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World Manufacturing Production

Statistics for Quarter I, 2014

Statistics Unit

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UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

Report on world manufacturing production, Quarter I, 2014

UNIDO Statistics presents this report on world manufacturing production growth for the first quarter of 2014 based on the indices of industrial production. The report also contains revised growth estimates for the fourth quarter of 2013. Reports on earlier quarters are available on UNIDO's website. Interested users can access methodological documents on the estimation procedure of annual growth rates and a compilation of quarterly indices on the statistical web pages of UNIDO's website. Since early 2013, the quarterly reports have been published with two major changes to the methodology, namely seasonal adjustment and country groups.

UNIDO's quarterly reports present seasonally adjusted index figures. Statistical indicators related to growth measures are often characterized by significant seasonal variations and differences in the number of working days over the time periods under comparison. The purpose of seasonal adjustment is to filter out any fluctuations or calendar effects within the shifts of the time series. The seasonal adjustment of index numbers is achieved using the TRAMO/SEATS method¹ in Demetra+ software. The software has also been applied to impute the missing index data in some cases. Imputed data are replaced by survey data as soon as those are available from national sources.

The growth figures are presented by the country groups used by UNIDO Statistics. As of 2013, new country groups have been applied in all UNIDO statistical publications. Details on the country groupings are provided in the 2013 edition of the *International Yearbook of Industrial Statistics*. The new country grouping is based on economic territories rather than on political boundaries. It comprises country groups by stage of industrialization, geographic region and income categories.

Major findings

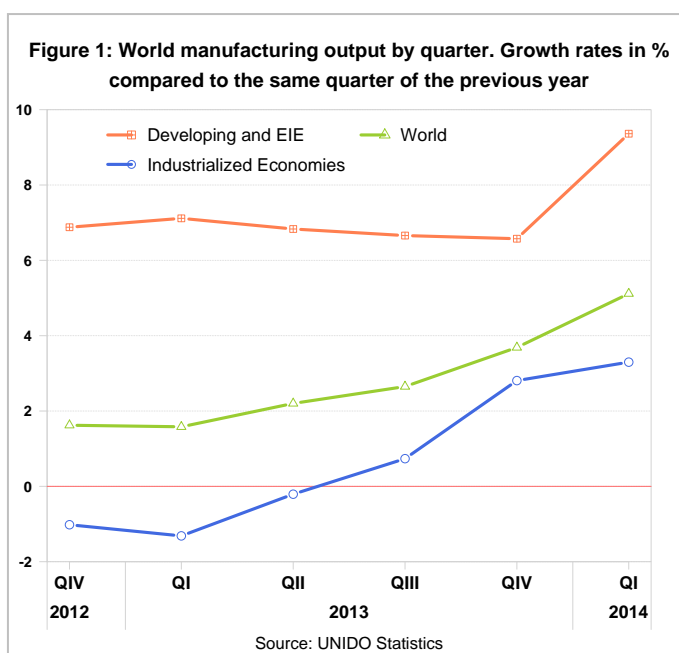
1. World manufacturing growth in the first quarter of 2014

Since the beginning of 2014, world manufacturing has entered a new phase of steady growth from a prolonged period of recession that caused a sharp decline in production in industrialized countries and a significant slowdown in developing

¹ TRAMO 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 analysis.

and emerging industrial economies. Early signs of recovery in industrialized countries appeared in 2013, which gradually took hold towards the end of 2013. Recent figures suggest that the prospects of sustained global industrial growth in coming years both in industrialized and in developing and emerging industrial economies are good, although there are still some risks of a downturn.

World manufacturing output rose by 5.1 percent in the first quarter of 2014 compared to the same period of the previous year. The global manufacturing growth figures have been consistently rising since the first quarter of 2013 (see Figure 1) and the current growth rate is the highest over the last three years. The manufacturing output of industrialized countries grew by 3.3 percent, the highest rate since 2007, if the short-lived recovery of 2010 before the second recession is excluded.



