

# Economic Outlook

Technology Industries of Finland

3 | 2017



**Global And Finnish  
Economic Outlook**  
Favourable growth continues  
**s. 3**

**Technology Industries In Finland**  
Significant growth  
in turnover and orders  
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## Favourable growth continues

In early 2017, the world economy grew faster than the year before. Growth forecasts have been revised slightly upwards in many countries. The International Monetary Fund (IMF) has kept its global growth forecast unchanged. According to the new projections, the world economy is expected to grow by 3.5 per cent this year and 3.6 per cent in 2018. Growth was estimated to be 3.2 per cent in 2016.

According to the IMF's July forecast, growth prospects are estimated to be better than forecast last spring in the euro area, Japan and China. The forecasts for the United States and Great Britain, however, have been revised slightly downwards.

The growth of the world economy and its favourable outlook is based on the broad extent of positive economic trends, both geographically and by sector. It is difficult to find a country anywhere in the world that does not exhibit at least slow economic growth. There are some countries where political instability is causing problems for companies. Extreme cases include the corruption scandals in Brazil and the political tumult in Venezuela. Industrial production declined in India in July, due to the introduction of a historic goods and services tax scheme. A unified, five-tier value-added tax was implemented, applicable throughout India, with a tax rate based on consumption rather than production.

According to the purchasing managers of companies representing various sectors, the growth of the world economy applies to all the main sectors in both industry and services. The outlook for the end of 2017 is also positive. Among the developed countries, optimism is currently highest in the euro area, where industry has attained stronger growth than the service sectors.

However, growth in the euro area may be retarded in the future by the strengthening of the euro. The euro has begun to strengthen since the spring and has appreciated against most other currencies. The rise of the euro is an indication of improved economic growth in the area, but also heralds an upturn in interest rates.

## Corporate investment is decisive for Finland's economic growth

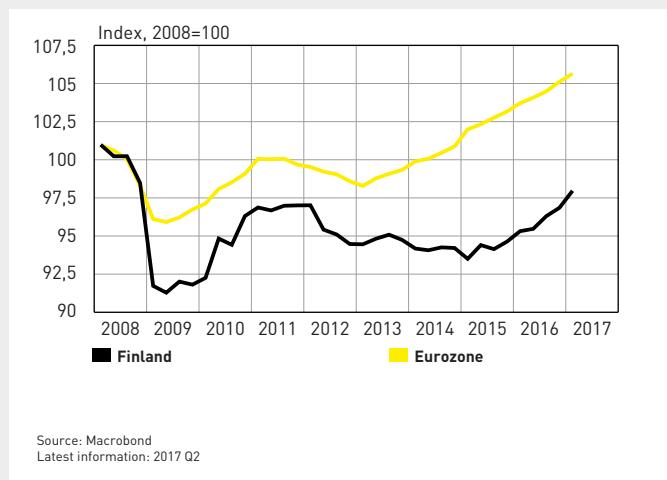
The Finnish economy is also returning to a growth track. Finland's GDP grew by an estimated three per cent from the previous year in January-June. In 2016, overall growth amounted to 1.9 per cent. Growth is supported by private consumption and construction and, to some extent, by exports and companies' productive investments. Companies' R&D investments, however, are still decreasing. These investments also play a significant role in the renewal of companies.

The growth potential of the Finnish economy is limited by two factors: reduced production capacity in the export sector and the diminishing working-age population. In all, the production capacity of the export sector has fallen by around a fifth since 2008. There has been a broad reduction in industrial production and jobs. This is due to deteriorating business conditions in Finland. The Competitiveness Pact negotiated by the labour market confederations will restore a degree of price competitiveness to companies with respect to their cost trends.

