

World Chemistry Report

The economic situation of the chemical industry worldwide in facts and figures

November 2019

Verband der Chemischen Industrie e. V. (VCI)

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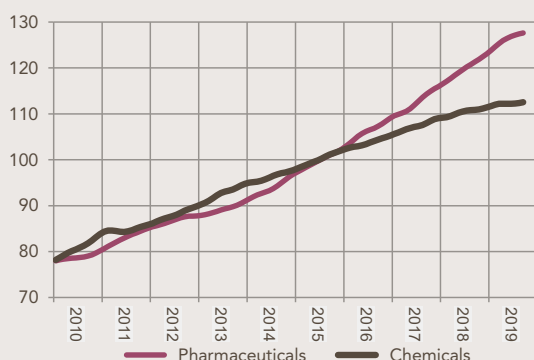
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VERBAND DER CHEMISCHEN INDUSTRIE e.V.
WIR GESTALTEN ZUKUNFT.



GLOBAL CHEMICALS AND PHARMACEUTICALS

Production, trend, index 2015=100



sources: Chemdata International, VCI

GLOBAL CHEMICALS AND PHARMACEUTICALS

Production, seasonally adjusted

	percentage change against previous year			
	2017	2018	Sep. 19	Jan. - Sep. 2019
chemicals (20)	+ 1,4	+ 2,8	+ 1,4	+ 1,9
pharma (21)	+ 5,8	+ 6,4	+ 5,7	+ 6,1
20/21	+ 4,1	+ 3,8	+ 2,9	+ 3,3

- The global production trend of chemicals continued to lose momentum, while the pharmaceuticals' trend rose.
- China was responsible for the dynamics in the past and still reports solid growth. Due to high dynamics in pharmaceuticals, production in Europe is also growing.

PRODUCTION OF CHEMICALS AND PHARMACEUTICALS

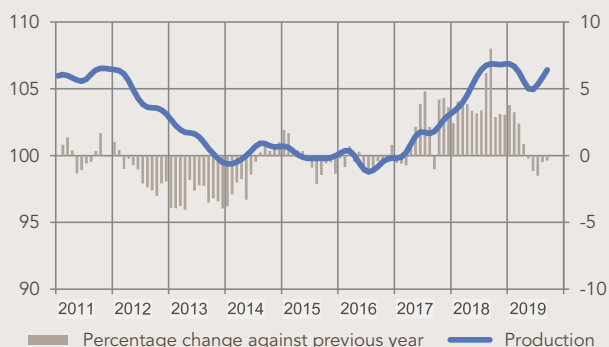
percentage change against previous year

countries and regions	2017	2018	Sep.19	Jan. - Sep. 2019
World	+ 4,1	+ 3,8	+ 2,9	+ 3,3
Europe	+ 2,6	+ 2,5	+ 3,5	+ 4,2
Western Europe	+ 2,0	+ 2,4	+ 3,1	+ 4,0
Germany	+ 2,9	+ 3,6	- 12,7	- 9,0
France	+ 5,4	+ 0,8	+ 6,8	+ 3,1
Italy	+ 4,9	+ 1,0	- 1,3	- 0,1
UK	+ 0,6	+ 1,6	- 4,3	+ 2,7
Spain	+ 3,7	+ 1,0	- 0,5	+ 1,7
Eastern Europe	+ 6,7	+ 2,9	+ 6,5	+ 5,7
Poland	+ 4,0	- 3,2	+ 2,8	+ 4,8
Russia	+ 6,2	+ 3,9	+ 7,1	+ 7,0
European Union (EU 28)	+ 1,8	+ 1,8	+ 2,9	+ 3,1
North America	+ 1,9	+ 3,9	- 0,4	+ 0,7
USA	+ 2,0	+ 4,0	- 0,3	+ 0,6
Canada	+ 0,2	+ 2,2	- 2,2	+ 3,5
Latin America	- 1,0	- 0,2	- 3,3	- 1,7
Brazil	- 0,6	+ 1,1	- 4,6	- 1,7
Chile	- 7,1	+ 4,1	+ 14,9	+ 3,4
Asia	+ 5,6	+ 4,5	+ 3,9	+ 3,9
China	+ 5,9	+ 5,3	+ 5,0	+ 5,3
Japan	+ 4,0	+ 1,0	- 2,0	- 0,1
India	+ 13,9	+ 4,0	- 1,6	+ 1,7
South Korea	+ 4,2	+ 3,2	- 0,2	- 3,1
World excl. China	+ 3,3	+ 3,3	+ 1,7	+ 2,4