This positive development, especially in European countries, is largely attributable to the rebound of domestic demand following the adoption of strong policy measures to stimulate industrial growth. Yet the current growth phase will not necessarily remain unscathed by a downturn in the context of resurfacing geopolitical disturbances, which are likely to affect consumer confidence adversely.

The manufacturing output of developing and emerging industrial economies grew at an impressive rate of 9.4 percent in the first quarter of 2014. However, there are certain downturn risks associated with the fragile growth prospects of developing and emerging industrial economies. The effects of the economic crisis of industrialized economies on industrial growth diffused to developing and emerging industrial economies with a time-lag. A similar scenario has now been observed, with developing and emerging industrial economies lagging behind in the recovery process. The major risks posed to the industrial growth of these economies are the possibility of reversal of capital flows as an external factor and a rise in the cost of production as an internal one.

Although industrialized economies account for nearly 2/3 of world manufacturing output, developing and emerging industrial economies contribute the most to its growth. During the years of recession in 2008 – 2013, the manufacturing value added of developing and emerging industrial economies grew by almost 5 percent per annum while the contribution of industrialized economies to global industrial growth was negative. A complete recovery from the recession at the global scale would require the elimination or significant control of risk looming over the industrial growth of developing countries.

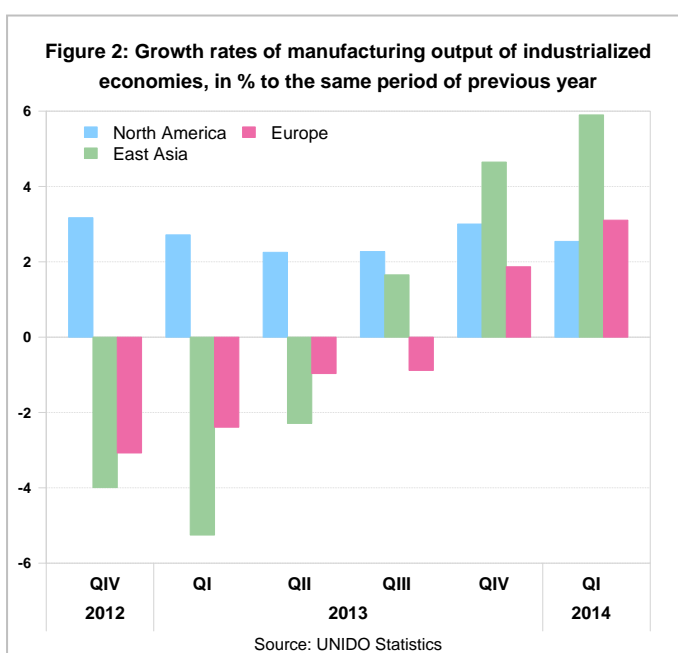
The recession resulted in significant job losses around the world, the systematic drop in household income and expenditure, a decrease in commodity trade and the reversal of capital flow from industrialized countries. It also changed the perception of policymakers and business communities with regard to the role of production sectors in the economy. Industrialized countries, which were hit hard by the financial crisis and a prolonged recession in Europe, adopted new policies of industrial growth through a number of stimulus packages aimed at increasing the domestic value addition of manufacturing.

By country group

Industrialized countries

Manufacturing has gained further momentum in industrialized countries and its growth base has broadened. While recovery was only visible in North America in the first half of 2013, it is now evident in all three industrialized regions – East Asia, Europe and North America.

