

# Economic Outlook

Technology Industries of Finland

3 | 2022

## Global And Finnish Economic Outlook

Europe and the United States are slipping into recession, the depth and length of which remain to be seen

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## Technology Industries in Finland

Results of the order book and personnel survey

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## Europe and the United States are slipping into recession, the depth and length of which remain to be seen

Global economy, and the advanced economies in particular, seem to be heading towards a recession late this year and during next year. At the moment, it is very difficult to assess the depth and length of the recession. Factors such as the geopolitical situation have a significant impact on the future course of the economy. Risks are currently overwhelmingly tilted to the downside, and future developments may be significantly weaker than those currently estimated.

Both the US Federal Reserve FED and the European Central Bank ECB have indicated clearly that curbing inflation is their main priority. It seems that the central banks will not hesitate to push the economy into recession to tame high inflation. They are encouraged by employment figures, which have so far remained good in both the United States and Europe.

According to the European definition, the US economy is already in a recession (defined as two consecutive quarters of negative GDP growth). According to preliminary data, the US GDP shrank in both the first and second quarter of the year.

Preliminary data from Europe suggests that the economy continued to grow during the second quarter but based on the Purchasing Managers' Indices (PMIs), could start to shrink in the third quarter.

### Economic indicators point to a recession in Europe

The eurozone composite PMI for manufacturing and services fell below 50 in July. This signals that the economy is facing a risk of contraction. PMIs fell for both the manufacturing and service sector.

The eurozone manufacturing PMIs sends a worrying signal about the situation in the sector. The last time new orders shrank this dramatically was during the euro crisis in 2012 – if we ignore the drop that took place in the beginning of the COVID crisis. Companies' long-term expectations have also become more pessimistic. At the same time, companies have reported that price pressures are easing and that their stocks of inventory are also rising.

According to the PMIs, there are large differences between individual companies in the eurozone: while some continue to struggle with issues such as shortage of materials, others are reporting that their warehouses are full, and demand has decreased significantly. The higher level of prices is also clearly curbing demand. All this points to a downturn in manufacturing. However, it is too early to assess how dramatic the downward turn will be.

In its July update, the International Monetary Fund IMF voiced its concern over the possibility of the global slowdown intensifying as the downside risks materialize one after another. According to the latest forecast, global growth is projected to be 3.2 per cent in 2022, which is 0.4 percentage point lower than in the April outlook. In 2023, growth is expected to be only 2.9 per cent.

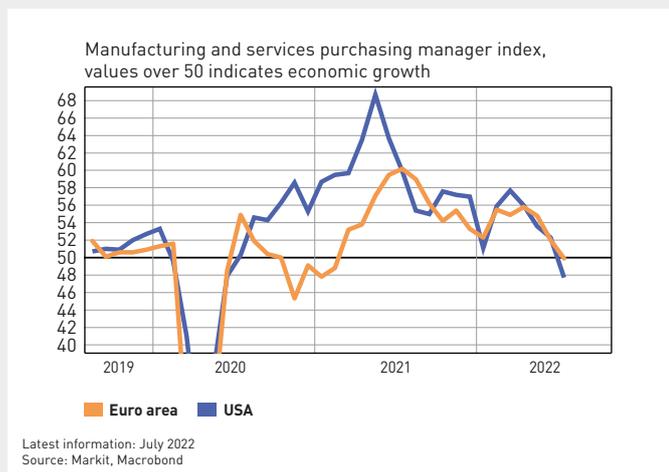
Russia's invasion of Ukraine casts a long and dark shadow on the economic outlook in Europe in particular. In terms of economy, Russian fossil fuels are a main risk factor. Availability of energy is essentially linked to the output capacity of manufacturing as well as future development of inflation.

Unfortunately, without Russian gas, Central Europe will struggle to meet the demand for energy in the autumn and winter. Possible energy shortages alone will maintain and increase inflationary pressure in Europe, even with significantly weaker economic growth. This is a tough nut to crack for the central bank.

