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**Economic Forecast  
2015–2016**

## **Finland's public deficit to fall below three per cent without further spending cuts**

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## Economic Forecast 2015–2016

# Finland's public deficit to fall below three per cent without further spending cuts

*Finland's GDP contracted by 0.1 per cent last year while the euro area simultaneously grew by 0.9 per cent. In the fourth quarter, GDP contracted by 0.4 per cent from the previous quarter. The recession spurred a further weakening of the financial position of the public sector. According to preliminary figures the general government deficit rose to 3.4 per cent as a percentage of GDP, thus exceeding the 3 per cent ceiling stipulated by the European Stability and Growth Pact for the first time since 1996.*

*The need to balance public finances is emerging as the most important short-term objective. The greatest risk in this situation is hitting the brakes too suddenly. The Labour Institute for Economic Research forecasts that public spending - including social welfare expenditures - will increase next year by 0.7 per cent in real terms. Government consumption expenditure will increase by only 0.1 per cent. Total taxes as a percentage of GDP rate are expected to rise from 44.2 per cent in 2015 to 44.4 per cent in 2016. The assumed fairly tight fiscal policy and the strengthening of economic growth will lower the budget deficit this year to 2.8 per cent of GDP from last year's 3.4 per cent. Next year the deficit-to-GDP ratio will fall to 2.2 per cent.*

*If public spending were cut next year by 2.1 billion euros, i.e. about one per cent of GDP, the growth rate for GDP is estimated to drop from 1.6 per cent to 0.6 per cent (see Appendix 1 regarding the multiplier used as the basis for this calculation). This kind of fiscal belt tightening would also be reflected in the labour market. Spending cuts of this magnitude would reduce the number of employed by approximately 24,000 persons in the first year. The 2.1 billion euros in spending cuts would erode tax revenues so that the public finances would incur at most 1.3 billion euros in savings. As a result, the general government deficit relative to GDP would decline by 0.6 percentage points. This kind of excessive tightening can be considered to be an overreaction. The cost of these measures in the form of the weakening of employment would be too high.*

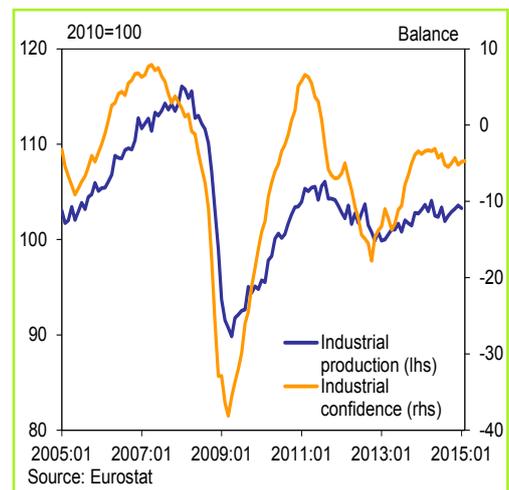
Labour Institute for Economic Research predicts that Finnish GDP will grow this year by 0.8 per cent and 1.6 per cent next year. This year, the forecast has been reduced by 0.2 percentage points, mainly as a consequence of the sharp deterioration in the prospects for Finnish-Russian exports.

## Europe has started to grow

The euro area survived last year's mid-term slump as economic growth picked up again towards the end of the year. The euro area's GDP grew by 0.9 per cent last year while the EU's GDP expanded by 1.3 per cent. The calming down of the international situation, strong weakening of the euro against the dollar in summer 2014, as well as the sharp drop in the price of oil gave a boost to economic growth late last year. Investments also began to recover.

When looking at the euro area confidence indicators, it is noteworthy that only consumer and retail confidence has strengthened this year. It can be concluded that the effect of the weakening of the euro

## Consumer confidence and retail sales in euro area 2005:01–2015:02



has not yet boosted confidence in industry nor has the easing of monetary policy, which lowers the market interest rates and improves access to finance, improved the outlook for construction. In contrast, the fall in consumer prices has bolstered real purchasing power and consumer and retail confidence has strengthened owing to the prospects for moderate wage increases.

