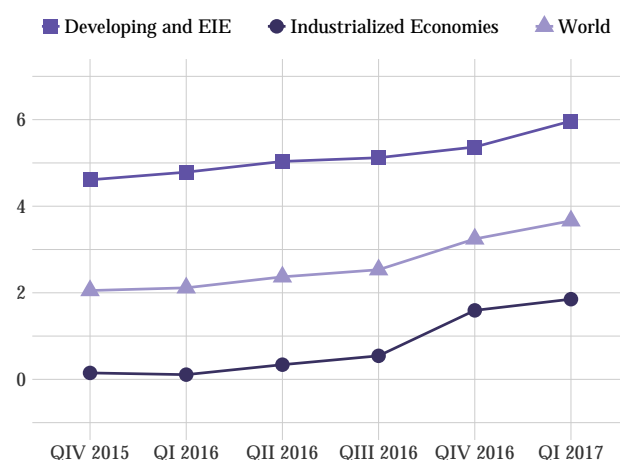
World manufacturing gained further strength in the first quarter of 2017, building on a sluggish, but already improving performance throughout 2016. Both industrialized economies and developing and emerging industrial economies indicated the onset of healthy dynamics in manufacturing production and entered the new production year 2017 with upward growth trends.

Although the degree of uncertainty has largely remained the same, recent figures presented in this report suggest that the prospects of sustained global industrial growth in the coming period both in industrialized and in developing and emerging industrial economies are improving. Risks of a downturn in the new context are associated with the changes in global trade arrangements, high geopolitical uncertainty and the implications of Brexit. In the case of developing economies, favourable investment conditions for the manufacturing industry are yet to be established.

Global manufacturing output rose by 3.7 per cent in the first quarter of 2017 compared to the same period of the previous year, visibly above the 2.6 per cent average increase observed in 2016. Positive trends with some improvement in growth figures were observed across all country groups, steadily progressing over several con-

secutive quarters, as depicted in Figure 1. The recent upturn in the growth performance of developing countries reflects the stronger than expected growth in China, the world's largest manufacturer, as well as a healthy pace of growth of the other countries within the country group. The major industrialized economies with a significant share in global manufacturing output, namely the United States, Japan, Germany and the Republic of Korea, thrived during the first quarter of 2017, and pushed the average growth of industrialized economies upward.

Figure 1: Growth of world manufacturing output in % compared to the same quarter of the previous year



Manufacturing production data from the first quarter of 2017 support the view that the positive development in industrialized economies at the end of 2016 was not short-lived: manufacturing output increased to 1.9 per cent in the first quarter of 2017 compared to the same period of 2016. The pace of growth remained rather moderate in the North American and European regions, where a 1.1 and 1.4 per cent expansion was recorded, respectively, in a year-by-year comparison. Production in East Asia, which experienced a significant reversal in growth in the second half of 2016 following several consecutive slumps that have lasted for nearly two years, witnessed a healthy 4.2 per cent year-by-year upturn, and had a positive impact on the manufacturing growth of industrialized countries as a whole.

The manufacturing output of developing and emerging industrial economies rose by 6.0

per cent. Increased manufacturing production was observed across all developing regions compared to the first quarter of 2016. Asian developing economies achieved a relatively higher growth rate at nearly 7.0 per cent, showing that strong global demand and investment at the beginning of 2017 strengthened the growth momentum and broke the 2-year stagnation at the same growth performance level. Other regions' production also increased compared to the same period of 2016: by a tenuous 0.4 per cent in Latin America, signaling a recovery from a long-lasting recession, and by a more passable but less stable 5.7 per cent in Africa.

Even though the level of growth in developing countries has been continuously higher than in industrialized countries, the threat of a slowdown remains looming over developing economies as long as economic and political instability persists in industrialized countries.

