

# Economic Outlook

Technology Industries of Finland

1 | 2023

**Global And Finnish  
Economic Outlook**  
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# Outlook slightly more upbeat, but a sluggish year ahead

The economy has developed largely as expected during the dark winter months, with waning growth but no sudden stop in activity. While many challenges remain in terms of energy, sentiments have been notably brighter because it looks like the worst possible crisis scenario will not materialise. However, the uptick only indicates that the acute risk of a severe recession has diminished. We will nevertheless face an anaemic year of no growth – or a slight contraction.

While it looks like the worst-case scenarios will not materialise during the winter, risks to the economy remain high.

According to the outlook published by the International Monetary Fund IMF at the end of January, the global economy is projected to grow 2.9 per cent in 2023. This is 0.5 percentage points lower than the growth rate in 2022, which according to preliminary data came to 3.4 per cent. In 2024, growth is expected to be 3.1 per cent. The January forecast for 2023 is 0.2 percentage point higher than predicted in the October 2022. The slight improvement indicates that the world economy may be able to avoid the worst-case scenarios – at least for now.

According to the IMF forecast, global economic growth will be underpinned by the strong recovery of China’s economy after a challenging year of coronavirus lockdowns. The reversal of China’s COVID policies will contribute to fast growth in 2023, which is expected to stall again in 2024.

While there has been a slight improvement in the outlook, it is important to keep in mind that world economic growth in 2022, 2023 and 2024 falls notably short of the historical average of 3.8 per cent seen 2000–2019.

During the turn of the year, there have been relatively clear signs of inflation cooling down in both the eurozone and the United States. Nevertheless, inflation remains high, and both the US Federal Reserve FED and the European Central Bank ECB have indicated that interest rate hikes will continue until inflation has been tackled. The stance of FED has been a bit more cautious than that of the ECB. This signals that the FED may stop increasing interest rates sooner than its European counterpart if inflation continues to slow down.

## Eurozone to see zero growth in early 2023

The eurozone composite PMI for manufacturing and services bounced back around the turn of the year, after several months of contraction. The PMI stood at 50.3 in January, which in practice means zero growth in early 2023. While stagnant growth in itself is nothing to rejoice about, it is positive to see that the downward trend in sentiment stopped around the turn of the year.

Sentiments in manufacturing are also more upbeat, although output is still expected to contract slightly in January. New orders and order books also contracted further.

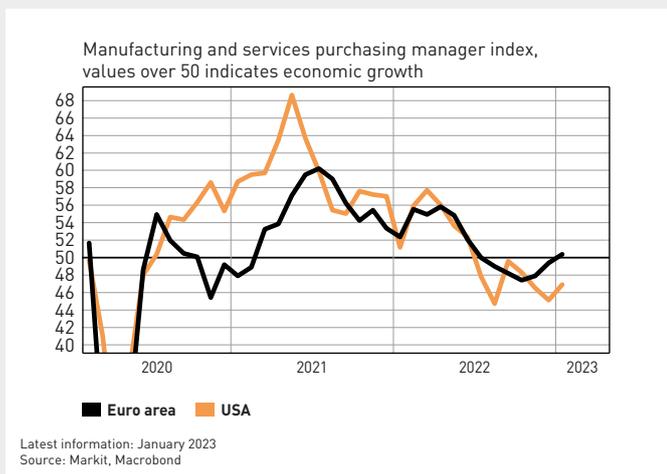
Manufacturing outlook in the United States is currently weaker than in Europe. Based on the January PMIs, output, new orders and order books contracted faster in the United States than in Europe. A slowdown in US manufacturing would be bad news for Europe too.

Manufacturing output grew strongly in both the United States and Europe after the COVID crisis eased in 2021, and continued to grow during the first half of 2022 despite Russia’s war of aggression. However, data on actual output indicates that growth slowed down significantly at the end of 2022, after which there is a slight downward trend in production volumes.

The only exception is Germany, where manufacturing output has stagnated for two years.

