# Economic situation and outlook 4/2014

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

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The Federation of Finnish
Technology
Industries



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# Increased uncertainty in the global economy



The growth of the world economy has failed to achieve the level predicted for this year. This is due to the slowing of growth in the large developed countries, Europe and Japan. This has also made the prospects for next year more uncertain.

The growth rate in China and India has continued to slow down, although the economies are still growing at an annual rate of 5–7 per cent. In Russia and Brazil, economic growth has stagnated altogether. For the first time in 19 years, China's steel consumption is predicted to decrease this year. This is mostly due to the slowing of housing construction. The weak development of global raw material prices is one factor that darkens the economic outlook of several developing countries.

However, the economic growth of Asia is without equal in the world. The GDP of countries such as Indonesia, Malaysia, the Philippines, and Vietnam will again grow by 5–6 per cent this year.

In contrast, the economic growth of Western Europe and Japan will remain at slightly more than one per cent. The dying down of growth in Russia, in combination with the economic sanctions, will have an impact on the Russian exports of several Western and Central European countries. The situation in Russia and Ukraine will continue to be a factor of uncertainty for the European economy next year, as well.

Economic development is not spread evenly between European countries, however. The GDP of the United Kingdom, Ireland, Sweden, and Norway will attain a growth rate of 2–3 per cent this year. The German economy will grow by 1.5 per cent. On the other hand, the economy of Finland has declined as badly as those of Italy and Greece. Finland's GDP will shrink or, at most, be equal to last year's level.

In the United States and Canada, the GDP will grow by approximately two per cent. The housing market is experiencing a revival, and unemployment is decreasing.

# Bleaker outlook for the European technology industry

The economist team of Orgalime, the organisation representing the interests of the mechanical, electrical, and metalworking industries in Europe, reported that the effects of the situation in Russia and Ukraine and the retardation of growth in developed countries were

already clearly apparent. The economic outlook for the next 12 months is uncertain.

The turnover of Germany's largest industrial sector, the machinery industry, will top last year's level by a slight margin. However, the number of new orders to the country's machinery industry companies has not grown for some time now. The prospects of the industry have declined from last year. No less than 45 per cent of the German machinery industry's exports are delivered outside Europe. Exports to developing countries, in particular, have been declining for more than two years now. Exports to Russia shrank by 18 per cent this year. Despite its straitened circumstances, the German machinery industry continued hiring new personnel, at least up to July. The country's cost competitiveness has been reflected in the employment situation. The German machinery industry employs more than one million people in total.

The turnover of Germany's electronics and electrotechnical industry, the country's second-largest industrial sector, is also forecast to exceed the previous year's level by a small margin. The number of new orders has remained at last year's level. The industry's turnover has failed to reach the level of 2008 as yet, and the general economic outlook has worsened. The Russian exports of German electronics and electrotechnical companies have declined by 20 per cent this year, and exports to Brazil by 8 per cent. The electronics and electrotechnical industry directly employs a total of 845,000 people in Germany and 690,000 people abroad. Approximately 36 per cent of the industry's exports are delivered outside Europe.

The growth of the UK economy has continued to be strong. The turnovers of the machinery, metal product, and vehicle industries have increased, but that of the electronics industry has declined. The machinery and vehicle industries, in particular, have achieved strong growth.

The estimates of Italian electronics and electrotechnical industry companies for the duration of the recession are bleak. Of companies in the industry, 61 per cent believe that the crisis will last longer than 18 months. The export of electronic machines from Italy to Germany and France has declined by more than 10 per cent this year. Exports to Russia, on the other hand, have only dropped by 4 per cent. The turnovers of the machinery and metal product industries are expected to contract slightly this year and next year.

The turnover of the Dutch technology industry will grow by an estimated 5.5 per cent this year, but will not yet achieve the level of 2008. The workforce will also grow by a few per cent. The developments in Eastern Europe have also affected Dutch technology industry companies, in which optimism with regard to the future has clearly waned during the autumn.

The development of the Swiss economy has slowed clearly in 2014. In January–March, the turnovers of the Swiss mechanical engineering and electronics industries were still looking at an annual growth of nearly 10 per cent, but growth died down altogether in April–June. The industry's new orders decreased by six per cent from the beginning of the year. Exports to EU Member States declined slightly in January–June, but those to Asia and the United States grew. At present, 39 per cent of companies in the industry anticipate growth in new orders in 2015. In Sweden, the turnover of technology industry companies will decrease by more than three per cent this year. This will entail a personnel reduction of nearly two per cent. The poor development of the economy is predicted to persist next year.