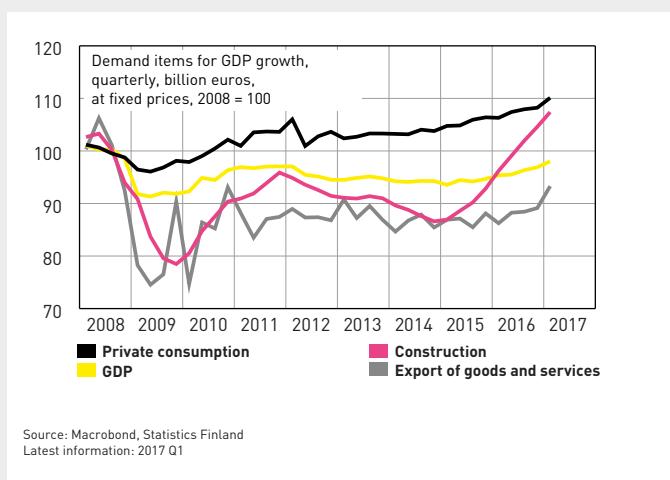
The working-age population began to decrease in Finland in 2010. The strict policy adopted by the Finnish Parliament with regard to increasing labour immigration will further retard favourable growth of the labour force. Companies now face increasing difficulties in finding skilled employees in Finland.

The first priority for ensuring continued economic growth is to improve companies' ability and preconditions to invest in Finland. There is now a desperate need for this. In real terms, business-sector investments in Finland for this year are almost six billion euros lower than in 2008. It is no surprise that, according to the Business Tendency Survey published by the Confederation of Finnish Industries in July, capacity was fully utilised in as many as 86% of the industry-sector companies that responded. In April, the figure was 74 per cent.

Gross Domestic Product Has Grown in the Euro Area for a Long Time, and Now also in Finland



Recently, Finland's Economic Growth Has also Been Supported by an Increase in Exports



Companies' investment trends in Finland differ from recent developments in our main competitor countries. In other countries, investments have already exceeded or at least reached the 2008 level. In Sweden, for example, real investments in 2017 will be some 10 per cent higher than in 2008, while in the United States investments will be 18 per cent higher and in Germany two per cent higher than in 2008. In Finland, investments are almost 20 per cent lower.

## Fast wage growth has weakened investment opportunities

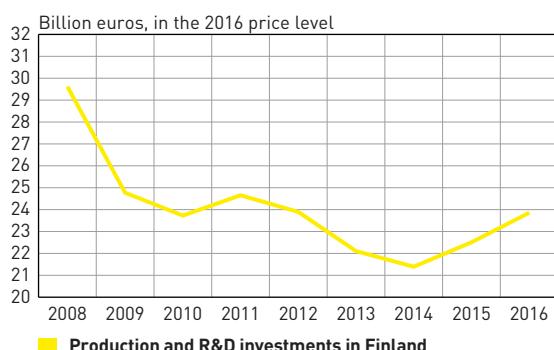
The scarcity of investment is also a problem in the technology industry. Investments made by Finnish technology industry companies will nominally be around EUR 5 billion in 2017, compared to EUR 8.4 billion in 2008. Correspondingly, the overall investments of Finnish industrial companies will total just over EUR 8 billion this year, compared to EUR 10.6 billion in 2008.

Companies will invest in Finland if they have the ability and desire to do so. Companies' ability to invest could be strengthened by avoiding general wage increases and reforming corporate taxation.

Pay development in recent years has not supported companies' ability to invest. Companies wage and non-wage labour costs have increased nominally by 12 per cent since 2008, while profits after tax have fallen by 21 percent and investment has fallen by almost the same amount.

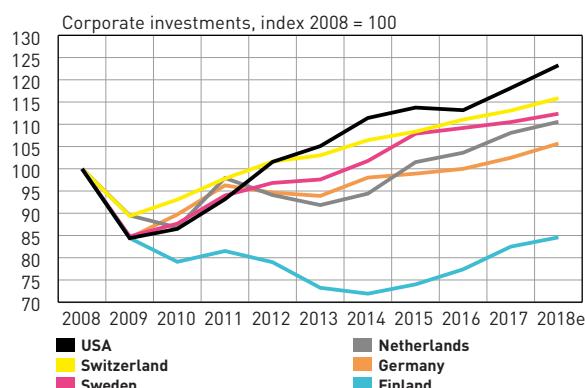
Future labour market settlements will also determine how much the cost burdens of companies change and whether agreements create better preconditions for companies to increase investment and the number of employees in Finland.