Overall, it looks like we will not see a very severe recession in early 2023. However, near-zero growth or a slight contraction is to be expected. Risks remain high, and it will not take much to make the outlook deteriorate significantly. It would be better not to rock the boat.

Europe’s economy at zero growth in the beginning of the year



In manufacturing, deterioration of moods so far stalled



## Outlook in Finland brightens slightly too

While consumer confidence remains exceptionally low, recent data indicates a turn for the better. Easing of the energy crisis has no doubt improved the consumer sentiment, at least for now. In terms of the economy, the key question is whether the improved sentiment leads to increase in consumption, on the housing market for example, or whether consumers decide to wait and continue to postpone major purchases for the time being.

As strange as it sounds while inflation remains high, once it peaks, the next challenge may be the possible negative effects of deflation on growth. Should consumers decide to wait for lower prices, it will have a very negative impact on the development of private consumption.

According to the Business Tendency Barometer published by the Confederation of Finnish Industries in January, the situation continued to deteriorate in late 2022. On the other hand, expectations are slightly brighter than before. This is undoubtedly due to the easing of the energy crisis, at least for now.

Manufacturing output growth has stalled also in Finland. Production volumes in manufacturing as a whole (including forestry and chemical industry) show clear negative trends. In the manufacturing sectors of technology industry, output volumes did not grow in the second half of 2022.

## New collective solutions safeguard competitiveness as long as there are no surprises in the economy

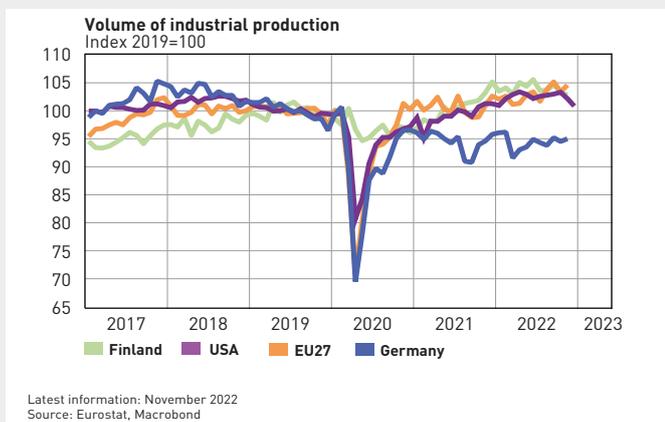
The new collective agreement approved by the Technology Industry Employers of Finland will set the benchmark and looks to safeguard Finland's cost-competitiveness over the next two years. However, there are two key conditions for this: firstly, that the economic situation in Finland and its competitor countries will develop as currently expected, and secondly, that the other sectors will not exceed the upward effect of the benchmark agreement in terms of labour costs.

Unfortunately, we already know that the second condition will not be met because of agreements in the public sector.

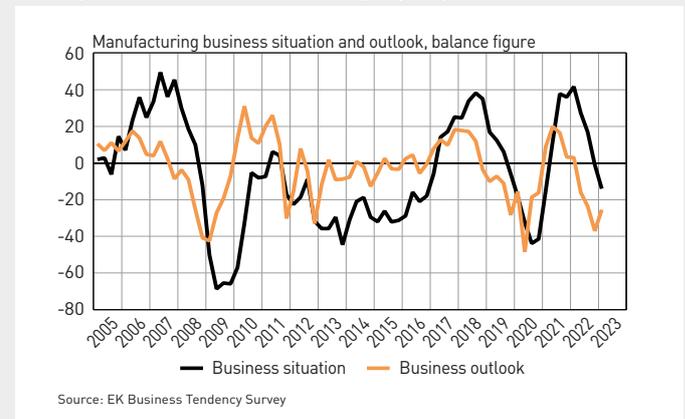
There is also a significant risk attached to Finland meeting the first condition. Wage formation in Finland is much more rigid than in many other countries. High nominal wage increases combined with clearly weaker-than-expected economic development has always led to a rapid and strong decline in Finland's cost-competitiveness. Hopefully, that will not be the case this time.

