

Economic Outlook

Technology Industries of Finland

1 | 2021

Global And Finnish Economic Outlook

Manufacturing has shown considerable resilience during the second wave of the pandemic

p. 3

Technology Industries in Finland

Clear recovery during the last quarter of the year

p. 4

Contents

| | |
|--|----|
| Global and Finnish Economic Outlook | 3 |
| Technology Industries in Finland | 4 |
| Electronics and Electrotechnical Industry in Finland | 6 |
| Mechanical Engineering in Finland..... | 7 |
| Metals Industry in Finland..... | 8 |
| Consulting Engineering in Finland..... | 9 |
| Information Technology in Finland..... | 10 |



Manufacturing has shown considerable resilience during the second wave of the pandemic

The second wave of the coronavirus pandemic started to weigh heavily on the economic outlook during the last quarter of 2020. The coronavirus situation has long been very difficult in many European countries as well as in the United States. New, sometimes very strict restrictions have been imposed, with a strong negative impact on many businesses in the service sector in particular. However, the impact on all sectors including the service sector has not been anywhere near as serious as in the spring of 2020. Manufacturing sector in particular has shown good and even very good levels of resilience. Overall, it seems we may have learned to live with the coronavirus to some extent, and the impact of the second wave – at least on the economy – will be much less severe than that of the first wave.

Other global news have also been mostly positive from the perspective of Finnish technology industry. The election of Joe Biden as the president of the United States, after an unusually eventful process, is most likely a good thing in terms of green transition, digitalisation and free trade. Brexit was also finally completed, at least for the most part.

Since the negative economic impact of the second wave of the pandemic has so far been less severe than expected, the International Monetary Fund IMF again made a slight upward revision in January on its previous 2021 forecast. The global economy is now projected to grow 5.5 per cent in 2021. In Finland, forecasters have revised up their preliminary estimates on the Finnish economy in 2020, but on the other hand, have revised down their latest forecasts for 2021.

They currently estimate that the Finnish economy contracted by slightly more than 3 per cent on average in 2020. In 2021, they expect the economy to expand by slightly less than 3 per cent. These forecasts are typically based on the assumption that the coronavirus situation will start to ease around mid-2021 with the availability of vaccines.

The Purchase Managers' Indices mirror sentiment on the short term, and indicate that the economy in Europe grew at a slightly negative or zero rate at the end of 2020 and early 2021.

The PMIs also indicate that the manufacturing sector has fared relatively well while the service sector has been the hardest hit by the pandemic.

Data on actual production levels in Europe and the United States is now available for the October-November period. Considering the good PMI indicators for the end of 2020, we can expect the manufacturing sector to be in a more or less similar situation in early 2021 as twelve months earlier. On a global scale, the sector has recovered from the pandemic quicker than expected.

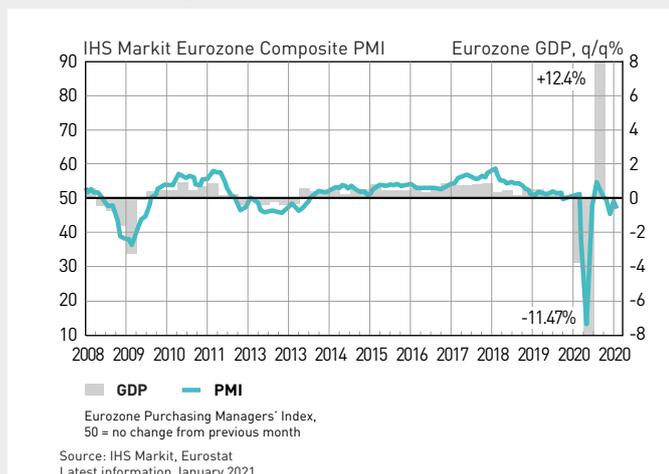
The next big issue is how quickly different regions such as Europe will be able to expand after the pandemic. Production in the EU was more or less stagnant for almost two year already before the pandemic, and Germany's production levels contracted for almost eighteen months. The only significant change since then has been the massive monetary and fiscal policy stimulus due to the pandemic. It has no doubt had a significant positive impact during the crisis, but such massive stimulus efforts cannot continue forever. Therefore, it is important to use the stimulus to improve competitiveness and drive growth on a longer term. The coronavirus crisis should not be used as a reason to delay structural economic reform.