### Corporate Investments in Finland Are in Real Terms Almost 6 Billion Euros Lower than in 2008



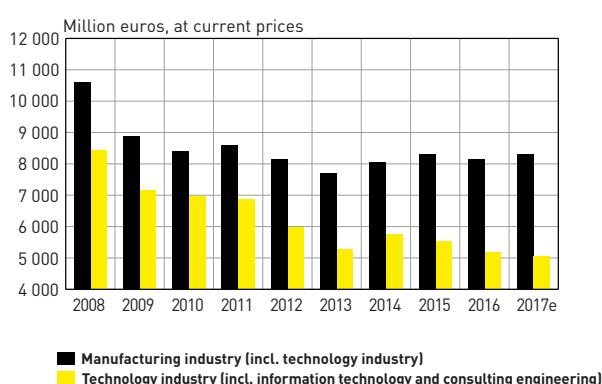
Source: Statistics Finland, National Accounts

### Companies in Finland Have Invested Significantly Less than in Competing Countries



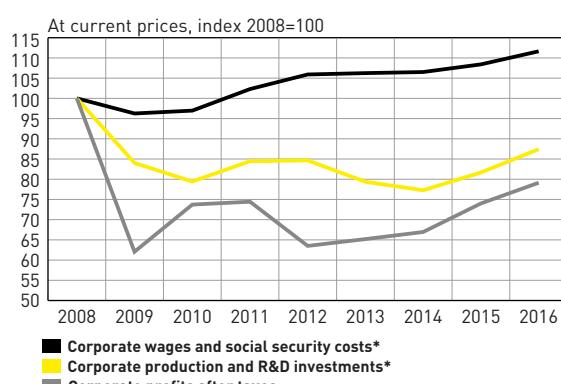
Source: OECD, Economic Outlook (June 2017)

### Investments in the Manufacturing and Technology Industry in Finland Do Not Promise Long-Term Strong Growth



Production and R&D investments in Finland.  
Source: Statistics Finland, [National Accounts],  
The Confederation of Finnish Industries\* investment survey (June 2017)

### Rapid Growth in Labour Costs Has Weakened the Ability of Companies to Invest in Finland



\* Both wages and R & D investments include R&D staff wage costs  
Source: Statistics Finland (National Accounts)



## Significant growth in turnover and orders

In comparison to the corresponding period in 2016, the turnover of technology industry companies in Finland increased by 11 per cent between January and April. In 2016, turnover amounted to 67.3 billion. In 2008, prior to the recession, the technology industry turnover in Finland totalled EUR 85.7 billion.

Both new orders and order books of technology industry companies increased substantially between April and June. Growth was boosted by major ship orders, among other factors. The number of requests for tenders received by technology industry companies continued to increase. Competitiveness will ultimately determine the extent to which these translate into actual orders.

The technology industry 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 25 per cent higher than between January and March and 47 per cent higher than in the corresponding period in 2016. Of the respondents, 49 per cent reported that the number of new orders was up since the January-March period, 42 per cent said it was down and nine per cent said it had remained stable.

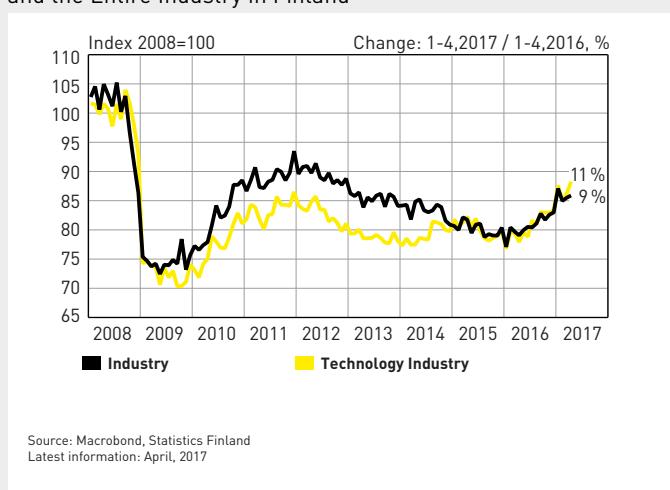
At the end of June, the value of order books was 10 per cent higher than at the end of March, and 18 per cent higher than in June 2016. Forty-seven per cent of companies reported an increase in the level of order books from March, while 39 per cent reported a drop and 14 per cent had seen no change.

Judging from order trends in recent months, the turnover of technology industry companies is expected to be higher in the autumn of 2017 than in the corresponding period last year.