The benchmark agreement signed with the Industrial Union is also quite favourable in terms of purchasing power. It will create the conditions for a sustainable strengthening of purchasing power in 2024 and hopefully also beyond that.

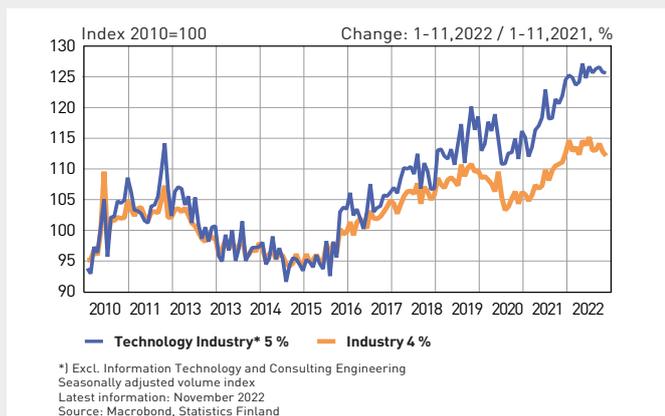
## Industrial production growth stalled worldwide



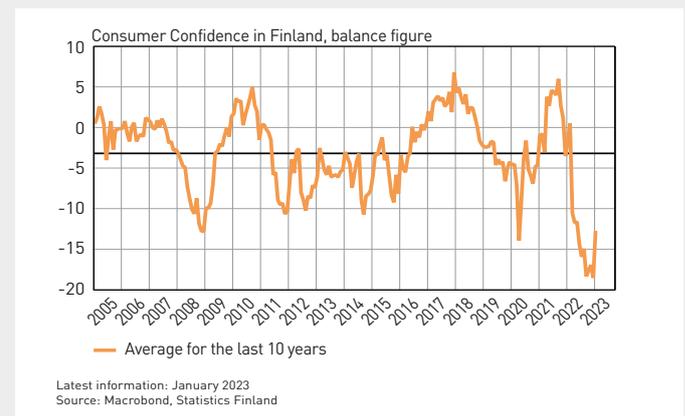
## The business cycle in manufacturing continued to deteriorate, but expectations for the future slightly improved



## Volume of Industrial Production has declined in Finland



## Consumer confidence improved, but still at exceptionally weak levels



# Order intake holding up as demand weakens

According to preliminary data, the turnover of technology industry companies in Finland grew approximately 16 per cent in 2022 from 2021. Turnover grew in all main sectors. The significantly higher level of prices contributed to turnover growth. Turnover in Finland in 2022 exceeded EUR 100 billion, totalling EUR 105 billion.

The monetary value of new orders in the October-December period was 12 per cent higher than in the previous quarter, but 6 per cent lower year-on-year. The quick rise of producer prices has contributed to the increase in the value of order intake.

The balance figure for tender requests in January was -12. The balance figure has now seen six consecutive quarters of decline. The data collected in January indicates that demand has continued to weaken. However, the rate of decline remains moderate.

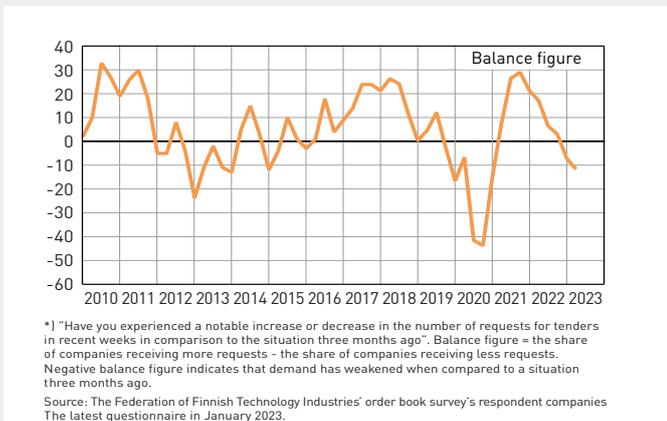
At the end of December, the value of order books was practically unchanged from the end of September and 1 per cent higher than in December 2021.