Findings by country group

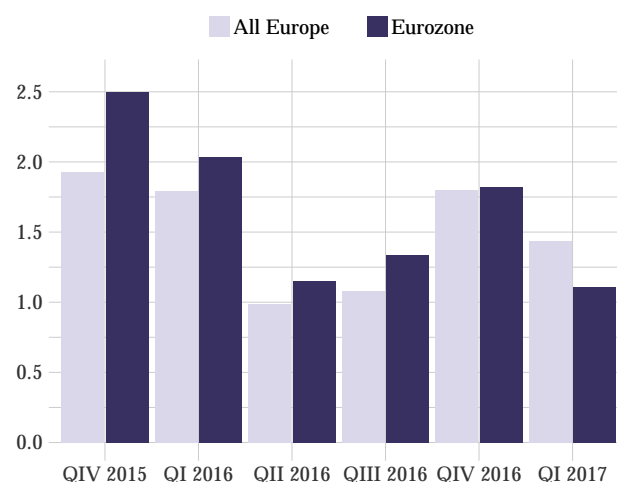
Industrialized economies

The manufacturing output growth of industrialized economies experienced some improvement over previous quarters, however, growth is still advancing in slow motion. Examining the first quarter results, the 1.9 per cent growth rate was attributable to moderate growth in Europe and North America, which was compensated by a notable pick-up in manufacturing activity in East-Asian industrialized economies.

Among the industrialized country group, Europe's manufacturing output grew by 1.4 per cent in the first quarter of 2017, while the eurozone registered a growth rate of only 1.1 per cent. Even though the growth trends for these two groups nearly merged at the end of 2016, the onset of 2017 brought a change, with European countries beyond the eurozone displaying stronger resistance to adverse impacts. The available data point to a more moderate growth rate, when comparing year-to-year developments among the leading eurozone economies, at 0.9 per cent in Germany, nearly 1.0 per cent in Italy and 0.6 per cent in France. The growth figures for the majority of eurozone countries were positive, with a strong growth of 7.6 per cent observed in Slovakia, which remains one of

the fastest-growing manufacturers in the single-currency bloc. A fairly robust growth rate of 3.5 per cent was recorded in the Netherlands, 2.7 per cent in Belgium, 2.6 per cent in Finland, 1.8 per cent in Spain and 1.7 per cent in Austria. A small recession was averted in Portugal in the first quarter of 2017, where a 1.6 per cent growth was registered. On the flip side, Ireland and Luxembourg lagged behind, their growth rate falling sharply by 6.4 per cent and 3.8 per cent, respectively.

Figure 2: Growth rates of manufacturing output in Europe, in % to the same period of the previous year



Taking a closer look at individual countries beyond the eurozone, the United Kingdom recorded a 2.7 per cent growth in manufacturing output on a year-to-year basis, supported by the favourable tailwind of a weaker sterling. Despite an expected slowdown in the aftermath of Brexit, it was the fastest manufacturing output growth in the UK in the last three years. Due to increased EU fund inflows, the pace of growth strengthened in Czechia and Hungary, where a 5.4 per cent and 6.5 per cent rise was recorded, respectively. Other positive results were visible in Switzerland with a 0.7 per cent growth rate as well as in Nordic countries - Sweden and Denmark expanded their manufacturing production by roughly 3.5 per cent, while Norway significantly moderated its contraction rate to only 2.0 per cent loss. Despite the positive change in oil prices and stronger export performance, Russian manufacturing experienced a slight drop by less than 1.0 per cent in the first quarter of 2017.

The overall manufacturing production in North America grew by 1.1 per cent compared to the same period of 2016. The rate of expansion picked up slightly in the United States, but remained relatively modest with a 0.9 per cent improvement in total manufacturing out-

put over the same period of the previous year. Manufacturing output in Canada rose by 2.7 per cent in the first quarter of 2017, benefitting from the strong performance of machinery and equipment.

The disruption of a long period of consecutive contraction in the industrialized East-Asian economies was confirmed by another positive result - a nearly 4.2 per cent improvement was observed in the first quarter of 2017 compared to the same period of the previous year. The relatively weak yen and strong global demand fuelled Japan's manufacturing sector, a major force behind the entire region's upturn, recording a positive growth rate of 3.9 per cent. This upswing was primarily attributable to the boost in all of Japan's three key industries - the automotive industry, computers, electronic and optical products and machinery and equipment. The manufacturing production in the Republic of Korea picked up pace at the onset of 2017, and amounted to 3.9 per cent on a year-to-year basis, its multi-year high. Malaysia's total manufacturing output recorded a 6.8 per cent rise in the first quarter of 2017, and a very strong growth rate of 8.5 per cent was observed in Singapore.

