

# World Manufacturing Production

## Statistics for Quarter II, 2013

Statistics Unit

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UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

## **Report on world manufacturing production, Quarter II, 2013 and expected growth of MVA in 2013**

UNIDO Statistics presents this report on expected annual growth of manufacturing value added in 2013 based on observations of quarterly production indices for the first six months of 2013, and forecasts for remaining months. Reports on earlier quarters are available on UNIDO's website. The report also contains growth estimates based on the indices of industrial production for the second quarter of 2013. Users are advised to take note that MVA refers to output net of intermediate consumption, whereas quarterly indices are based on gross output. 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 on world manufacturing have been regularly published since the first quarter of 2011. However, earlier reports included index figures for some countries that were not seasonally adjusted or for which no information was available where seasonal adjustment was made at the national level. Statistical indicators related to growth measures are often characterized by significant seasonal variations and differences in the number of working days over time periods under comparison. The purpose of seasonal adjustment is to filter out any fluctuations or calendar effects within the shifts of time series. To gain a meaningful comparison of growth rate figures for different periods in a given year and to enhance our understanding and interpretation of the underlying trend, UNIDO publishes growth figures based on seasonally adjusted index numbers. The seasonal adjustment of index numbers is achieved using the TRAMO/SEATS method<sup>1</sup> in Demetra+ software.

The country groups are an essential part of the compilation and presentation of the quarterly growth figures. As of 2013, new country groups have been applied in all UNIDO statistical publications. Details on the country groups 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

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<sup>1</sup> 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.

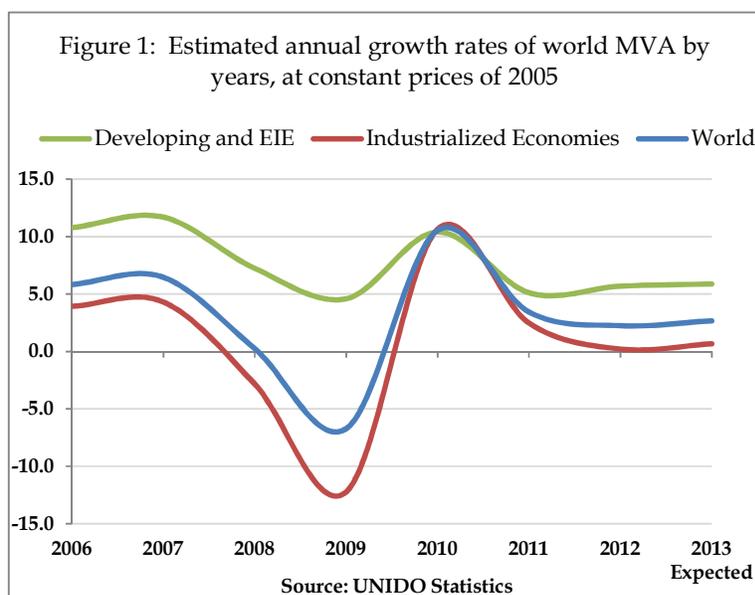
income categories. This report presents the growth figures for country groups by stage of industrial development and by geographic region.

## Major findings

### 1. MVA growth prospects in 2013

World manufacturing value added is expected to rise modestly in the remainder of 2013 on account of improved growth prospects in industrialized countries. According to a UNIDO projection based on mid-year estimates, world MVA will grow by 2.7 percent in 2013 compared to 2.2 percent in 2012. One major development has been observed in European economies where the declining trend of manufacturing output ceased or reversed by the end of the second quarter of 2013. Yet, unemployment and lack of consumer confidence continue to pose a serious challenge to industrial growth in many European countries, and annualized growth may still remain negative for 2013.

Despite the recent improvement, the current growth rate of industrialized economies is inadequate to make up the losses caused by prolonged recession in Europe. The manufacturing output of industrialized countries is expected to increase marginally to 0.7 percent growth in 2013 from 0.3 percent in 2012.



