



Economic outlook

1/2016

- ELECTRONICS AND ELECTROTECHNICAL INDUSTRY • MECHANICAL ENGINEERING
- METALS INDUSTRY • CONSULTING ENGINEERING • INFORMATION TECHNOLOGY

Global and Finnish Economic Outlook

Global economy grows,
but outlook is uncertain s. 3

Technology Industries in Finland

Order books continue to improve
slightly. Previously received ship
orders have strongly boosted
the growth of order books since
early 2014 s. 5



Global economy grows, but outlook is uncertain

The global economy has continued to grow at an annual rate of approximately three per cent in recent months. However, uncertainty over its future development has increased. This is largely due to China, as well as other developing economies such as Brazil and Russia. These countries are either reporting weaker investment and manufacturing activity, or a considerable slowdown in their economic growth. World market prices for key raw materials have collapsed as a result. Currency depreciations in many emerging market economies are adding to their debt burden.

On these grounds, in January the International Monetary Fund (IMF) decided to revise its forecasts for global growth downwards, for both 2016 and 2017. According to the new projections, the global economy is expected to grow by 3.4 per cent this year and 3.6 per cent in 2017. Economic development in China continues to have a major impact on the global economic growth forecast. According to the IMF, based on purchasing power parity China accounts for 16 per cent of the global economy and almost one third of projected economic growth for 2016.

China's mixed messages

The outlook for economic development in China is mixed. Its GDP is reported to have grown at an annual rate of 6.8 per cent in the

period between October and December. This growth was mainly generated by the service sector. At the same time, statistics indicate that steel and electricity production have contracted for the first time in 25 years. According to Cisa (the China Iron and Steel Association), steel consumption in China fell by 4.6 in 2015 and is expected to contract by five per cent in 2016. Steel and coal output have dropped correspondingly.

Investment activity accounts for a significant proportion of economic growth in China. It also has a major effect on manufacturing and imports of investment goods. According to the statistics reported by China, growth of residential construction and the construction sector in general have stalled in recent months. Construction of new real estate infrastructure in cities has fallen. On the other hand, corporate investment activities in the cities have increased. In turn, the manufacturing sector's purchasing managers have reported a decline in production. Correspondingly, China's demand for imports from both Western countries and other Asian countries has declined in broad terms. This is indicative of a fall in demand for investment goods.

Investments in Brazil and Russia have contracted at an annual rate of some 10 per cent, while their GDPs are shrinking at an annual rate of some five per cent. Manufacturing activities have also weakened in both countries. Purchasing managers from

India's manufacturing sector have also reported a contraction in industrial production. However, the projected GDP growth in India remains at a high level.

Europe and the United States on a growth path

In recent months, the service sectors in the United States and most European countries have driven GDP growth. According to purchasing managers, growth in the euro area continued throughout January. The consumer confidence index is also at a healthy level. Falling prices for raw materials and low interest rate levels have at least temporarily improved purchasing power.

According to the IMF's January 2016 World Economic Outlook, Western Europe is expected to grow at a rate of less than two per cent and the United States by 2.5 per cent. Economic growth is expected to continue in most Central and Eastern European countries, except in Russia, where GDP is expected to shrink further.

Positive economic development in the United States is reflected by improved housing sales and construction, as well as rising house prices. For example, sales and construction volumes for residential houses are up by some 70 per cent from the lowest levels reported in 2011. However, housing market activity remains at a significantly lower level than in 2005.