### The poor cost competitiveness of Belgium and Finland sets a warning example

In Belgium, the restructuring of the economy is treating industrial companies with a rough hand. The number of jobs in the Belgian technology industry will decrease from roughly 305,000 in 2008 to 265,000 by the end of 2014. There will be no growth in turnover this year. In January–June, total exports grew by 4 per cent in comparison to 2013, but exports to Russia shrank by 16 per cent, those to Ukraine by 44 per cent, and those to Brazil again by 16 per cent.

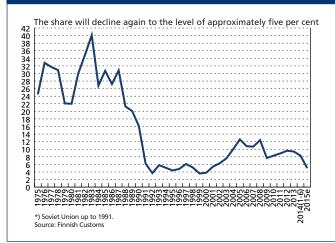
The structural changes being experienced in the Belgian technology industry are similar to devel-opments in Finland in four aspects. In both countries, jobs in the industry have decreased by 15 per cent since the beginning of 2008. At present, roughly 30 per cent of technology companies are un-profitable in both countries. Fixed investments in both countries are at a clearly lower level than in 2008, down by one-third in Finland and one-fourth in Belgium. The cost competitiveness (labour costs/productivity) has developed equally poorly in both countries since 2005. By autumn this year, the countries had fallen behind Germany and Spain by nearly 20 per cent in this regard. Despite the Pact for Employment and Growth, signed in the autumn of 2013, Finland's position in relation to Germany has continued to deteriorate this year. The collective wage solution has not promoted the adoption of company-specific salary and working time systems, which would be critical for the im-provement of productivity.

The production volumes of the Austrian machinery and metal product industries grew by a few per cent in January–July, but the growth of new orders petered out. The outlook for the metal product industry in particular has deteriorated in recent months. Europe accounts for 74 per cent of the in-dustry's exports. As a whole, the industry's exports decreased slightly in early 2014. The largest relative drop was experienced in exports to Brazil, which declined by 27 per cent. Russian exports remained unchanged, and exports to the largest EU member states, with the exception of France, grew, as did exports to the United States and Asia.

In Denmark, industrial production has continued growing this year, as well. The reduction in jobs has also been stopped. The turnover of Danish technology industry companies is expected to grow by 4.5 per cent this year. Of the industry's exports, 66 per cent are destined for Europe.

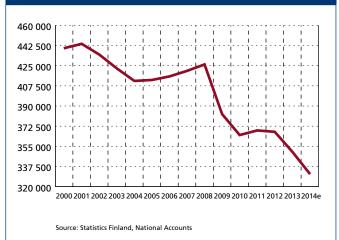








#### Industrial Personnel in Finland



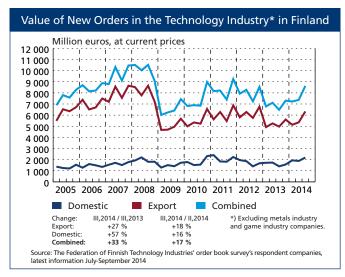
# Growth in orders due to major individual orders, calls for tenders decreased during the autumn

The turnover of companies in the technology industries in Finland totalled EUR 65.2 billion in 2013. Between January and July of this year, turnover was roughly equal to twelve months earlier. The turnovers of the electronics, machinery, and steel product industries shrank, in particular, while the greatest growth was achieved in the vehicle and software industries and in metal ore mining. In 2008, prior to the financial crisis, the Finnish technology industry's turnover was EUR 85.7 billion.

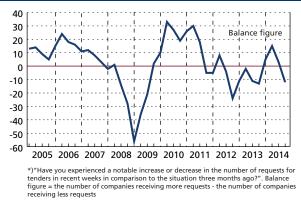
Both order books and the number of new orders grew in July– September in the technology industry. This growth is based on individual high-value orders. Compared to April–June, both order books and the number of new orders shrank in more companies than they grew in.

The reduction in calls for tenders in the industry in autumn, for the first time this year, speaks to the uncertainty of the market situation. The crisis in Ukraine and recession in Russia, in addition to the economic sanctions imposed on the country, are hindering the growth potential of several technology industry companies.

According to the Federation of Finnish Technology Industries' survey of order books, the monetary value of new orders reported



#### Tender Requests\* Received by Technology Industry Companies

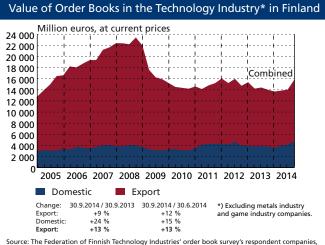


Source: The Federation of Finnish Technology Industries' order book survey, latest information: October 2014. between July and September was 33 per cent higher than in the corresponding period in 2013, and 17 per cent higher than in the preceding quarter. Of the respondents, 62 per cent said the quantity of new orders had fallen since April–June, 33 per cent said it had grown, and 5 per cent said it had remained stable.