While the negative risks of the second wave have not materialised to the extent expected, in particular in the manufacturing sector, it does not necessarily mean that the risks no longer apply. It seems that it will take a long time to achieve a high level of vaccination coverage and until such time, we cannot rule out significant disruptions to manufacturing activities in Europe, for example.

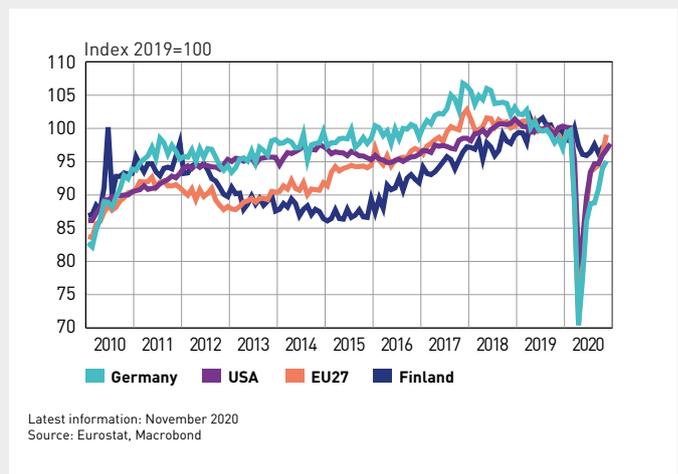
So far, Finland has fared clearly better than many others

At the moment it seems that Finland fared much better than many other countries during the first year of the pandemic. This is undoubtedly mostly due to the fact that the coronavirus situation has been kept better under control in Finland, at least so far.

Zero growth or a slight contraction in the European economy at the turn of the year



Industrial production has continued to recover worldwide



Clear recovery during the last quarter of the year

After a difficult year, it finally looks like that the situation of the Finnish technology industry has, at least for now, taken a turn for the better. On the other hand, while the overall situation is much improved, there are significant differences between individual companies. Direct or indirect impacts of the pandemic continue to weigh heavily on the order intake of some companies.

The corona pulse survey conducted by the Federation of Finnish Technology Industries among its member companies at the end of January clearly indicates that the situation has improved. Substantially smaller number of businesses is now suffering from weak demand, and a clear majority of companies say that the quietest time of production is already behind them.

The outlook improved for companies of all sizes. However, larger companies continue to expect a brighter outlook than smaller ones.

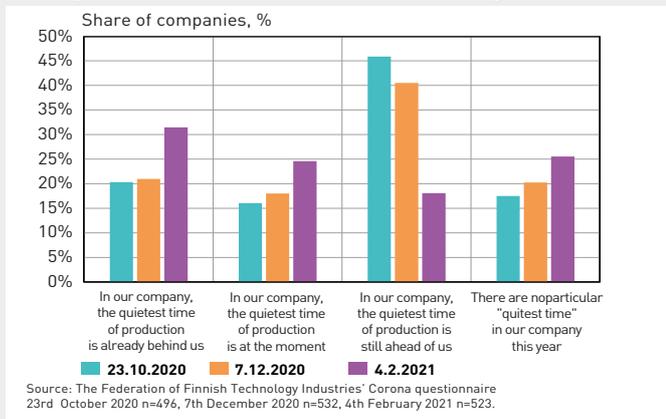
The corona pulse survey continued to indicate significant differences between individual companies, also within individual sectors.

Long-term outlook remains subdued

The pulse survey again invited companies to estimate their turnover development in 2021 in comparison to 2020. Less than one third, or 26 per cent, expect their turnover in 2021 to be smaller than in 2020, 37 per cent expect their turnover to remain relatively unchanged and another 37 per cent expect their turnover to grow.