In January this year, the ECB decided to step up significantly its quantitative easing by also buying bonds of the member states. This decision triggered a decline in financing costs and further weakening of the euro against the dollar, so that by March 20 the euro had weakened against the dollar by 22 per cent in the last 12 months. The euro area's average fiscal policy will also become less stringent, which will contribute to economic growth this year and next.

The Labour Institute for Economic Research estimates that the euro area's GDP will grow by 1.6 per cent this year and 2.0 per cent next year. The EU area's growth will be 0.3 percentage points higher in both years. Foreign trade will fuel European economic growth in both years, but the pick-up in growth is primarily attributable to the strengthening of domestic demand. This year, the euro area's private consumption growth will rise from last year's 1.2 per cent to 1.4 per cent. Next year, private consumption will grow by 1.8 per cent. Investment will grow by 1.6 this year and 2.2 per cent next year. The euro area's public finances will strengthen. Thus the euro area's general government deficit relative to GDP will fall this year to 2.1 per cent from last year's 2.6 per cent. Next year, it will be only 1.8 per cent.

EU growth will pick up most in the new member states. It is noteworthy that in the Baltic countries and Poland, which are highly dependent on Russian trade, GDP will grow this year and next year by an average of 3 to 4 per cent. These countries have succeeded to divert their exports previously headed for Russia to other countries. On the other hand, in these "catch-up economies" the low level of labour costs makes it possible, in principle, to increase wages rapidly even under the current economic conditions. Wages have risen in the Baltic countries during last year by an average of 6 per cent compared to the previous year. This has strengthened domestic purchasing power and private consumption.

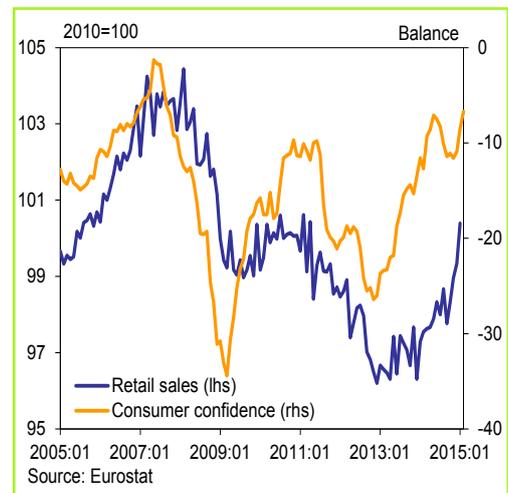
Of the developed countries, Germany's growth remains stable and clearly faster than in Finland. German public finances have also strengthened all the time, without the need for any significant budgetary cuts. Italy is only just now pulling out of recession and is still struggling with weak public finances. In contrast, the Spanish economy has gained momentum. Fiscal policies there are noticeably less stringent. France is struggling with the same types of problems as Finland. Growth is slow and the financial position of the general government has remained weak, which is why France is under pressure to implement fiscal cuts, if only because of the obligations of the Stability and Growth Pact.

Sweden's GDP growth is remarkably fast: 2.8 per cent this year and 3.1 per cent next year. The main difference with respect to Finland is Sweden's stronger domestic demand and expansionary fiscal policy.

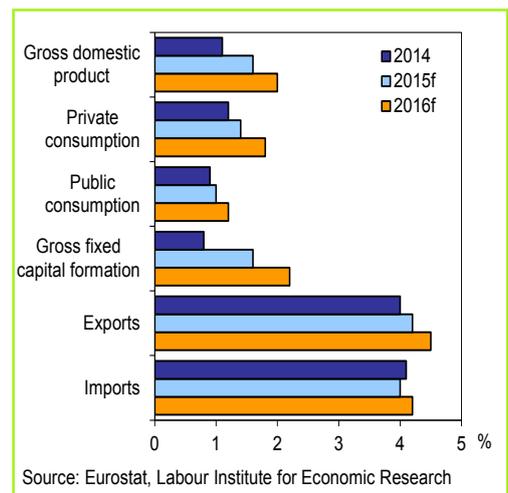
### ECB's new operations spurred lower interest rates and weaker euro