sources: Chemdata International, VCI

NORTH AMERICA CHEMICALS AND PHARMACEUTICALS

Production, trend, index 2015 = 100



sources: Chemdata International, VCI

NORTH AMERICA CHEMICALS AND PHARMACEUTICALS

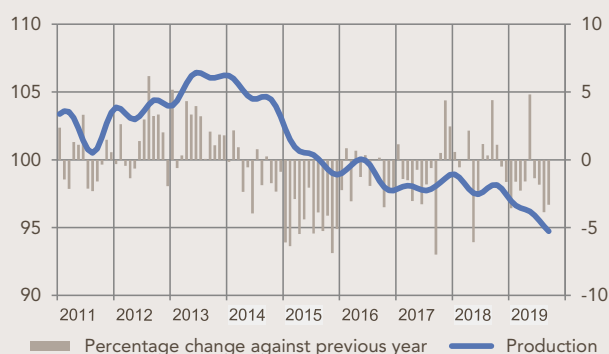
Production, seasonally adjusted

	percentage change against previous year			
	2017	2018	Sep. 19	Jan. - Sep. 2019
chemicals (20)	+ 3,6	+ 4,3	- 1,1	+ 0,3
pharma (21)	- 0,9	+ 3,6	+ 0,7	+ 1,5
20/21	+ 1,9	+ 3,9	- 0,4	+ 0,7

- The steep production increase in the chemical industry of North America seems to be over. In 2019, production increased only slightly due to less favourable domestic and foreign customer demand.
- Growth rates for both chemicals and pharmaceuticals were weaker than 2018.

LATIN AMERICA CHEMICALS AND PHARMACEUTICALS

Production, trend, index 2015 = 100



sources: Chemdata International, VCI

LATIN AMERICA CHEMICALS AND PHARMACEUTICALS

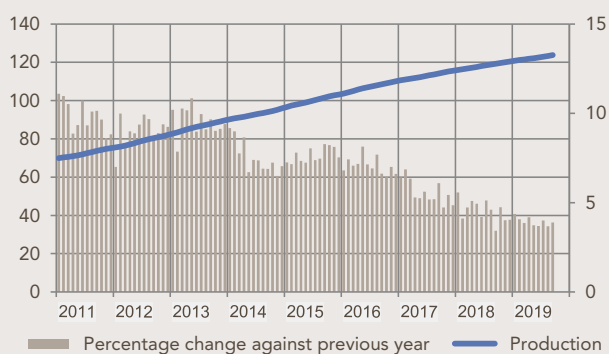
Production, seasonally adjusted

	percentage change against previous year			
	2017	2018	Sep. 19	Jan. - Sep. 2019
chemicals (20)	- 0,1	- 1,0	- 2,6	- 1,4
pharma (21)	- 3,4	+ 1,7	- 4,0	- 2,1
20/21	- 1,0	- 0,2	- 3,3	- 1,7

- The hopes for stronger growth rates have not been fulfilled.
- In 2019, the production of both the chemical as well as the pharmaceutical industry were below the previous year due to lower exports and structural problems.

ASIA CHEMICALS AND PHARMACEUTICALS

Production, trend, index 2010 = 100



sources: Chemdata International, VCI

ASIA CHEMICALS AND PHARMACEUTICALS

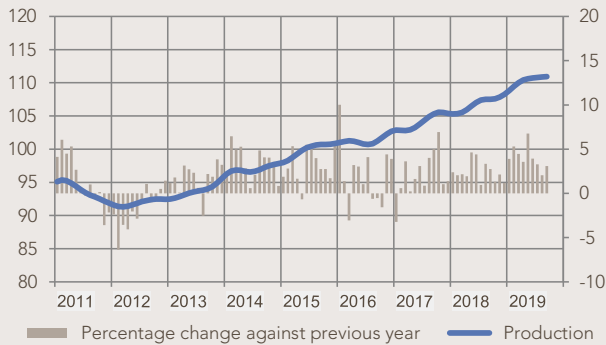
Production, seasonally adjusted

	percentage change against previous year			
	2017	2018	Sep. 19	Jan. - Sep. 2019
chemicals (20)	+ 4,1	+ 3,4	+ 2,9	+ 3,1
pharma (21)	+ 10,7	+ 8,2	+ 4,7	+ 5,6
20/21	+ 5,6	+ 4,5	+ 3,9	+ 3,9

- The upward trend of production in Asia is still strong, but slowed down. Growth rates are much lower than in previous years.
- The political uncertainty within the country has not benefitted the Chinese chemical industry.
- Pharmaceuticals were more dynamic than chemicals.