While companies' expectations have improved, a rather high share of them expect their outlook for 2021 to be relatively subdued. And this is despite the fact that the preceding comparable period is the pandemic year 2020. It seems that companies continue to be concerned over their long-term growth outlook.

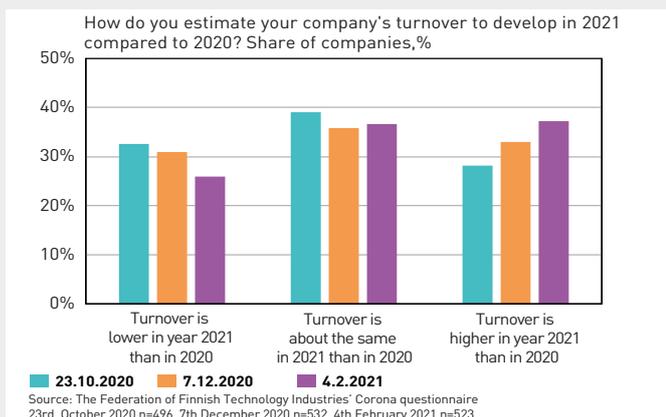
According to the companies' estimates, the difficulties are starting to fall behind, at least for the time being



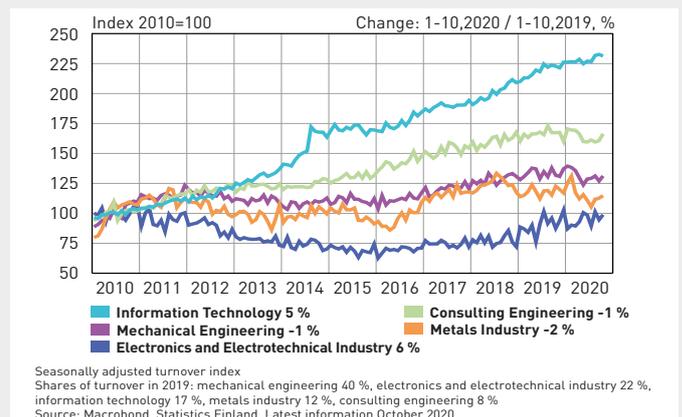
Weak demand worries companies far less than before



Business expectations for the whole of 2021 have improved, but still relatively little



Turnover of the Technology Industry in Finland



Results of the order book and personnel survey Q4/2020

According to preliminary data, the turnover of technology industry companies in Finland grew by approximately 1 per cent in 2020 from 2019. Turnover grew in electronics and electrotechnical industry as well as in information technology and fell in mechanical engineering, metals industry and consulting engineering. Overall, the technology industry sectors fared much better than expected during the first year of the pandemic. In 2020, their turnover in Finland amounted to approximately EUR 83 billion.

Order intake for the fourth quarter exceeded expectations and came as a very positive surprise. 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 October and December was as much as 60 per cent higher than in the preceding quarter and 21 per cent higher than in the corresponding period in 2019.

While this significant improvement is partly due to some very large orders received during the last quarter, the volume of new orders was nevertheless much higher. Order intake improved for companies of all sizes in all technology industry sectors.

The number of requests for tender also picked up at the turn of the year. The balance figure for January was positive (+8), indicating a pick up in demand since October.

At the end of December, the value of order books was 10 per cent higher than at the end of September and 4 per cent higher

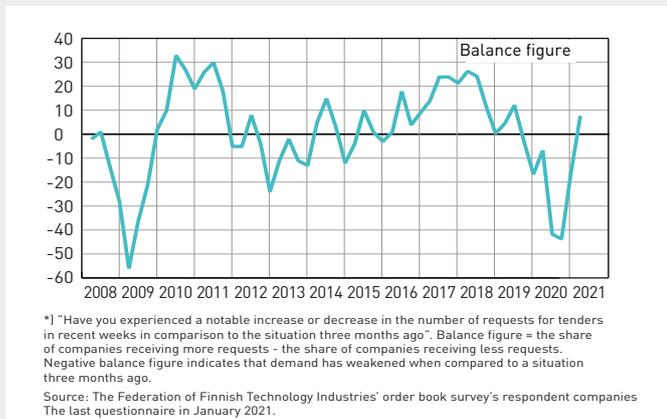
than in December 2019. It is important to note that shipyards' share of the total value of books remains exceptionally large.