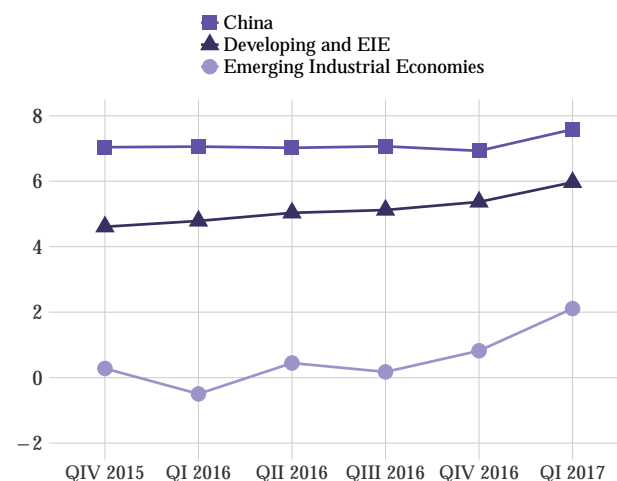
Developing and emerging industrial economies

In the first quarter of 2017, the overall accelerated growth of manufacturing output in developing and emerging industrial economies was affected by positive signals coming from different parts of the country group - Latin America broke the long-lasting period of recession, Asian economies (including China) prospered more than expected and increased China-Africa trade boosted production in Africa. Strong investments among private companies and healthy external demand were translated into the fastest acceleration in manufacturing output in China since the last quarter of 2014, at 7.6 per cent over the same period of the previous year. China's ongoing economic transition, which entails a weaker but more stable and sustainable pace, is upgrading the manufacturing industry by optimizing investment in the environment and supporting the development of advanced manufacturing industries.

Latin American economies, which have recently faced a severe decline due to a series of domestic and external shocks, is recovering from last year's dismal performance and recorded minor, but finally positive growth of 0.4 per cent in the first quarter of 2017 in a year-to-year comparison. Argentina and Brazil have softened the fall of their manufacturing activities and are slowly emerging from recession, however, given the severity of the recession, these economies are likely to take a longer time for full recovery. Manufacturing production in Brazil has been contracting uninterruptedly since the beginning of

2014, dropped by merely 0.4 per cent in the first quarter of 2017. Production continued to fall in Argentina, albeit at a slower pace - by 3.1 per cent compared to the same period of the previous year, likely softened by a strengthening peso. Looking at the other countries in the region, Mexico recorded a positive growth of 3.4 per cent, whereas manufacturing output fell in Colombia and Chile by 2.6 and 1.2 per cent, respectively.

Figure 3: Growth of manufacturing output of developing economies in % to the same quarter of the previous year



Improved growth performance was also observed in Asia and the Pacific region, where manufacturing output rose by nearly 7.0 per cent at the onset of 2017. Viet Nam, one of Asia's fast-growing economies, strayed from the long-term trajectory of double-digit growth in manu-

facturing and achieved only 7.5 per cent in the first quarter of 2017 in a year-by-year comparison. Abruptly weakened exports slowed Viet Nam's manufacturing output growth, but the country largely maintained its attractiveness for foreign direct investment. On the other hand, surging exports in Indonesia led the country's manufacturing sector to expand by 4.3 per cent, accelerating from the 2.2 per cent growth rate recorded at the end of 2016. Higher global demand prompted manufacturing growth in India, which gained traction in the first quarter of 2017 and recorded 1.5 per cent increase compared to the same period of the previous year, after a disappointing performance in 2016. Together with Bangladesh, India is expected to be the region's fastest-growing economy in 2017. According to UNIDO estimates, very positive developments in growth were also observed in Saudi Arabia, the Philippines and Pakistan.