Recession in industrialized countries has resulted in a sustained deceleration of industrial production in developing and emerging industrial economies. The overall industrial growth rate has systematically fallen or remained constant in these economies for the last three consecutive years. This trend is not expected to be turned around in 2013. The manufacturing output of developing and emerging industrial economies is expected to grow by 5.9 percent in 2013, the same rate as in 2012. The growth of China, the largest manufacturer among the emerging industrial economies, might slip slightly from 8.4 percent in 2012 to 8.3 percent. China's deceleration can be explained by its shift from extensive investment led growth to

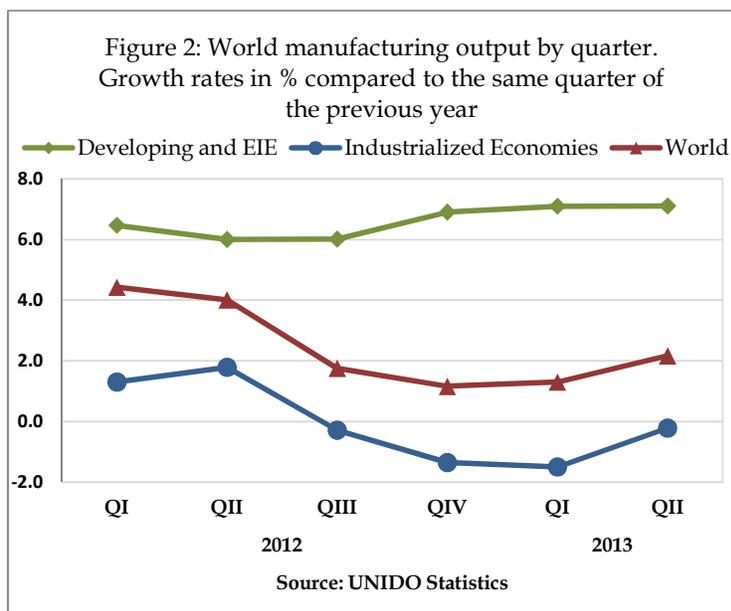
more intensive and demand driven growth with an imminent impact on structural change. A slower pace of industrial growth is expected to continue in major emerging economies such as Brazil, India, Mexico and Turkey.

In general, the positive developments in Europe may signal an improved business environment for world industry. Developing economies might benefit from such growth through exports of consumer goods to meet increased demand in the European market and outflow of capital for new investments. However, the current pace of growth is still inadequate to drive structural change and accelerate the growth of global manufacturing.

## 2. World manufacturing growth in the second quarter of 2013

World manufacturing output growth slightly increased in the second quarter of 2013, indicating an improved trend, especially in European economies. The growth rate of manufacturing output rose to 2.2 percent in the second quarter of 2013 from 1.3 percent in the first quarter compared to the same period in the previous year. For the first time in the last five quarters, an upward growth trend in manufacturing has been observed in industrialized countries (see Figure 2). However, an immediate upturn is not expected, and the annualized growth rate for Europe is likely to remain the same.

The overall growth of industrial production of developing and emerging industrial economies remained relatively higher. However, it is evident that the prolonged recession in industrialized economies has caused an overall deceleration of industrial production in these economies. The manufacturing output of developing and emerging



industrial economies rose by 7.1 percent in the second quarter. The high growth rate of these countries is mainly attributable to China. Excluding China, the growth of manufacturing output in the second quarter was only 2.7 percent in these

countries. China's manufacturing growth dropped to 9.6 percent in the second quarter of 2013, compared to 9.9 percent in the first quarter.

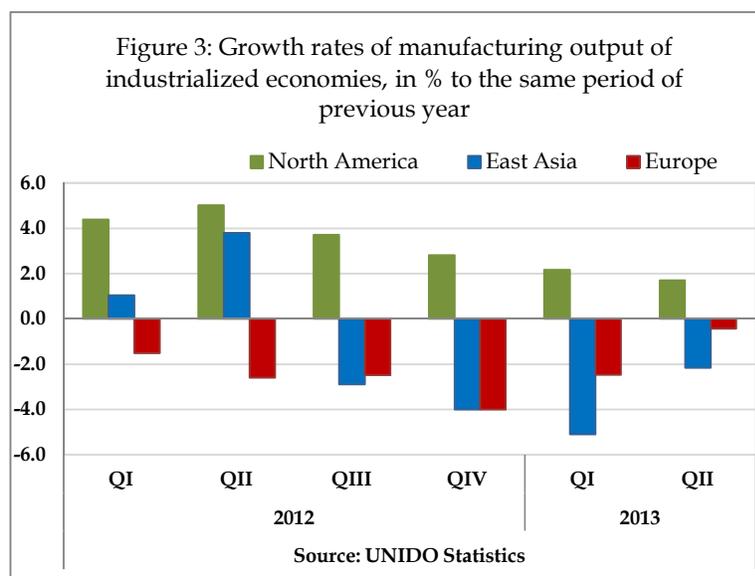
The impact of the global recession on the industrial production of China and other emerging industrial economies has differed, as reported in earlier UNIDO reports. China's manufacturing maintained a higher growth rate throughout the recession period. Its exports were complemented by strong growth in domestic demand. The industrial production of other emerging industrial economies was more vulnerable to fluctuations in external demand for goods and capital inflows in key areas of investment.