Last September the European Central Bank lowered its refinancing rate to a record low 0.05 per cent. The deposit rate is -0.2 per cent. The prevailing inflation expectations do not give us reason to expect an interest rate hike during the forecast period. Euro area short-term interest rates have also subsided very close to zero, and they are not

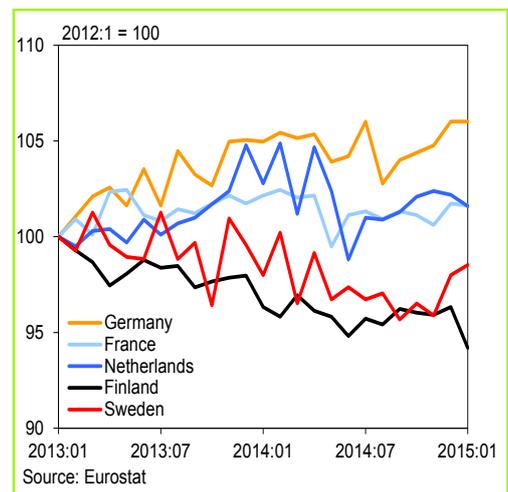
### Industrial confidence and industrial production in euro area 2005:01–2015:02



### Eurozone economic growth 2014–2016



### Industrial production 2013:01–2015:01



anticipated to rise significantly. This view would have to be reassessed if, for example, the euro weakened substantially from current levels or if oil and other commodity prices started to rise sharply.

The volume of the ECB's refinancing operations was half as high as the approximately 1500 billion level reached in the year 2012, mostly because the banks paid back their low-interest LTRO loans before the central bank started its purchases of bonds and asset backed securities last fall. The purchases of sovereign bonds amounting to EUR 60 billion per month that started in March will continue until the autumn of 2016 and afterwards if necessary. Banks and other investors have been surprisingly reluctant, however, to give up their low-risk investments, which in turn has improved the efficiency of these operations on long-term rates. For example, 2-year yields on German and Finnish government bonds have turned negative. Germany's 10-year yield is now about 0.2 while Finland's is about 0.3 per cent. Long-term interest rates are not expected to rise in the immediate future.

**Table 1. International economy**

	Share of world GDP (%)	GDP growth (%)		
		2014	2015f	2016f
United States	16.3	2.4	2.5	2.8
Eur-19	12.0	0.9	1.6	2.0
Germany	3.4	1.6	1.7	2.1
France	2.4	0.4	1.1	1.5
Italy	1.9	-0.4	1.0	1.4
EU28	16.9	1.3	1.9	2.3
Sweden	0.4	2.2	2.8	3.1
United Kingdom	2.3	2.6	3.0	3.2
China	16.5	7.4	7.0	6.8
India	6.8	5.8	7.0	7.5
Japan	4.5	0.6	1.0	1.0
Russia	3.3	0.8	-5.0	-3.0
Brazil	2.9	0.1	0.0	1.0

Source: BEA, BOFIT, Eurostat, IMF, Labour Institute for Economic Research

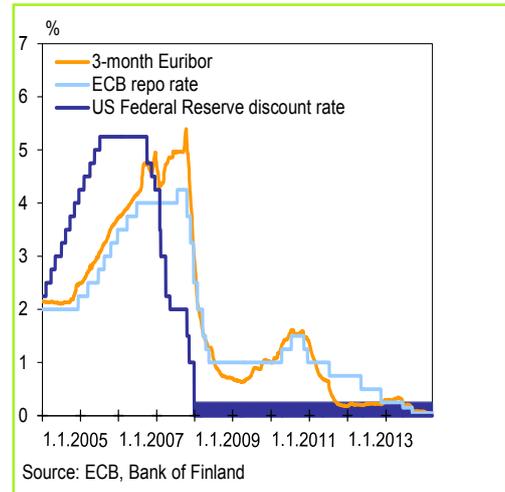
### Euro-area deflation will be short-lived

The rise in the harmonised index of consumer prices in the euro area slowed last year to an average of 0.4 per cent, subsiding into mild deflation at the end of the year. The main reasons were lower prices of energy and food as well as producer prices. On an annual basis, these components will continue to have a significant effect for several months. On the other hand, the considerable weakening of the euro, easing of money markets and the pick-up of bank lending and economic growth will gradually begin to spur inflation. The market's inflation expectations have also begun to rise slightly, but they are still in the long term (average 2020-2025) below the ECB's inflation target. This year the rate of inflation will remain at zero and next year it will pick up to one per cent.