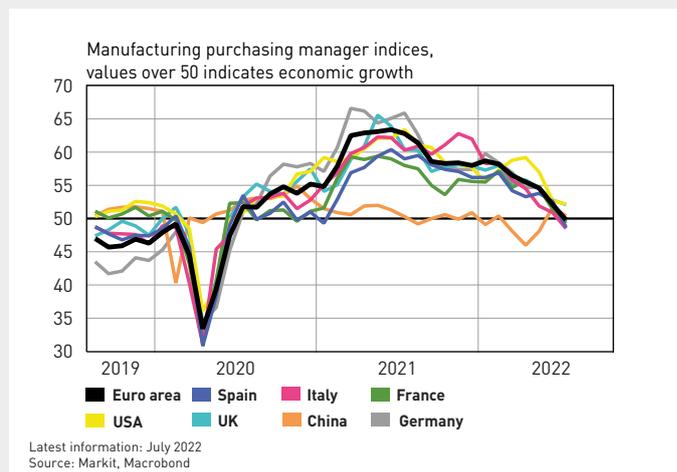
### Finland will see weaker growth as a result of a global slowdown

Finland cannot escape the impact of a slowdown in global economic growth. There is usually a slight delay before the Finnish economy is affected, which is likely also this time. Finnish manufacturing sector has strong order books, which will keep the wheels of production turning long into the autumn. However, falling global demand will have an impact on production volumes, and we expect to see this in Finland at the latest by the turn of the year.

#### Growth coughs up in eurozone and US alike



#### In manufacturing, output turning to decline



Unfortunately, we should be prepared to face the most pessimistic scenario. Many manufacturing companies have increased their stocks of inventory, and according to surveys among European companies, many have also significantly expanded their stock of finished products. In the worst-case scenario, this can quickly lead to a sharp decline in demand as companies start to reduce their stocks and new orders drop.

Price instability and large stocks of inventory make it more difficult to manage profitability. The value of stock bought when prices were high can deteriorate significantly in a short time. If materialized, a risk like this can jeopardize the entire business – including its future.

### It is possible to do well even if growth is slowing down

Even though the European economy seems to be heading towards a recession, the situation in Finland is not utterly hopeless. As the risk of recession is very high, it is important to find factors that can help Finnish technology companies succeed on the global market even if aggregate demand weakens.

Under the present circumstances, it is easy to identify two key factors that can help us through the upcoming recession with minimum impact – if we get things right. These factors are cost-competitiveness of labour and the companies' capacity for renewal.

Labour market negotiations have remained difficult over the past years, but despite the challenges, Finland's cost-competitiveness has remained at a tolerable level in comparison to the rest of

the eurozone, despite the small historical gap. This has contributed to the fact that Finnish export industries have fared relatively well despite the crises experienced over the past few years.

In recent times, inflation has been brisk and demand strong and as a result, cost-competitiveness has been less in focus. However, it will gain importance quickly once demand decreases and price becomes a crucial factor in directing demand. If we succeed in improving the cost-competitiveness of labour in Finland over the coming years, we are in a significantly better position to compete over a shrinking number of orders.

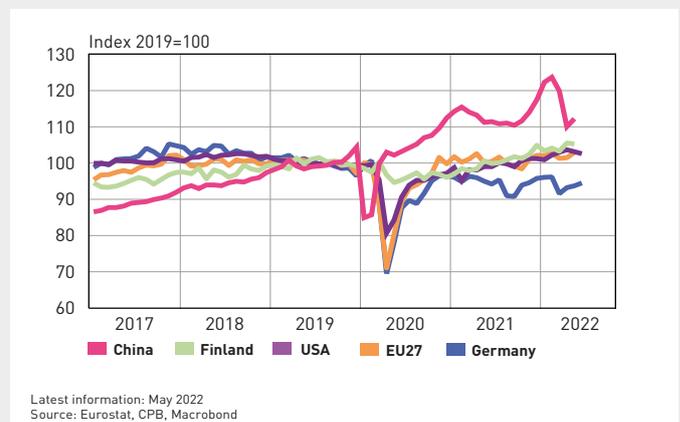
Another factor that will have an essential impact on our success, is the industry's capacity for renewal and participation in the value chains of green transitions. With pioneering technologies and high level of skills, Finnish exporting industries are in a better position to succeed in global competition. We should place more focus on these areas. Demand for technologies that drive green transition is likely to remain high over the coming years, despite the economic cycle. In this respect, Finnish companies are relatively well placed.