WESTERN EUROPE CHEMICAL AND PHARMA PRODUCTION

trend, index 2015=100



sources: Chemdata International, VCI

WESTERN EUROPE CHEMICAL AND PHARMA PRODUCTION

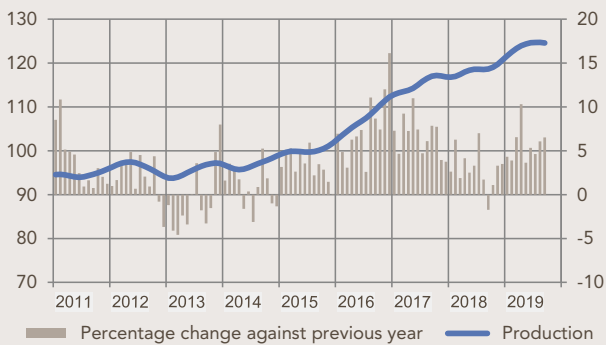
seasonally adjusted, change against previous year in percent

	percentage change against previous year			
	2017	2018	Aug. 19	Jan. - Sep. 2019
chemicals (20)	+ 1,8	- 0,5	- 1,3	- 0,3
pharma (21)	+ 2,7	+ 5,8	+ 10,4	+ 9,9
20/21	+ 2,0	+ 2,4	+ 3,1	+ 4,0

- In Western Europe, production almost continuously increased since June 2016. This trend continued in 2019.
- The growth has its sole origin in the pharmaceutical industry. Chemical production decreased compared to last year due to weaker demand of domestic and foreign customer industries.

EASTERN EUROPE CHEMICAL AND PHARMA PRODUCTION

trend, index 2015=100



sources: Chemdata International, VCI

EASTERN EUROPE CHEMICAL AND PHARMA PRODUCTION

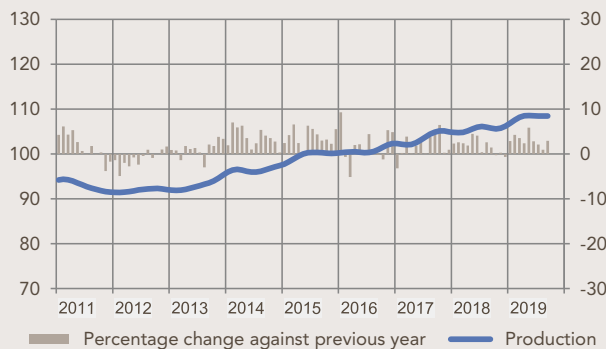
seasonally adjusted, change against previous year in percent

	percentage change against previous year			
	2017	2018	Sep. 19	Jan. - Sep. 2019
chemicals (20)	+ 6,0	+ 3,5	+ 4,2	+ 3,4
pharma (21)	+ 9,2	+ 0,5	+ 12,9	+ 11,4
20/21	+ 6,7	+ 2,9	+ 6,5	+ 5,7

- In Eastern Europe a strong production increase was visible since the beginning of 2016.
- After some setbacks in the pharmaceutical industry in 2018, this positive trend continued in 2019.
- Overall, the pharmaceutical industry shows higher dynamics than the chemical industry.

EUROPEAN UNION (EU 28) CHEMICAL AND PHARMA PRODUCTION

trend, index 2015=100



sources: Chemdata International, VCI

EUROPEAN UNION CHEMICAL AND PHARMA PRODUCTION

seasonally adjusted, change against previous year in percent

	percentage change against previous year			
	2017	2018	Sep. 19	Jan. - Sep. 2019
chemicals (20)	+ 2,0	- 0,5	- 1,3	- 0,7
pharma (21)	+ 1,7	+ 4,9	+ 7,8	+ 8,2
20/21	+ 1,8	+ 1,8	+ 2,9	+ 3,1

- Growth rates in the EU28 were positive in early 2019 due to positive development in the pharmaceutical industry.
- The moderate industry demand slowed down chemicals to negative growth rates, while pharmaceuticals rose strongly.