Judging from order trends at the end of 2020, the turnover of technology industry companies in early 2021 is expected to be at a similar level as in the corresponding period in 2020.

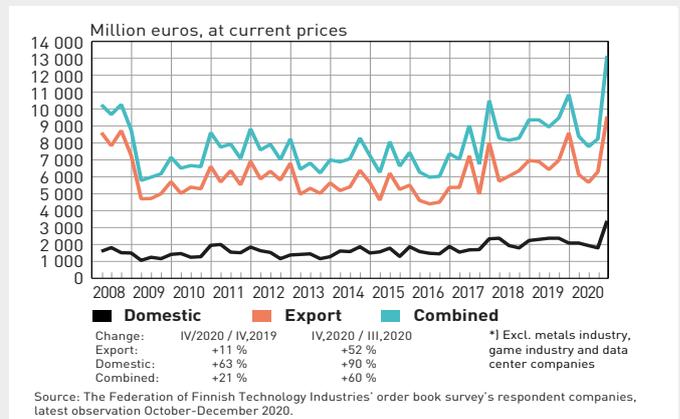
The number of personnel employed by technology industry companies in Finland was down approximately 1 per cent from the 2019 average. On average, the industry employed 310,000 people in 2020. At the end of December, the industry had 308,000 employees, which is some 7,000 less than during the third quarter of 2019, which saw the highest number of employees since the financial crisis. According to the personnel survey by the Federation of Finnish Technology Industries, the number of employees affected by lay-off procedures at the end of December was close to 28,000.

Recruitment of new employees remained at a low level in the October-December period. In total, recruitments came to 6,500. Some companies were increasing their personnel, others were hiring new employees due to retirements and employee turnover.

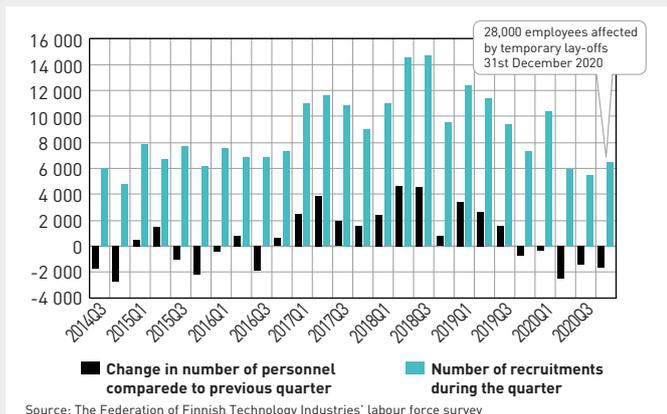
Tender requests* received by the technology industry companies in Finland



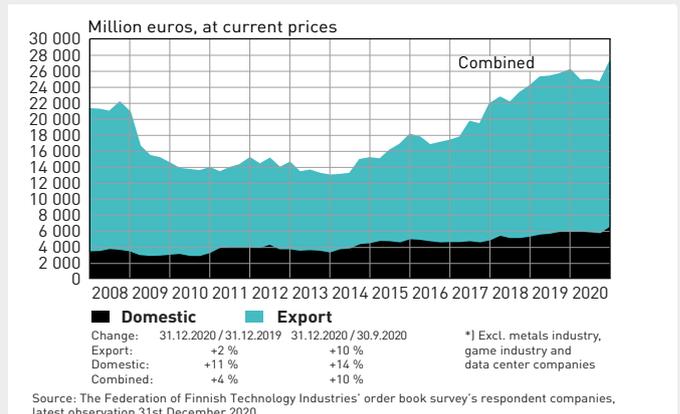
Value of new orders in the technology industry* in Finland



Number of personnel in Finnish technology industry continued to decrease in Q4 2020



Value of order books in the technology industry* in Finland





Electronics and Electrotechnical Industry in Finland

Strong growth in the value of new orders

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 6 per cent in 2020 from 2019. In 2020, their turnover in Finland amounted to approximately EUR 19 billion.

