Business Worldwide



The business situation of the global chemical industry in the 4th quarter 2023

Global chemical markets: Sluggish demand

Overall economy

The global economy continued to show little momentum at the end of 2023, with the individual regions developing heterogeneously. While the US economy remained strong until most recently, dynamics in China slowed and Europe is in a phase of stagnation. Geopolitical uncertainties and high interest rates hamper developments.

Industry

Even though the GDP still showed some minor growth overall, industrial production declined in many countries. In the major industrialised nations in particular, production was further curbed compared to the previous quarter and fell short of the previous year too. The situation in emerging markets was somewhat better in part. However, global industry is still a long way from

dynamic growth. Companies continued to be faced with a considerable lack of orders.

Chemicals/Pharmaceuticals

Global chemical production increased compared to the previous quarter. But this was solely attributable to growth in some Asian countries – mainly China and India. The lack of orders due to the worldwide weakness of industry slowed the development.

Pharmaceutical production returned to normal in many countries after the immense spikes of the pandemic years.

Outlook

There are still no signs of a rapid, noticeable recovery. On the contrary, we are expecting GDP growth globally to be lower this year than in 2023, with lasting differences between the national economies. Growth in emerging markets is generally better than in the advanced economies, although growth in Europe is relatively subdued compared to that in North America and the major Asian economies. The risks to the short-term global outlook continue to rather point downwards.

The weakness in the industry will continue in 2024. We are anticipating further production cutbacks in Europe in particular. However, growth also remains weak in the USA and momentum is slowing in China. Therefore, the demand for chemical products will remain subdued worldwide. But we no longer expect another slump in production in any country.

March 2024

- Global economy: without momentum
- Industrial production:
 Phase of weakness continues
- Chemicals/
 Pharmaceuticals:
 High costs, weak demand,
 special effects coming to an end
- Outlook: Hope rests on 2025

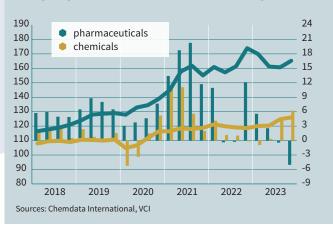
Chemical and Pharma production

By regions, seasonally adjusted, 4th quarter, change against previous year and previous quarter in percent

	chem	icals	pharmaceutical		cals pharmaceuticals		
	yoy	qoq	yoy	qoq			
World	+6.4	+ 1.1	- 5.2	+ 2.5			
Europe							
EU	+ 0.5	+ 0.0	-8.8	+6.2			
Germany	+ 1.2	- 1.7	- 12.4	- 3.3			
Russia	+ 7.3	-0.4	+ 18.7	- 2.2			
Americas							
USA	+ 1.8	- 1.0	+ 1.5	- 0.5			
Brazil	- 1.9	- 0.7	- 19.0	- 10.0			
Asia							
Japan	- 3.6	+ 0.5	+ 3.7	- 0.2			
South Korea	+ 0.9	- 1.1	+ 3.5	- 4.4			
India	+ 0.2	+2.0	+3.0	+ 2.0			
China	+ 11.2	+ 1.9	- 7.3	+3.0			

Sources: Chemdata International, VCI

Slight plus in chemical and pharmaceutical production Production, seasonally adjusted, Index 2015 = 100 (left axis), changes against previous year in percent (bars, right axis)





Global economy without momentum

The global economy continued to show little momentum at the end of 2023, with the individual regions developing heterogeneously. The US economy remained strong until most recently, whereas dynamics in China slowed and Europe is in a phase of stagnation. While the GDP still showed some minor growth overall, industrial production declined in many countries. Geopolitical uncertainties and high interest rates hamper developments.

There are still no signs of a rapid, noticeable recovery. On the contrary, we are expecting growth globally to be lower this year than in 2023, with lasting differences between the national economies. Growth in emerging markets is generally better than in the advanced economies, although growth in Europe is relatively subdued compared to that in North America and the major Asian economies. The risks to the short-term global outlook continue to rather point downwards.