Judging from order trends towards the end of 2022, the turnover of technology industry companies is expected to grow at a slower pace or stop growing during early 2023.

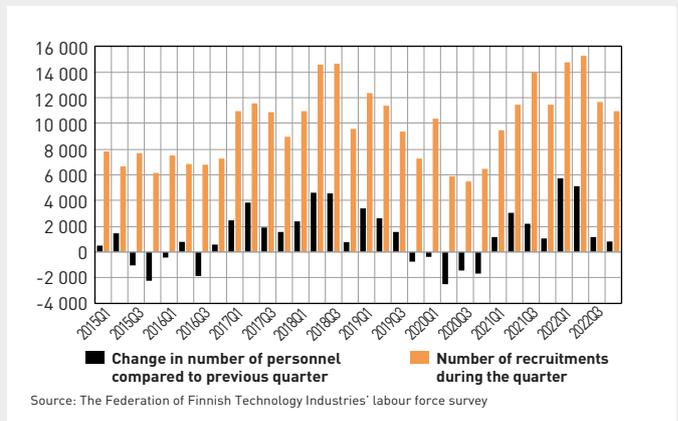
The number of personnel employed by technology industry companies in Finland in 2022 was up 4 per cent, or 13,000 people, from 2021. On average, the industry employed approximately 336,000 people in 2022. At the end of December, the industry had approximately 338,000 employees. Personnel grew in each quarter of 2022, but expansion in the second half of the year was much slower than in the first half. According to the personnel survey by Technology Industries of Finland, the number of employees affected by lay-off procedures at the end of December was approximately 10,000.

Recruitment of new employees remained at the average level in the October-December period. In total, recruitments came to 11,000. Some companies were increasing their personnel, others were hiring new employees due to retirements and employee turnover.

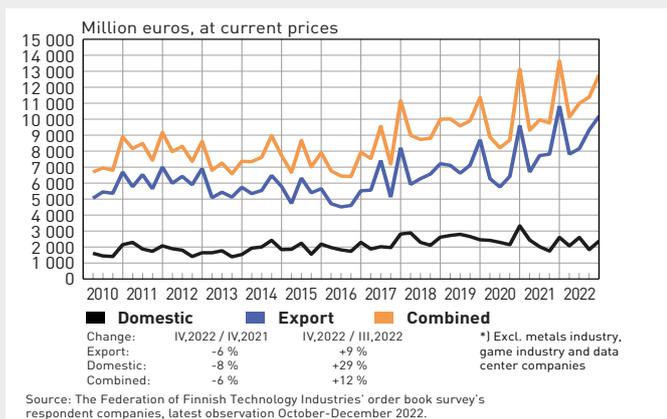
Tender requests\* received by the technology industry companies in Finland



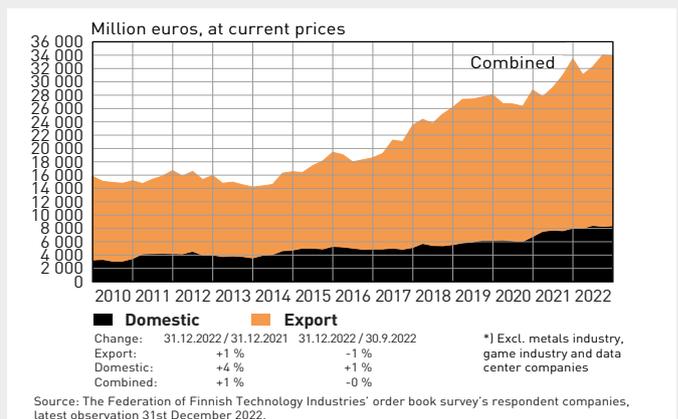
Headcount growth in the technology industry continued to slow



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



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





## Electronics and Electrotechnical Industry in Finland

### Value of order books continued to grow

According to preliminary data, the turnover of companies in the electronics and electrotechnical industry (telecommunications equipment, electrical equipment and medical technology) in Finland grew by approximately 2 per cent in 2022 from 2021. In 2022, their turnover in Finland amounted to more than EUR 19 billion.

