Europe’s technology industries see strong growth in the rear-view mirror and bumpy road ahead

Twice a year, Orgalim’s economists compile data and examine the main economic developments for Europe’s technology industries. The result is this report outlining future economic trends for our industries.

- Strong growth in 2021 as our industries saw healthy recovery
- Solid 3.8% turnover growth forecast for 2022 but major downside risks
- War in Ukraine takes toll on our industries – directly and indirectly
- Further price increases and supply disruption aggravating the situation
- Employment expected to grow 1.4% this year

We can currently look at 2022 from two angles. In the rear-view mirror, we see well-filled order books and continued dynamic growth towards the end of 2021 and the beginning of 2022. But looking ahead shows us a completely different road than we had hoped for 2022. The war in Ukraine and further prices rises have once again aggravated the situation.

This goes beyond the direct effects of the war in Ukraine, which include the consequences of the sanctions on the export and import side. Europe’s technology industries are highly integrated upstream and downstream, which means they are also very susceptible to indirect effects that are felt when demand or supply sectors fail. In addition, there are other indirect consequences of the war, which have led to an enormous increase in the prices of energy, industrial metals and other raw materials.

And the war alone is not the only thing that throws the market off balance. The corona pandemic continues to have a negative impact on the free movement of goods in our sectors. Covid-related restrictions, especially in China, are aggravating supply bottlenecks. At the time of writing, Shanghai is in a lockdown, and there is a risk of port closures and production halts in China.

In short: there are many reasons to believe that Europe's technology industries will need to continue to adapt to volatile times.

Better than expected end to 2021
The year 2021 ended better than expected with production growth of 12.8%, boosted by a strong fourth quarter. All sectors have returned to pre-crisis levels, with electrical, electronics and ICT rebounding particularly strongly. However, rising raw material prices and a lack of availability have made production more expensive and restricted production growth.
Solid growth forecast in 2022 with major downside risks

For 2022, the forecasts of the Orgalim member associations are still solidly positive at +3.8 % turnover growth. However, two factors make this year’s forecast particularly uncertain.

On the one hand, the order situation is still good and optimism was high before the start of the war in Ukraine that we would see healthy production growth this year. On the other hand, downside risks are extremely high for our sector. Increasing raw material prices continue to squeeze profits, and a lack of availability is slowing down production and could have a severe impact on demand in the technology industries’ customer sectors. In addition, exploding energy prices are creating further cost pressure. All of this will sooner or later have an impact on industry’s willingness to invest.

The ingredients for a potential downturn are there; whether it occurs or not depends, among other things, on the course of the war in Ukraine and price developments in supplier markets. It should be noted that the growth estimates are in turnover value terms, meaning that price effects are included. We assume that a large part of the forecast growth for 2022 is also due to price effects and that real growth could turn negative in 2022.

Ukraine war impacts differ around Europe

Here’s what we can say already about the impact of the war in Ukraine on Europe’s technology industries:

• Many companies are hit hard by the direct consequences of the war, such as export and import restrictions. EU technology industry exports to Russia, Belarus and Ukraine amounted to approximately €42.7 billion in 2021 – some 6.4% of all extra-EU exports. The direct effect on turnover of a widespread loss of exports to these regions is around 1.7% – that is the share of these exports as a percentage of the total turnover of our industries.

• The indirect consequences are much more extensive. These include, for example, production losses at customers, delivery difficulties on the supply side, and price increases for pre-materials and energy. These consequences are difficult to assess for the whole of Europe. However, we know, for example, that 77% of companies in the German mechanical engineering industry are affected by these indirect consequences.

• Impacts vary considerably by country. Due to their geographic proximity alone, Northern and Eastern European countries have higher export and import exposure to Russia, Ukraine and Belarus. The same applies, of course, to their suppliers and customers. Dependence on Russian natural gas also varies considerably. Countries that are highly dependent on Russian natural gas face production cutbacks in the event of delivery failures and reducing that dependence will be particularly expensive in these regions.

• The war will have a substantial impact on the financial year of almost all companies, directly or indirectly. These consequences are included in the current assessment, but their extent can change on a daily basis.
Key figures

2,480 billion EUR
Turnover value of Europe's technology industries in 2021

10.974 million
Direct employment of Europe's technology industries in 2021

Production % change for same period year on year
NACE 25/26/27/28/33 Eurostat production index EU 27; short term business statistics; Price adjusted, calendar and seasonally adjusted
Orgalim forecasts for turnover

Data sources: E&S WG Forecasts year on year; NACE 25/26/27/28/

Orgalim forecasts for employment

Data sources: E&S WG Forecasts year on year; NACE 25/26/27/28/
**Orgalim export value 2021 (extra-EU exports)**

Data sources: Eurostat trade data; HS 82-85+90,91,93

- RU+UA+BY €42.7 bn (6.4%)
- Ukraine €7.8 bn
- Belarus €2.6 bn
- Other extra-EU €621.5 bn
- RU+UA+BY €42.7 bn (6.4%)

**Orgalim forecasts for investments**

Data sources: E&S WG data forecasts year-on-year; NACE 25/26/27/28

- 2021: 8.2%
- 2022: 4.1%
**Highlights per sector**

**Metal technology sector – supply chain failures slow growth**

- **11.7% production growth in 2021**
- **4.2% growth forecast for 2022**
- **Metals supply problems slowing production**

The metal technology sector is greatly affected by the price increases and supply problems for industrial metals. In Germany, according to the German steel and metal working industry association, WSM, incoming orders last year were significantly higher than production growth at (14.8 % versus 8.6 %): many orders could not be processed due to a lack of availability of pre-materials. Across Europe, production growth in 2021 was still an impressive 11.7%.