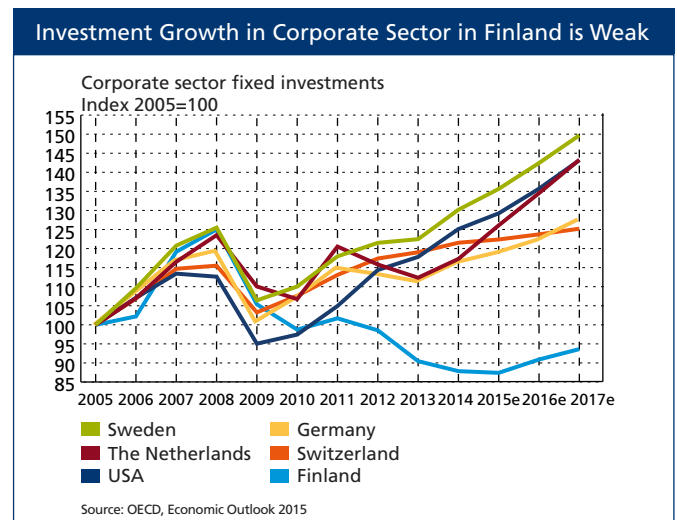
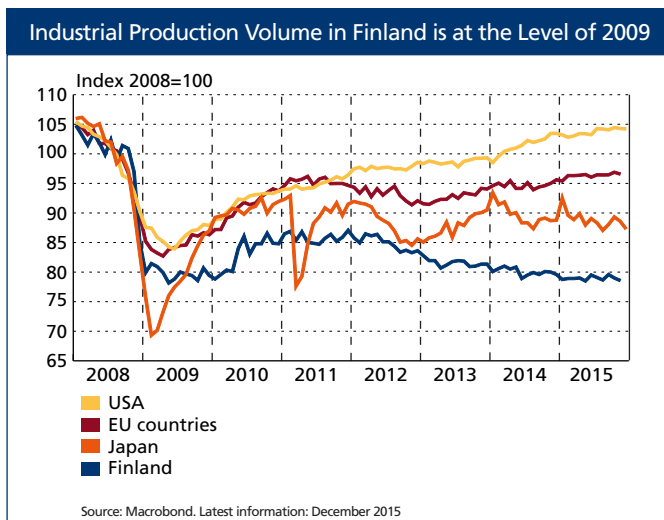
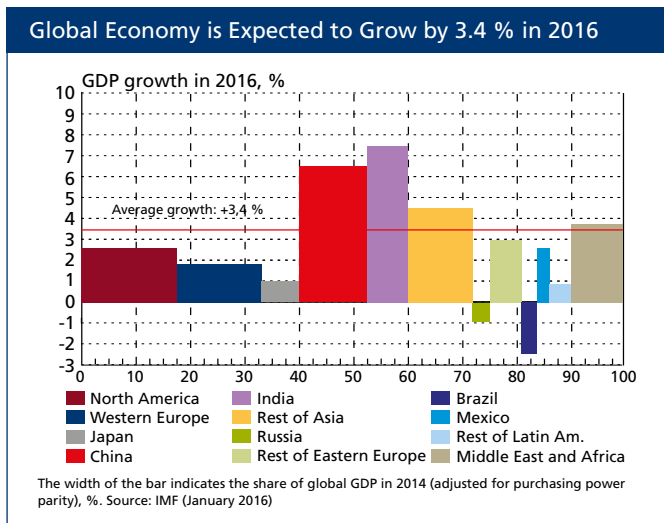
The continued strength of the dollar is increasingly weighing down on the export industry in the United States. According to purchasing managers, manufacturing activity has taken a downward turn.

Finnish economy fragile

Considering the risks and uncertainties related to the global economy, in many respects the situation remains worrying for Finland's national economy. As an exception to the recent growth trend of other Western European economies, Finland's GDP has failed to pick up. The production volume of Finland's key export sector, i.e. industry, has fallen back to the levels reported in 2009 and exports are not expanding. At the same time, the consumer confidence index in Finland remains lower than average in Western Europe. Tax and cost hikes, high unemployment and a weak performance in the industry sector have not created conditions in which Finnish households can increase their spending. The positive effects of lower raw material prices have been limited.

It is vital that the Finnish economy return to a growth path. The government should take bold steps to improve the operational environment and competitiveness of Finnish companies. The steps taken so far have had only marginal effects at best. In such a context, the sharp cut in funding for Tekes (the Finnish Funding Agency for Technology and Innovation) is an unprecedented step.

To promote growth, labour market organisations must be able to improve cost competitiveness and reform the labour market model.



Order books continue to improve slightly

Previously received ship orders have strongly boosted the growth of order books since early 2014

The turnover of technology industry companies in Finland grew slightly from 2014 to 2015, amounting to EUR 67.7 billion. In 2008, prior to the financial crisis, the corresponding figure was approximately EUR 86 billion.

The level of new orders in the technology industries between October and December fell short of the corresponding period in 2014. There were no large ship orders in either period. However, the order books strengthened somewhat after September. The expansion of order books since early 2014 is mainly due to large ship orders. Since ship deliveries will be scheduled for the coming years, their effect on the technology industry's turnover and production will be gradual over a long period leading up to 2020.