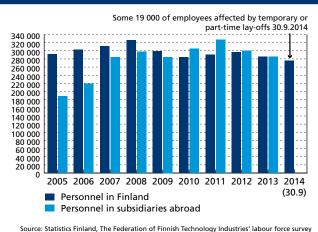
At the end of September, the value of order books was 13 per cent greater year on year, and also 13 per cent above the value reported at the end of June. Of the respondents, 56 per cent said their order books had reduced in size since June, while 38 per cent said they had grown, and 6 per cent said they remained stable.

Judging from order trends in recent months, the turnover of technology companies is expected to be higher in the next few months than in the corresponding period year earlier.

In 2013, the number of personnel employed by Finnish technology industry companies decreased by four per cent, or 11,000 employees. The total number of personnel was 285,000. The reduction in personnel has continued in January–September this year, and the number of employees was approximately 275,500 at the end of September. In 2008, the industry employed a total of 326,000 people in Finland.



Source: The Federation of Finnish Technology Industries' order book survey's respondent companies, latest information 30.9.2014



#### Personnel in the Technology Industry

# • $\Lambda$ Electronics and Electrotechnical Industry in Finland



# New orders and order books recover from lengthy decline

The turnover of companies in the electronics and electrotechnical industry (telecommunications equipment, electrical equipment, and medical technology) in Finland was EUR 15.8 billion in 2013. Between January and September of this year, turnover was six per cent lower than twelve months earlier. In 2008, prior to the financial crisis, the turnover of the Finnish electronics and electrotechnical industry was EUR 30.4 billion.

The number of new orders for the electronics and electrotechnical industries started growing in July–September. After a lengthy period of decline, this now applied to telecommunications devices as well. In April–June, both order books and the number of new orders shrank in more companies than they grew in.

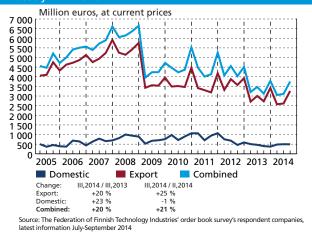
According to the Federation of Finnish Technology Industries' survey of order books, the monetary value of new orders reported by electronics and electrical industry companies between July and September was 20 per cent higher than in the corresponding period of 2013, and 21 per cent higher than in the preceding quarter.

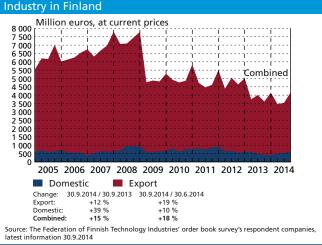
At the end of September, the value of order books was 15 per cent greater year on year, and 18 per cent above the value reported at the end of June.

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

The number of electronics and electrotechnical personnel in Finland dropped by 5,600 people, or 11 per cent, in 2013. The total number of personnel was 43,200. The reduction in personnel has continued in January–September this year, and the number of employees was approximately 42,500 at the end of September. 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

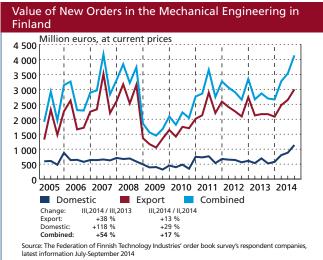


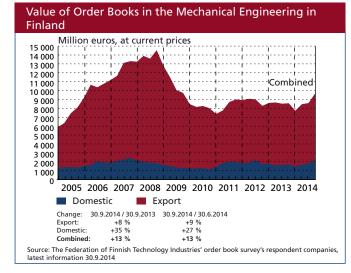


### Value of Order Books in the Electronics and Electrotechnical

## Mechanical Engineering in Finland







# New orders and order books grew thanks to large orders

The turnover of mechanical engineering companies (machinery, metal products, vehicles) in Finland was EUR 27.2 billion in 2013. Between January and July of this year, turnover was roughly equal to twelve months earlier. Turnover decreased in the manufacturing of machinery, but increased especially in the production of vehicles. In 2008, prior to the financial crisis, the Finnish mechanical engineering industry accumulated a total turnover of EUR 33.3 billion.

The quantity of new orders in the mechanical engineering grew considerably in July–September. This growth is based on individual high-value orders. There are, nevertheless, major differences between individual companies. Compared to April–June, both order books and the number of new orders shrank in more companies than they grew in.