According to UNIDO estimates, manufacturing output in Africa increased to 5.7 per cent

in the first quarter of 2017. It should be noted, however, that estimates for Africa are based on limited data. Egypt and Senegal registered a positive two-digit growth rate, Morocco and Côte d'Ivoire expanded by 1.4 per cent and 4.5 per cent, respectively, while Tunisia's manufacturing output dropped slightly by 0.7 per cent compared to the same period of the previous year. South Africa, the region's most industrialized economy, observed the lowest growth with a contraction rate of 1.7 per cent and dim prospects for 2017.

Among other developing economies, the manufacturing output of Eastern European countries achieved relatively higher growth rates. Manufacturing output rose by 6.6 per cent in Poland, 6.7 per cent in Romania, 3.5 per cent in Bulgaria, 7.0 per cent in Serbia and 2.2 per cent in Croatia. Turkey also performed well in the manufacturing sector, which grew by 1.7 per cent.

Findings by industry group

Economists are predicting that despite the increased risks, the world is set for a slightly better year in 2017⁵. UNIDO data largely supports these predictions. Production of motor vehicles, one of the leading sectors in manufacturing, is once again experiencing a steady expansion at the global level, however, disruption of free trade could hurt automobile and component makers. Nearly every major automotive producer is intensifying investments in electric vehicles despite low oil prices. Future cars will increasingly be electric, connected and self-driving, and 2017 will bring progress on all three fronts. A greater source of concern is the world's larger automobile market, China, which is forecast to slow in 2017.

Global manufacturing production maintained a positive growth in nearly all industries in the first quarter of 2017. High- and medium-high-technology manufacturing industries repeatedly held top positions, when looking at year-by-year developments - the manufacture of computers, electronics and optical products grew by 8.5 per cent, the production of machinery and equipment rose by 6.1 per cent and the manufacture of motor vehicles by 5.6 per cent.

Among other high-technology sectors, the manufacture of pharmaceutical products increased by 3.2 per cent, while almost no change was recorded in the production of other transport equipment over the same period of the previous year.

Relatively high growth rates in the production of basic consumer goods were maintained worldwide. The global manufacture of food products rose by 3.5 per cent, beverages by 2.8 per cent and the global manufacture of wearing apparel increased by 2.6 per cent.

As regards durable and capital goods, the production of machinery and equipment experienced an exceptionally high growth rate and overtook the automotive industry in the first quarter of 2017. The manufacture of non-metallic mineral products, which essentially supply construction materials, registered a growth figure of 3.3 per cent while the manufacture of fabricated metal products rose by 2.9 per cent worldwide. The global manufacturing of basic metals and furniture both rose at a moderate pace of 2.1 per cent.

In low-technology manufacturing sectors, the global production of wood products rose by

⁵[Industries in 2017, a special report from The Economist Intelligence Unit](#)

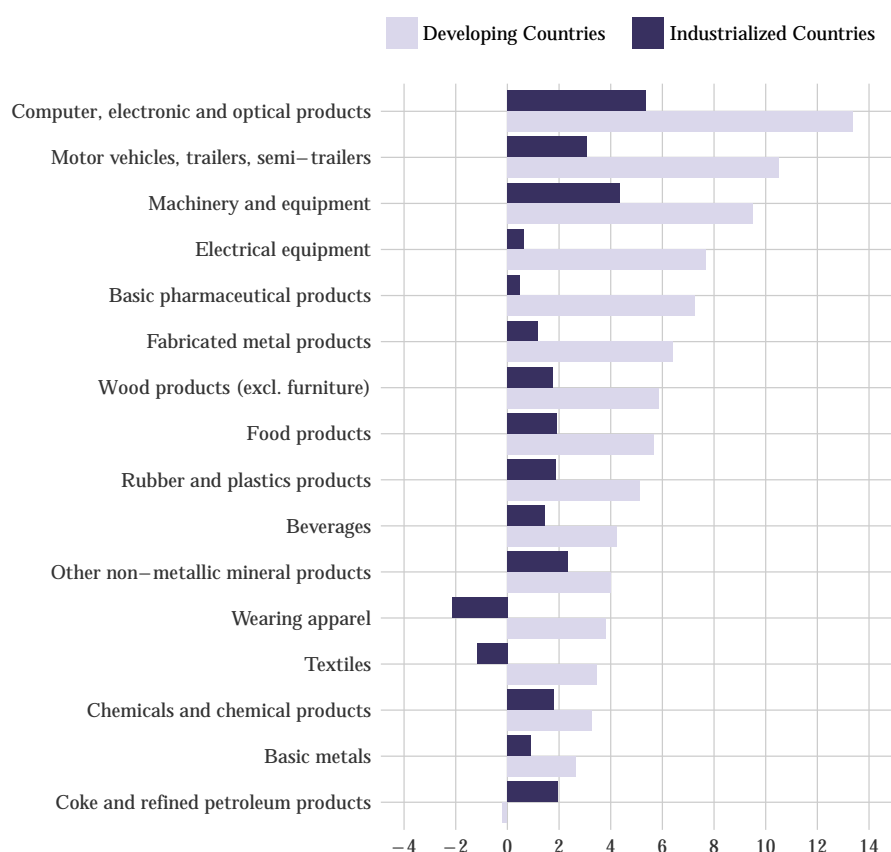
3.2 per cent, while the growth pace of manufacturing of paper products, textiles and leather products remained below 2.5 per cent.