All is not lost yet. It is reassuring to see that, once again, we hold the trump cards. By making wise decisions, we can make sure that Finland's future is bright, despite the global turmoil.

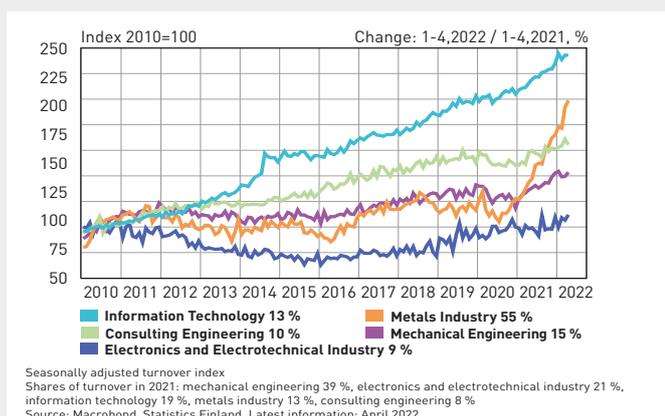
### Commodity price pressures relent



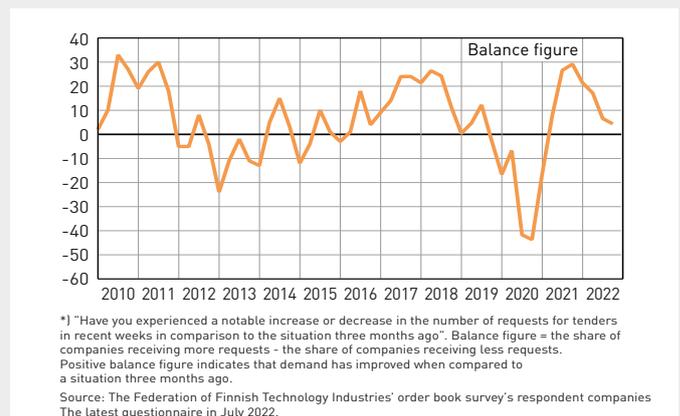
### Development of the volume of industrial production



### Turnover of the Technology Industry in Finland



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



# Results of the order book and personnel survey

The turnover of technology industry companies in Finland grew by approximately 11 per cent in 2021 from 2020. Turnover grew in all main sectors. The significantly higher level of costs contributed to turnover growth. In 2021, their turnover in Finland amounted to more than EUR 91 billion.

The order intake for the second quarter of the year was slightly higher than in the previous quarter. The monetary value of new orders in the April-June period was 10 per cent higher than in the previous quarter and 12 per cent higher year-on-year. The quick rise of producer prices has contributed to the increase in the value of order intake. This should be taken into account when assessing the development of production volumes over the coming months. As a result of the higher level of prices, the value of the order intake is growing more than production volumes.

The balance figure for tender request in July was +4. The balance figure has now seen four consecutive quarters of decline. The data collected in July indicates that demand is starting to level out. It is reassuring to see that according to the results of the tender request survey, demand has not yet weakened dramatically.