According to the Federation of Finnish Technology Industries' survey of order books, the monetary value of new orders reported by mechanical engineering companies between July and September was 54 per cent higher than in the corresponding period of 2013, and 17 per cent higher than in the preceding quarter.

At the end of September, the value of order books was 13 per cent greater year on year, and also 13 per cent above the value reported at the end of June.

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

The number of mechanical engineering personnel in Finland dropped by 5,000 people, or four per cent, in 2013. The total number of personnel was 125,500. The reduction in personnel has continued in January–September this year, and the number of employees was approximately 118,400 at the end of September. In 2008, the industry employed a total of 150,100 people in Finland.

# Metals Industry in Finland



# Production volumes increased from last year

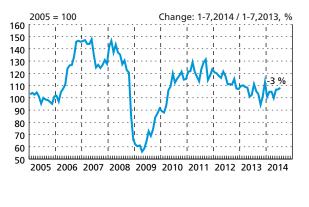
The turnover of metals industry companies (steel products, nonferrous metals, castings, metallic minerals) in Finland was EUR 8.8 billion in 2013. Between January and July of this year, turnover was three per cent lower than twelve months earlier. The turnover of metal ore mines grew. In 2007, prior to the financial crisis, the Finnish metals industry's turnover was EUR 11.2 billion.

Between January and August, the total production of steel products, non-ferrous metals, castings, and metallic minerals in Finland increased by four per cent year-on-year. Of the individual categories, the production of steel products, castings, and metallic ores increased, while the production of non-ferrous metals remained at last year's level.

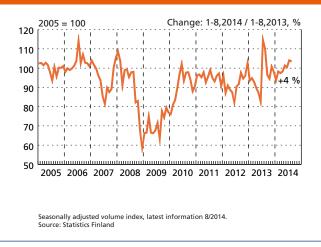
In comparison to the corresponding period in 2013, global steel production increased by two per cent between January and September. In September, production volumes decreased slightly from the corresponding month last year. Steel production in the EU grew by three per cent in January–September. The growth in North America and Asia amounted to 2.5 per cent. By far the largest production country, China, accounted for 50 per cent of global steel production in September.

In 2013, the number of personnel employed by Finnish metals industry companies decreased by seven per cent, or 1,200 employees. The total number of personnel was 15,800. The reduction in personnel has continued between January and September of this year, and the number of employees was approximately 15,300 at the end of September. In 2008, the industry employed a total of 18,100 people in Finland.

Turnover of the Metals Industry in Finland



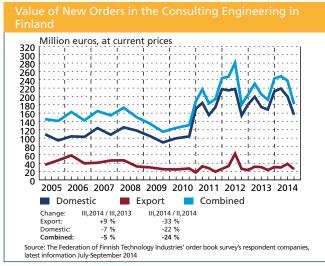
Seasonally adjusted turnover index, latest information 7/2014. Source: Statistics Finland

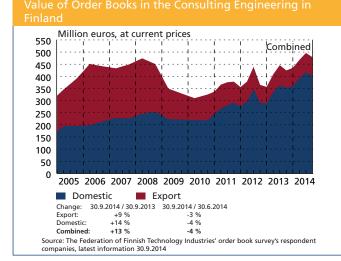


#### Production Volume of the Metals Industry in Finland

## Consulting Engineering in Finland







#### Decline in new orders

The turnover of consulting engineering companies (industrial, social, and construction expert services) in Finland was EUR 5.0 billion in 2013. Between January and July of this year, turnover was slightly lower than twelve months earlier. In 2008, prior to the financial crisis, the industry's turnover in Finland was EUR 5.5 billion.

In the consulting engineering sector, the number of new orders decreased in July–September. Order books also shrank somewhat from June.

According to the Federation of Finnish Technology Industries' survey of order books, the monetary value of new orders reported by consulting engineering companies between July and September was 5 per cent less than in the corresponding period of 2013, and 24 per cent less than in the preceding quarter. Compared to the corresponding period last year, the industrial sector's new orders declined by as much as 30 per cent and the civil engineering sector's by no less than 40 per cent. New orders to the housing construction sector increased by six per cent.

At the end of September, the value of order books was 13 per cent higher year-on-year, but four per cent below the value reported at the end of June.

The turnover of consulting engineering companies in the next months is expected to remain similar to year earlier levels.

The number of personnel employed by the Finnish consulting engineering industry increased slightly in 2013, being 46,300. The increase in personnel has continued in January–September this year, and the number of employees was approximately 46,600 at the end of September. In 2008, the industry employed a total of 45,500 people in Finland.