The value of both new orders and order books increased in the October-December period from the preceding quarter.

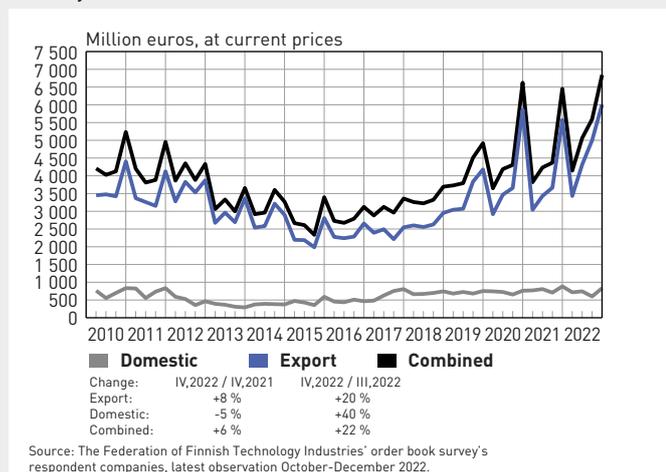
The electronics and electrotechnical companies that took part in Technology Industries of Finland's survey of order books reported that the monetary value of new orders between October and December was 22 per cent higher than in the preceding quarter and 6 per cent higher than in the corresponding period in 2021.

At the end of December, the value of order books was 13 per cent higher than at the end of September and 7 per cent higher than in December 2021.

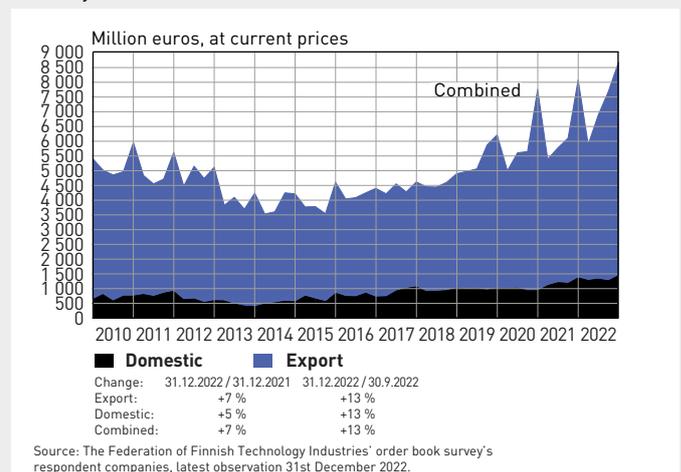
Judging from order trends towards the end of 2022, the turnover of electronics and electrotechnical companies in early 2023 is expected to be higher than in the corresponding period last year.

The number of personnel employed by electronics and electrotechnical companies in Finland grew by 3.6 per cent in 2022 from the 2021 average. The industry employed 40,500 people, approximately 1,400 more than in 2021. At the end of December, the number of personnel was 40,900.

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

### Order intake stagnant for two years now

According to preliminary data, the turnover of mechanical engineering companies (machinery, metal products and vehicles) in Finland increased by 16 per cent in 2022 from 2021. In 2022, their turnover in Finland amounted to EUR 41 billion.

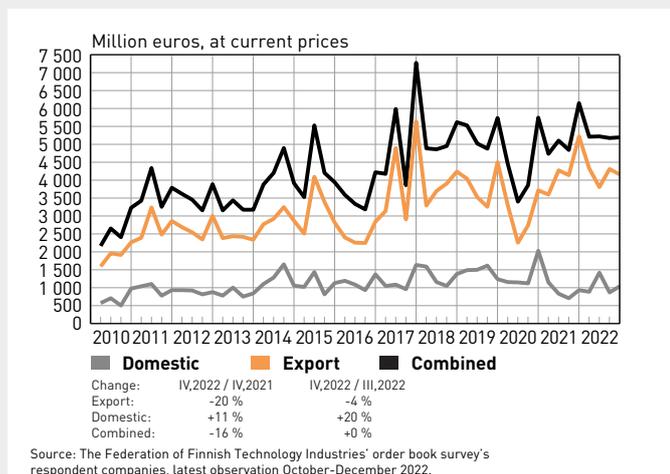
The value of new orders in mechanical engineering in the October-December period remained practically unchanged from the previous quarter. Year-on-year, the value of new orders decreased by 16 per cent. The quick rise of producer prices continues to contribute to the increase in the monetary value of order intake.