### By country group

#### *Industrialized countries*

The growth figures for the second quarter of 2013 indicate that industrialized countries have begun to recover from a prolonged recession. While North America has firmly maintained a positive growth trend for the last six consecutive quarters, the declining trend in Europe has now ceased.

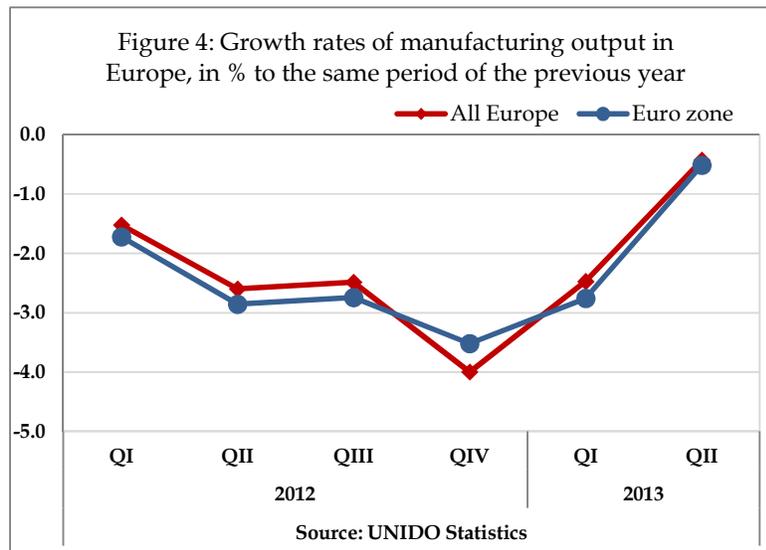
The manufacturing output of the United States rose by 2.1 percent in the second quarter compared to the same period the previous year. In East Asia, as an indication of renewed growth prospects, manufacturing output rose by 1.5 percent in Japan, 4.6 percent in the Republic of Korea and 5.9 percent in Malaysia compared to the previous quarter, although the region's overall growth compared to the same period of the previous year was still lower.



East Asia's manufacturing growth has been influenced by a series of policy measures adopted by the Government of Japan. On the one hand, these measures have increased consumer's confidence in the domestic market. On the other hand,

the weakened Yen is expected to boost exports. These changes create favourable conditions for further industrial growth in Japan as well as in the region as a whole.

There are first indications in Europe of industrial growth following a prolonged recession. As shown in Figure 4, the declining rate of manufacturing output has dropped to 0.4 percent (0.5 percent for eurozone countries) in the second quarter of 2013. This was the lowest rate of decline for



Europe's manufacturing economy since the beginning of 2012. Compared to the first quarter of 2013, Europe's manufacturing output actually grew by 1.1 percent. Recent UNIDO estimates also suggest that the industrial production of the eurozone has expanded at a faster pace than initially anticipated. The latest data (see Figure 4) reveal that there is no difference in industrial growth trends of countries within and outside of the eurozone.

Signs of recovery were evident in Europe's major economies in the second quarter. Compared to the first quarter of 2013, manufacturing output rose by 1.5 percent in France, 2.6 percent in Germany and 0.7 in the United Kingdom. However, year-to-year growth in these countries was only observed in Germany. Indications of growth were also seen in countries where recession was particularly severe. In comparison with the first quarter of 2013, the manufacturing output of Greece grew by 12.8 percent, in Portugal by 2.3 percent and in Spain by 0.6 percent.