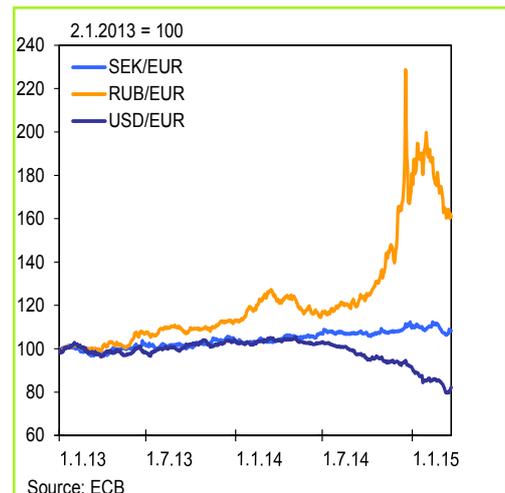
### Oil prices plunged and they will not rebound quickly

The average price of crude oil (Brent) last year was just under USD 100 a barrel, nearly 10 per cent below the previous year's level. In the

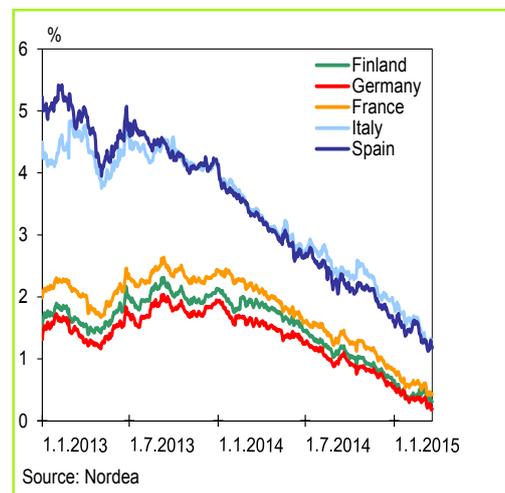
### Short-term interest rates 2.1.2005–20.3.2015



### Exchange rates 2.1.2013–23.3.2015



### Government bond yields 1.1.2013–20.3.2015



second half of the year the price of oil fell sharply. It dipped below USD 50 but has now risen to about USD 55. The unexpected decline has been affected by growth of shale production in the US and the weakening of world oil demand. OPEC and Saudi Arabia in particular have not reduced their production and they are trying to make other producers with higher production costs cut their output. The low-margin oil production is currently being shut down, which may raise the price of oil as early as the end of this year. It is nevertheless not expected to increase very significantly from current levels over the next two years.

Owing to the slackening of growth in China and other emerging countries as well as Japan, the prices of many raw materials have dropped even as much as tens of per cent after last summer or autumn. In recent months metal prices have followed the price of oil, which suggests that this stems from changes in global economic demand. The decline in agricultural product prices is attributable to a good harvest. There are nevertheless exceptions: for example, the price of beef has remained almost unchanged and the price of pulp in euros has risen since last summer by nearly 40 per cent.

### US growth remains steady

Last year, the US GDP grew by 2.4 per cent, i.e. at approximately the same rate as in the years after the financial crisis, with the exception of 2011. In early 2015 the strengthening of the dollar seems to be weakening exports and slowing industrial growth. In part this is attributable to decreases in civil engineering construction investment, which is connected to shutting down unprofitable oil and gas production locations. A slowdown has also been visible in the wholesale and retail trade, and especially in residential construction, which has mainly been due to the severe winter.

