

Global car production approx. 20% below expected level due to chip crisis

hpo economic commentary, 4th quarter 2021

The peak in demand in this sector has already passed.

Disrupted supply chains have been the dominant topic in the industry for about a year now. The effects of this are increasingly evident in the statistics, and the skid marks are clearly visible. Especially the automotive production, central to the industry, is suffering severely from the acute supply shortages in the semiconductor

industry. This will continue until mid-2022, according to industry experts.

The chart below shows the **automotive production in the key producing countries**, which are responsible for more than 80 % of the global production. The actual

quarterly figures (thin black curve) show a steep drop following the recovery in the second half of 2020. The 12-month moving average (thick black curve) has been moving downwards again since the middle of the year.

The red curve in the figure shows the forecast of hpo forecasting. This curve is a momentary snapshot representing the **production values that hpo would expect based on the general global economic indicators**. A similar progression of the thick red and black curves shows that the hpo model can estimate global automotive production quite well. The hpo model – whose input data includes global economic indicators such as retail sales and industrial production – also calculates declining automotive production numbers starting in Q2 2021 but at a roughly 20% higher level. Our interpretation is that this gap is attributable to supply chain bottlenecks.

Irrespective of this, the **peak in demand in this sector has already passed**, according to our analyses. It can be assumed that the shortfall from 2021 will be made up again in the coming year. However, this is likely to be only a temporary effect.



Fig. 1: Production of passenger cars and light trucks in main countries of automotive production

Source: Actual data of Trading Economics, forecast curve of hpo forecasting

Industrial production has probably already passed its peak again

Sentiment varies around the world.

The very short and incomplete recovery in the automotive sector means that **other industries, which are heavily dependent on automotive, are also recovering only relatively hesitantly**. For example, according to the Destatis statistics office, demand for tools in Germany is again stagnating at a level that is still well below pre-crisis levels.

Industrial production peaked in July in both Europe and the US. This figure has since fallen for two months in a row in the US. Europe also recorded a slowdown in August. No figures are yet available for September. Only a few recent industrial production data have been published for Asia, but Japan, for example, experienced an exceptionally sharp slump in September.

This development is highly relevant because – as our company founder Peter Meier describes in his book “The Economy as an Oscillating System” (Hanser Verlag, 2019) – the **rate of change in industrial production** in the OECD runs ahead of the Business Confidence Index (BCI) sentiment indicator by around six months and has a similar shape to the latter (see Figure 2). The leading indicator calculated can forecast economic turning points with a reliability comparable to the BCI but at a much earlier stage. If the slowdown in industrial production is confirmed in the coming

months, demand in the capital goods industry must be expected to decline in 2022. In Europe and the US, **sentiment**, as measured by the BCI, is still very good.

On the other hand, Asia has been pessimistic for quite some time, and the regional BCI recently took another massive plunge around the turmoil in the Chinese real estate sector.

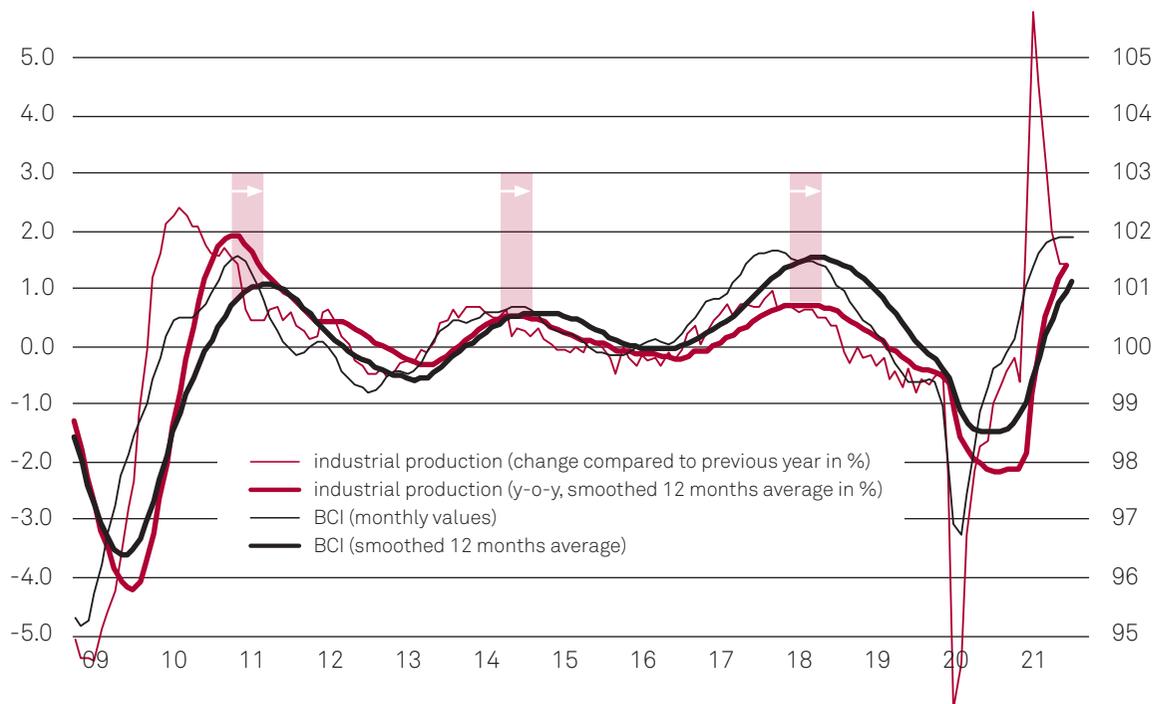


Fig. 2: Year-on-year change in industrial production in OECD vs. Business Confidence Index (BCI) in OECD