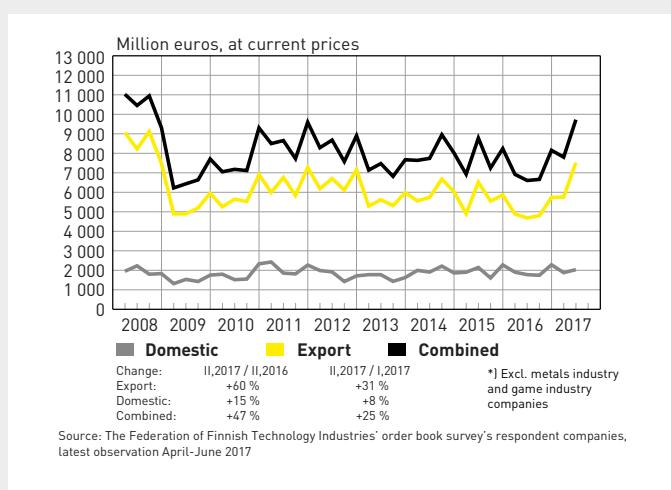
The number of personnel employed by technology industry companies in Finland increased somewhat between April and June from the 2016 average. At the end of June, the industry employed approximately 296,000 people. Personnel increased by two per cent, or 6,000 employees from the 2016 average.

The recruitment activities of technology industry companies picked up markedly in 2017 in comparison to recent years. They recruited a total of 22,600 new employees between January and June. In 2016, total recruitments came to 28,500. Some companies were increasing their personnel, while others were hiring new employees due to retirements and employee turnover.

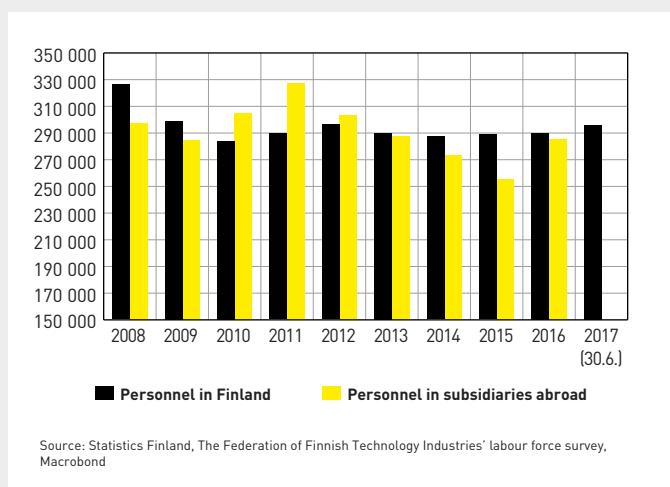
Turnover of the Technology Industry and the Entire Industry in Finland



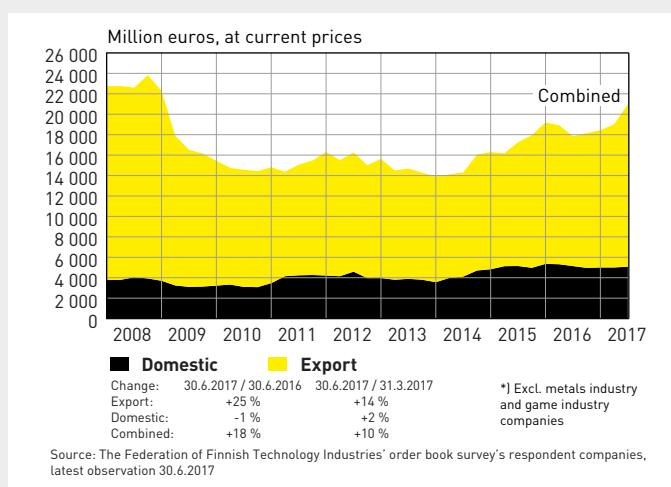
Value of New Orders in the Technology Industry\* in Finland



Technology Industry Personnel in Finland and Abroad



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





## Electronics and Electrotechnical Industry in Finland

Turnover is growing for the first time since 2008

In comparison to the corresponding period in 2016, the turnover of companies in the electronics and electrotechnical industry (telecommunications equipment, electrical equipment and medical technology) in Finland increased by nine per cent between January and April. In 2016, turnover amounted to 13.3 billion. In 2008, prior to the recession, the electronics and electrotechnical industry turnover in Finland totalled EUR 30.4 billion.