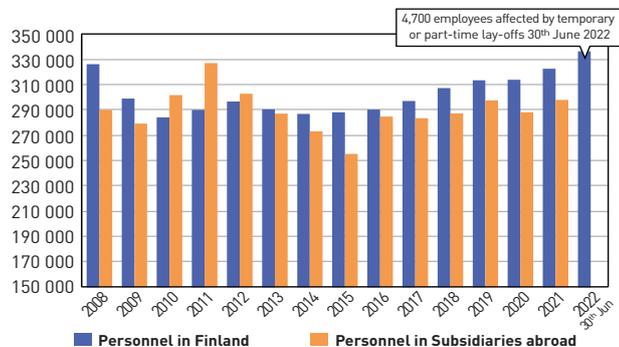
At the end of June, the value of order books was 2 per cent higher than at the end of March and 8 per cent higher than in June 2021.

Judging from order trends in the first half of the year, the turnover of technology industry companies in the remainder of 2022 is expected to be higher than in the corresponding period last year.

The number of personnel employed by technology industry companies in Finland at the end of June was 1.6 per cent higher than at the end of March. The industry employed approximately 336,400 people at the end of June, which is a new record. The previous employment peak was recorded in 2008. According to the personnel survey by Technology Industries of Finland, the number of employees affected by lay-off procedures at the end of June was only approximately 4,700. Approximately 18,000 summer workers in technology companies worked during the summer of 2021.

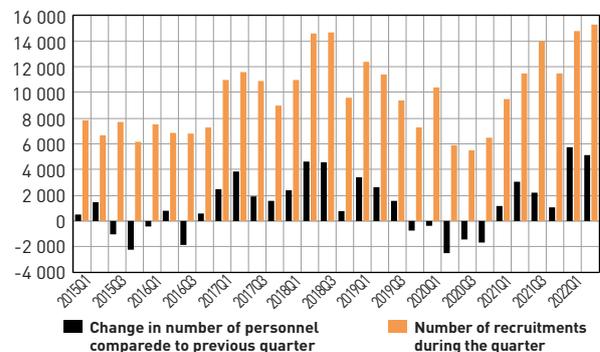
Recruitment of new employees remained very robust between April and June. In total, recruitments came to as much as 15,300. Some companies were increasing their personnel, others were hiring new employees due to retirements and employee turnover.

The number of employees in the technology industry in Finland higher than ever before



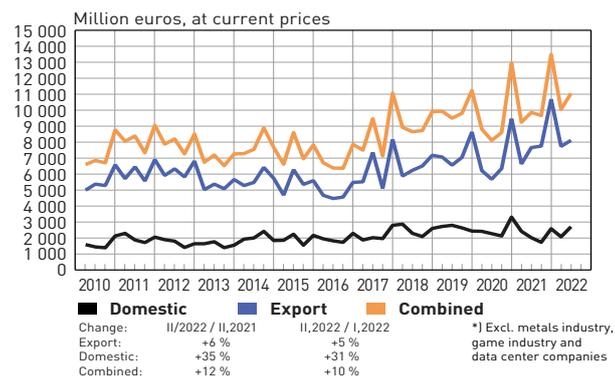
Source: Statistics Finland, The Federation of Finnish Technology Industries' labour force survey.

The number of staff in the technology industry in Finland continues to grow



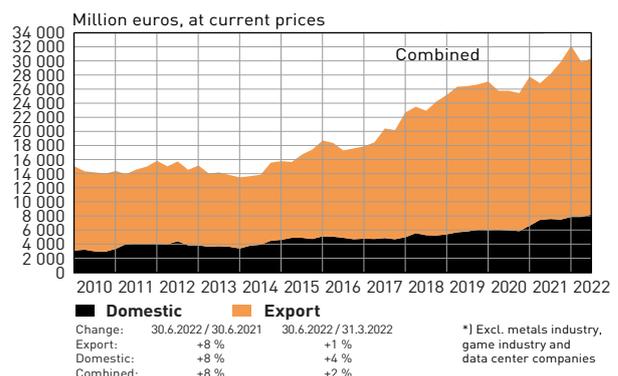
Source: The Federation of Finnish Technology Industries' labour force survey

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



Source: The Federation of Finnish Technology Industries' order book survey's respondent companies, latest observation April-June 2022.