Based on calls for tenders received by companies in the sector, there have been no fundamental changes in the market situation over the last three months.

The 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 eight per cent lower than in the corresponding period in 2014, but two per cent higher than in the preceding quarter.

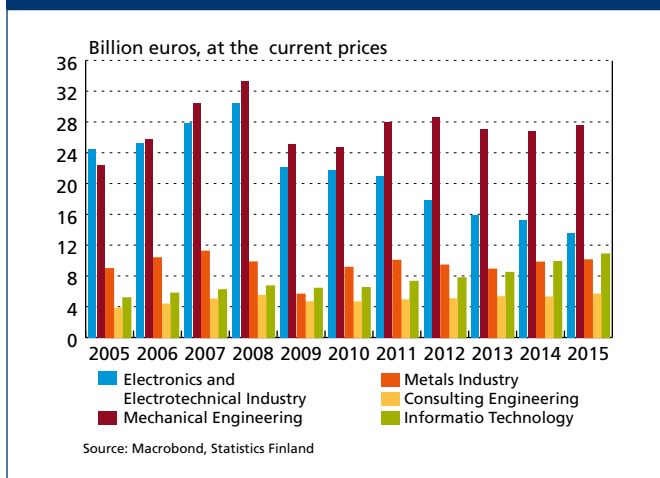
At the end of December, the value of order books was up 15 per cent from the corresponding period last year, and three per cent higher than at the end of September.

Judging from the order trends in recent months, the turnover of technology industry companies in Finland is expected to remain at the same or a slightly lower level in early 2016 than in the corresponding period last year.

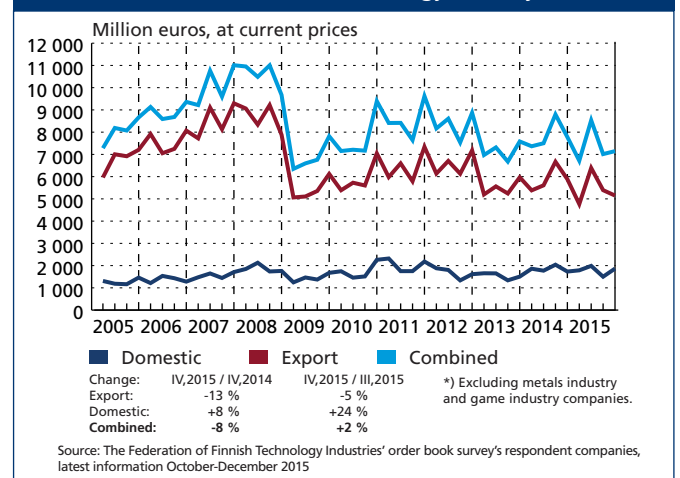
In 2015, the number of personnel employed by technology industry companies in Finland fell by almost one per cent or 3,000 employees. Personnel numbers also fell in the period between October and December. At the end of December, 17,000 employees were affected by temporary or part-time lay-offs. On average, the industry employed 282,000 people in 2015. In 2008, the industry employed a total of 326,000 people in Finland.

Despite the reductions, technology industry companies recruited a total of 28,500 new employees last year. A total of 6,200 new recruitments were made in October–December. Some companies were increasing their personnel, while others were hiring new employees due to retirements and employee turnover.

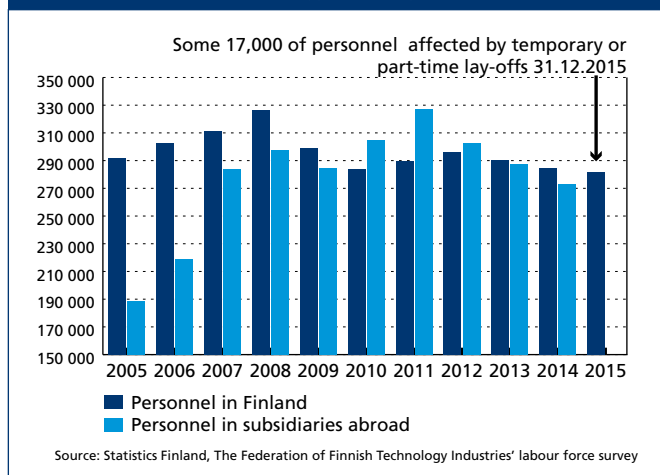
Turnover of the Technology Industry in Finland