Both new orders and order books in the electronics and electrotechnical industry were up in April-June. This year, the industry's turnover will grow for the first time since 2008.

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 in the industry between April and June was nine per cent higher than in the

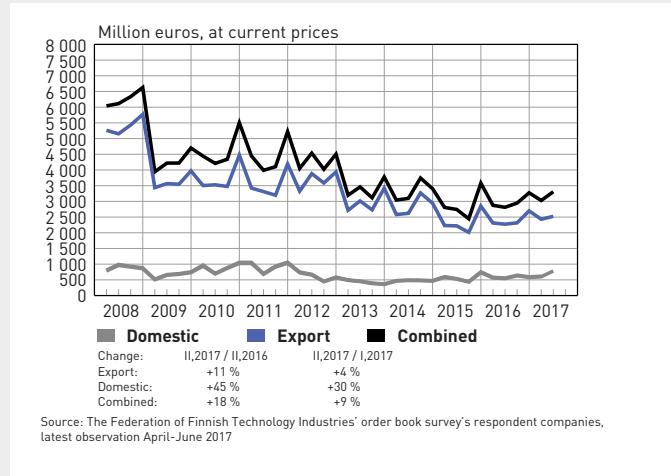
preceding quarter and 18 per cent higher than in the corresponding period in 2016.

At the end of June, the value of order books was eight per cent higher than at the end of March, and 11 per cent higher than in March 2016.

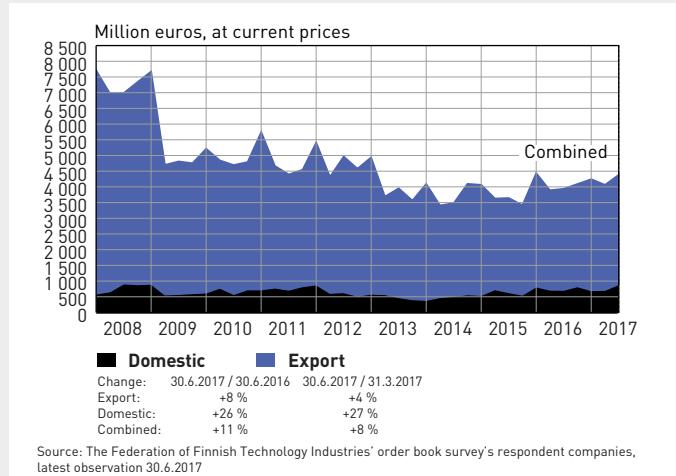
Judging from order trends in recent months, the turnover of electronics and electrotechnical industry companies in the autumn is expected to be higher than in the corresponding period last year.

The number of personnel employed by electronics and electrotechnical companies in Finland declined slightly in the April-June period from the 2016 average. At the end of June, the industry employed approximately 39,100 people. Personnel decreased by just under one per cent, or 300 employees from the 2016 average.

**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

Growth in orders due to ship orders in particular

In comparison to the corresponding period in 2016, the turnover of mechanical engineering companies (machinery, metal products and vehicles) in Finland increased by eight per cent between January and April. In 2016, turnover amounted to 27.7 billion. In 2008, prior to the recession, the mechanical engineering industry's turnover in Finland totalled EUR 33.3 billion.

Both new orders and order books in the mechanical engineering industry increased substantially in April-June. The growth in new orders was driven by ship orders in particular, although order books were also bolstered by other orders.

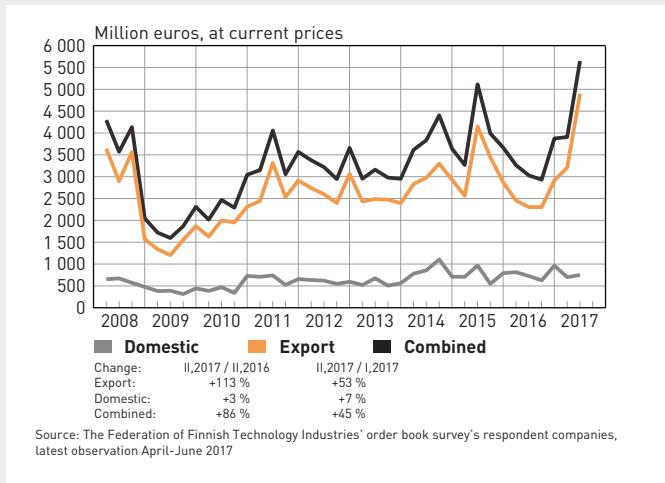
The mechanical engineering companies that took part in the Federation of Finnish Technology Industries' survey of order books reported that the monetary value of new orders between April and June was 45 per cent higher than in the preceding quarter and 86 per cent higher than in the corresponding period in 2016.