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



Source: The Federation of Finnish Technology Industries' order book survey's respondent companies, latest observation 30th June 2022.



## Electronics and Electrotechnical Industry in Finland

### Value of new orders up year-on-year

The turnover of companies in the electronics and electrotechnical industry (telecommunications equipment, electrical equipment and medical technology) in Finland grew by approximately 5 per cent in 2021 from 2020. In 2021, their turnover in Finland amounted to more than EUR 18 billion.

The value of both new orders and order books increased in the April-June period from the previous quarter.

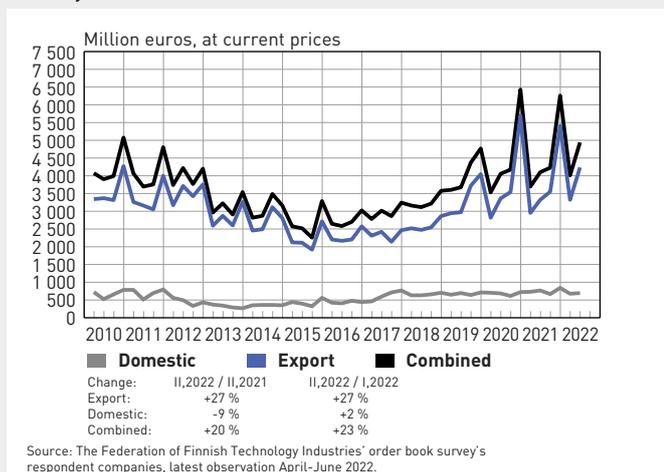
The electronics and electrotechnical companies that took part in the Federation of Finnish Technology Industries' survey of order books reported that the monetary value of new orders between April and June was 23 per cent higher than in the preceding quarter and 20 per cent higher than in the corresponding period in 2021.

At the end of June, the value of order books was 15 per cent higher than at the end of March and 18 per cent higher than in June 2021.

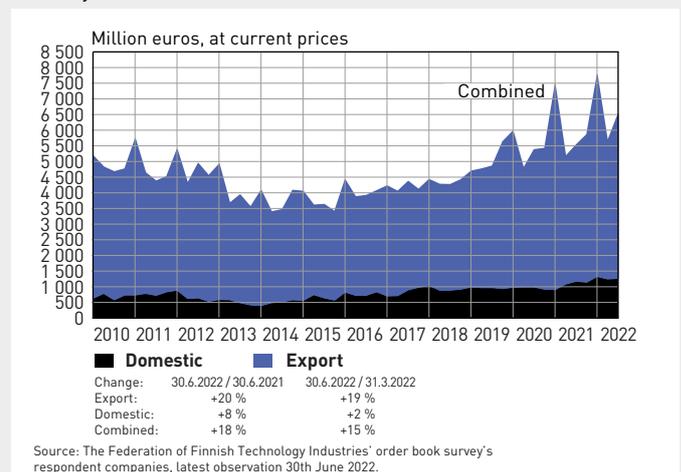
Judging from order trends in the first half of the year, the turnover of electronics and electrotechnical companies in the remainder of 2022 is expected to be higher than in the corresponding period last year.

The number of personnel employed by electronics and electrotechnical companies in Finland at the end of June was 0.9 per cent higher than at the end of March, totalling 40,500 people.

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

### Intake of export orders drops

The turnover of mechanical engineering companies (machinery, metal products and vehicles) in Finland increased by 10 per cent in 2021 from 2020. In 2021, their turnover in Finland amounted to EUR 35 billion.