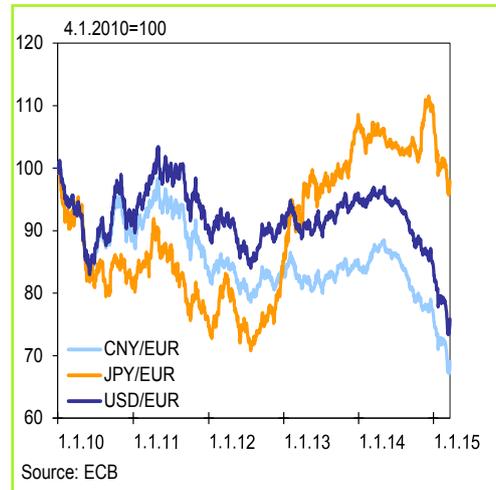
The United States still shows clear positive growth potential. With employment continuously improving and inflation declining to around zero and especially energy prices having declined, households' purchasing power is developing favourably, although the rate of increase in nominal wages has still not picked up. Household wealth, debt servicing expenditures and confidence are at a good level. Housing production will recover, and public finances are not likely to be affected by new tightening measures. Also, the recovery of the global economy has a positive effect, and the United States' real competitiveness will not weaken as much as could be deduced from the dollar's strengthening so far.

The US Federal Reserve has indicated that it intends to begin gradually tightening its monetary policy by raising interest rates. The starting date of these activities is still open. In the market this has been expected to take place already in June, but now these expectations have been moved slightly forward. This can be also seen in a slight weakening of the dollar. We forecast US economic growth to reach 2.5 per cent this year and 2.8 per cent next year.

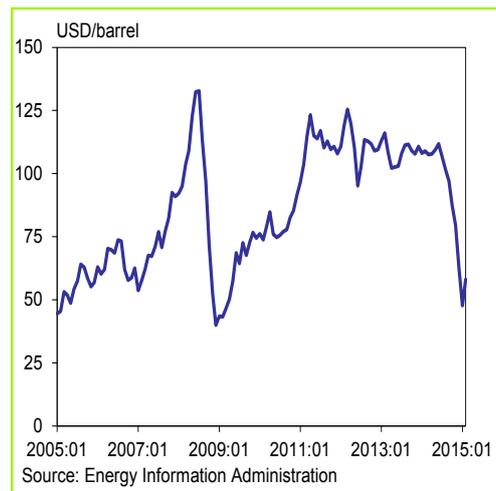
### China has a much to do even with its reduced growth target

China became the world's largest economy measured in terms of GDP last year. The country's economic growth decelerated last year by 0.3 percentage points from that of the previous year, to 7.4 per cent. At the recent annual National People's Congress session, Prime Minister Li Ke-

### Exchange rates 4.1.2010–23.3.2015



### World market price of crude oil (Brent) 2005:01–2015:02



### Inflation in assorted countries 2005:01–2015:02



qiang announced a reduction of the national growth target from 7.5 per cent to "about" 7.0 per cent. At the same time he noted this particular objective will be challenging, while shifting emphasis of the growth strategy from investment to consumption. On the other hand, he assured that the government still has a lot of ways of boosting the economy. Monetary and fiscal policy has indeed been eased slightly in China.

The change in China's growth strategy is inevitably linked to the slowdown in GDP growth. At the same time consumption and retail sales growth should accelerate, but in recent years the case has been the opposite. Also weakening demand for industrial production, freight railways, power generation and raw materials and the weakening of producer prices are signs of an economic slowdown. The expanding burden of debt especially in regional government is already causing great concern about a financial crisis in China. On the other hand, growth has recently spawned a steep increase in the trade surplus.

The forecast assumes that the Chinese authorities will have the necessary administrative means to prevent the significant deterioration of growth to under "about" 7 per cent. Economic growth will reach 7.0 percent this year and next year 6.8 per cent.

### Japan's growth remains sluggish

Japan's economic growth was zero last year, whereas in the previous year it reached 1.5 per cent. The surprisingly sharp decline was primarily due to the increase in VAT in April from 5 to 8 per cent. Private consumption fell by 1.2 per cent and housing investment as much as 5.2 per cent, but the balance of trade and, in particular public investment's 3.7 per cent growth supported the development of aggregate output. Japan's monetary policy will continue to be relaxed and will spur inflation somewhat, but the weak development of real income will dampen private consumption. Japan's economic growth will reach only one per cent this year and next year.