The European economy ended last year without growth. In the 4th quarter of 2023, economic output almost stagnated compared to the previous three months. This means that the EU only achieved an annual growth rate of 0.4 percent for 2023. The average of the quarterly figures conceals the different regional developments. Among the four major countries, Germany came last with a contraction in economic output by 0.3 percent, while Spain was first with growth of 0.6 percent. In between were France (0.1 percent) and Italy (0.2 percent).

In fact, the difficulties on the supply side eased as the energy crisis subsided and supply chain problems were resolved. But meanwhile, there is simply a lack of demand without any signs of improvement for the present year. GDP growth in the EU will remain weak in 2024 with an increase by just 0.5 percent. Private consumption is supported by tight labour markets and rising real incomes. At the same time, higher financing costs and existing uncertainties will weigh

on private investment. There is no stimulus from abroad due to weaker growth globally. The international competitiveness of companies remains strained because of high energy and raw material costs.

At the end of 2023, the US economy improved more strongly than expected with growth of 0.8 percent against the previous quarter. A stable labour market and falling inflation kept private consumption, which is so important for the US economy, at a solid level. Other components – investments including inventory investments and foreign trade contributions – also contributed to growth. Thus, the US economy grew by 2.5 percent in 2023 as a whole.

Now we are expecting only a minor slowdown in growth for the current year. Inflation rates are falling but keep above the Fed's target. Accordingly, interest rates will remain at a high level for the time being. Dampening effects of high interest rates on consumption and investment will be reflected in growth in 2024. But at the same time, the labour market appears to remain stable and prop up consumption.

In the 4th quarter of 2023, China's GDP continued to rise with an increase of 1.0 percent over the previous quarter. Thus, the country returned to moderate growth by Chinese standards. In particular, the property market crisis weighed on growth and slowed private consumption. In 2023 overall, the economy exceeded the government's target of 5 percent.

Momentum is likely to weaken further in 2024. The property market remains in crisis and uncertainty among private households is adversely affecting the demand. In addition, there is a structural decline in the demand for housing due to demographics. Companies are uncertain because of the large number of regulatory measures and US sanctions, which is likely to weigh on investment demand. The shrinking workforce should cause a skills shortage in the coming years. The weak outlook for the global economy is slowing down the export sector.

National economic indicators:

GDP, industrial and chemical production, changes against previous year in percent, forecasts for 2024

		GDP		Ma	anufacturing	g	Chemi	cals (excl. P	harma)
	2022	2023	2024	2022	2023	2024	2022	2023	2024
World	2.9	2.5	2.3	3.0	1.9	1.9	1.8	2.9	3.1
Europe									
EU	3.5	0.4	0.5	3.6	-1.5	-0.5	-6.3	-8.0	1.0
Germany	1.9	-0.1	0.2	-0.2	-1.0	-2.5	-12.1	-10.5	0.0
Russia	-2.1	3.3	1.9	0.3	7.5	1.0	-2.3	4.5	2.0
Americas									
US	1.9	2.5	2.1	2.7	-0.5	0.0	2.2	-1.0	0.0
Brazil	3.1	3.1	1.4	-0.3	-1.0	1.0	1.1	-6.0	1.5
Asia									
Japan	0.9	1.9	0.5	0.0	-1.0	1.0	-3.8	-6.5	0.5
South Korea	2.6	1.3	2.2	1.4	-4.0	4.0	-9.9	-10.5	3.0
India	6.7	7.7	5.3	4.0	5.0	2.0	4.2	0.0	0.5
China	3.0	5.5	4.7	3.1	4.5	4.0	5.8	9.5	5.5

Sources: Feri. Chemdata International. forecasts 2024: VCI



Industrial production

By regions, seasonally adjusted, change against previous year and previous quarter in percent

	2021	2022	.022 4. quarter 2	ter 2023
			yoy	qoq
World	+ 9.6	+ 3.0	+3.0	+1.2
Europe				
EU	+ 9.7	+ 3.6	- 2.5	-0.6
Germany	+ 4.7	-0.2	- 3.9	- 2.1
Russia	+ 7.3	+0.3	+ 7.8	- 0.9
Americas				
USA	+ 5.0	+ 2.7	- 0.6	- 0.5
Brazil	+ 4.6	- 0.3	+0.1	+ 0.5
Asia				
Japan	+ 5.8	+ 0.0	- 0.3	+ 2.1
South Korea	+8.4	+ 1.4	+ 4.4	+ 1.1
India	+ 13.5	+ 4.0	+ 5.4	- 2.4
China	+ 11.0	+ 3.1	+6.3	+ 1.6

Industrial production remained weak in many countries in the final quarter of last year. In the major industrialised nations, production was reduced even further compared to the previous three months. 2022 levels were missed everywhere. In some emerging markets, the situation was somewhat better. However, global industry is still a long way from dynamic growth. Industrial companies continued to be faced with a considerable lack of orders. High inflation and interest rates curbed the demand for industrial goods.