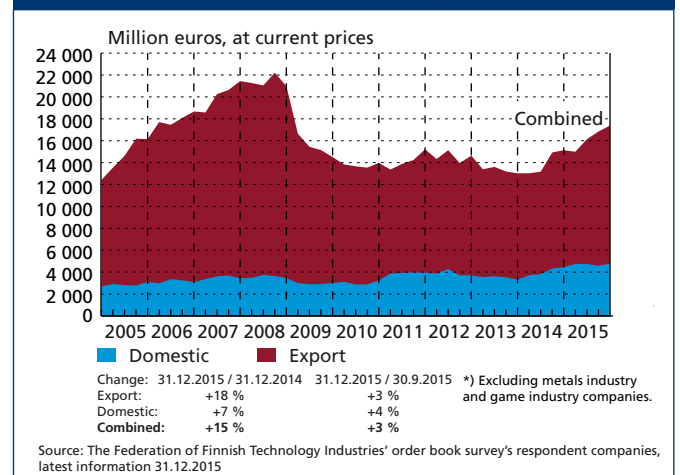
Value of New Orders in the Technology Industry* in Finland



Personnel in the Technology Industry



Value of Order Books in the Technology Industry* in Finland





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Orders still down from the previous year

The turnover of companies in the electronics and electrotechnical industry (telecommunications equipment, electrical equipment and medical technology) in Finland fell by 11 per cent from 2014. The decrease in turnover was especially noteworthy in the telecommunications equipment sector. Total turnover in 2015 amounted to EUR 13.6 billion. In 2008, prior to the financial crisis, turnover was approximately EUR 30.4 billion.

Burdened by the slump in the telecommunications equipment sector, both new orders and order books in the electronics and electrotechnical industry fell between October and December from the corresponding period year earlier.

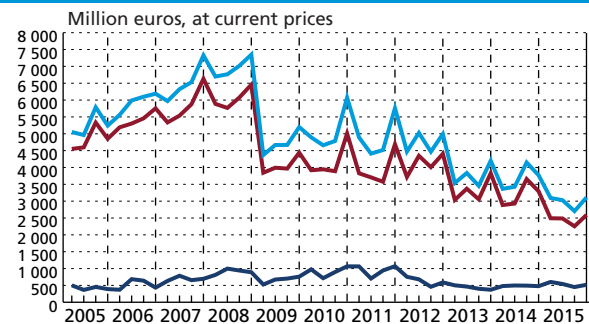
The companies that took part in the Federation of Finnish Technology Industries' survey of order books reported that the monetary value of new orders in the industry between October and December was 18 per cent lower than in the corresponding period in 2014, but 15 per cent higher than in the preceding quarter.

At the end of December, the value of order books was down 11 per cent from the corresponding period year earlier, but seven per cent higher than the value reported at the end of September.

Judging from order trends in recent months, the turnover of electronics and electrotechnical companies in early 2016 is expected to remain below last year's level.

The number of electronics and electrotechnical personnel in Finland fell by 1,500 people, or almost four per cent, in 2015. On average, the industry employed 40,500 people in 2015. In 2008, the industry employed a total of 60,900 people in Finland.

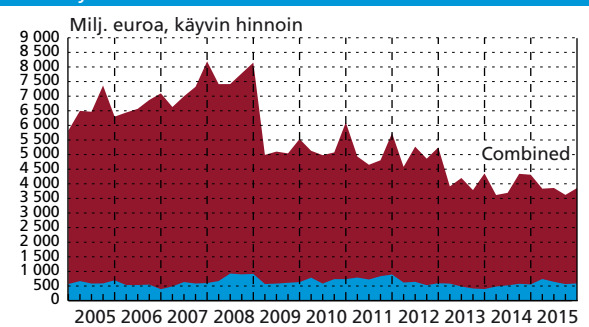
Value of New Orders in the Electronics and Electrotechnical Industry in Finland



Change:	IV,2015 / IV,2014	IV,2015 / III,2015
Export:	-21 %	+15 %
Domestic:	+9 %	+15 %
Combined:	-18 %	+15 %

Source: The Federation of Finnish Technology Industries' order book survey's respondent companies, latest information October-December 2015