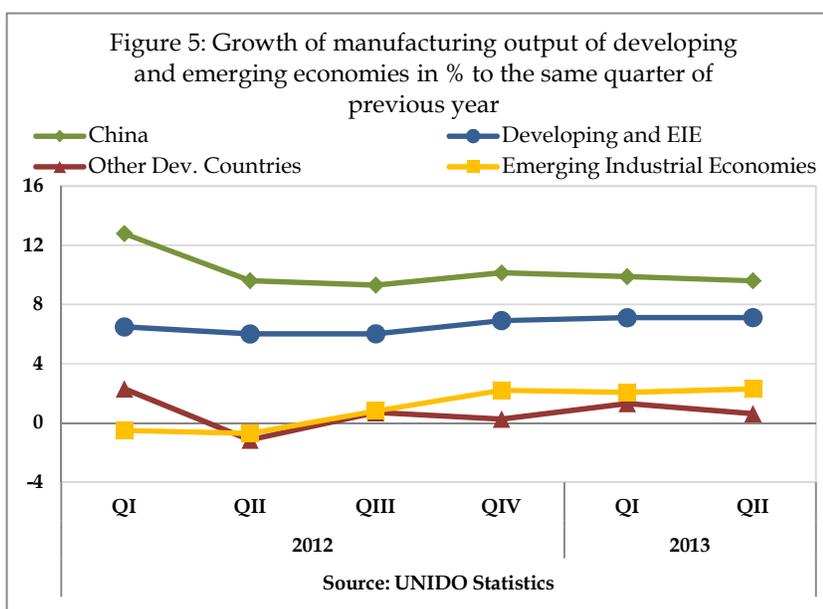
Several smaller economies of Europe, such as Austria, Belgium, Denmark and Estonia, continued to maintain the growth of manufacturing output in the second quarter. However, manufacturing output fell in Italy by 3.4 percent, in the Russian Federation by 4.3 percent and in Sweden by 4.6 percent compared to the same period of the previous year. The banking instability at the beginning of the year severely affected industrial production in Cyprus, where manufacturing output fell by 14.1 percent compared to the same period of the previous year.

Recession in Europe is still the cause for the negative growth of manufacturing output in Bulgaria, Czech Republic, Slovakia and Slovenia.

In general, recent figures indicate that the European economy is emerging from recession and industrial production is expected to rise in coming months. At the same time, continued fiscal austerity measures, tight credit conditions and unemployment are still high in many countries making the current recovery in Europe is fragile. The positive aspect of the current developments is that all three industrialized regions are on the path of recovery simultaneously, which helps to create a favourable business environment to retain and expand overall growth.

### Developing and emerging industrial economies

Developing and emerging industrial economies<sup>2</sup> maintained a high growth of industrial production in the second quarter, which was mainly attributable to China. In other countries, as depicted in Figure 5, industrial growth has decelerated for quite some time.



Following a period of sluggish growth, Brazil's manufacturing gained momentum in the second quarter and rose by 3.8 percent compared to the same period the previous year. Recently introduced policy measures by the Government of Brazil directed towards lowering taxes and energy costs seem to have a positive impact on the country's business environment. At the same time, the lack of skilled manpower remains a hurdle to the country's predominantly labour intensive industry. Strong growth performance was observed in Indonesia, where manufacturing output grew by 6.6 percent in the second quarter. Indonesia's growth performance is credited to domestic factors such as an increase in domestic

<sup>2</sup> 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.

consumption and the loosening of credit facilities, as well as external factors such as rising exports and increase in foreign direct investment.

Manufacturing growth remains sluggish in India - Asia's other major emerging industrial economy. India has sustained weaker growth for a long period. In the second quarter of 2013, its manufacturing output grew at the marginal rate of 0.2 percent compared to the same period of the previous year. The recent plunge of the Indian currency to a record low is likely to affect the industries with a further rise in import prices and, consequently, an increase in the cost of production.

The overall growth of manufacturing in Africa based on the limited data available was found low. The manufacturing output of South Africa, the continent's largest manufacturer, rose by 2.2 percent in the second quarter of 2013. However, manufacturing output dropped in Egypt amid political instability. Elsewhere, manufacturing output rose in the second quarter by 1.6 percent in Morocco and 2.5 percent in Tunisia, but fell in the West African countries Cameroon and Senegal. Current industrial data were not available to estimate the growth of other such major African economies as Ghana, Kenya and Nigeria.