Customer industries worldwide

Industrial production by industries, seasonally adjusted, change against previous year and quarter in %

2021	2022	4. quar	ter 2023
		yoy	qoq
+ 9.6	+3.0	+3,0	+1.2
+ 5.9	+ 0.6	+ 5.4	- 0.9
+ 12.5	+ 0.8	+1.8	+ 1.3
+ 7.3	+ 1.5	+ 0.0	+ 0.0
+ 16.0	+ 5.4	- 5.0	+2.8
+8.3	- 0.8	+2.2	+ 0.2
+ 5.4	+ 6.1	+ 9.5	- 0.2
+ 13.5	+ 3.2	- 1.8	+ 0.3
+ 15.9	+ 8.8	+ 5.9	+ 0.9
+ 16.4	+ 6.4	+ 5.0	+3.1
+ 4.6	+ 1.7	- 0.0	- 0.3
+6.2	- 2.5	+ 0.6	+ 0.6
+ 10.4	- 2.2	- 3.2	+ 0.6
+ 5.1	- 0.5	+ 1.1	+ 1.2
+6.3	-0.1	- 3.3	+ 0.2
+10.3	- 0.4	- 2.5	+ 1.8
	+9.6 +5.9 +12.5 +7.3 +16.0 +8.3 +5.4 +13.5 +15.9 +16.4 +4.6 +6.2 +10.4 +5.1 +6.3	+9.6 +3.0 +5.9 +0.6 +12.5 +0.8 +7.3 +1.5 +16.0 +5.4 +8.3 -0.8 +5.4 +6.1 +13.5 +3.2 +15.9 +8.8 +16.4 +6.4 +4.6 +1.7 +6.2 -2.5 +10.4 -2.2 +5.1 -0.5 +6.3 -0.1	yoy +9.6 +3.0 +3,0 +5.9 +0.6 +5.4 +12.5 +0.8 +1.8 +7.3 +1.5 +0.0 +16.0 +5.4 -5.0 +8.3 -0.8 +2.2 +5.4 +6.1 +9.5 +13.5 +3.2 -1.8 +15.9 +8.8 +5.9 +16.4 +6.4 +5.0 +4.6 +1.7 -0.0 +6.2 -2.5 +0.6 +10.4 -2.2 -3.2 +5.1 -0.5 +1.1 +6.3 -0.1 -3.3

The figures for global industrial production by sectors no longer gave a clear picture for the last quarter of 2023. Although steel production no longer matched the high level of the previous quarter, it remained well above the previous year thanks to Chinese capacities. Other inputs – such as metals, basic chemicals, rubber and plastic goods, paper and electronic components – also remained in the positive range only thanks to growth in China. The production of capital goods (machinery) and durable consumer goods was frequently without momentum.

The lack of orders was felt in all sectors: High inflation is curbing consumption and rising interest rates are adversely affecting the financing conditions for investments. Geopolitical conflicts are increasing existing uncertainty, leading to an additional reluctance to invest and consume

Reluctance to spend on consumer durables

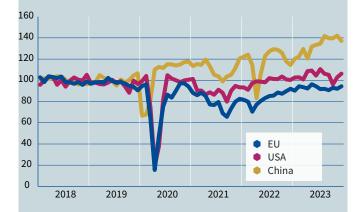
Industrial production furniture, seasonally adjusted, Index 2015 = 100, change against previous year in percent



The high inflation of recent years had a direct impact on the consumption of durable consumer goods such as furniture. Consumers were increasingly uncertain, private consumption fell and the production of furniture collapsed worldwide. Here, the bottom appears to have been reached in Q4 2023. Furniture production increased again for the first time in almost two years – but not everywhere: In Europe and the USA, the negative trend persisted with companies cutting back production further.