The growth performance of developing and emerging industrial economies outperformed industrialized economies in nearly all manufacturing industries, including a number of high-technology industries, with only one exception - the manufacture of coke and refined petroleum

products, as illustrated in Figure 4. The fastest growing industry in both country groups was the manufacture of computer, electronic and optical products with Asian economies as the largest contributors.

The growth rates for selected industries are presented below. Additional statistics on the growth rates in the first quarter of 2017 are available in the Statistical Tables.

Figure 4: Estimated growth rates by Industry in % compared to previous year Quarter I, 2017



Statistical Tables

Table 1

Estimated growth rates of world manufacturing output

In % compared to the previous quarter and to the same period of the previous year

Quarter I, 2017

	Share in world MVA (2010)	Compared to the previous quarter	Compared to the same period of the previous year
World	100.0	1.1	3.7
Industrialized Economies	63.3	0.5	1.9
North America	20.6	0.8	1.1
Europe	24.1	0.4	1.4
East Asia	15.3	0.5	4.2
Developing and EIE (by development group)	36.7	1.9	6.0
China	19.8	2.1	7.6
Emerging Industrial Economies	14.7	1.4	2.1
Other Developing Economies	2.0	2.3	8.8
Developing and EIE (by region)	36.7	1.9	6.0
Africa	1.1	1.7	5.7
Asia & Pacific	26.3	2.1	7.0
Latin America	6.5	0.3	0.4
Others	2.8	2.4	4.2

Source: UNIDO Statistics

Notes: Not all subgroups are presented; seasonally adjusted data

Table 2

Estimated growth rates of output by manufacturing industry

In % compared to the same period of the previous year

Quarter I, 2017

	Developing and Emerging Industrial Economies	Industrialized Economies	World
Food products	5.7	1.9	3.5
Beverages	4.3	1.4	2.8
Tobacco products	7.2	-9.5	3.0
Textiles	3.5	-1.2	2.3
Wearing apparel	3.8	-2.2	2.6
Leather and related products	4.1	-2.0	2.5
Wood products (excl. furniture)	5.9	1.7	3.2
Paper products	4.2	0.4	2.1
Printing	4.5	-2.0	-0.3
Coke and refined petroleum products	-0.2	1.9	0.9
Chemicals and chemical products	3.3	1.8	2.5
Basic pharmaceutical products	7.3	0.5	3.2
Rubber and plastics products	5.1	1.9	3.1
Other non-metallic mineral products	4.0	2.4	3.3
Basic metals	2.6	0.9	2.1
Fabricated metal products	6.4	1.2	2.9
Computer, electronic and optical products	13.4	5.4	8.5
Electrical equipment	7.7	0.6	3.8
Machinery and equipment	9.5	4.4	6.1
Motor vehicles, trailers, semi-trailers	10.5	3.1	5.6
Other transport equipment	3.2	-1.0	0.1
Furniture	5.2	0.4	2.1
Other manufacturing	3.0	-2.1	-0.6
Total Manufacturing	6.0	1.9	3.7