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

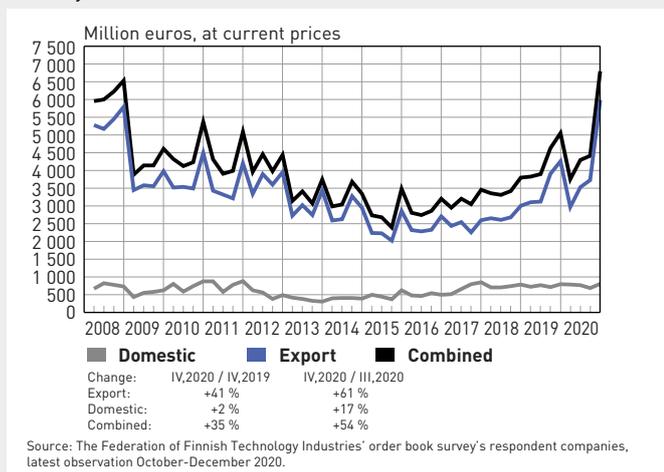
The electronics and electrotechnical companies that took part in the Federation of Finnish Technology Industries' survey of order books reported that the monetary value of new orders between October and December was as much as 54 per cent higher than in the preceding quarter and 35 per cent higher than in the corresponding period in 2019.

At the end of December, the value of order books was 38 per cent higher than at the end of September and 26 per cent higher than in December 2019.

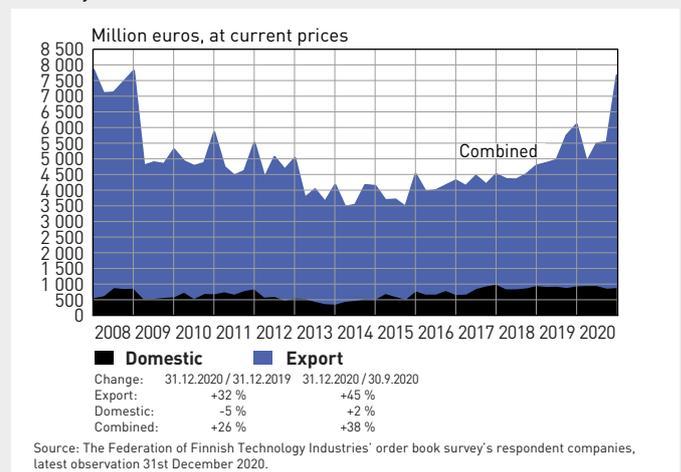
Judging from order trends at the end of 2020, the turnover of electronics and electrotechnical industry companies in early 2021 is expected to be higher than in the corresponding period in 2020.

The number of personnel employed by electronics and electrotechnical companies in Finland was up approximately 0.5 per cent in 2020 from the 2019 average. The industry employed some 37,400 people, down 200 from 2019.

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

New orders pick up significantly

According to preliminary data, the turnover of mechanical engineering companies (machinery, metal products and vehicles) in Finland decreased by slightly more than 1 per cent in 2020 from 2019. In 2020, their turnover in Finland amounted to slightly less than EUR 33 billion.

The value of new orders in mechanical engineering increased as much as 71 per cent from the previous quarter in the October-December period. Year-on-year, the value of new orders increased by 10 per cent. This improvement is partly due to some very large orders received during the last quarter that extend long into the future. However, even without these orders, order intake developed very well.