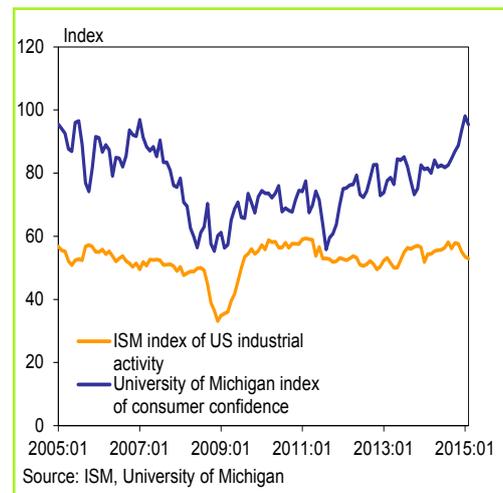
### Russia will go into recession

Russia's economic growth fell to 0.6 per cent last year, from the previous year's 1.3 per cent. The country's growth already slowed down in 2013, but now the collapse in the price of oil and the sanctions imposed on Russia due to the crisis in Ukraine have been a severe setback. Depreciation of the rouble has compensated for the decline in oil prices, but simultaneously in February 2015, inflation had already accelerated to more than 16 per cent, and real wages, private consumption and investment had declined by several percentage points. GDP is expected to decline by 5 per cent this year and next year by 3 per cent. It is assumed that oil prices will rise rather slowly from their current level and the sanctions will stay in effect next year. Naturally, there is considerable uncertainty associated with the price of oil, the crisis in Ukraine and internal political developments in Russia and thus its economic growth.

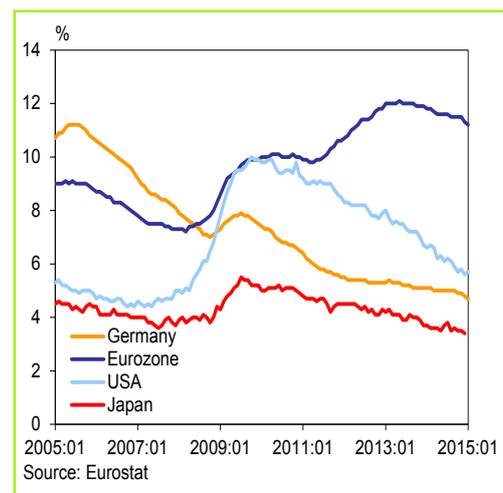
### Brazil is in trouble – but India is the bright spot of the emerging economies

As a producer of raw materials such as coffee and many minerals Brazil has suffered from the drop in demand and prices of raw materials since last summer. Additionally, political instability has had a negative impact

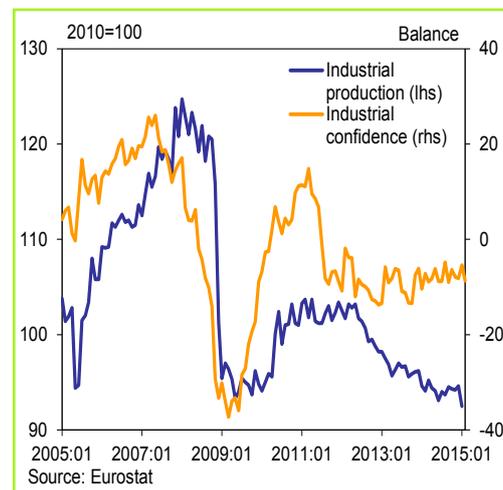
### US economic indicators 2005:01–2015:02



### Unemployment in assorted countries 2005:01–2015:01



### Industrial confidence and industrial production in Finland 2005:01–2015:02



on investment. Due to inflation, the central bank has had to raise its key interest rate. During last year, the country's GDP began to decline. The stabilization of demand for raw materials and sizeable devaluation of the Brazilian currency, however, will stop the decline in GDP at zero, and the country could already reach small growth next year.