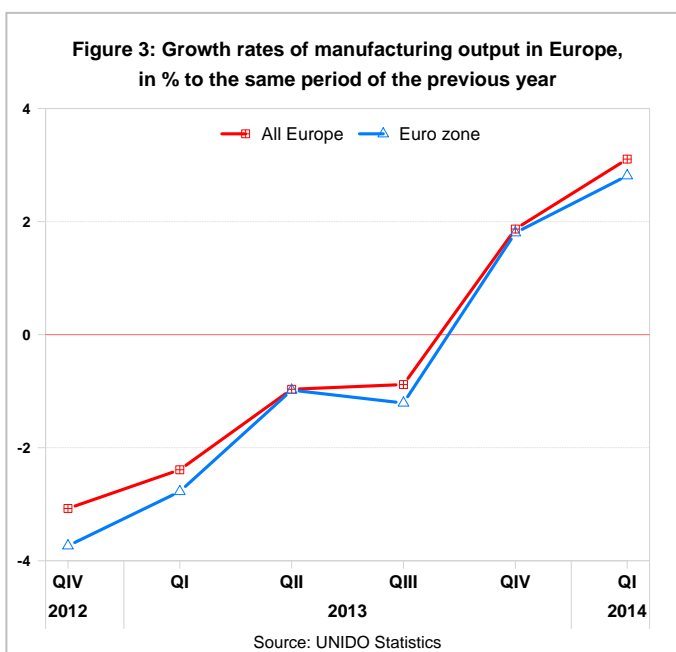
In East Asia, Japan made an impressive start in 2014 with an 8.1 percent growth in manufacturing output. This is the highest growth rate of Japan’s manufacturing sector in the last few years. The new policy measures adopted by the government brought about a devaluation of the yen, which made Japanese commodities highly competitive in the external market. The production of



machinery and equipment, electrical machinery, motor vehicles and other high-technology industries rose at impressive rates. Manufacturing output also increased in other industrialized economies of East Asia such as Malaysia and Singapore. However, in the wake of the rising exchange rate of the won versus the US dollar, the manufacturing output of the Republic of Korea dropped by 1.0 percent in the first quarter of 2014.

The manufacturing output of the United States has been characterized by strong growth in high-technology industries and in the production of capital goods. An increase in the sales and orders of durable goods such as household appliances and motor vehicles indicate the consumers' confidence in the long-term stability of an economy. As a result, the manufacturing output of the United States grew by 2.5 percent in the first quarter of 2014. However, the growth of US manufacturing was lower than expected. Canada's manufacturing output grew at a higher rate of 2.9 percent in the first quarter of 2014.

European manufacturing has finally emerged from a prolonged recession with consistent growth in two consecutive quarters. In the first quarter of 2014, the manufacturing output of Europe rose by 3.1 percent, mainly attributable to growth in the production of fabricated metal products, machinery and equipment and motor vehicles. The difference in growth rate between the eurozone and the



rest of the European countries that was evident at the beginning of the crisis (see Figure 3) has almost disappeared. Manufacturing output grew in all major European economies in the first quarter of 2014.

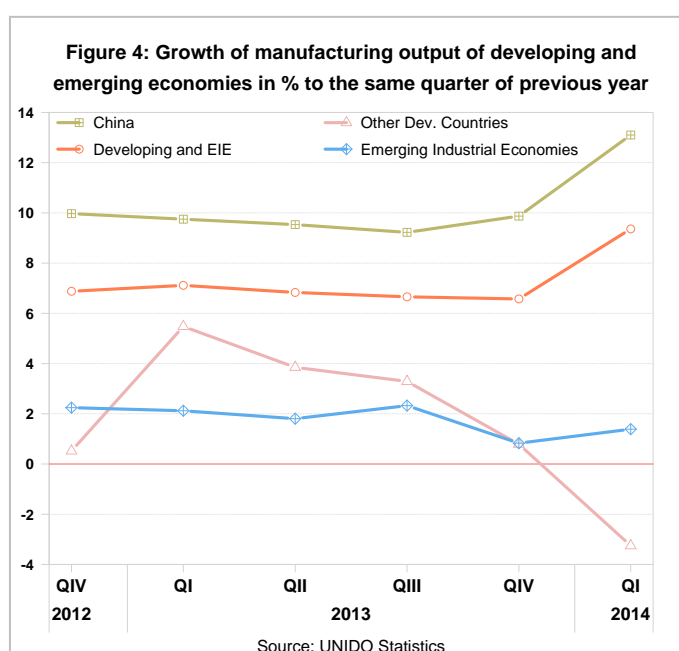
Among the eurozone countries, manufacturing output grew by 1.8 percent in France, 4.1 percent in Germany and 1.3 percent in Italy. It grew in Austria by 3.9 percent, 3.4 percent in Belgium and 4.7 percent in Ireland. Outside the eurozone, manufacturing output rose by 8.2 percent in the Czech Republic, 8.9 percent in Hungary, 7.4 percent in Switzerland and 3.5 percent in the United Kingdom.