At the end of December, the value of order books was 5 per cent lower than at the end of September and 1 per cent lower than in December 2021. It remains necessary to consider that the ship-yards' share of the total value of order books is exceptionally large.

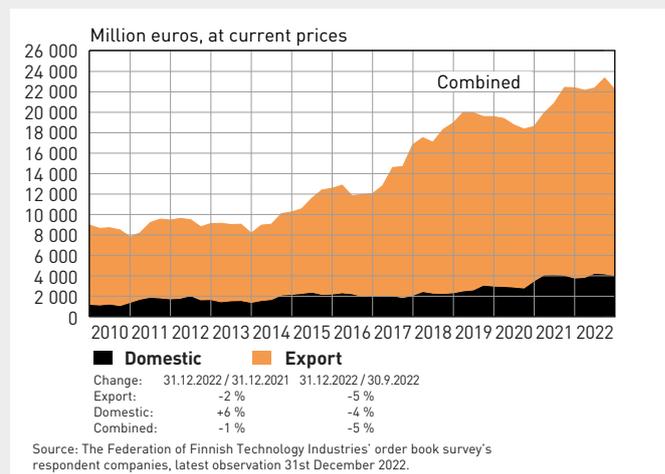
Judging from order trends towards the end of 2022, the turnover of mechanical engineering companies in early 2023 is expected to be higher than in the corresponding period last year. However, growth is expected to slow down in early 2023.

The number of personnel employed by mechanical engineering companies in Finland grew by 3.1 per cent in 2022 from the 2021 average. The industry employed 137,800 people, approximately 4,100 more than in 2021. At the end of December, the number of personnel was 138,200.

Value of new orders in the mechanical engineering in Finland



Value of order books in the mechanical engineering in Finland





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## Metals Industry in Finland

### Turnover growth slows down

According to preliminary data, the turnover of metals industry companies (steel products, non-ferrous metals, castings and metallic minerals) in Finland increased by 39 per cent in 2022 from 2021. In 2022, their turnover in Finland amounted to EUR 20 billion. The sharp rise in producer prices in early 2022 contributed significantly to the turnover growth, but the prices fell quickly during the second half of the year.

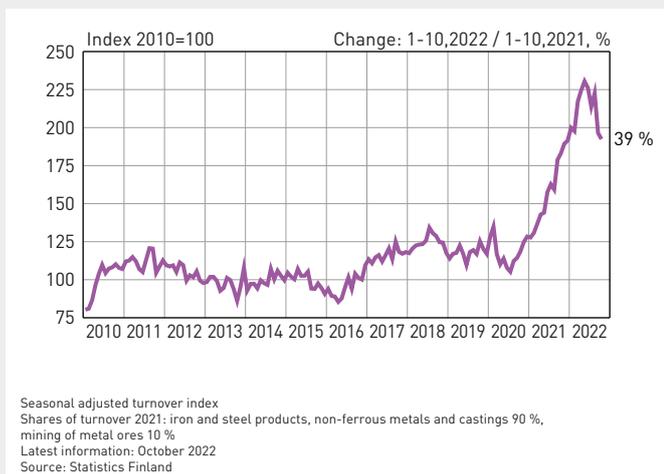
The total production of steel products, non-ferrous metals, castings and metallic minerals in Finland in the January-November period increased by 7 per cent year-on-year.