For this year we expect a nominal turnover increase of 4.2%. This, too, is heavily dependent on further developments in important customer sectors – above all the automotive sector. Supply bottlenecks in some areas are forcing production halts, which subsequently have a direct impact on suppliers, and thus on the metal technology sector. An example of this is the loss of wire harness production in Ukraine. Actual performance in 2022 will depend on the ability of the industry to compensate for such supply chain failures quickly and flexibly.

**Electrical engineering, electronics and ICT – surge held back by supply problems**

- **16.5% production growth in 2021**
- **2.9% turnover growth forecast for 2022**
- **Raw materials issues, such as for neon gas, aggravate chips shortage**

Structurally, the growth of the electrical engineering, electronics and ICT sector continues to be fuelled by the increased demand for electronic components globally, driven in turn by the digitalisation and decarbonisation trends. The sector was the growth driver of the technology industries last year, with production growing 16.5%.

For this year we currently estimate 2.9 % turnover growth. However, we expect a downward correction to this figure, based on developments over the past few weeks, notably in Germany. There are multiple reasons for this. The industry is still affected by the shortage of semiconductors on the global market. An improvement was originally expected around mid-2022 but, according to the German sector association ZVEI, better supply to the market may well be delayed. The delivery failure of neon gas from Ukraine increases the chips shortage in the electronics industry as half of the global supply of neon gas – which is needed for lasers in chip production – comes from Ukraine. There are therefore enormous downside risks for this sector as well.

According to a recent ZVEI member survey, more than 60% of companies in the German electro and digital industry fear that the existing difficulties in the supply chain will worsen again in the coming weeks, although the companies have so far mostly been managing to cover their raw material requirements from regions other than Russia. Additional shortages are expected in particular for stainless steel and other metals, wood, chemical products and semiconductors. Other concerns are the scarce container capacities.
Mechanical engineering sector - high demand but also high risks

- 12% production growth in 2021
- 4.2% turnover growth forecast for 2022
- High exposure to indirect impacts of war in Ukraine

After a steep decline at the beginning of the Corona crisis in 2020, the mechanical engineering sector made an impressive comeback in 2021. With production growth coming in at 12% for the year, the industry has exceeded the pre-crisis level in terms of value of turnover. The demand for capital-intensive goods has risen again surprisingly quickly and reflects the sustained positive development in demand over the past year.

On the input material side, manufacturers are suffering from delivery problems with electronic components, like controllers, but also from a shortage of metal products, including sheet steel. According to the German mechanical engineering association, VDMA, 77% of machine builders in Germany are severely or markedly affected by the indirect impacts of the war in Ukraine war. This is not only about direct exports or imports in the crisis region: rather, the existing problems mentioned above are intensified by the effects of the war. Nevertheless, from today’s perspective, we still expect 4.2% turnover growth for mechanical engineering in 2022.

Employment

Employment expected to grow in 2022, after decline in 2021

At the start of 2022, unemployment across Europe had shrunk to its lowest level in recent decades, at 6.2%. Europe’s technology industries, too, are contributing, with employment currently expected to grow 1.4% this year.

In 2021, employment was very weak in our sectors, however – down 0.8%. In many cases, the reason was the expiry of public support measures in the labour market. Many employees were retained in 2020 thanks to these measures, and large-scale job cuts were prevented or postponed. This fall-out from the pandemic cannot disguise the fact that the labour market for skilled workers remains very tight across Europe.

Spotlight on prices

Prices of industrial metals and other materials rise sharply again in 2022

Since the beginning of 2021, we have seen an almost unprecedented increase in the price of industrial metals. We expected it to peak in the fourth quarter of 2021 but, instead, in 2022, there has unexpectedly been another, even steeper price increase. The S&P industrial metals index – an index of the most important industrial metals listed on the London Metal Exchange – clearly demonstrates this development.
The hope last autumn was that we would see a slow downward trend in prices – not just of industrial metals, but also of semiconductors, electronic components, plastics, etc – which would ease the burden on companies in the technology industries.

However, price increases gained new momentum even before the start of the war in Ukraine. The reasons for this are a mix of rising energy costs that make production more expensive or uneconomical, transport and delivery bottlenecks (triggered by the zero-Covid policy in China), and now the import restrictions due to the war in Ukraine.

While growth forecasts for our industries this year are so far positive, it must not be forgotten that the increased cost burden on companies decouples production growth and profits. Even if there is growth in 2022, substantial cost increases will negatively impact companies’ profit margins.

Orgalim represents Europe’s technology industries: companies that innovate at the crossroads of digital and physical technology. Our industries develop and manufacture the products, systems and services that enable a prosperous and sustainable future. Ranging from large globally active corporations to regionally anchored small and medium-sized enterprises, the companies we represent together comprise Europe’s largest manufacturing branch, directly employing 10.97 million people across Europe, generating an annual turnover of €2,480 billion, and producing one third of the EU’s manufactured exports.

Orgalim commits to champion an EU policy agenda for sustainable growth; to support the industry in its transformation; and to advance dialogue between business, policymakers and citizens on the relationship of technology to society. We are shaping a future that’s good.