Value of Order Books in the Electronics and Electrotechnical Industry in Finland



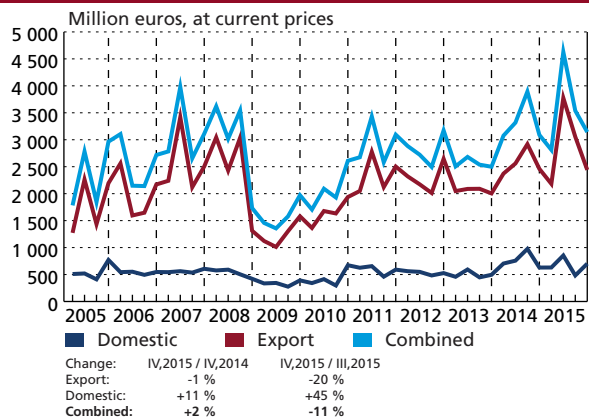
Change:	31.12.2015 / 31.12.2014	31.12.2015 / 30.9.2015
Export:	-13 %	+7 %
Domestic:	+6 %	+4 %
Combined:	-11 %	+7 %

Source: The Federation of Finnish Technology Industries' order book survey's respondent companies, latest information 31.12.2015



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Value of New Orders in the Mechanical Engineering in Finland



Source: The Federation of Finnish Technology Industries' order book survey's respondent companies, latest information October-December 2015

New orders pick up slightly from the previous year

The turnover of mechanical engineering companies (machinery, metal products and vehicles) in Finland grew by an estimated three per cent from 2014, to EUR 27.6 billion. In 2008, prior to the financial crisis, the turnover was EUR 33.3 billion.

The order books of mechanical engineering companies continued to improve slightly between October and December. The expansion of order books since early 2014 is largely due to previously received large ship orders. Since these ship deliveries will be scheduled for the coming years, their effect on the mechanical engineering industry turnover and production will be gradual over a long period leading up to 2020.

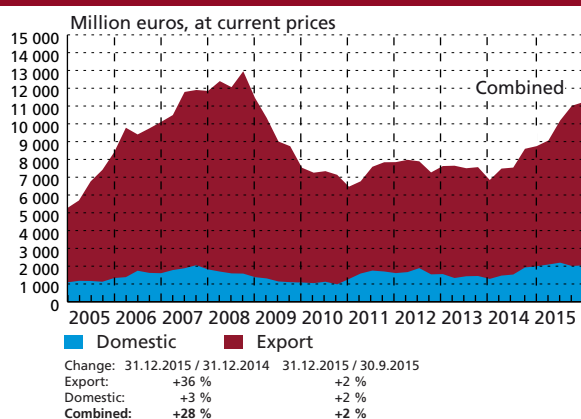
The mechanical engineering companies that took part in the Federation of Finnish Technology Industries' survey of order books reported that the monetary value of new orders between October and December was two per cent higher than in the corresponding period in 2014, but 11 per cent lower than in the preceding quarter.

At the end of December, the value of order books was 28 per cent higher year-on-year, and two per cent higher than at the end of September.

Judging from order trends in recent months, the turnover of mechanical engineering companies in early 2016 is expected to remain at the same or a slightly lower level than in the corresponding period last year.

The number of mechanical engineering personnel in Finland dropped by 1,300 people, or one per cent, last year. On average, the industry employed 121,000 people in 2015. In 2008, the industry employed a total of 150,100 people in Finland.

Value of Order Books in the Mechanical Engineering in Finland



Source: The Federation of Finnish Technology Industries' order book survey's respondent companies, latest information 31.12.2015



Metals Industry in Finland



Turnover slightly up, production volumes flat

The turnover of metals industry companies (steel products, non-ferrous metals, castings and metallic minerals) in Finland grew by three per cent from 2014 and amounted to EUR 10.1 billion in 2015. The corresponding 2008 pre-crisis figure was EUR 11.2 billion.