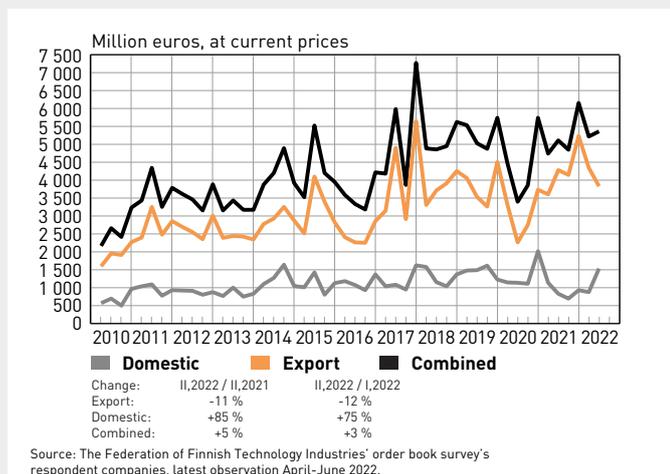
The value of new orders in mechanical engineering increased by 3 per cent from the previous quarter in the April-June period. Year-on-year, the value of new orders increased by 5 per cent. The quick rise of producer prices has contributed to the increase in the monetary value of order intake. Order intake increased only for domestic orders, and that figure is boosted by a large individual order from the public sector. Export orders fell significantly both from the previous quarter and year-on-year.

At the end of June, the value of order books was 2 per cent lower than at the end of March, but 4 per cent higher than in June 2021. It remains necessary to consider that the shipyards' share of the total value of order books is exceptionally large.

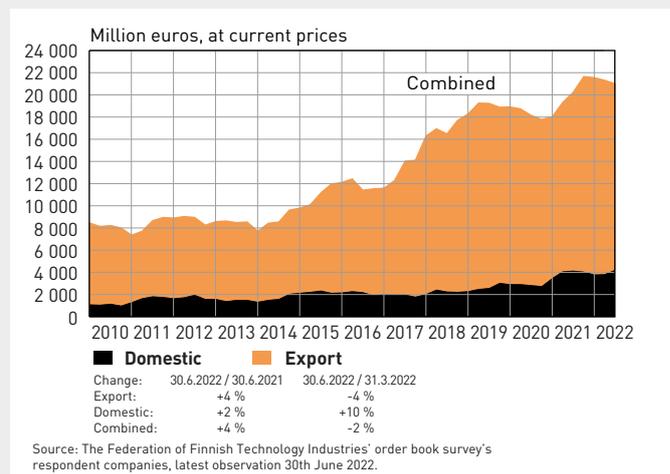
Judging from order trends in the first half of the year, the turnover of mechanical engineering companies in the remainder of 2022 is expected to be higher than in the corresponding period last year. Turnover has been boosted by the sharp rise in costs.

The number of personnel employed by mechanical engineering companies in Finland at the end of June was 1.2 per cent higher than at the end of March, totalling approximately 138,400.

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 may shift into reverse as raw material cost pressures ease

The turnover of metals industry companies (steel products, non-ferrous metals, castings and metallic minerals) in Finland increased by 36 per cent in 2021 from 2020. In January-July 2022, their turnover was up by as much as 55 per cent year-on-year. In 2021, their turnover in Finland amounted to more than EUR 14 billion. The sharp rise in producer prices has contributed significantly to the turnover growth in the metals industry.

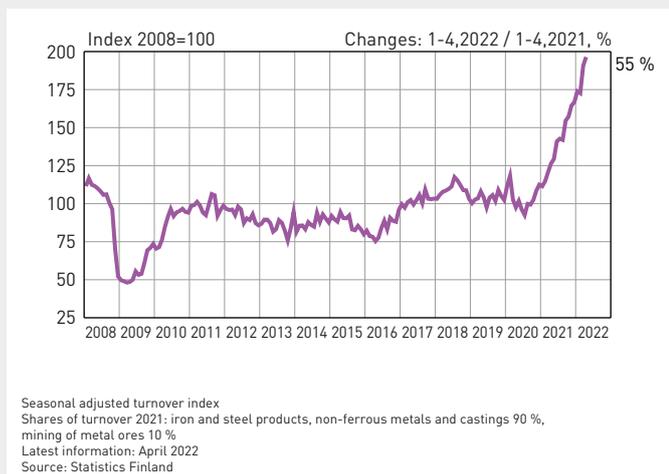
The total production of steel products, non-ferrous metals, castings and metallic minerals in Finland in the January-May period increased by approximately 8 per cent year-on-year.

