

A photograph of an industrial facility, likely a paint manufacturing plant. The image shows several large, cylindrical stainless steel storage tanks (Vorratsbehälter) arranged in a row. The tanks are labeled with blue and green signs: '812.201 Vorratsbehälter 4' and '810.201 Vorratsbehälter 2'. The tanks are situated on a raised platform with metal railings. Above the tanks, there are large, horizontal pipes wrapped in silver insulation. The background shows the interior of a large industrial building with a high ceiling and structural beams.

Raw material situation

Shortage of raw materials puts paint industry under pressure

Information on the current situation
on the procurement markets

JUNI 21

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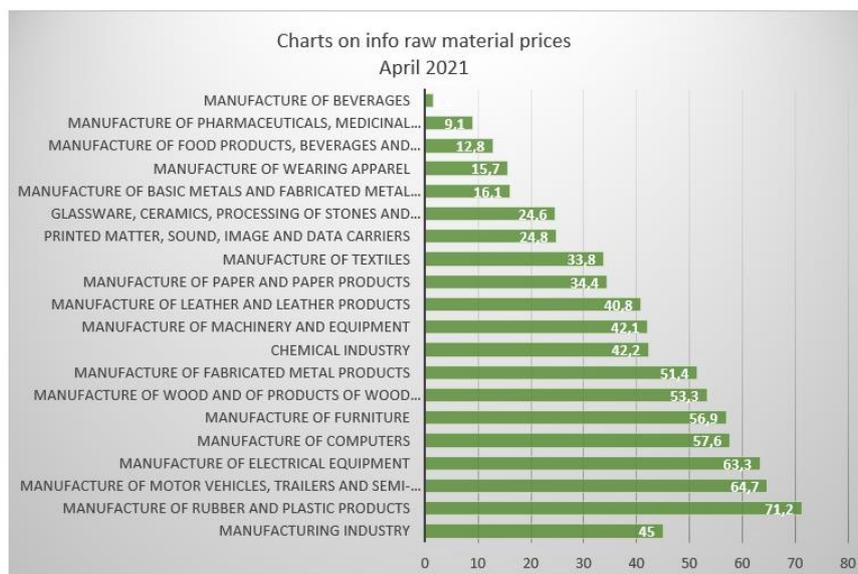


The European paint industry is under increased pressure due to rising raw material prices: a complex mix of increased demand, capacity issues and tight transport resources of key raw materials is increasing uncertainty in the supply chain. After a previous year marked by the COVID 19 pandemic, companies face major challenges in 2021 due to the rise in raw material prices.

The reasons are manifold.

The global supply markets have been massively affected by the shortage of important raw materials and the associated explosion in the cost of building materials, and it is not yet foreseeable how long this turbulence will last. This is an unusual and drastic situation for the entire construction industry, and for all trades involved in construction.

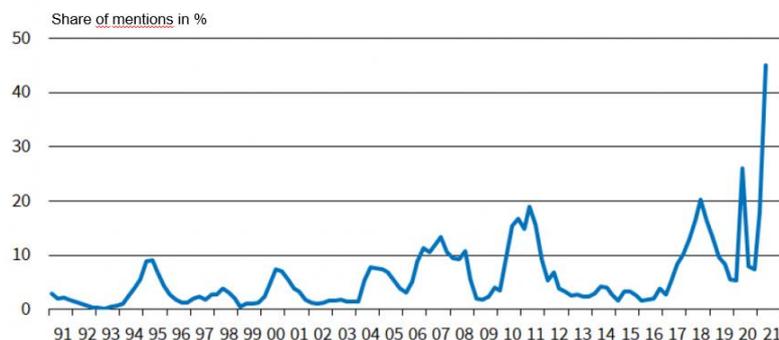
The shortage of primary products affects almost all sectors