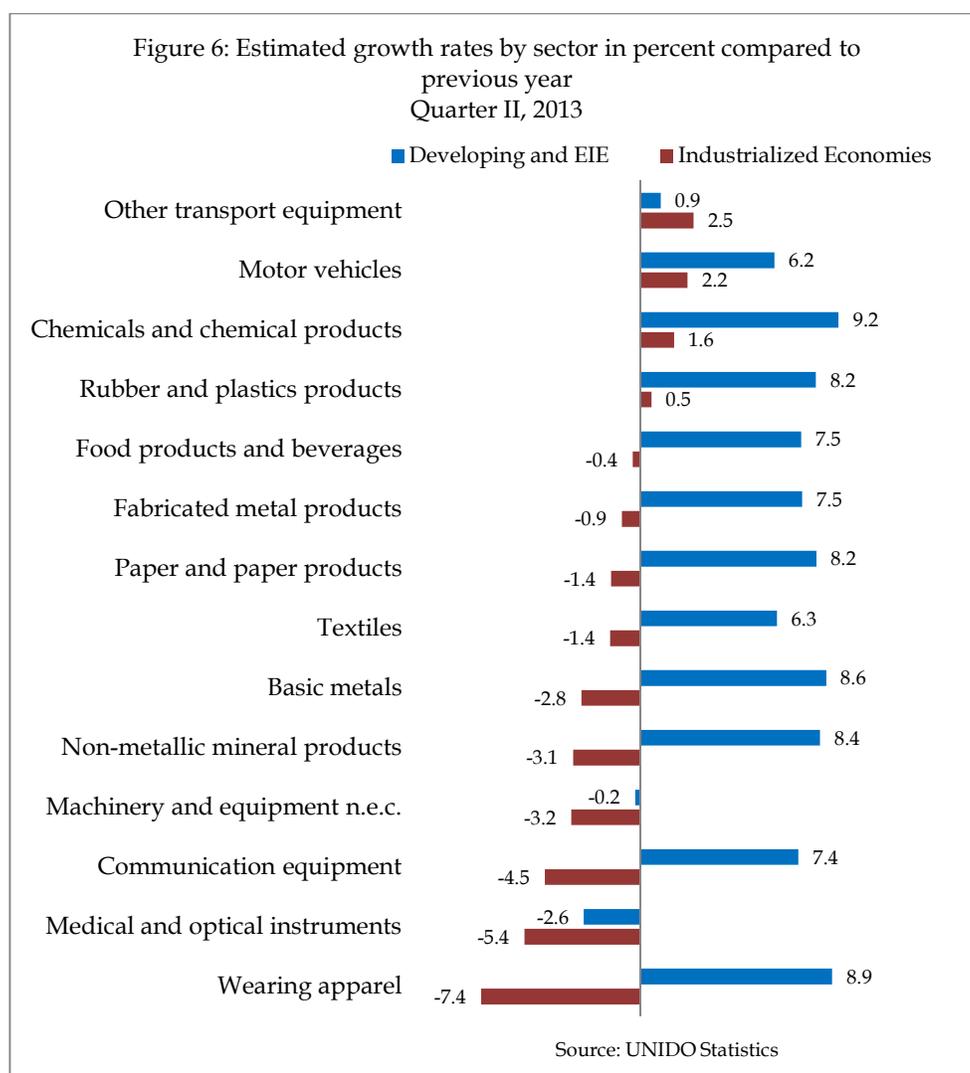
The manufacturing output in the Latin America region grew by 2.1 percent in the second quarter. Most of the countries maintained a positive growth rate at lower pace. The manufacturing output of Argentina grew by 3.5 percent, Columbia's by 2.0 percent, Mexico's by 0.4 percent and Peru's by 1.4 percent. However, manufacturing output fell in Chile by 1.1 percent and Ecuador by 3.2 percent. Among European emerging industrial economies, manufacturing output rose in Turkey by 3.4 percent and Serbia by 1.5 percent, but fell in Croatia by 6.0 percent. Estimates based on the limited data available indicated a positive growth of manufacturing in least developed countries (LDCs). Bangladesh's industrial production, which accounts for more than half of all LDCs', grew by 7.5 percent.

### **By industry groups**

Growth figures were also estimated for manufacturing industries for industrialized and developing and emerging industrial economies separately. As usual, industrialized countries performed better in high-technology industries, yet their production of basic consumer goods such as food, beverages, wearing apparel, printing and publishing declined.