However, manufacturing output dropped by 2.0 percent in Sweden and 2.5 percent in the Russian Federation.

The overall growth of manufacturing output in industrialized countries is a very positive development. As the recession took a strong hold, European countries realized that the market mechanism had failed and stepped in with a number of policy measures which have produced some visible results. Europe’s manufacturing has been on the rise for over six months already, while North America and East Asia are making impressive contributions to the growth of industrialized countries.

Developing and emerging industrial economies

Developing and emerging industrial economies² maintained a relatively higher growth of manufacturing output in the years of recession. However, the pace has continuously slowed throughout 2013. So far, only China has recovered with a very high growth of manufacturing output at 13.1 percent in the first quarter of 2014. Following the sluggish growth trend throughout most of 2013, China adopted some policy measures to boost growth, including tax breaks for smaller establishments and investments in infrastructure. A further increase in the export of Chinese manufactured commodities was another indication of the country’s improving growth potential.



However, other emerging industrial economies are still afflicted by low growth, with the effect of recession in industrialized countries continuing to persist. The manufacturing output of other emerging industrial economies (excluding China) rose by merely 1.4 percent in the first quarter of 2014.

² In the UNIDO country groups, China belongs to the group of emerging industrial economies. However, due to its size, data for China are reported separately to the extent possible.

Manufacturing output fell in Argentina by 1.8 percent, in Brazil by 0.2 percent and in India by 1.6 percent. Moderate growth of 3.8 percent was observed in Indonesia, 2.5 percent in Mexico and 1.6 percent in South Africa. Relative higher growth was observed in Turkey where manufacturing output rose by 4.8 percent in the first quarter of 2014 compared to the same period of the previous year.

In general, the growth figures in developing and emerging industrial economies have remained moderate for all developing regions. Due to their limited domestic market, many developing countries rely on exports to expand production. In recent years, the export orientation of industry, which earns valuable foreign currency, has exhibited vulnerability to external conditions. So far, external conditions for commodity exports and capital inflow remain unfavourable and the growth prospect of these countries appears fairly weak.