ifo Business Surveys – April 2021

The index for shortages of inputs is at its highest level in 30 years

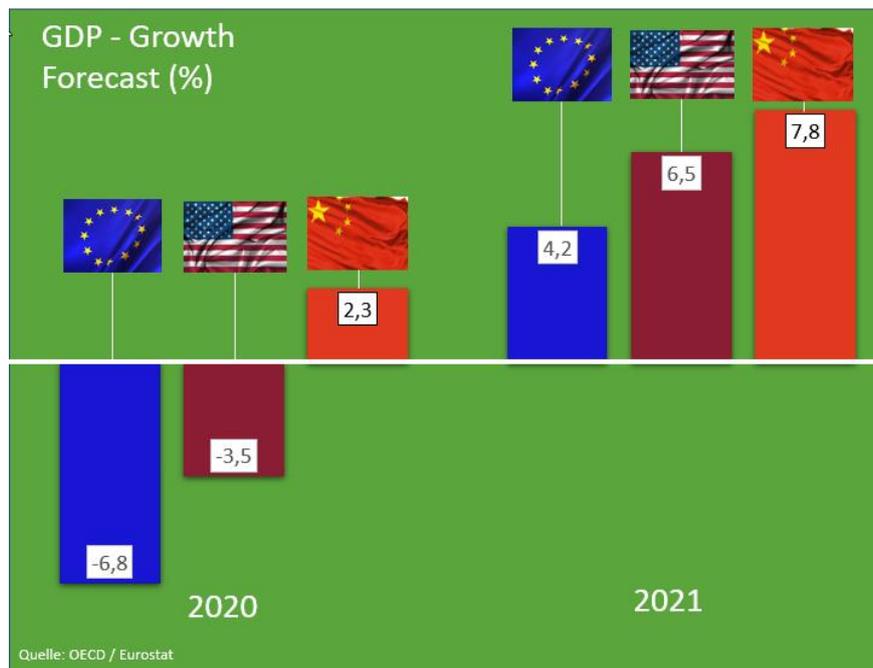
ifo index for the shortage of preliminary products in the manufacturing sector



Source: ifo Business Surveys, April 2021

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Although China was hit hard by the pandemic in early 2020, the economy grew by 2.3 percent. Economic growth of over six percent is even forecast for 2021. This leads to greater domestic supply in this important producing country with correspondingly fewer exports.



Worldwide restrictions due to the Corona virus affected supply capacity. With reduced mobility and a decrease in global oil consumption due to restrictions on aviation and automobiles, the volumes produced were also reduced.

In view of this reduced capacity, petrochemical products (e.g. solvents, acrylics) relevant to the paint industry have become more expensive. In addition, the recent OPEC decisions led to an increase in the oil price, which further intensified the negative effect.



As a result of the Corona pandemic, capacities were reduced or shut down in many areas of the industry.

Inventories along the entire supply chain have been run down.

The rapid recovery of the global economy (China / economic stimulus programme in the USA) is causing demand to rise rapidly.

This high growth in demand is being met with under-stocked supply chains.

Increasing capacity bottlenecks and rising delivery times are the result.

Ordering behaviour is also changing massively and additionally fuelling the emerging bottlenecks.

The capacity problems were also triggered by unforeseen events at manufacturers in Asia and Europe. These include plant closures or accidents. Affected raw material suppliers claimed Force Majeure in this context and had to significantly tighten their supply.



Current climatic events and accidents are causing further, unexpected disruptions and bottlenecks:

- **Texas winter storm (Around 80% of the capacities of the US basic chemical industry are located in the states of Texas and Louisiana).**
- **Fire at BASF (monomer production)**
- **Suez Canal blockade (container freighter accident)**

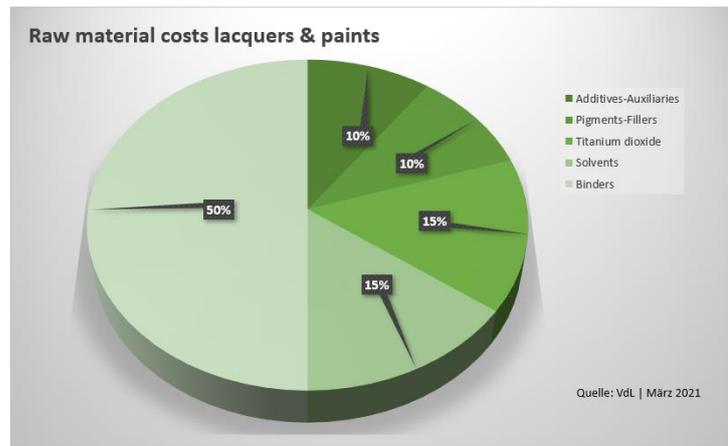
Another cost factor is limited transport resources. The COVID 19 pandemic led to irrational demands in international trade, which had a negative impact on the number of shipping containers used to transport raw materials.

The current global shortage of containers has led to a sharp increase in transport costs: prices for containers between China and Europe have risen by more than 400 per cent since the fourth quarter of 2020.



The transport market on the world's oceans can hardly cope with the swelling freight volume.
Container transports from Asia to Europe are massively affected.
Containers are in short supply and sea freight is exploding.
Traffic jams in the ports are significantly increasing transport times.

Single events in the international supply chain are common and can usually be absorbed. However, the industry is already moving into critical area, with raw material prices accounting for more than half of expenditure.



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Since January 2020, the cost of key components such as epoxy resins has increased by 60 per cent in Europe. The situation is similar for solvents, where prices almost doubled. Global pigment raw material costs also saw a sharp increase.