The number of personnel employed by metals industry companies in Finland at the end of June was 0.3 per cent lower than at the end of March, totalling approximately 16,900.

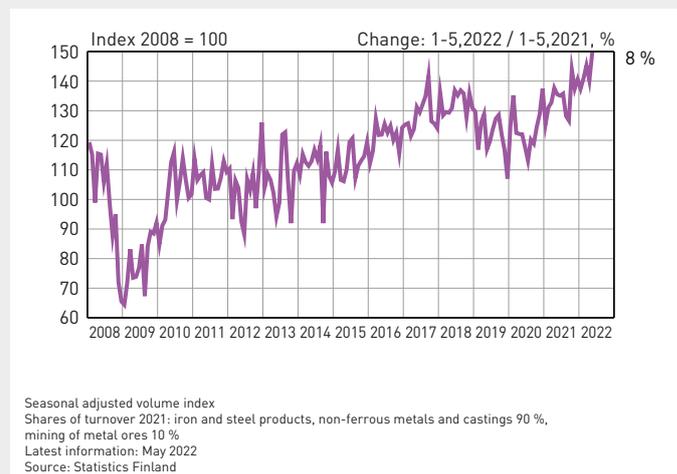
Year-on-year, global steel production decreased by 5.5 per cent between January and June. Production decreased by 4.8 per cent in Asia, by 6.2 per cent in the EU and by 2.3 per cent in North America.

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.

Turnover of the metals industry in Finland



Production volume of the metals industry in Finland





## Consulting Engineering in Finland

### Value of order books continued to grow

The turnover of consulting engineering companies (industrial, social and construction expert services) in Finland increased by more than 5 per cent in 2021 from 2020. In 2021, their turnover in Finland amounted to approximately EUR 7 billion.

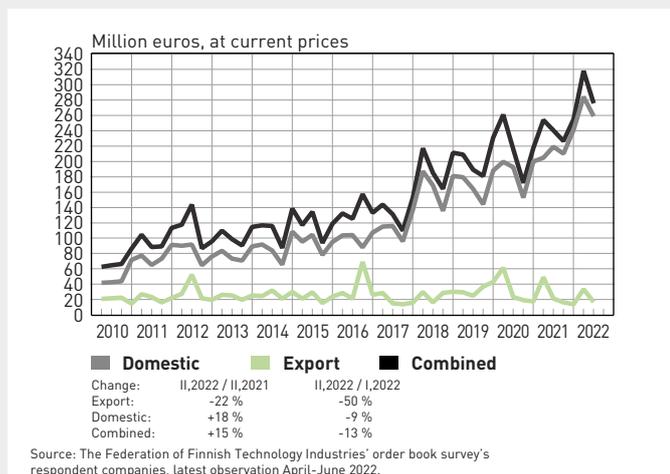
The consulting engineering companies that took part in the Federation of Finnish Technology Industries' survey of order books reported that the monetary value of new orders between April and June was 13 per cent lower than in the preceding quarter, but 15 per cent higher than in the corresponding period in 2021.

At the end of June, the value of order books was 1 per cent higher than at the end of March and 16 per cent higher than in June 2021.