Industrialized countries were outpaced by developing and emerging industrial economies in most manufacturing industries. However, industrialized

countries maintained high growth in motor vehicles, production of other transport equipment and chemical products. Automobile manufactures in the United States maintained their strength in the second quarter of 2013. The production of motor vehicles also rose in Germany and the United Kingdom, but fell in France and Italy due to a fall in domestic demand. The production of other transport equipment, which includes the production of aircraft manufacturing and shipbuilding, rose by 2.5 percent in industrialized countries.



Due to significantly reduced capital outflow from industrialized countries, the production of general purpose machinery and equipment in the market of developing and emerging industrial countries declined. The production of machinery and equipment decreased in France, Germany, Italy, Japan and the United Kingdom due to a fall in external market demand. In other segments of the machinery industry, Japan increased its production of electrical equipment,

whereas the production of medical and optical instruments rose in both Italy and France.

Developing and emerging economies performed well in the production of basic consumer goods. Food production grew by 11.8 percent in China and 12.8 percent in Indonesia. However, output from food manufacturing decreased in India by 4.5 percent. The production of wearing apparel rose in India, Indonesia, South Africa and Turkey. In total, developing and emerging industrial economies increased the production of food and beverages by 7.5 percent, textiles by 6.3 percent and wearing apparel by 8.9 percent in the second quarter.

The production of chemical goods, which includes a large selection of household supplies and pharmaceutical products, rose by 9.2 percent compared to the same period of the previous year. The production of chemical goods rose at an impressive rate of 9.3 percent in India, which has made tremendous progress in terms of the supply of pharmaceutical products to the world market.

Further statistics on the growth rates in the second quarter of 2013 are presented in the Statistical Annex.

## Statistical Tables

**Table 1:**

**Estimates of annual MVA growth by group, at constant US\$ 2005  
(in % to previous year).**

	Estimates for 2012	Expected for 2013
World	2.2	2.7
Industrialized Economies	0.3	0.7
North America	2.0	1.2
Europe	-2.1	-1.8
East Asia	3.9	2.9
Developing and Emerging Industrial Economies (by development group)	5.8	5.9
China	8.4	8.3
Emerging Industrial Economies	3.5	2.2
Least Developed Countries	6.2	8.2
Other Developing Economies	2.3	4.2
Developing and Emerging Industrial Economies (by region)	5.8	5.9
Africa	4.4	3.9
Asia & Pacific	5.4	7.1
Latin America	1.2	2.6

**Table 2:**  
**Estimated growth rates of world manufacturing output**  
 Quarter II, 2013  
*Seasonally adjusted*

	Share in world MVA (2010)	Growth rates compared to:	
		previous quarter	same period of the previous year
World	100.0	1.0	2.2
Industrialized Economies	67.7	1.0	-0.2
North America	22.4	0.0	1.7
Europe	24.7	1.1	-0.4
East Asia	17.2	2.3	-2.2
Developing and Emerging Industrial Economies (by development group)	32.3	1.0	7.1
China	15.3	1.4	9.6
Emerging Industrial Economies	13.8	0.5	2.3
Least Developed Countries	0.5	0.2	7.1
Other Developing Economies	2.7	0.3	0.6
Developing and Emerging Industrial Economies (by region)	32.3	1.0	7.1
Africa	1.5	2.1	0.7
Asia & Pacific	21.7	0.8	8.8
Latin America	5.8	1.2	2.1
Others	3.3	2.6	2.8

**Table 3:****Estimated growth rates of output by manufacturing sector**

Quarter II, 2013 (in % compared to the same period of the previous year)