At the end of March, the value of order books was 14 per cent higher than at the end of March, and 23 per cent higher than in March 2016.

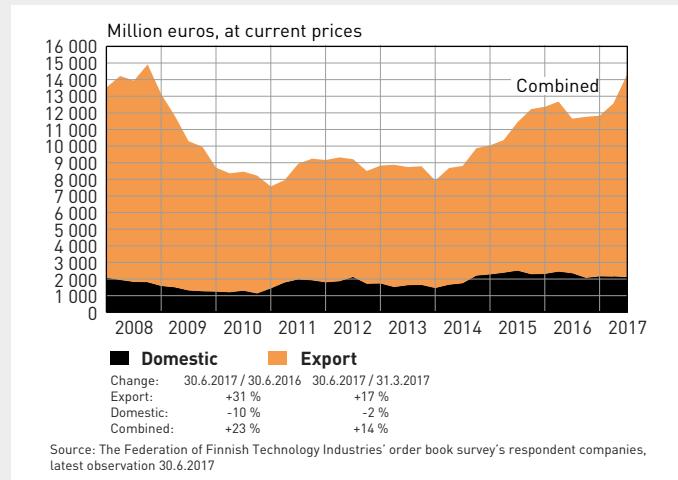
Judging from order trends in recent months, the turnover of mechanical engineering companies is expected to be higher in the autumn of 2017 than in the corresponding period last year.

The number of personnel employed by mechanical engineering companies in Finland grew in the April-June period from the 2016 average. At the end of June, the industry employed approximately 127,500 people. Personnel increased by some three per cent, or close to 4,000 employees from the 2016 average.

Value of New Orders in the Mechanical Engineering in Finland



Value of Order Books in the Mechanical Engineering in Finland





## Metals Industry in Finland

Growth in turnover boosted by price rises in particular

In comparison to the corresponding period in 2016, the turnover of metals industry companies (steel products, non-ferrous metals, castings and metallic minerals) in Finland increased by 28 per cent between January and April. In 2016, turnover amounted to EUR 9 billion. In 2007, prior to the recession, the metals industry turnover in Finland totalled EUR 11.1 billion.

The recent growth in the turnover of metals industry companies is mainly based on the rise in sales prices. This is due to the favourable development in world market prices of steel products and non-ferrous metals from early 2016.

Total production of steel products, non-ferrous metals, castings and metallic minerals in Finland between January and May increased by three per cent year-on-year. Production of metallic minerals and castings increased in particular. Production of steel products and non-ferrous metals increased slightly.

Global steel production was up 4.5 per cent in the January–June

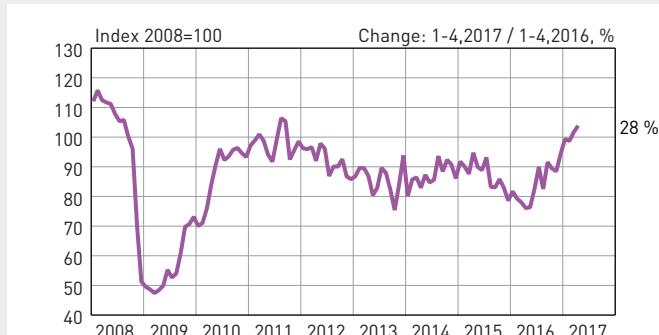
period from twelve months earlier. Production increased by four per cent in the EU, by two per cent in North America and five per cent in Asia. The global crude steel capacity utilisation ratio in June 2017 was 73 per cent, which is the highest level reported in two years.

China, India, Japan, the United States, Russia and South Korea were the largest producers in June. China accounted for 51 per cent of global steel production.

Judging from order trends in recent months, the turnover of metals industry companies in the autumn of 2017 is expected to be higher than in the corresponding period last year.