Raw materials	Data in %
Binders	17,2
Acrylates	42,8
Epoxy	58,4
Solvents	71,8
Butanol	117,9
Ester	131,8
Ethanol	37,2
Xylenes	36,5
Titanium dioxide	6,1
Other pigments	7,0
Zinc phosphate	10,6
Zinc dust	23,0
Additives	8,6
Other	-
Packaging	9,4
Freight	3,6
Other raw materials	
Isocyanates	31,5

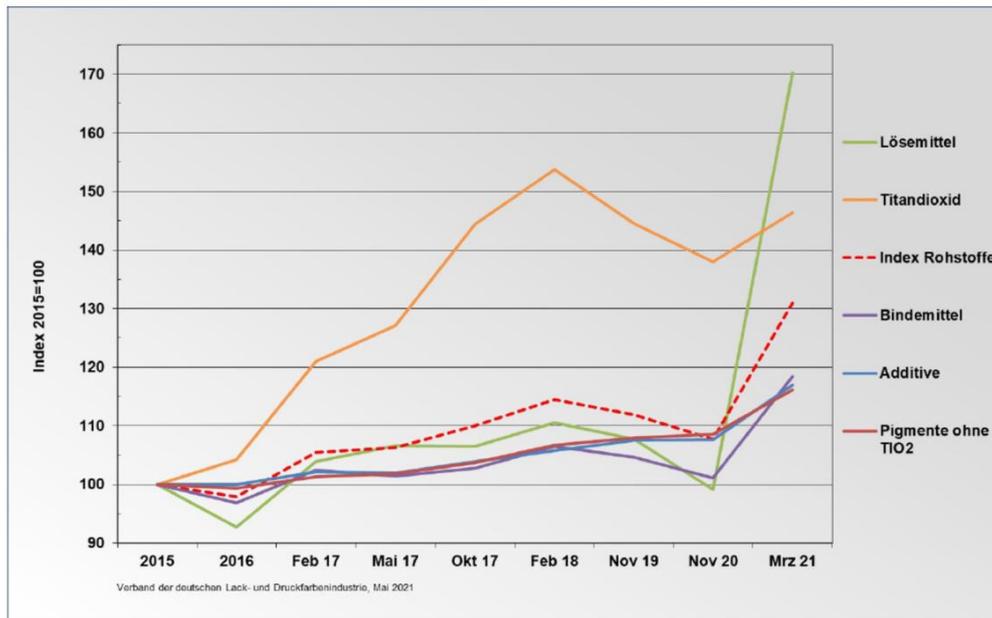
Development of raw material prices in 2021 compared to 2020*

* Comparison date March 2021 vs. March 2020

Notes

- Production restrictions as well as price surcharges by Force Majeur
- Reductions in raw material deliveries due to Force Majeur
- Force Majeur in liquid dispersions, shortage in additives and silicones
- Strong price increases expected across all raw materials in Q2
- Tight supply situation for UV monomers and epoxy resins

Source: VdL | March 2021



This crisis shows the vulnerability of global supply chains and sharpens the focus on risk management

DAW is closely monitoring developments in the supply chain which, due to their global nature, are influenced by numerous factors - geopolitical, logistical, price and capacity components.

Against this background, efforts are directed towards minimising higher costs through internal process optimisations, alternative procurement and efficiency improvements.

Our message to you - our customers

Some material systems are only available to a very limited extent due to a lack of raw material supply. This does not only affect niche products. Especially for the core range, it is noticeable that worldwide supply flows have come to a standstill or have been temporarily suspended.

We are doing everything we can to ensure the best possible delivery capacity within the framework of what is currently feasible. However, stock buffers have already been exhausted in many places and availability of goods is a serious problem. The continuing high demand and the start of the façade season will present us with further challenges.

Our commercial partners are also making a very important contribution in this crisis. Thanks to the stock range of the distributors of up to several weeks, the ability to deliver our products to users and end consumers has been largely ensured so far.

Thus, in the first four months of this year - despite the massive shortage of raw materials - a considerably higher order volume than in the previous year could be delivered to you, our customers.

With great efforts, we are currently managing to produce and deliver a higher volume every day than in previous years. However, this is not yet sufficient to serve the extraordinarily high order volumes in the otherwise usual time frame:

In this context, we would therefore like to address an appeal to you to coordinate early with our commercial partners regarding delivery dates and to order only materials that are needed immediately. Please refrain - as far as possible - from stock purchases in the coming weeks. This would lead to a further distortion of the supply chain and bears the risk of further fueling the price spiral of raw materials.



Daniel Weber – CSCO DAW SE

It feels like the first months of this year are a constant struggle with strong headwinds. That's why we formed a task force weeks ago to better manage the difficult situation together with suppliers and retailers.

These are perhaps the most strenuous months in a long time ... and I can promise you that we are doing everything we can to justify your trust in us.

Steffen Heiko Fischer - COO DAW SE



Video message Steffen Heiko Fischer und Daniel Weber
www.daw.de