Heterogeneous developments in the automotive industry Industrial production, seasonally adjusted, Index 2015 = 100

Industrial production, seasonally adjusted, Index 2015 = 100 change against previous year in percent



The recovery process in the global automotive industry significantly lost momentum at the end of 2023. Overall, even the level of the previous quarter was missed slightly. In Europe, production picked up again after the decline in autumn. However, dynamics remained weak. In the USA, strikes by the United Auto Workers (UAW) union against the three major carmakers in Detroit led to a massive slump in production in October. The recovery in November and December was not enough to turn the quarterly result into a positive one. And in China, momentum slowed significantly in the final months of the year.

This means that developments in the three major regions for motorcars remained mixed. Europe continues to lag behind – although the gap to the USA has narrowed. Existing problems persist. The structural upheaval due to the transition to electromobility in the European automotive industry, supply chain problems, production difficulties at suppliers and high energy and raw material costs are hampering developments. Moreover, there is now a noticeable slowdown in demand. In view of the incentive programmes in the USA (IRA) and China (promoting e-mobility), this picture of different speeds might persist.



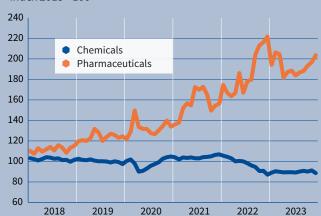
EU: Customer industries production, seasonally adjusted, changes in percent

•			•	
	2021	2022	4. quart	ter 2023
			yoy	qoq
manufacturing industry	+ 9.7	+3.6	- 2.5	- 0.6
basic metals	+ 11.5	- 4.3	- 2.6	- 1.0
fabricated metals	+ 11.7	+ 0.9	-3.0	- 1.1
chemicals	+ 6.1	- 6.3	+ 0.5	+ 0.0
pharmaceuticals	+ 18.1	+ 19.2	- 8.8	+6.2
plastics processors	+ 8.8	- 1.7	- 2.6	- 0.5
automotive industry	+ 1.1	+5.2	+3.8	+ 1.9
mechanical engeneering	+ 12.1	+ 5.1	- 5.3	- 1.4
electrical appliances	+ 12.8	+ 4.7	-6.8	- 4.6
electrical equipment	+28.3	+ 14.4	- 8.6	- 0.7
food and beverages	+3.8	+ 2.1	- 1.2	- 0.5
textile industry	+ 9.1	- 1.5	- 3.8	- 0.3
furniture industry	+ 10.6	- 1.0	- 6.6	- 1.2
paper industry	+6.1	- 1.1	- 4.8	+1.2
printing industry	+ 5.3	- 1.3	- 7.1	- 0.4
glass/ceramic industry	+ 10.5	-0.2	- 13.6	- 3.0
construction	+ 5.4	+ 2.6	+0.1	-0.2

Europe remains the hardest hit by the global industrial crisis. Almost all sectors lowered production, in part even considerably. The previous year's level was missed almost everywhere. Despite falling energy prices, the competitiveness of energy-intensive industries remained poor. Weak private consumption caused production cuts in industries close to consumers. Rising interest rates slowed down the capital goods and construction industries.

EU: No dynamics in chemistry

chemical and pharmaceutical production, seasonally adjusted, Index 2015 = 100



Chemical production in the EU has been moving sideways rather than upwards since the end of 2020, with high energy and raw material costs leading to reduced production in 2022. The last few months did not bring a turnaround. Production stagnated at a low level. A dynamic recovery cannot be expected. The cost burden remains high and puts the industry at a competitive disadvantage compared to other regions. Moreover, demand is falling due to the global weakness of industry.

In the pharmaceutical industry, the high demand during the corona pandemic – together with the strong vaccine production – came to an end. But overall, the demand for pharmaceutical products remained intact. This means that production should return to normal.