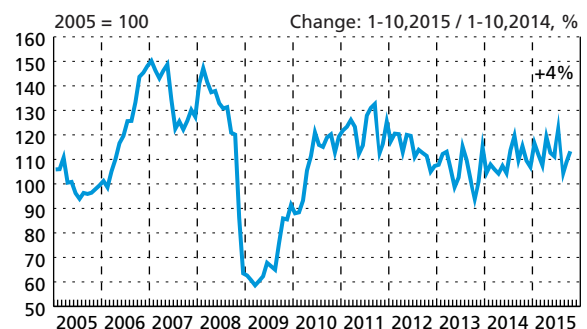
Total production of steel products, non-ferrous metals, castings and metallic minerals in Finland between January and November remained at the same level as in the corresponding period in 2014. Production of steel products increased slightly, while production volumes of non-ferrous metals remained unchanged. Production of castings and metallic minerals decreased.

Global steel production shrank by some three per cent from 2014 to 2015. China, Japan, India, the United States and Russia were the largest producers. China accounted for 50 per cent of global steel production.

In December, global steel production was down by almost six per cent from the corresponding period in 2014. Capacity utilisation was 65 per cent, down from the up to 73 per cent reported in early 2015. In comparison to December 2014, production fell by eight per cent in the EU, by 13 per cent in Northern America and by five per cent in Asia.

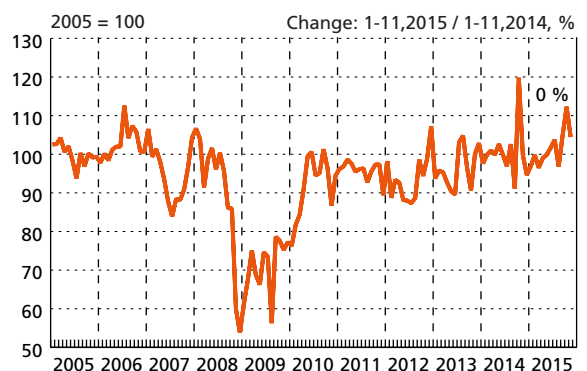
In 2015, the number of personnel employed by Finnish metals industry companies decreased by around four per cent, or 600 people. On average, the industry employed 15,100 people in 2015. In 2008, the industry employed a total of 18,100 people in Finland.

Turnover of the Metals Industry in Finland



Seasonally adjusted turnover index, latest information 10/2015
Source: Statistics Finland

Production Volume of the Metals Industry in Finland

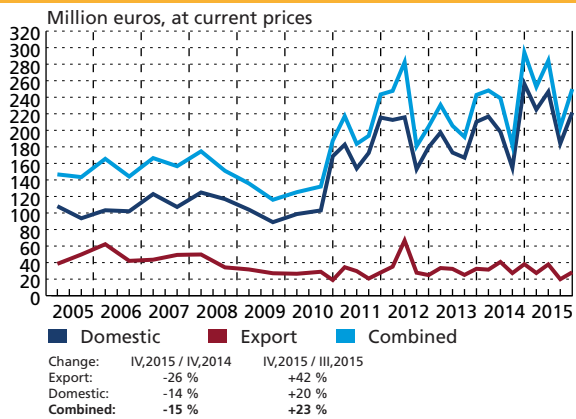


Seasonally adjusted volume index, latest information 11/2015
Source: Statistics Finland



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Value of New Orders in the Consulting Engineering in Finland



Source: The Federation of Finnish Technology Industries' order book survey's respondent companies, latest information October-December 2015

Order books support continued turnover growth

The turnover of consulting engineering companies (industrial, social and construction expert services) in Finland increased by some seven per cent from 2014, totalling EUR 5.6 billion in 2015. In 2008, prior to the financial crisis, the industry's turnover in Finland was EUR 5.5 billion.

The level of new orders in the consulting engineering industry between October and December fell from the corresponding period year-on-year, but increased from the previous quarter. At the end of December, the order books were up year-on-year. There are nevertheless major differences between individual companies. Typically for the sector, new order volumes also fluctuate strongly from one quarter to another.

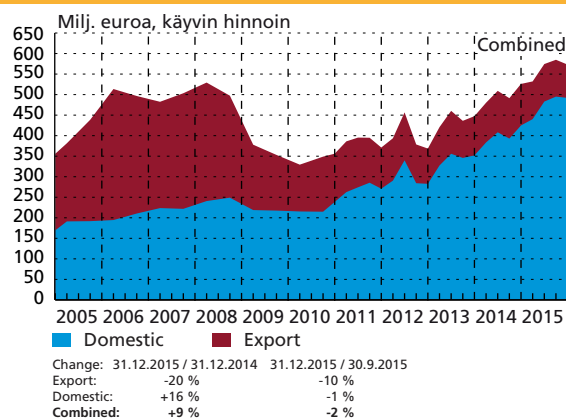
Consulting engineering companies that took part in the Federation of Finnish Technology Industries' survey of order books reported that the monetary value of new orders in the industry between October and December was 15 per cent lower than in the corresponding period of 2014, but 23 per cent higher than in the preceding quarter.