The calculation methods used in India's National Accounts have been revised so that they now show significantly faster economic growth than before. Also, subdued inflation, a weaker currency as well as strengthening investment and consumer demand support the country's economic growth. India's growth rate is likely to exceed that of China in the next few years. This year, its growth will reach 7 per cent and next year already 7.5 per cent.

### Finnish exports will pick up despite fall in Russian trade

Finland's exports declined last year by 0.4 per cent. In net terms, foreign trade, however, boosted economic growth, as imports fell even more, by 1.4 per cent. Estimates of last year's exports and imports are still preliminary and subject to change, particularly regarding the trade of services.

Last year, industry received more new orders than the previous year. Most of these were export orders. Late last year the order intake already increased to a distinctly higher level than the previous year. This is increasing export deliveries this year and next, particularly in the machinery and equipment industries and the transport industry. The significant weakening of the euro against the dollar is also supporting our exports.

However, the strengthening of the euro in relation to the Swedish krona by about five per cent and in relation to the Russian rouble by 22 per cent over the last 12 months has had the opposite effect. Even before this, however, the rouble had weakened against the euro. Overall, the nominal exchange rate of the euro, weighted by Finland's country-specific imports and exports has weakened only one per cent during the last year. In this respect, Finland's foreign trade price competitiveness has not changed much.

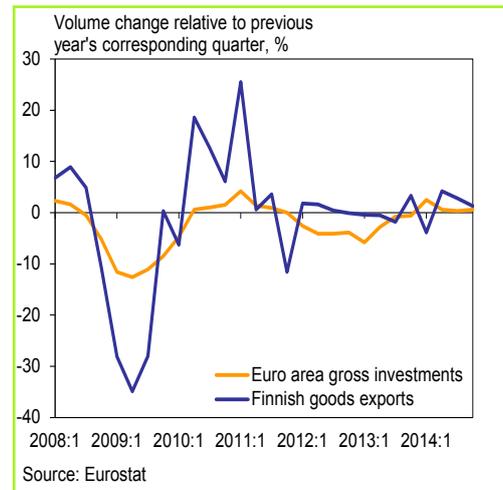
When taking into account the development of labour costs, Finland's competitiveness has nevertheless improved with respect to almost all of our competitor countries. In the last 12 months, for example, industrial labour costs per hour have risen in the euro area by an average of 1.3 per cent, 1.7 per cent in Germany, 3.4 per cent in Sweden, but in Finland they have fallen by 0.6 per cent. In addition, the competitive advantages gained by Russia from the weakened rouble will be eroded by its rampant 16 per cent inflation, which will later also spill over into wages.

The recent upturn in Finland's price competitiveness and the acceleration of growth in Europe will boost export growth. On the other hand, Finnish exports to Russia are going to decline this year by about 20 per cent. Next year, the change will already be significantly smaller. Finnish exports to the United States will grow the fastest.

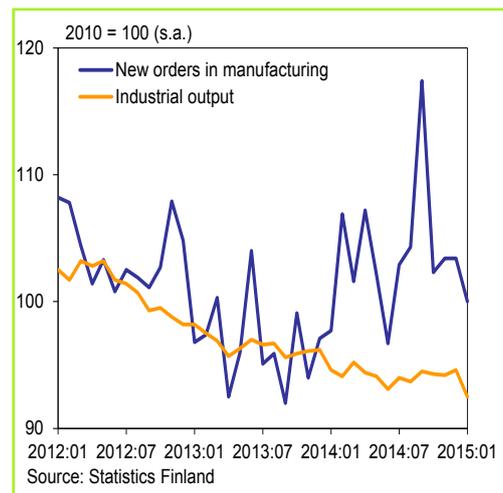
Other factors affecting exports that should be mentioned are expansion of capacity in biofuel production, as well as import duties the EU might impose on stainless steel from China and Taiwan, which would increase stainless steel production in Finland.