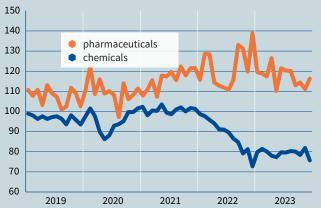
Germany: Customer industries

production, seasonally adjusted, changes in percent

	2021	2022	4. qua	rter 2023
manufacturing industry	+ 4.7	- 0.2	gg. Vorjahr – 3.9	gg. Vorquartal – 2.1
manufacturing industry basic metals	+ 9.5	- 0.2 - 4.6	- 3.6	- 3.5
fabricated metals	+ 8.7	- 1.7	- 5.2	- 3.2
chemicals	+ 5.7	- 12.1	+1.2	- 1.7
pharmaceuticals	+ 5.6	+ 4.7	- 12.4	- 3.3
plastics processors	+ 5.1	- 3.7	- 3.6	- 2.0
automotive industry	- 3.2	+4.2	+ 1.6	+ 1.9
mechanical engeneering	+ 7.2	+ 0.7	- 5.9	- 4.7
electrical appliances	+ 10.7	+ 4.1	- 9.9	- 7.9
electrical equipment	+ 10.0	+ 5.6	+ 0.3	- 2.7
food and beverages	+0.1	+ 0.5	- 4.1	- 2.1
textile industry	+ 5.1	- 6.6	-4.1	- 1.4
furniture industry	+ 1.9	- 5.1	- 9.0	- 4.5
paper industry	+ 5.3	- 5.3	-6.8	-0.2
printing industry	+ 1.9	- 7.2	-8.9	- 1.9
glass/ceramic industry	+ 4.2	- 2.1	- 15.9	-3.0
construction	+ 0.7	+1.7	- 3.1	-3.8

The German economy contracted in Q4 2023 and industrial production was reduced once again. Almost all sectors cut back production. The previous year's levels were also missed nearly everywhere. German industry is in crisis. Companies continued to hold back on orders for inputs. The demand for chemical products remained weak in the German chemical industry's domestic market.

Germany: Chemicals production remains in a deep trough chemical and pharmaceutical production, seasonally adjusted, Index 2015=100



A slump in orders from Germany and abroad caused a production drop in the chemical industry in the final quarter 2023. Production fell by 1.7 percent compared with the previous three months. The disastrous prior-year quarter was exceeded by 1.2 percent. However, developments within the industry were mixed. Manufacturers of fine and speciality chemicals had to cut back their production considerably as demand from industrial customers failed to materialise. In contrast, other chemical sectors increased their production slightly. Capacities were underutilised. Pharmaceutical production recorded a sharp slump. This is not so much due to a lack of demand but rather a return to normal after the spikes in the years of the pandemic. Further data on the situation of the German chemical and pharmaceutical industry is available in the Grman Quarterly Report: https://bit.ly/wirtschaftliche_Lage



China: Customer industries

production, seasonally adjusted, changes in percent

2021	2022	4. quarter 2023		
+11.0	+3.1	gg. Vorjahr + 6.3	gg. Vorquartal +1.6	
+ 2.8	+1.9	+ 6.7	- 0.7	
+ 18.5	- 0.1	+6.2	+3.6	
+8.6	+ 5.8	+ 11.2	+1.9	
+ 25.1	- 2.3	- 7.3	+ 2.3	
+8.4	- 1.4	+ 7.6	+ 1.0	
+ 6.5	+6.9	+ 16.9	+ 0.9	
+ 14.8	+ 0.7	+ 2.1	+ 1.6	
+ 19.0	+ 11.8	+ 10.0	+ 1.9	
+ 16.5	+ 7.4	+ 7.6	+ 3.4	
+ 7.4	+ 3.7	+ 1.0	- 1.6	
+ 5.5	- 1.7	-0.0	+ 0.9	
+ 14.4	- 5.7	- 0.8	+ 1.9	
+ 7.6	- 0.5	+8.3	+2.4	
+12.6	+ 0.7	-0.2	+1.4	
+ 10.6	- 1.4	- 0.4	+3.0	
	+11.0 + 2.8 + 18.5 + 8.6 + 25.1 + 8.4 + 6.5 + 14.8 + 19.0 + 16.5 + 7.4 + 5.5 + 14.4 + 7.6 + 12.6	+11.0 +3.1 +2.8 +1.9 +18.5 -0.1 +8.6 +5.8 +25.1 -2.3 +8.4 -1.4 +6.5 +6.9 +14.8 +0.7 +19.0 +11.8 +16.5 +7.4 +7.4 +3.7 +5.5 -1.7 +14.4 -5.7 +7.6 -0.5 +12.6 +0.7	gg. Vorjahr +6.3 +2.8 +1.9 +6.7 +18.5 -0.1 +6.2 +8.6 +5.8 +11.2 +25.1 -2.3 -7.3 +8.4 -1.4 +7.6 +6.5 +6.9 +16.9 +14.8 +0.7 +2.1 +19.0 +11.8 +10.0 +16.5 +7.4 +7.6 +7.4 +3.7 +1.0 +5.5 -1.7 -0.0 +14.4 -5.7 -0.8 +7.6 -0.5 +8.3 +12.6 +0.7 -0.2	