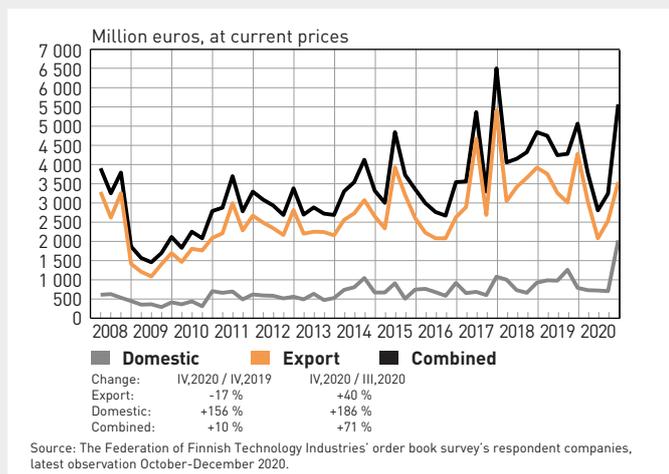
At the end of December, the value of order books was 3 per cent higher than at the end of September, but 3 per cent lower than in December 2019. Shipyards' share of the total value of order books is exceptionally large. As much as 71 per cent of the

strengthening of the order books since early 2014 is attributable to ship orders.

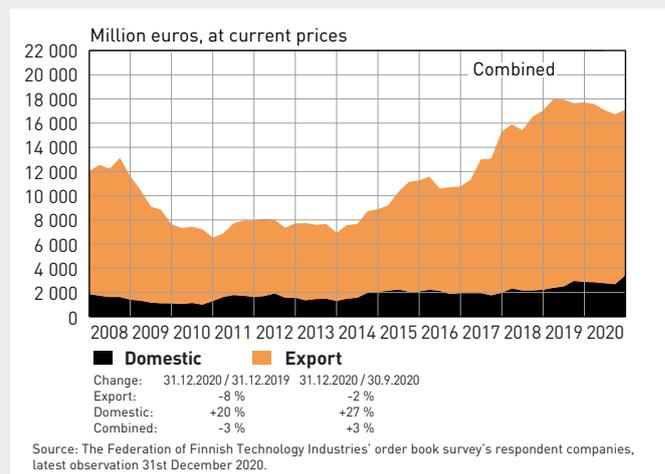
Judging from order trends at the end of 2020, the turnover of mechanical engineering companies in early 2021 is expected to be at a similar level as in the corresponding period in 2020.

The number of personnel in mechanical engineering companies in Finland decreased by 2 per cent in 2020 from the 2019 average. The industry employed some 131,000 people, down 2 600 from 2019.

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 and production picked up at year-end

According to preliminary data, the turnover of metals industry companies (steel products, non-ferrous metals, castings and metallic minerals) in Finland decreased by approximately 2 per cent in 2020 from 2019. In 2020, their turnover in Finland amounted to approximately EUR 10 billion.

The total production of steel products, non-ferrous metals, castings and metallic minerals in Finland in the January-November period decreased 2 per cent year-on-year.

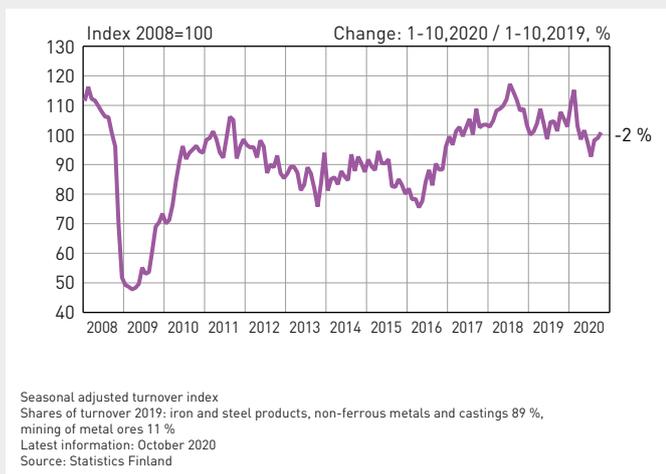
The number of personnel in metals industry companies in Finland fell by 3.5 per cent in 2020 from the 2019 average. The industry employed some 16,100 people, down 600 from 2019.