Source: OECD raw data, hpo forecasting calculation, and presentation

Can China stabilize the global economy again, as it did in 2008?

The growth figures will probably remain below the long-term trend growth.

During the **2008 financial crisis** and beyond, China stimulated its economy on a large scale with cheap loans through its state banks and large investments in infrastructure. These investments were a boon for the European capital goods industry at the time. Today, China cannot play this stabilizing role to the same

extent because it is severely challenged with **tackling its debt bubble**.

There are growing indications that the focus in China was too one-sidedly on high economic growth figures imposed by the state for many years. **To meet the**

ambitious targets of the central government, the regional governments invested too much in infrastructure. These investments were primarily financed by selling land to real estate developers. With the real estate crisis and restrictive monetary policy, this cycle is now faltering, and many economists' forecasts for China's economic growth are currently being revised in a downward direction. Despite having coped well with the pandemic, China is now in danger of sliding into a financial crisis. This will not necessarily take the form of a recession with a shrinking gross domestic product, but the growth figures will probably remain below the long-term trend growth for several years.

Currently, China is still benefiting from **strong consumption, especially in the US**, which was (overly) fueled by the inflationary stimulus packages of the Trump and Biden administrations during the pandemic. In particular, demand for consumer durables reached unprecedented levels in the US by mid-2021. Most recently, demand for these consumer durables and the Consumer Confidence Index in the US showed a steep downward trend. The supportive effect of US consumption for China and the global economy is likely to diminish further after Christmas at the latest.

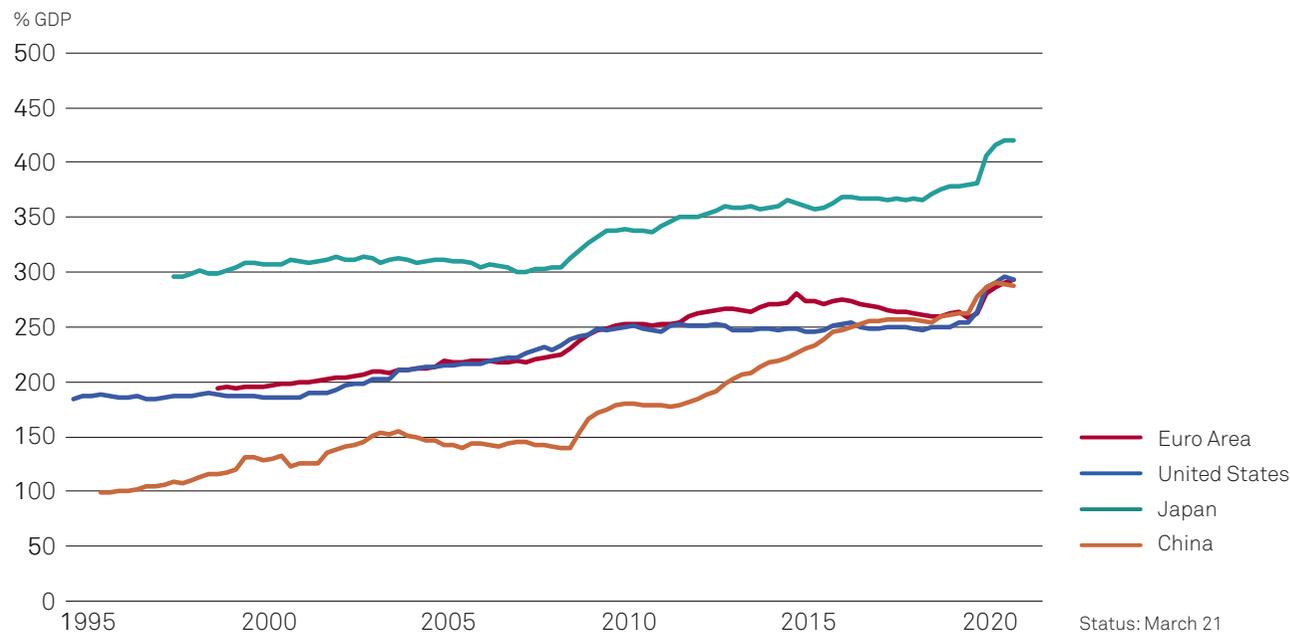


Fig. 3: Credit to the non-financial sector (private and public) from all sectors at market value

Source: BIS raw data, illustration by hpo forecasting

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