At the end of December, the value of order books was nine per cent higher year-on-year, but two per cent lower than the value reported at the end of September.

Judging from order trends in recent months, the turnover of consulting engineering companies in early 2016 is expected to exceed last year's levels.

The number of personnel employed by the Finnish consulting engineering industry increased by more than two per cent, or 1,000 people, in 2015. On average, the industry employed 47,300 people in 2015. In 2008, the industry employed a total of 45,500 people in Finland.

Value of Order Books in the Consulting Engineering in Finland



Source: The Federation of Finnish Technology Industries' order book survey's respondent companies, latest information 31.12.2015



Information Technology in Finland



Growth of order books continues

The turnover of the information technology sector (IT services and software) in Finland grew by 10 per cent from 2014 to 2015. This growth was driven by the software industry, particularly the game industry. In 2015, turnover amounted to EUR 10.8 billion. In 2008, prior to the financial crisis, the industry's turnover in Finland was EUR 6.7 billion.

New orders and order books in the information technology sector continued to rise. There are nevertheless major differences between individual companies. Typically for the sector, order volumes also fluctuate strongly from one quarter to another.

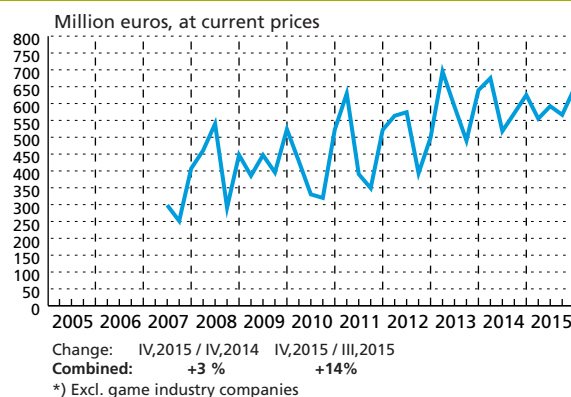
The information technology companies that took part in the Federation of Finnish Technology Industries' survey of order books reported that the monetary value of new orders placed between October and December was three per cent higher than in the corresponding period in 2014, and 14 per cent higher than in the preceding quarter.

At the end of December, the value of order books was 11 per cent higher than in the corresponding period year earlier, and seven per cent higher than at the end of September.

Judging from order trends in recent months, the turnover of information technology companies is expected to be higher in early 2016 than in the corresponding period last year.

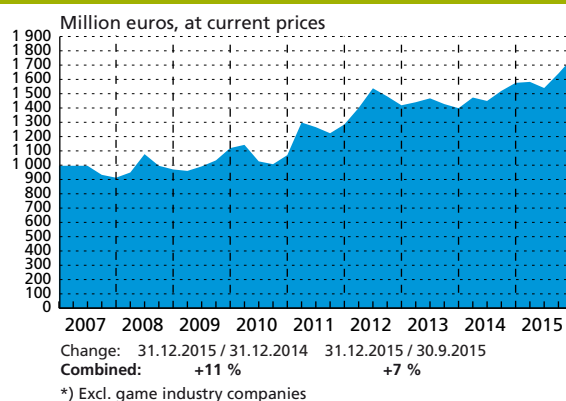
In 2015, the number of personnel employed by Finnish technology industry companies decreased by one per cent, or 600 people. The industry employed 57,900 people on average in 2015. In 2008, the industry employed a total of 51,700 people in Finland.

Value of New Orders in the Information Technology in Finland*



Source: The Federation of Finnish Technology Industries' order book survey's respondent companies, latest information October-December 2015

Value of Order Books in the Information Technology in Finland*



Source: The Federation of Finnish Technology Industries' order book survey's respondent companies, latest information 31.12.2015



ECONOMIC OUTLOOK 1/2016

Information based on the situation on 2 February 2016.

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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 and metal prices: www.techind.fi.



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