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# The economic outlook has noticeably darkened during the autumn - downturn in technology industry output

The economic outlook has been deteriorating steadily as winter approaches. Almost all economic news has been negative. We are once again witnessing increasing geopolitical instability, this time in the Middle East. The latest data on demand and order intakes in the Finnish technology industry predicts major challenges during the winter and early spring. Strong order books are still supporting production for the time being, but unless demand starts to show signs of recovery, the situation may deteriorate considerably next year.

However, we are not yet talking about an economic crisis or more serious recession. At least for the moment, the downswing seems to be part of the "normal" economic cycle. And by normal, we mean that things are largely developing in line with expectations: economic activity wanes with rising interest rates. There are also no external factors that would lead to a crisis in the economy, such as the coronavirus pandemic, financial crisis or euro crisis.

As this currently appears to be a typical economic cycle, there is also cause for optimism. The economy is well-placed to begin growing again once inflation subsides and interest rates stabilise and eventually start to fall. The current consensus is that the first cuts in interest rates could be seen during the second half of 2024. However, increased instability in the Middle East has fuelled uncertainty around inflation, and has thereby also blurred the outlook for interest rates.

Although the economic cycle still appears to be progressing normally at this stage, the outlook is subject to considerable risks and uncertainties. Geopolitical tensions and instability have steadily increased and high interest rates are beginning to burden indebted countries in Southern Europe. There will be another presidential election in the USA in a year's time, Russia is continuing its war of aggression in Ukraine, gas pipes and data cables are being damaged in the Baltic Sea ... There is a long list of risks that will have considerable impacts if realised.

#### Near-term growth noticeably slower than average

According to the outlook published by the International Monetary Fund IMF at the end of October, the global economy is forecast to grow by 3.0 per cent in 2023. As of October, the forecast for next year was 2.9 per cent, which is one-tenth lower than it was in July. As global economic growth has averaged 3.8 per cent in the period 2000–2019, the growth rate for this and next year will be very slow in comparison to the long-term average.

The IMF forecasts that growth in the eurozone will be 0.7 per cent in 2023 and 1.2 per cent in 2024. The German economy is forecast to contract by 0.5 per cent in 2023, and very slow growth is projected for developed economies as a whole over the next few years.

The IMF forecasts that China's economy will grow by 5.0 per cent this year and 4.2 per cent next year.

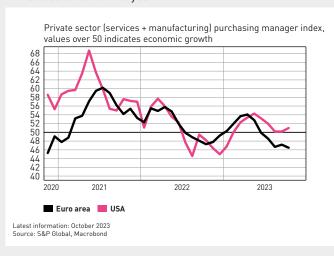
### A downturn in industrial production in Europe

As data on European industrial production volumes is now available until August, it is becoming increasingly clear that there has been a slight downward trend in production volumes throughout the year. Trends in industrial production volumes in Finland tend to follow the same pattern as in Europe.

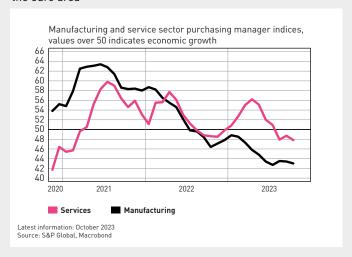
Although the USA has been faring slightly better than Europe this year, the situation is not particularly good there either. In practice, industrial production in the United States has seen virtually zero growth for almost two years.

Production trends in Europe's industrial powerhouse, Germany, have also been quite poor. German industry is clearly underperforming in comparison to industry elsewhere in Europe. Heavier energy-intensive industries and sectors that have been dependent on Russian fossil fuels are struggling in particular. The German automotive industry has also faced major challenges that are likely to continue over the coming years. These challenges are also

#### Purchasing manager indices point to a recession in the euro area in the second half of the year



#### Situation in manufacturing industry continued to be difficult in the euro area



having broad-ranging impacts throughout the automotive industry's extensive subcontracting network.

However, things are slightly better in the German mechanical, electronics and electrotechnical industries, although there is no growth in sight there either.

The Purchase Managers' Indices show that the situation in the eurozone has remained extremely challenging throughout the autumn. The preliminary data published in October points to a clear contraction in output. According to the Purchase Managers' Indices, new industrial orders have been falling at an extremely fast rate in the eurozone. The last time such a rapid drop was seen was during the financial crisis.

#### Demand now burdened by many factors

Industrial demand is currently being burdened by many factors at

First, high interest rates are weakening demand in general. High interest rates have made many previously profitable investments unprofitable, and these investments are therefore being postponed.

Secondly, companies that were recently suffering from shortages of materials and components had been attempting to increase their stocks of raw materials and semi-finished products. Now that there has been a downturn in the economy, these companies are seeking to considerably reduce their inventories as they prepare for harder times. High interest rates have also led to a significant rise in warehousing costs, which has led many companies to order less

from their suppliers. However, in order to keep production up and running, companies will have to start ordering raw materials and semi-finished products again sooner or later.