### Information Technology in Finland



# Positive development in orders continues

The turnover of companies in the information technology sector (IT services and software) in Finland totalled EUR 8.3 billion in 2013. Between January and July of this year, turnover was 16 per cent higher than twelve months earlier. The turnover of software companies grew, in particular. In 2008, prior to the financial crisis, the Finnish information technology industry's turnover was EUR 6.7 billion.

The positive trend in the new orders and order books of the information technology industry continued in July–September. There are, nevertheless, major differences between individual companies. Compared to April–June, both order books and the number of new orders shrank in more companies than they grew in.

According to the Federation of Finnish Technology Industries' survey of order books, the monetary value of new orders reported by information technology companies between July and September was 18 per cent higher than in the corresponding period of 2013, and 11 per cent higher than in the preceding quarter.

At the end of September, the value of order books was seven per cent greater year on year, and five per cent above the value reported at the end of June.

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

The number of personnel employed by the Finnish information technology industry increased slightly in 2013, being 54,500. The number of personnel decreased somewhat between January and September of this year, being approximately 52,700 at the end of September. In 2008, the industry employed a total of 51,700 people in Finland.

Million euros, at current prices 800 750 700 650 600 550 500 450 400 350 300 250 200 150 100 50 0 2006 2007 2008 2010 2011 2012 2013 2014 2005 2009 III,2014 / III,2013 III,2014 / II,2014 Change: Combined: +18 % +11 % \*) Excl. game industry companies.

Value of New Orders in the Information Technology in

Source: The Federation of Finnish Technology Industries' order book survey's respondent companies, latest information July-September 2014



### 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 30.9.2014



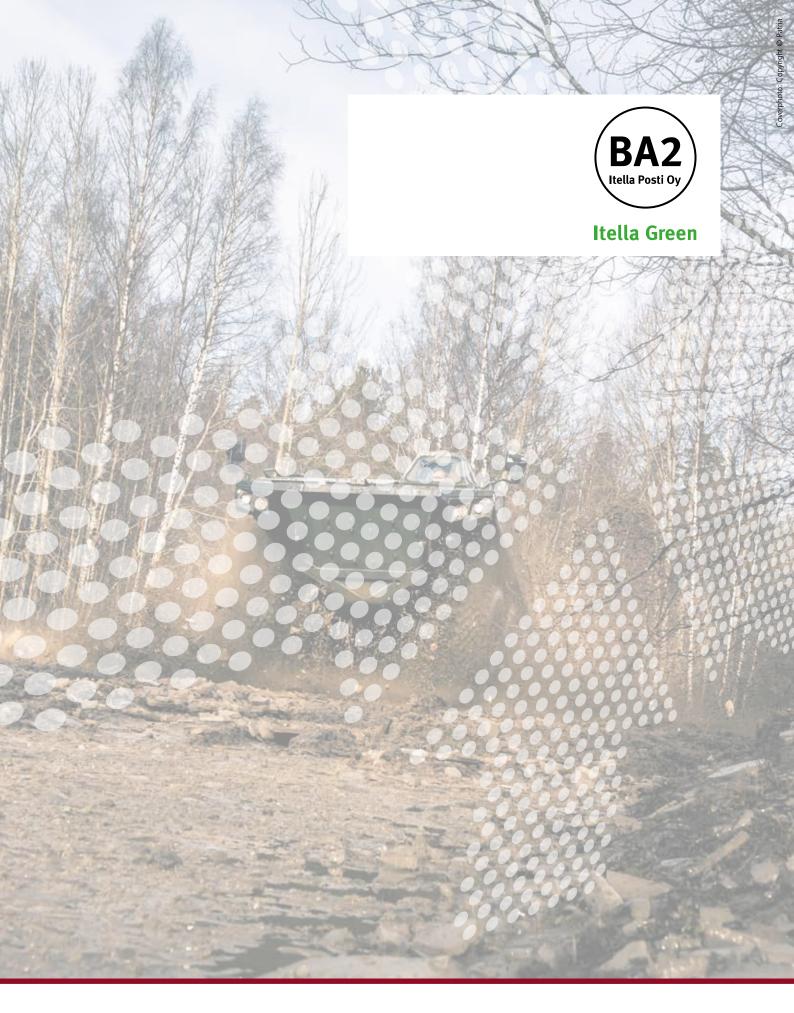
### ECONOMIC SITUATION AND OUTLOOK 4/2104

Information based on the situation on 29/10/2014.

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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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