PRODUCTIONS OF CHEMICALS (EXCL. PHARMA)

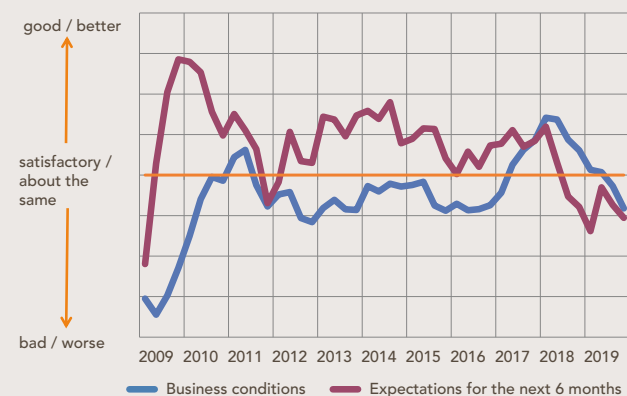
percentage change against previous year

countries and regions	2017	2018	Sep. 19	Jan. - Sep. 2019
World	+ 3,6	+ 2,8	+ 1,4	+ 1,9
Europe	+ 2,5	+ 0,2	- 0,3	+ 0,3
Western Europe	+ 1,8	- 0,5	- 1,3	- 0,3
Germany	+ 1,7	- 2,2	- 2,9	- 3,2
France	+ 6,5	- 2,5	+ 4,7	+ 1,1
Italy	+ 3,4	+ 0,4	+ 2,1	+ 0,2
UK	+ 2,6	+ 1,0	- 7,0	+ 1,0
Spain	+ 4,1	+ 0,8	- 1,3	+ 0,5
Eastern Europe	+ 6,0	+ 3,5	+ 4,2	+ 3,4
Poland	+ 4,3	+ 3,0	+ 2,1	+ 5,7
Russia	+ 4,9	+ 3,0	+ 4,2	+ 4,0
European Union (EU 28)	+ 2,0	- 0,5	- 1,3	- 0,7
North America	+ 3,6	+ 4,3	- 1,1	+ 0,3
USA	+ 3,8	+ 4,1	- 0,7	+ 0,3
Canada	- 0,2	+ 8,0	- 5,2	+ 1,2
Latin America	- 0,1	- 1,0	- 2,6	- 1,4
Brazil	+ 1,1	- 0,3	- 3,2	- 1,1
Chile	- 7,8	+ 4,4	+ 11,2	+ 2,1
Asia	+ 4,1	+ 3,4	+ 2,9	+ 3,1
China	+ 3,8	+ 3,6	+ 3,2	+ 4,0
Japan	+ 5,8	+ 1,4	- 0,1	+ 1,1
India	+ 0,1	+ 2,3	- 1,3	+ 0,8
South Korea	+ 3,5	+ 2,3	- 1,3	- 3,7

sources: Chemdata International, VCI

WORLD BUSINESS CLIMATE

Balance of positive and negative answers



sources: ifo, VCI

► The economic climate deteriorated in all regions, according to the ifo World Economic Climate. In the advanced economies and in Asia's emerging and developing economies, experts have revised both their assessment of the situation and expectations downwards.

► By contrast, in Latin America, the Commonwealth of Independent States, and the Middle East and North Africa, only the assessment of the situation was more negative, while estimates for the months ahead remained broadly unchanged.

► The experts expect significantly weaker growth in world trade. Trade expectations are at their lowest level since the outbreak of the trade conflict last year. Respondents also expect weaker private consumption, lower investment activity, and declining short- and long-term interest rates.

Calculation of the World Production Index

The World Production Index (WPI) measures the production volume of the business of chemistry. As input the WPI uses production indices of around 50 nations as published by national sources and Eurostat. Missing values have been calculated using the FERI forecasts. All indices are seasonally adjusted. The WPI measures production activity generally consistent with the overall industry nomenclature of NACE 20 and 21. As weights the WPI uses fixed weights based on the production values in the base year 2010.

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