Thirdly, as European industry is currently in a deflationary environment, many of those considering investments are wondering whether to invest now or wait and see whether the acquisition price will go down.

A deflationary environment poses a major hindrance to profitable growth in general.

However, the aforementioned phenomena are transient in nature. As long as there are no severe shocks to the economy, we may see a return to growth in the second half of next year.

#### Economic outlook for industry has further deteriorated in Finland

The Confederation of Finnish Industries' (EK) latest Business Tendency Survey indicates that the economic situation and outlook for the entire manufacturing industry continued to weaken during the third quarter.

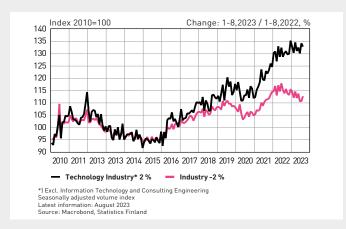
It is concerning to note that the outlook for employment has clearly deteriorated during the quarter. The data indicates that there will probably be a fall in employment figures over the winter. It seems that as the employment figures have weakened, the shortage of skilled employees has also eased, at least temporarily.

Insufficient demand was clearly the largest obstacle to growth in industry during the third quarter.

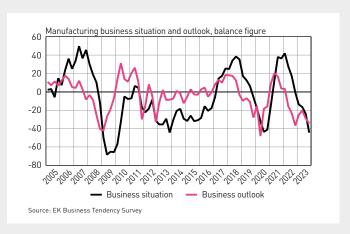
#### Industrial production in Europe on the decline



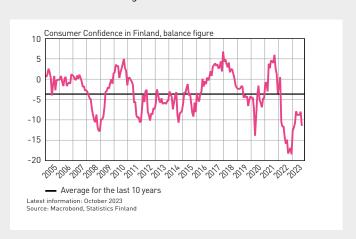
### Volume of Industrial Production in Finland



#### The business cycle in the manufacturing at a very weak level



### Consumer confidence again weakened





# Sharp fall in new orders - order books are quickly being consumed

In 2022, the turnover of technology industry companies in Finland grew by approximately 15 per cent on 2021. Turnover grew in all main sectors. Their turnover in Finland amounted to approximately EUR 105 billion in 2022. Output growth and a significantly higher price level contributed to turnover growth last year. Turnover in the January-July period of 2023 was on par with turnover twelve months earlier.

The monetary value of new orders in the July-September period was 24 per cent lower than in the previous quarter and 30 per cent lower year-on-year. Order intake was exceptionally poor during the third guarter. There were nothing but negative trends in both new orders and order books in all of the technology industry's main sectors

The balance figure for tender requests was -31 in October. The data collected during October clearly indicates that there has been a marked decline in demand in the market during the third quarter. Such a strong fall in demand will most likely have an unfavourable impact on order intake in the fourth quarter.

At the end of September, the value of order books was four per cent lower than at the end of June and 13 per cent lower than in September 2022.

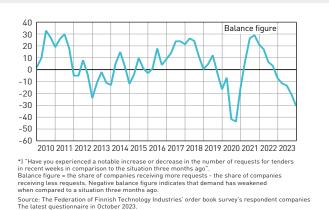
On the basis of order trends in the third guarter, the turnover of technology industry companies is expected to contract over the next six months.

At the end of September, technology industry companies in Finland employed 0.1 per cent more people than at the end of June. The industry employed approximately 335,000 people at the end of September. According to Technology Industries of Finland's personnel survey, approximately 9,500 employees were affected by lay-off procedures at the end of September. Although there has been a notable increase in the number of people laid off, the figures are still guite low in view of the circumstances.

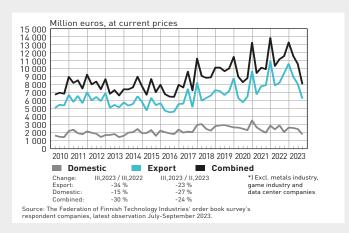
Fewer personnel were recruited in the July-September period than in 2022. Recruitments totalled 8,700. Some companies were increasing their payroll, while others were hiring new employees due to retirements and employee turnover.

This trend in personnel numbers was a welcome surprise: personnel reductions were not being made in spite of the clear contraction in new orders. Although there have already been some redundancies, it seems that many companies are still hiring more personnel. Companies report that the shortage of skilled employees has temporarily eased slightly.