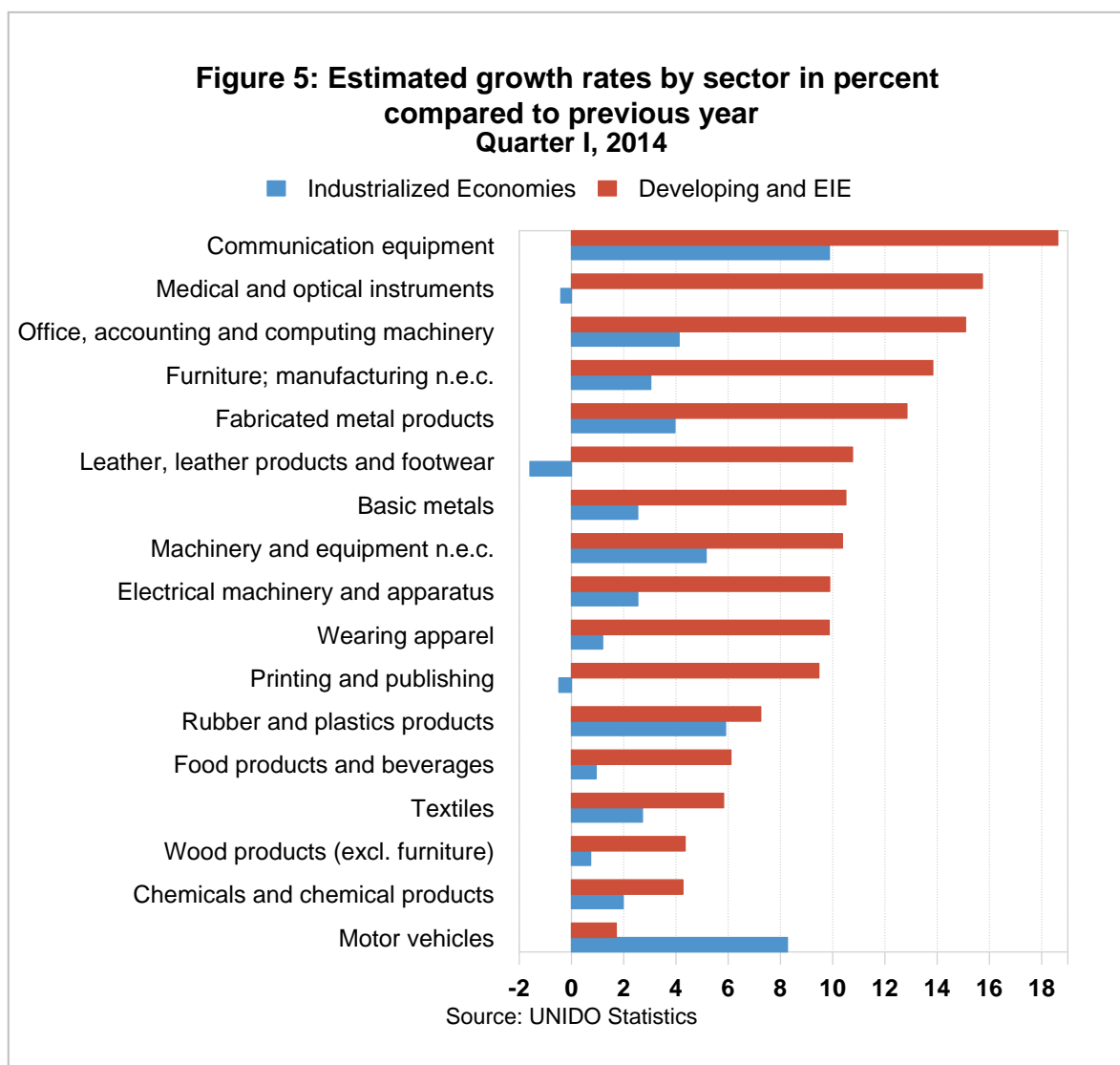
By industry groups

In a comparison by industry group, developing and emerging industrial economies maintained a positive growth rate in the first quarter of 2014 in all manufacturing activities. For the first time in the post-crisis period, the observed quarterly growth figures have been positive across nearly all industries for both industrialized and emerging industrial economies.

Positive growth was observed in industries producing input items, consumer goods as well as capital goods, which indicates a longer term growth prospect of manufacturing output on a global scale. Generally, industrialized countries dominate the growth in machinery and equipment. However, positive growth for industrialized countries was also observed in the manufacture of foods, textiles and wearing apparel. In the first quarter of 2014, the manufacture of textiles rose by 2.7 percent in industrialized countries. The production of textiles grew by 11.4 percent and 13.8 percent in Canada and Malaysia, respectively. Among other producers, the Czech Republic, France Hungary and the Russian Federation also experienced significant growth in textiles manufacturing.

Motor vehicles play a conspicuous role in the manufacturing sector of industrialized countries. The manufacture of motor vehicles in industrialized countries maintained a remarkable growth rate of 8.3 percent, being the only industry led by this country group in the first quarter of 2014. It confirms growing demand, which in turn indicates rising consumer confidence in durable goods. Among the major markets, motor vehicle manufacturing rose by 9.9 percent in Germany, by 8.0 percent in Japan, by 7.6 percent in the United Kingdom and by 5.8 percent in the United States. Pursuing market recovery, significant growth was also

observed in France and Italy, where the production of motor vehicles increased by 11.7 percent and 10.4 percent, respectively.



Estimated growth by industry is depicted in Figure 5 by industrialized and by developing and emerging industrial economies.