Global steel production fell by approximately one per cent from 2019. Production increased by 1.6 per cent in Asia, but fell by as much as 12 per cent in the EU. Production in the United States

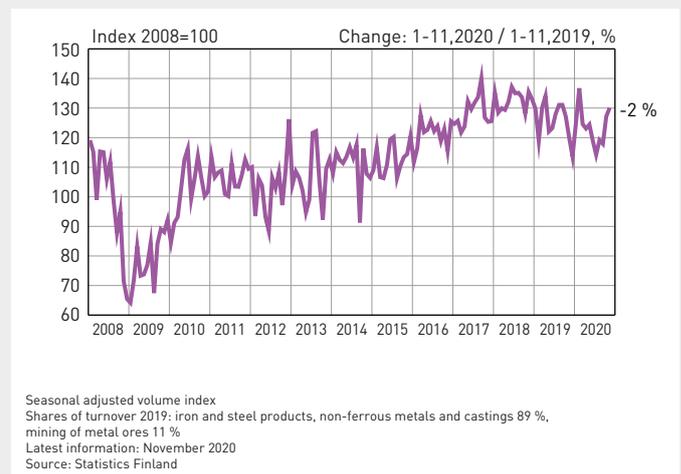
decreased by 17 per cent. The growth of Asian and global steel production in 2020 is due to the increase of production by more than 5 per cent in China, which is the largest producer. Production fell by approximately 11 per cent in India, approximately 16 per cent in Japan and approximately 6 per cent in South Korea.

China, India, Japan, the United States and South Korea were the largest producers in 2020. China accounted for approximately 58 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

New orders almost at last year's level

According to preliminary data, the turnover of consulting engineering companies (industrial, social and construction expert services) in Finland fell by approximately 1 per cent in 2020 from 2019. In 2020, their turnover in Finland amounted to approximately EUR 6.5 billion.

The volume of new orders in consulting engineering increased significantly during the October-December period, while the value of order books remained relatively unchanged.

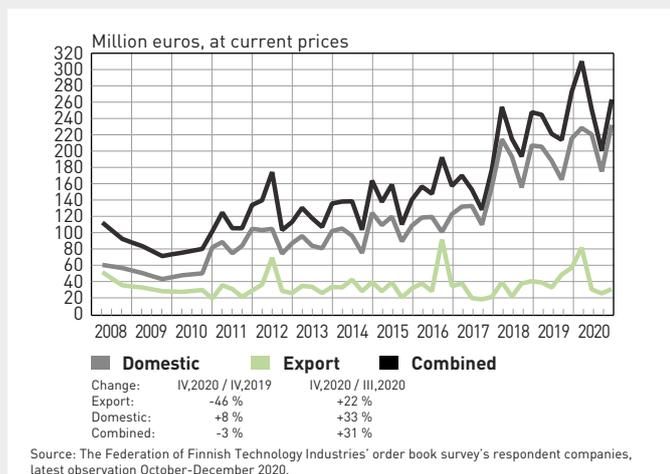
The consulting engineering companies that took part in the Federation of Finnish Technology Industries' survey of order books reported that the monetary value of new orders between October and December was 31 per cent higher than in the preceding quarter, but 3 per cent lower than in the corresponding period in 2019.

At the end of December, the value of order books was 1 per cent lower than at the end of September, but 4 per cent higher than in December 2019.

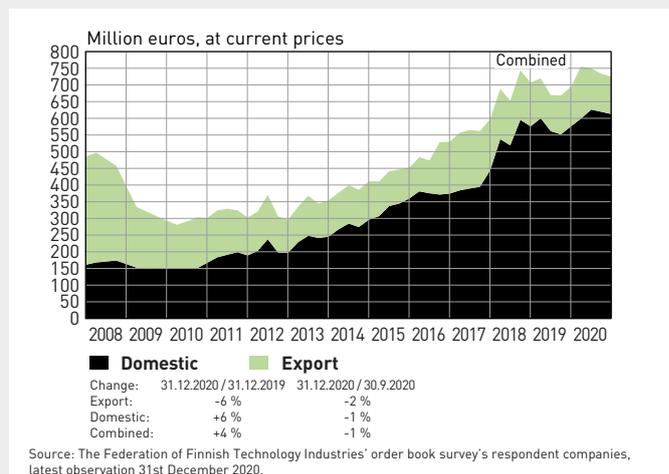
Judging from order trends at the end of 2020, the turnover of consulting engineering companies in early 2021 is expected to at a similar level to the corresponding period in 2020.