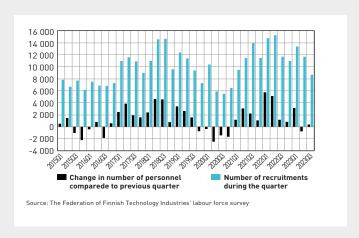
#### Tender requests\* received by the technology industry companies in Finland



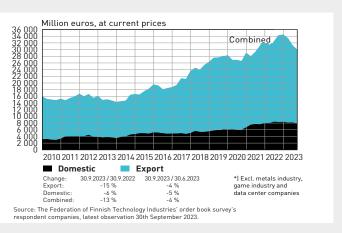
## Value of new orders in the technology industry\* in Finland



#### Growth in headcount stalled in the technology industry in Finland



## Value of order books in the technology industry\* in Finland





# **Electronics and Electrotechnical Industry in Finland**

Value of new orders continued to fall

In 2022, the turnover of companies in the electronics and electrotechnical industry (telecommunications equipment, electrical equipment and medical technology) in Finland grew by approximately 16 per cent on 2021. Their turnover in Finland amounted to approximately EUR 21 billion in 2022. Turnover in the January-July period of 2023 was on par with turnover twelve months

In the July-September period, the value of both new orders and order books in the electronics and electrotechnical industry decreased on the previous quarter. As has been typical for the sector in recent years, order volumes can fluctuate strongly from one quarter to another.

The electronics and electrotechnical companies that took part in Technology Industries of Finland's survey of order books reported

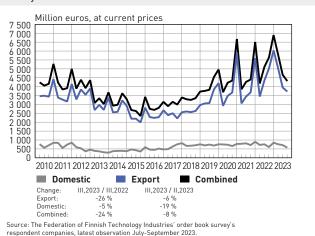
that the monetary value of new orders in the July-September period was eight per cent lower than in the preceding quarter and 24 per cent lower than in the corresponding period of 2022.

At the end of September, the value of order books was five per cent lower than at the end of June and 21 per cent lower than in September 2022.

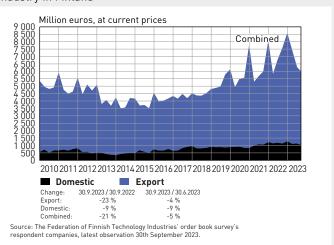
On the basis of order trends in the third quarter, the turnover of electronics and electrotechnical industry companies is expected to contract over the next six months.

At the end of September, electronics and electrotechnical companies in Finland employed 0.6 per cent fewer people than at the end of June. The industry employed approximately 41,300 people in September.

### Value of new orders in the electronics and electrotechnical industry in Finland



### Value of order books in the electronics and electrotechnical industry in Finland





# **Mechanical Engineering in Finland**

# Extremely sharp fall in new orders

In 2022, the turnover of mechanical engineering companies (machinery, metal products and vehicles) in Finland increased by 12 per cent on 2021. Their turnover in Finland amounted to approximately EUR 38 billion in 2022. Turnover was six per cent higher in the January-July period of 2023 than twelve months earlier.

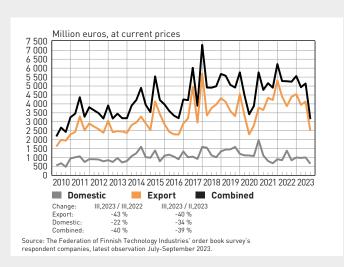
In the July-September period, the value of new orders in mechanical engineering fell by as much as 39 per cent on the preceding quarter. Year-on-year, the value of new orders decreased by 40 per cent. At current prices, the quarterly value of new orders has not been this low since 2010. When price rises are also taken into account, the order intake for the past quarter can be considered exceptionally poor.

At the end of September, the value of order books was four per cent lower than at the end of June and 11 per cent lower than in September 2022. It should be noted that shipyards have an exceptionally large share of the total value of order books.

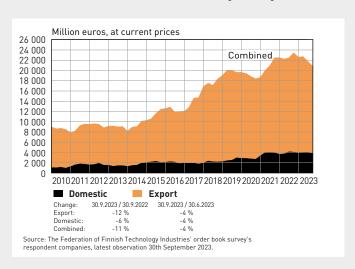
On the basis of order trends in the third quarter, the turnover of mechanical engineering companies is expected to contract over the next six months.

At the end of September, mechanical engineering companies in Finland employed about the same number of people as at the end of June. The industry employed approximately 137,200 people in September.

#### Value of new orders in the mechanical engineering in Finland



#### Value of order books in the mechanical engineering in Finland





In 2022, the turnover of metals industry companies (steel products, non-ferrous metals, castings and metallic minerals) in Finland increased by 32 per cent on 2021. Their turnover in Finland amounted to EUR 19 billion in 2022. Turnover was as much as 20 per cent lower in the January–July period of 2023 than twelve months earlier. Lower producer prices have contributed to the significant fall in turnover that has occurred during the year.

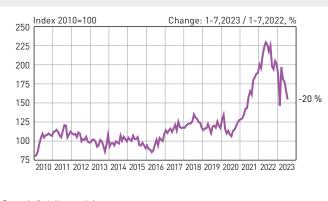
In the January-August period of 2023, the total production of steel products, non-ferrous metals, castings and metallic minerals in Finland saw a year-on-year decrease of one per cent.