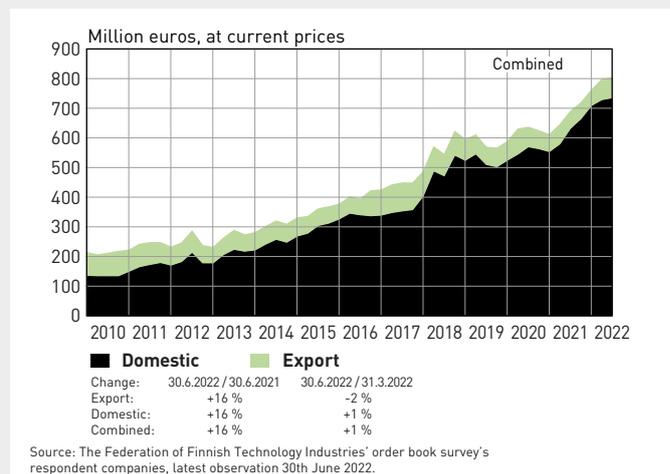
Judging from order trends in the first half of the year, the turnover of consulting engineering companies in the remainder of 2022 is expected to be higher than in the corresponding period last year.

The number of personnel employed by consulting engineering companies in Finland at the end of June was 2.9 per cent higher than at the end of March, totalling approximately 59,300.

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 fell slightly from the previous quarter

The turnover of information technology companies (IT services and software) in Finland grew by 8 per cent in 2021 from 2020. In 2021, their turnover in Finland amounted to slightly less than EUR 17 billion.

Order intake for the April-June period was lower than in the previous quarter. Order books also shrank slightly. Typically for the sector, order volumes can fluctuate strongly from one quarter to another.

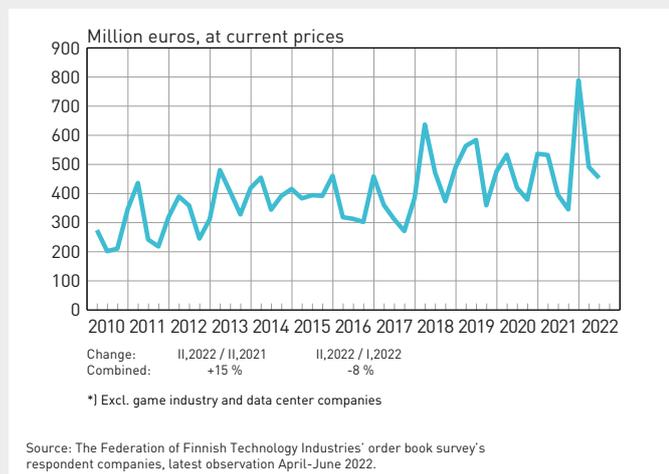
The information technology companies that took part in the Federation of Finnish Technology Industries' survey of order books reported that the monetary value of new orders between April and June was 8 per cent lower than in the preceding quarter, but 15 per cent higher than in the corresponding period in 2021. Game industry and data centre companies are not included in the survey.

At the end of June, the value of order books was 3 per cent lower than at the end of March, but 21 per cent higher than in June 2021.

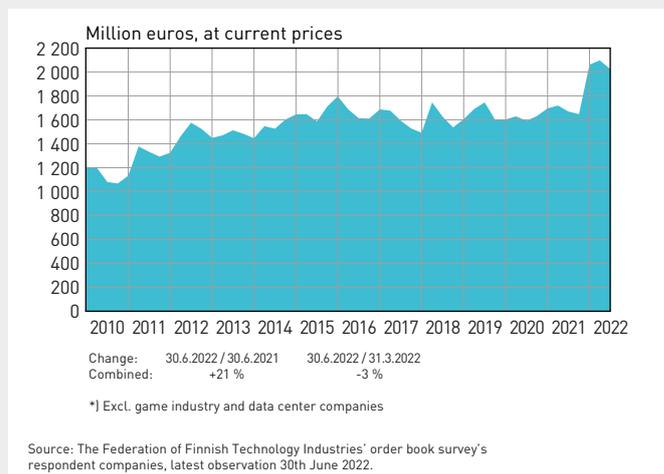
Judging from order trends in early 2022, the turnover of information technology companies in the remainder of the year is expected to be higher than in the corresponding period last year.

The number of personnel employed by information technology companies in Finland at the end of June was 1.9 per cent higher than at the end of March, totalling approximately 81,400.

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



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



## ECONOMIC OUTLOOK 3 | 2022

Information based on the situation on 10 August 2022

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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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