The number of personnel employed by consulting engineering companies in Finland grew by 0.5 per cent in 2020 from the 2019 average. The industry employed some 53,000 people, up 200 from 2019.

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 picked up at year-end

According to preliminary data, the turnover of information technology companies (IT services and software) in Finland grew by 5 per cent in 2020 from 2019. In 2020, their turnover in Finland amounted to almost EUR 15 billion.

New orders increased from the previous quarter between September and December. Order books also expanded slightly. Typically for the sector, order volumes fluctuate strongly from one quarter to another.

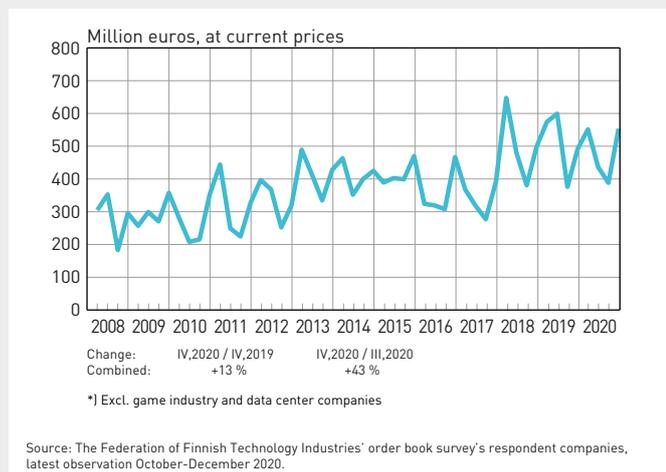
The information technology companies that took part in the Federation of Finnish Technology Industries' survey of order books reported that the monetary value of new orders between October and December was 43 per cent higher than in the preceding quarter and 13 per cent higher than in the corresponding period in 2019. Game industry and data centre companies are not included in the survey.

At the end of December, the value of order books was 3 per cent higher than at the end of September and 5 per cent higher than in December 2019.

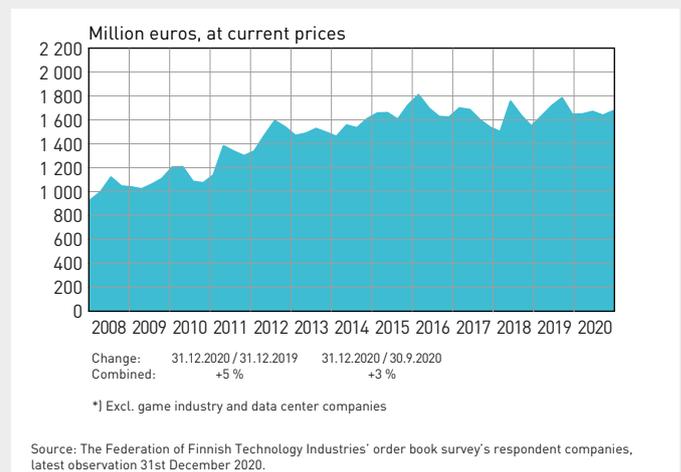
Judging from order trends at the end of 2020, the turnover of information technology companies in early 2021 is expected to be higher than in the corresponding period last year.

The number of personnel in information technology companies in Finland grew by slightly less than 1 per cent in 2020 from the 2019 average. The industry employed some 73,000 people, up 600 from 2019.

Value of new orders in the information technology* in Finland



Value of Order Books in the Information Technology* in Finland



ECONOMIC OUTLOOK 1 | 2021

Information based on the situation on 4 February 2021

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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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