Developing and emerging industrial economies maintained a high growth rate not only in traditional industries such as the manufacture of foods, beverages, textiles and wearing apparel, but also in high-tech industries such as machinery and equipment. In traditional industries, the developing and emerging industrial economies are leading the production of basic consumer goods. The production of wearing apparel rose by 4.1 percent in Brazil, by 12.9 percent in China, by 5.6 percent in Indonesia and by 7.4 in South Africa compared to the same period of 2013. The manufacture of food and beverages rose by 9.0 percent in China, 9.9 percent in Egypt, 9.0 percent in Indonesia and by 8.7 in Romania. The production of textiles rose by 5.8 percent in developing and emerging industrial economies. The

highest growth was observed in Egypt, Macedonia and South Africa with 14.2 percent, 18.2 percent and 15.1 percent, respectively.

High growth was furthermore observed in fabricated metals in developing and emerging industrial markets. Demand was largely driven by demand from growing machinery industries in industrialized countries.

Although trade in the office machinery and computers industry may indicate a country's ability to transform science into innovative products, industrialized countries have witnessed a slowdown in this type of manufacturing over the past few quarters. With the rise of global supply chains, high-performing developing and emerging industrial economies are taking over as leaders in the manufacture of high-tech equipment by producing goods for global markets at much cheaper cost. The production of office, accounting and computing machinery in developing and emerging industrial economies rose by 15.1 percent in the first quarter of 2014. The growth performance of these countries was also notable in communication equipment - 18.6 percent - and in the production of medical and optical instruments.

As a whole, industrial growth figures in the first quarter of 2014 indicate a boost in the manufacturing sector of developing and emerging industrial countries. Growth is becoming more sustainable among industrialized markets and world manufacturing production is experiencing tremendous improvement.

Detailed data per industry and country group are featured in the annexed tables.

Table 1:
Estimated growth rates of world manufacturing output
Quarter I, 2014

Seasonally adjusted

	Share in world MVA (2010)	Growth rates compared to the:	
		previous quarter	same period of the previous year
World	100.0	4.81	5.12
Industrialized Economies*	67.7	0.42	3.30
North America	22.4	0.64	2.54
Europe	24.7	0.87	3.11
East Asia	17.2	-0.31	5.90
Developing and Emerging Industrial Economies (by development group)	32.3	12.88	9.36
China	15.3	19.05	13.10
Emerging Industrial Economies	13.8	0.90	1.39
Least Developed Countries	0.5	-2.51	-2.96
Other Developing Economies	2.7	0.41	-3.24
Developing and Emerging Industrial Economies (by region)	32.3	12.88	9.36
Africa	1.5	-0.43	0.71
Asia & Pacific	21.7	15.82	10.51
Latin America	5.8	1.10	1.45
Others	3.3	0.87	5.70

* Not all subgroups in this group are presented

Table 2
Estimated growth rates of output by manufacturing sector
Quarter I, 2014 (in % compared to the same period of the previous year)

Seasonally adjusted

	Developing and Emerging Industrial Economies	Industrialized Economies	World
Food and beverages	6.1	0.9	3.3
Tobacco products	22.0	-1.7	18.8
Textiles	5.8	2.7	5.0
Wearing apparel, fur	9.9	1.2	7.4
Leather, leather products and footwear	10.8	-1.6	6.8
Wood products (excl. furniture)	4.4	0.7	1.9
Paper and paper products	13.1	-5.4	0.9
Printing and publishing	9.5	-0.5	1.1
Coke, refined petroleum products	6.4	-0.2	3.5
Chemicals and chemical products	4.3	2.0	2.8
Rubber and plastics products	7.2	5.9	6.4
Non-metallic mineral products	11.7	5.9	9.0
Basic metals	10.5	2.5	7.6
Fabricated metal products	12.8	4.0	6.3
Machinery and equipment n.e.c.	10.4	5.2	7.1
Office, accounting and computing machinery	15.1	4.1	5.0
Electrical machinery and apparatus	9.9	2.5	6.5
Radio, TV and communication equipment	18.6	9.9	15.5
Medical, precision and optical instruments	15.7	-0.4	2.2
Motor vehicles, trailers, semi-trailers	1.7	8.3	6.9
Other transport equipment	10.3	2.8	7.0
Furniture; manufacturing n.e.c.	13.8	3.0	8.5
Total Manufacturing	9.4	3.3	5.1