At the end of September, metals industry companies in Finland employed 0.4 per cent more people than at the end of June. The industry employed approximately 16,100 people in September.

Global steel production in the January-September period remained on par with production during the corresponding period of 2022. Production fell by 9.1 per cent in the EU and by 3.3 per cent in North America. In Asia, production was up by 1.6 per cent.

China, India, Japan and the United States were the largest producers in January-September. China accounted for approximately 57 per cent of global steel production.

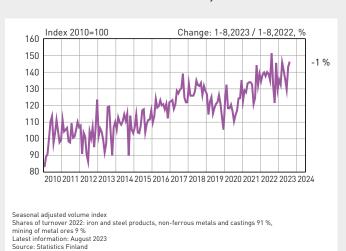
### Turnover of the metals industry in Finland



Seasonal adjusted turnover index Shares of turnover 2022: iron and steel products, non-ferrous metals and castings 91 %, mining of metal ores 9 %

Latest information: July 2023 Source: Statistics Finland

### Production volume of the metals industry in Finland





# **Consulting Engineering in Finland**

# New orders and order books declining

In 2022, the turnover of consulting engineering companies (industrial, social and construction expert services) in Finland increased by nine per cent on 2021. Their turnover in Finland amounted to just over EUR 7 billion in 2022. Turnover was five per cent higher in the January-July period of 2023 than twelve

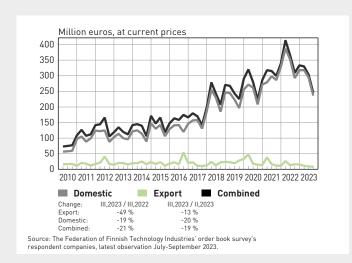
The consulting engineering companies that took part in Technology Industries of Finland's survey of order books reported that the monetary value of new orders in the July-September period was 19 per cent lower than in the preceding quarter and 21 per cent lower than in the corresponding period of 2022.

At the end of September, the value of order books was two per cent lower than at the end of June and seven per cent lower than in September 2022.

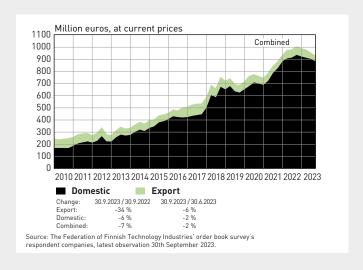
On the basis of order trends in the third quarter, the turnover of consulting engineering companies is expected to contract over the next six months.

At the end of September, consulting engineering companies in Finland employed 0.1 per cent fewer people than at the end of June. The industry employed approximately 54,800 people in September.

### Value of new orders in the consulting engineering in Finland



### Value of order books in the consulting engineering in Finland





# Information Technology in Finland

## New orders continued to decline

In 2022, the turnover of information technology companies (IT services and software) in Finland grew by 10 per cent on 2021. Their turnover in Finland amounted to approximately EUR 19 billion in 2022. Turnover was seven per cent higher in the January-July period of 2023 than twelve months earlier.

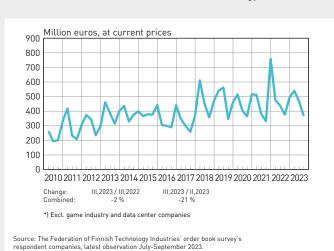
The information technology companies that took part in Technology Industries of Finland's survey of order books reported that the monetary value of new orders in the July-September period was 21 per cent lower than in the preceding quarter and two per cent lower than in the corresponding period of 2022. Game industry and data centre companies are not included in the survey. As is typical for the sector, order volumes can fluctuate strongly from one quarter to another.

At the end of September, the value of order books was three per cent lower than at the end of June and also three per cent lower than in September 2022.

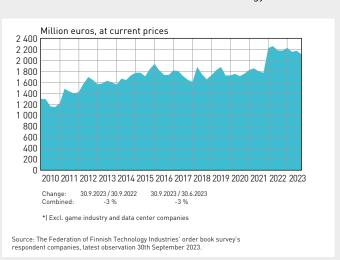
On the basis of order trends in the third quarter, the turnover of information technology companies is expected to stagnate over the next six months.

At the end of September, information technology companies in Finland employed 0.7 per cent more people than at the end of June. The industry employed approximately 85,800 people in September.

#### Value of new orders in the information technology\* in Finland



### Value of Order Books in the Information Technology\* in Finland



# ECONOMIC OUTLOOK 4 | 2023

Information based on the situation on 2 November 2023

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Please visit the homepage of the Federation of Finnish Technology Industries for additional information on

technology industry turnover, exports, investments, personnel and the development of producer prices: www.techind.fi.

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