*Seasonally adjusted*

	Developing and Emerging Industrial Economies	Industrialized Economies	World
Food and beverages	7.5	-0.4	2.9
Tobacco products	5.9	-3.8	4.6
Textiles	6.3	-1.4	4.0
Wearing apparel, fur	8.9	-7.4	3.7
Leather, leather products and footwear	7.2	-0.5	4.6
Wood products (excl. furniture)	9.3	2.4	4.3
Paper and paper products	8.2	-1.4	1.6
Printing and publishing	7.5	-3.4	-2.1
Coke, refined petroleum products	5.6	0.5	3.2
Chemicals and chemical products	9.2	1.6	4.1
Rubber and plastics products	8.2	0.5	3.2
Non-metallic mineral products	8.4	-3.1	2.5
Basic metals	8.6	-2.8	4.2
Fabricated metal products	7.5	-0.9	1.0
Machinery and equipment n.e.c.	-0.2	-3.2	-2.9
Office, accounting and computing machinery	-5.1	3.8	3.7
Electrical machinery and apparatus	10.1	-0.6	5.0
Radio, TV and communication equipment	7.4	-4.5	2.8
Medical, precision and optical instruments	-2.6	-5.4	-5.3
Motor vehicles, trailers, semi-trailers	6.2	2.2	3.0
Other transport equipment	0.9	2.5	1.5
Furniture; manufacturing n.e.c.	9.7	0.6	5.1
<b>Total Manufacturing</b>	<b>7.1</b>	<b>-0.2</b>	<b>2.2</b>

**Table 4:****Estimated growth rates of output by manufacturing sector**

Quarter II, 2013 (in % compared to Quarter I of 2013)

*Seasonally adjusted*

	Developing and Emerging Industrial Economies	Industrialized Economies	World
Food and beverages	1.3	-0.4	0.4
Tobacco products	9.0	-1.1	7.7
Textiles	-2.1	0.0	-1.5
Wearing apparel, fur	-2.1	-1.9	-2.1
Leather, leather products and footwear	-0.9	0.2	-0.6
Wood products (excl. furniture)	-3.0	-0.6	-1.4
Paper and paper products	2.4	0.1	0.9
Printing and publishing	1.8	-0.9	-0.5
Coke, refined petroleum products	0.6	0.7	0.6
Chemicals and chemical products	1.3	0.9	1.0
Rubber and plastics products	0.7	0.5	0.6
Non-metallic mineral products	-0.6	1.5	0.4
Basic metals	0.4	0.0	0.3
Fabricated metal products	-6.7	0.5	-1.5
Machinery and equipment n.e.c.	2.9	1.0	1.2
Office, accounting and computing machinery	1.5	1.7	1.7
Electrical machinery and apparatus	3.5	-0.5	1.7
Radio, TV and communication equipment	8.9	3.4	6.8
Medical, precision and optical instruments	-1.4	-0.2	-0.2
Motor vehicles, trailers, semi-trailers	2.5	5.3	4.7
Other transport equipment	-4.2	2.5	-1.3
Furniture; manufacturing n.e.c.	4.1	-0.3	1.9
<b>Total Manufacturing</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>

**Table 5:****Estimated growth rates of world manufacturing output**

Quarter I, 2013 (revised)

*Seasonally adjusted*

	Share in world MVA (2010)	Growth rates compared to:	
		previous quarter	same period of the previous year
World	100.0	3.2	1.3
Industrialized Economies	67.7	0.1	-1.5
North America	22.4	1.2	2.2
Europe	24.7	0.0	-2.5
East Asia	17.2	-1.1	-5.1
Developing and Emerging Industrial Economies (by development group)	32.3	9.6	7.1
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Other Developing Economies	2.7	-2.7	-1.4
Developing and Emerging Industrial Economies (by region)	32.3	9.6	7.1
Africa	1.5	-0.4	-1.5
Asia & Pacific	21.7	13.2	9.3
Latin America	5.8	-0.2	0.7
Others	3.3	0.3	2.0

**Table 6:****Estimated growth rates of output by manufacturing sector**

Quarter I, 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	7.5	0.0	3.1
Tobacco products	3.8	-2.7	2.9
Textiles	7.1	-2.9	4.2
Wearing apparel, fur	9.9	-4.5	5.4
Leather, leather products and footwear	6.9	-1.6	4.0
Wood products (excl. furniture)	7.8	1.7	3.4
Paper and paper products	4.8	-2.0	0.1
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Office, accounting and computing machinery	-3.6	3.3	3.2
Electrical machinery and apparatus	12.2	-0.4	6.1
Radio, TV and communication equipment	8.0	-11.8	-0.3
Medical, precision and optical instruments	-7.2	-6.2	-6.2
Motor vehicles, trailers, semi-trailers	3.8	-4.5	-3.0
Other transport equipment	5.0	1.4	3.3
Furniture; manufacturing n.e.c.	6.4	-0.8	2.7
<b>Total Manufacturing</b>	<b>7.1</b>	<b>-1.5</b>	<b>1.3</b>