The number of personnel employed by metals industry companies in Finland grew by 1.2 per cent in 2022 from the 2021 average. The industry employed 17,000 people, approximately 200 more than in 2021. At the end of December, the number of personnel was 17,000.

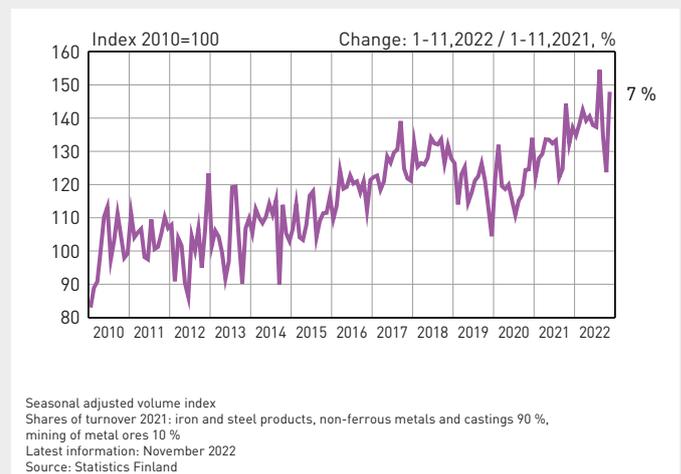
Global steel production decreased by 4.3 per cent from 2021. Production decreased by 2.3 per cent in Asia, by 10.2 per cent in the EU and by 5.5 per cent in North America.

China, India, Japan, the United States and Russia were the largest producers in the first half of 2022. China accounted for approximately 55 per cent of global steel production in 2022.

Turnover of the metals industry in Finland



Production volume of the metals industry in Finland





## Consulting Engineering in Finland

### New orders up slightly from previous quarter

According to preliminary data, the turnover of consulting engineering companies (industrial, social and construction expert services) in Finland increased by approximately 8 per cent in 2022 from 2021. In 2022, their turnover in Finland amounted to almost EUR 8 billion.

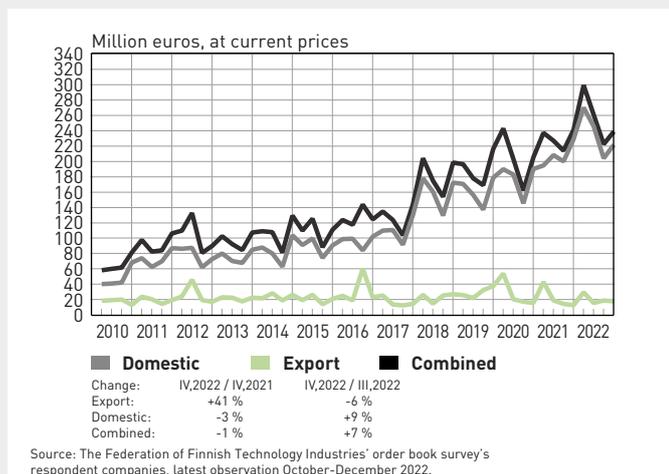
The consulting engineering companies that took part in Technology Industries of Finland's survey of order books reported that the monetary value of new orders between October and December was 7 per cent higher than in the preceding quarter, but 1 per cent lower than in the corresponding period in 2021.

At the end of December, the value of order books was five per cent higher than at the end of September, but six per cent lower than in December 2021.

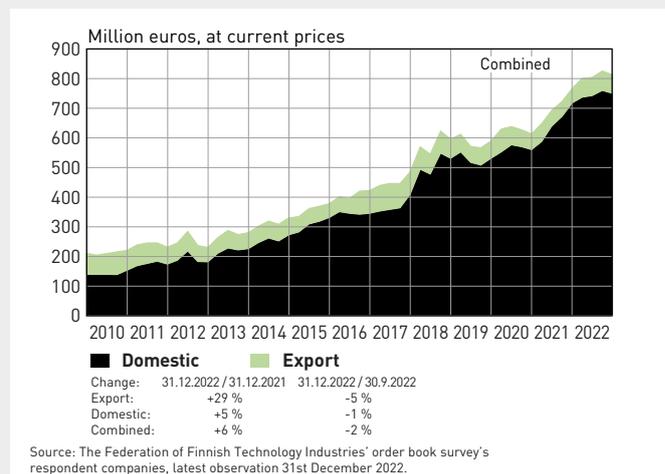
Judging from order trends towards the end of 2022, the turnover of consulting engineering companies in early 2023 is expected to be higher than in the corresponding period last year.