Table 3:
Estimated growth rates of output by manufacturing sector
 Quarter I, 2014 (in % compared to Quarter IV of 2013)

Seasonally adjusted

	Developing and Emerging Industrial Economies	Industrialized Economies	World
Food and beverages	9.9	1.1	5.0
Tobacco products	9.3	1.4	8.4
Textiles	15.4	2.2	11.5
Wearing apparel, fur	20.6	5.2	16.1
Leather, leather products and footwear	17.8	-0.2	11.9
Wood products (excl. furniture)	14.8	-1.7	3.2
Paper and paper products	19.6	-4.0	3.8
Printing and publishing	8.2	0.4	1.6
Coke, refined petroleum products	3.3	0.3	1.9
Chemicals and chemical products	4.5	0.2	1.7
Rubber and plastics products	12.3	3.0	6.3
Non-metallic mineral products	19.0	2.2	10.7
Basic metals	13.8	3.9	10.1
Fabricated metal products	28.2	1.8	8.2
Machinery and equipment n.e.c.	16.7	3.6	8.2
Office, accounting and computing machinery	26.2	1.3	3.2
Electrical machinery and apparatus	18.1	0.0	9.4
Radio, TV and communication equipment	17.0	3.0	11.8
Medical, precision and optical instruments	24.8	-1.7	2.2
Motor vehicles, trailers, semi-trailers	0.8	1.9	1.7
Other transport equipment	11.9	1.1	7.1
Furniture; manufacturing n.e.c.	7.4	4.0	5.8
Total Manufacturing	12.9	0.4	4.8

Table 4:
Estimated growth rates of world manufacturing output
 Quarter IV, 2013 (revised)

Seasonally adjusted

	Share in world MVA (2010)	Growth rates compared to the:	
		previous quarter	same period of the previous year
World	100.0	0.08	3.69
Industrialized Economies	67.7	1.45	2.81
North America	22.4	1.15	3.00
Europe	24.7	1.05	1.87
East Asia	17.2	3.27	4.65
Developing and Emerging Industrial Economies (by development group)	32.3	-1.61	6.57
China	15.3	-2.71	9.87
Emerging Industrial Economies	13.8	-0.16	0.83
Least Developed Countries	0.5	-0.64	2.73
Other Developing Economies	2.7	-0.16	0.79
Developing and Emerging Industrial Economies (by region)	32.3	-1.61	6.57
Africa	1.5	1.34	0.17
Asia & Pacific	21.7	-2.31	7.84
Latin America	5.8	-0.47	0.66
Others	3.3	0.52	4.96

Table 5:
Estimated growth rates of output by manufacturing sector
 Quarter IV, 2013 (revised) (in % compared to the same period of the previous year)

Seasonally adjusted

	Developing and Emerging Industrial Economies	Industrialized Economies	World
Food and beverages	4.7	0.2	2.2
Tobacco products	8.6	-2.9	7.1
Textiles	5.2	1.5	4.1
Wearing apparel, fur	4.9	-6.9	1.2
Leather, leather products and footwear	5.3	3.0	4.6
Wood products (excl. furniture)	9.1	3.8	5.3
Paper and paper products	6.0	0.2	2.0
Printing and publishing	7.9	-0.1	1.1
Coke, refined petroleum products	4.2	-1.9	1.5
Chemicals and chemical products	7.5	2.5	4.2
Rubber and plastics products	4.4	4.4	4.4
Non-metallic mineral products	7.9	2.3	5.1
Basic metals	11.6	4.7	8.9
Fabricated metal products	8.8	2.3	3.8
Machinery and equipment n.e.c.	9.1	2.6	4.8
Office, accounting and computing machinery	7.6	3.0	3.3
Electrical machinery and apparatus	8.7	4.6	6.7
Radio, TV and communication equipment	7.7	2.9	5.9
Medical, precision and optical instruments	8.6	2.1	3.0
Motor vehicles, trailers, semi-trailers	2.6	9.7	8.3
Other transport equipment	7.1	2.5	5.0
Furniture; manufacturing n.e.c.	9.5	1.9	5.7
Total Manufacturing	6.6	2.8	3.7