Industry in China continued its positive trend of the previous quarter at a moderate pace. However, not all sectors moved upward and some continued to fall short of the previous year. Consumer confidence remained weak in view of the property crisis and the debt that comes with it. There was no impetus from abroad due to the weak global economy. The government stepped up its measures to counter weak growth, although the scope of these measures remained limited and rather focused on individual sectors and stabilisation.

China: pharmaceuticals normalized – chemicals expanded chemical and pharmaceutical production, seasonally adjusted, Index 2015 = 100



The official Chinese data for chemical production showed an unusually dynamic trend in the summer months, although this has recently levelled off considerably. It remains somewhat unclear where production is heading. The reasons are that developments in Chinese customer industries were rather subdued and trade with foreign countries was poor due to the global weakness of industry. If the available figures are correct, this could lead to significant stock building for chemicals in China.

In the pharmaceutical industry, the normalisation phase after the strong production growth of the corona years appears to have come to an end. Production returned to its usual growth in Q4 2023.

USA: Customer industries

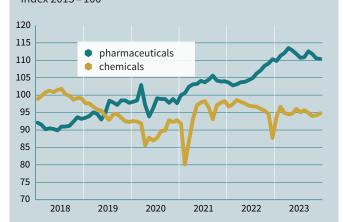
production, seasonally adjusted, changes in percent

	2021	2022	4. quarter 2023	
			yoy	qoq
manufacturing industry	+5.0	+ 2.7	-0.6	-0.5
basic metals	+ 9.6	- 0.5	-0.1	- 0.7
fabricated metals	+ 5.7	+3.4	- 2.4	- 1.1
chemicals	+ 4.2	+2.3	+1.8	-0.9
pharmaceuticals	+ 5.2	+2.3	+ 1.5	- 0.4
plastics processors	+ 6.7	+ 2.8	- 3.1	- 0.8
automotive industry	+ 5.8	+ 9.8	+0.2	- 5.2
mechanical engeneering	+ 7.1	+ 5.6	- 2.8	- 1.4
electrical appliances	+4.8	+3.6	+ 0.4	+ 0.0
electrical equipment	+ 9.4	+ 12.7	+ 11.4	+2.2
food and beverages	+ 0.5	+1.4	- 2.8	+ 0.5
textile industry	+ 6.6	- 0.8	- 7.2	- 3.3
furniture industry	+ 2.7	+ 2.3	- 6.6	- 2.0
paper industry	-0.0	- 1.1	- 2.8	+ 0.9
printing industry	+2.1	- 2.6	- 5.3	+ 0.5
glass/ceramic industry	+ 5.7	+5.4	- 2.5	- 0.0
construction	+6.4	+ 5.3	+ 8.7	+3.1

Unlike the overall economy, US industry is still moving backwards. Just a few sectors were able to increase production while many others remained below the previous year's levels. Rising interest rates led to higher financing costs and persistently high inflation dampened consumer confidence.

USA: without dynamics

chemical and pharmaceutical production, seasonally adjusted, Index 2015 = 100



The US pharmaceutical industry remained at a high level but was recently unable to further increase dynamics.

Chemical production was curbed in the last quarter 2023. Low domestic demand from industrial customers and the weakness of industry globally stifled the demand for chemical products.

Further data on production of the chemical and pharmaceutical industry worldwide is available on a monthly basis in the World Chemistry Report: https://bit.ly/World_CR



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