The number of personnel employed by consulting engineering companies in Finland grew by 5.8 per cent in 2022 from the 2021 average. The industry employed 59,000 people, approximately 3,200 more than in 2021. At the end of December, the number of personnel was 59,500.

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 up from the previous quarter

According to preliminary data, the turnover of information technology companies (IT services and software) in Finland grew by 13 per cent in 2022 from 2021. In 2022, their turnover in Finland amounted to almost EUR 19 billion.

Order intake for the October–December period was higher than in the previous quarter. Typically for the sector, order volumes can fluctuate strongly from one quarter to another.

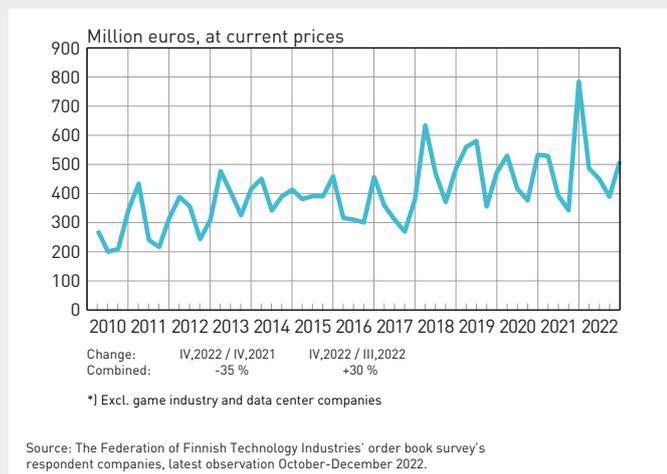
The information technology companies that took part in Technology Industries of Finland’s survey of order books reported that the monetary value of new orders between October and December was 30 per cent higher than in the preceding quarter, but 35 per cent lower than in the corresponding period in 2021. Game industry and data centre companies are not included in the survey.

At the end of December, the value of order books was 2 per cent higher than at the end of September and practically unchanged from December 2021.

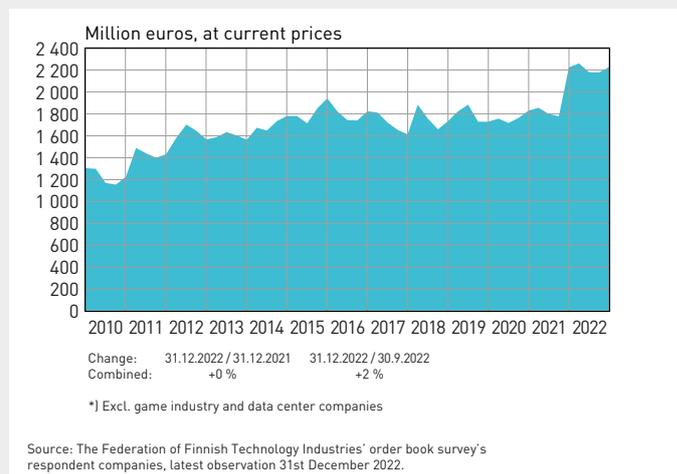
Judging from order trends towards the end of 2022, the turnover of information technology companies in early 2023 is expected to be higher than in the corresponding period last year.

The number of personnel employed by information technology companies in Finland grew by 5.5 per cent in 2022 from the 2021 average. The industry employed 81,600 people, approximately 4,300 more than in 2021. At the end of December, the number of personnel was 82,800.

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



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



# ECONOMIC OUTLOOK 1 | 2023

Information based on the situation on 9 February 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](http://www.techind.fi).

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**Technology Industries  
of Finland**