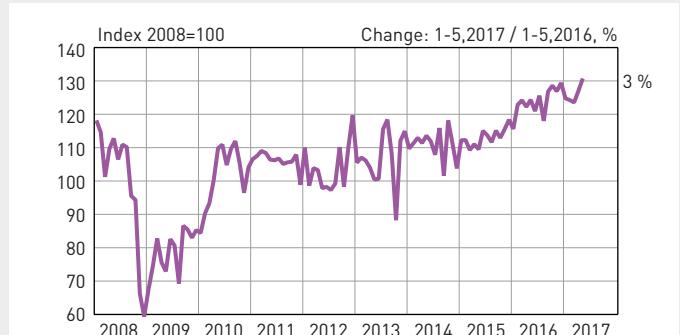
The number of personnel employed by metals industry companies in Finland declined slightly in the April–June period from the 2016 average. At the end of June, the industry employed approximately 15,100 people. Personnel decreased by almost two per cent, or just under 300 employees from the 2016 average.

### Turnover of the Metals Industry in Finland



Source: Macrobond, Statistics Finland  
Latest information: April, 2017

### Production Volume of the Metals Industry in Finland



Source: Macrobond, Statistics Finland  
Latest information: May, 2017



## Consulting Engineering in Finland

### Order books continue to improve

In comparison to the corresponding period in 2016, the turnover of consulting engineering companies (industrial, social and construction expert services) in Finland increased by eight per cent between January and April. In 2016, turnover amounted to 5.8 billion. In 2008, prior to the recession, the consulting engineering turnover in Finland totalled EUR 5.5 billion.

The favourable order trend in the consulting engineering sector continued in the April-June period. Both new orders and order books were higher than twelve months earlier. Typically for the sector, new order volumes tend to fluctuate strongly from one quarter to another.

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

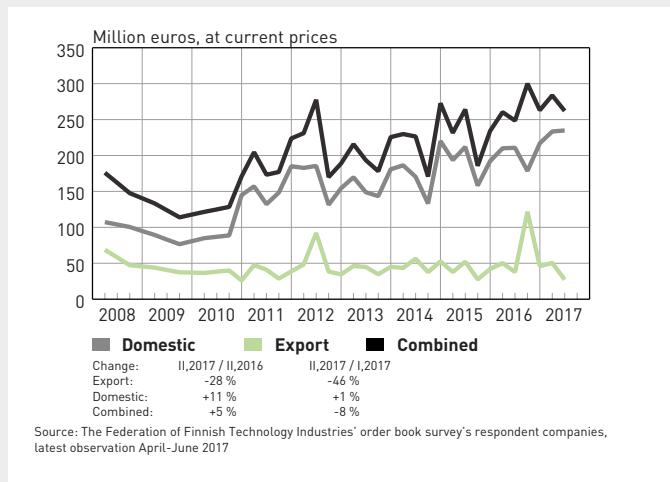
April and June was eight per cent lower than in the preceding quarter but five per cent higher than in the corresponding period in 2016.

At the end of June, the value of order books was two per cent higher than at the end of March, and 15 per cent higher than in March 2016.

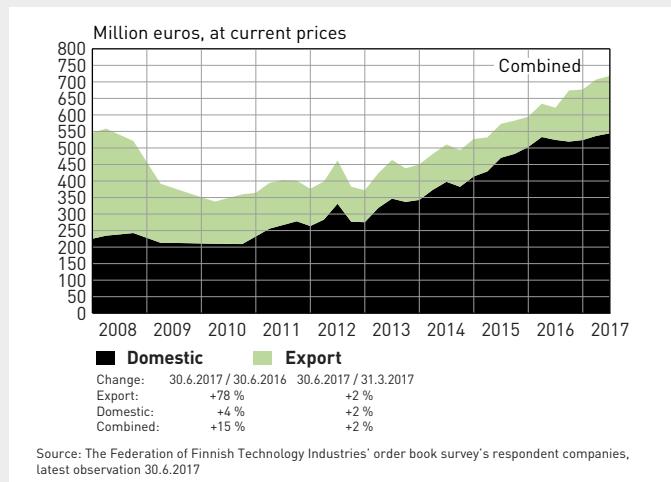
Judging from order trends in recent months, the turnover of consulting engineering companies in the autumn is expected to exceed that of last year.