Source: UNIDO Statistics

Notes: Seasonally adjusted data

Table 3

Estimated growth rates of output by manufacturing industry

In % compared to the previous quarter

Quarter I, 2017

	Developing and Emerging Industrial Economies	Industrialized Economies	World
Food products	0.8	1.1	1.0
Beverages	0.2	0.6	0.4
Tobacco products	-4.0	-2.5	-3.7
Textiles	1.6	-0.2	1.2
Wearing apparel	2.1	0.4	1.7
Leather and related products	1.4	-1.1	0.7
Wood products (excl. furniture)	1.4	0.6	0.9
Paper products	0.9	0.2	0.5
Printing	1.4	0.1	0.5
Coke and refined petroleum products	0.1	0.4	0.3
Chemicals and chemical products	0.1	0.5	0.3
Basic pharmaceutical products	2.1	-1.2	0.1
Rubber and plastics products	2.4	0.7	1.3
Other non-metallic mineral products	1.5	1.1	1.3
Basic metals	1.9	0.5	1.4
Fabricated metal products	2.4	1.8	2.0
Computer, electronic and optical products	3.7	0.9	2.0
Electrical equipment	2.8	0.6	1.6
Machinery and equipment	3.2	1.5	2.1
Motor vehicles, trailers, semi-trailers	1.8	0.3	0.8
Other transport equipment	2.2	0.1	0.6
Furniture	3.6	0.3	1.5
Other manufacturing	1.4	-1.1	-0.3
Total Manufacturing	1.9	0.5	1.1

Source: UNIDO Statistics

Notes: Seasonally adjusted data

Table 4

Estimated growth rates of world manufacturing output

In % compared to the previous quarter and to the same period of the previous year

Quarter IV, 2016 (revised)

	Share in world MVA (2010)	Compared to the previous quarter	Compared to the same period of the previous year
World	100.0	1.2	3.2
Industrialized Economies	63.3	1.1	1.6
North America	20.6	0.4	0.5
Europe	24.1	1.0	1.8
East Asia	15.3	2.0	3.0
Developing and EIE (by development group)	36.7	1.4	5.4
China	19.8	1.7	6.9
Emerging Industrial Economies	14.7	0.2	0.8
Other Developing Economies	2.0	3.1	14.2
Developing and EIE (by region)	36.7	1.4	5.4
Africa	1.1	1.9	4.4
Asia & Pacific	26.3	1.4	6.6
Latin America	6.5	-0.1	-1.0
Others	2.8	3.2	3.1

Source: UNIDO Statistics

Notes: Not all subgroups are presented; seasonally adjusted data

Table 5

Estimated growth rates of output by manufacturing industry

In % compared to the same period of the previous year

Quarter IV, 2016 (revised)

	Developing and Emerging Industrial Economies	Industrialized Economies	World
Food products	6.2	1.7	3.6
Beverages	5.6	0.5	2.9
Tobacco products	-1.8	-6.4	-2.8
Textiles	3.6	-0.8	2.5
Wearing apparel	3.7	-4.0	2.1
Leather and related products	2.9	-0.8	2.0
Wood products (excl. furniture)	5.8	2.9	3.9
Paper products	4.5	-0.1	1.8
Printing	3.8	-2.4	-0.8
Coke and refined petroleum products	1.2	1.7	1.5
Chemicals and chemical products	3.6	1.6	2.6
Basic pharmaceutical products	6.6	2.8	4.3
Rubber and plastics products	4.4	1.2	2.4
Other non-metallic mineral products	4.2	2.2	3.3
Basic metals	0.9	1.1	1.0
Fabricated metal products	5.4	0.2	1.8
Computer, electronic and optical products	12.4	3.6	7.0
Electrical equipment	5.5	0.6	2.8
Machinery and equipment	7.6	2.3	4.1
Motor vehicles, trailers, semi-trailers	11.0	3.3	5.9
Other transport equipment	0.0	-0.8	-0.6
Furniture	3.7	0.7	1.8
Other manufacturing	3.8	-0.8	0.5
Total Manufacturing	5.4	1.6	3.2

Source: UNIDO Statistics

Notes: Seasonally adjusted data