The number of personnel employed by consulting engineering companies in Finland continued to grow in the April-June period from the 2016 average. At the end of June, the industry employed approximately 51,800 people. Personnel increased by almost four per cent, or 1,800 employees from the 2016 average.

Value of New Orders in the Consulting Engineering in Finland



Value of Order Books in the Consulting Engineering in Finland





## Information Technology in Finland

### Uneven order trends between individual companies

In comparison to the corresponding period in 2016, the turnover of information technology companies (IT services and software) in Finland increased by ten per cent between January and April. In 2016, turnover amounted to 11.5 billion. In 2008, prior to the recession, the information technology turnover in Finland totalled EUR 6.7 billion.

Order trends in the information technology sector have continued to be mixed. Sales of software, such as games, have continued to grow, whereas sales of other services have developed less favourably. Typically for the sector, new order volumes in particular 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 12 per cent lower than in the preceding quar-

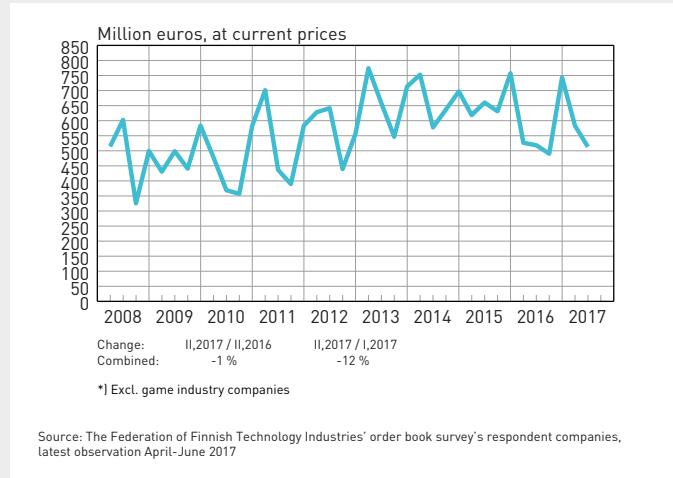
ter and slightly lower than in the corresponding period in 2016. Game industry companies are not included in the survey.

At the end of June, the value of order books was five per cent lower than at the end of March. Order books also contracted slightly from March 2016.

Judging from order trends in recent months and the positive development of the software industry in particular, the turnover of information technology companies is expected to be higher in the autumn of 2017 than in the corresponding period last year.

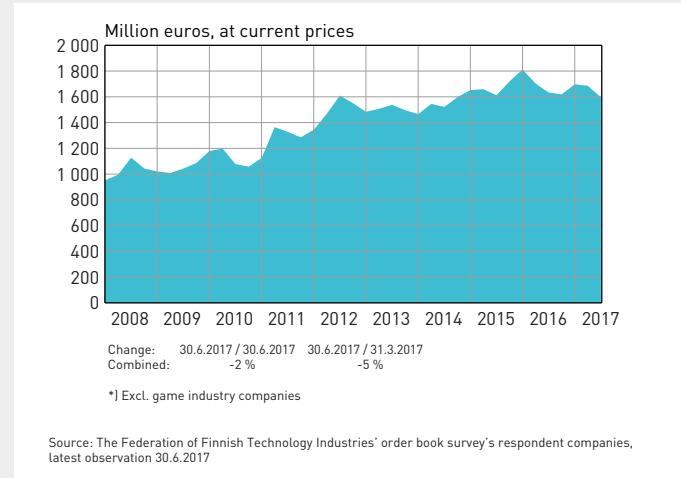
The number of personnel employed by information technology companies in Finland continued to grow in the April-June period from the 2016 average. At the end of June, the industry employed approximately 62,600 people. Personnel increased by almost two per cent, or close to 1,000 employees from the 2016 average.

Value of New Orders in the Information Technology\* in Finland



Source: The Federation of Finnish Technology Industries' order book survey's respondent companies, latest observation April-June 2017

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



Source: The Federation of Finnish Technology Industries' order book survey's respondent companies, latest observation 30.6.2017

## ECONOMIC OUTLOOK 3 | 2017

Information based on the situation on 8 August 2017

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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).



**Itella Green**



**Technology Industries  
of Finland**