The Labour Institute for Economic Research predicts that Finnish exports will grow this year by 1.9 per cent from last year. Both goods and services exports will grow at approximately the same rate. Next year export growth will accelerate to 3.6 per cent. Imports will grow by 1.4

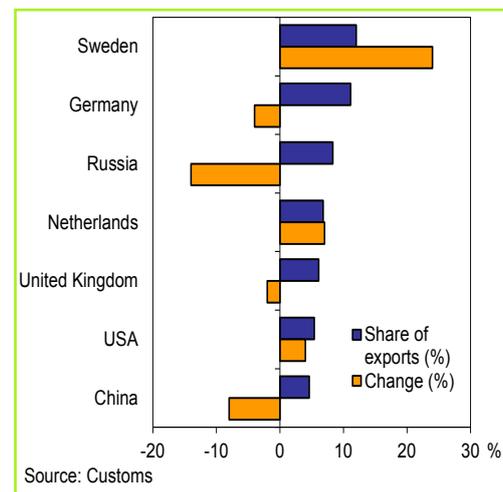
### Demand for investment goods and Finnish exports 2008:1–2014:4



### Industrial production in Finland 2012:01–2015:01



### Finnish merchandise exports in January–December 2014



per cent this year and slightly below 3 per cent next year. Especially this year, imports will be curbed by the fact that domestic demand will not increase much. Aircraft procurements by Finnair and new vessels acquired for merchant shipping will, however, increase imports in both years.

Due to the effects of the sharp drop in oil prices, the average price level of goods imports this year will remain 4.5 per cent below last year's level. Since the prices of exports of goods are only reduced by an average of half a percentage point, Finland's terms of trade have improved significantly. This is reflected in the trade balance, with the surplus increasing from last year's 712 million euros to 3.1 billion euros this year. Next year, the trade balance surplus will be 3.5 billion euros. The deficit of the balance sheet of services will, however, be more than 1.5 billion euros. Last year, the current account deficit amounted to 3.7 billion euros. This year, the deficit will shrink to 1.4 billion euros, and next year it will be 1.1 billion euros.

### Industrial production will grow this year

Manufacturing output will grow by about one and a half per cent this year and next year, driven by exports, by slightly less than three per cent. Of the assorted industrial sectors, the metal industry's situation will improve the most. Construction will decline this year, due to the slump in housing construction. Next year, construction will pick up somewhat and grow by slightly over one per cent. In the service sector, telecommunication services and technical services will continue to grow both this year and next year by slightly less than four per cent, highlighting the shift in the structure of production towards services.

As a result of weak growth in purchasing power, the drop in shopping by Russian tourists and online stores becoming more common, the retail trade will contract so much that the volume of value added of the total retail and wholesale trade will decrease this year by half a percentage point. Next year, the retail and wholesale trade will grow by the same amount. At that time, wholesale trade growth will already be clearly brisker than this year. The growth of public services and private well-being services will only be 0.2 per cent this year. Next year, these sectors will grow by half a percentage point.

### Investment will continue to fall this year

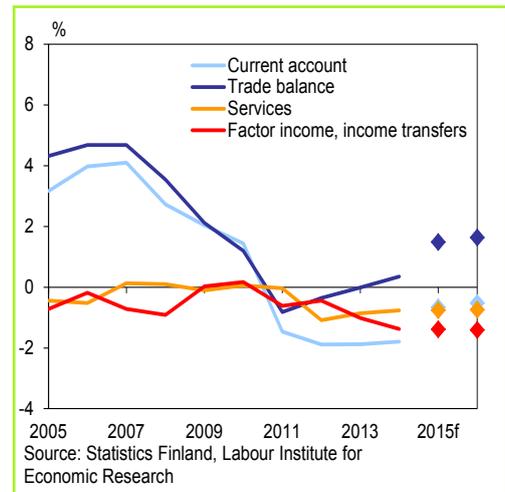
The amount of investment fell last year by 5.1 per cent. Construction investments contracted by 4.3 per cent and machinery, equipment and transport equipment investments by 10.7 per cent. Information investments (mainly R & D) decreased by 1.0 per cent. Economic prospects are still characterized by uncertainty, and the volume of investment is expected to decline this year by about 0.8 per cent in relation to last year. In 2016, investment will incur a modest increase of 1.6 per cent.

Investment in residential buildings continued to decline significantly last year, and will continue to contract this year by 2.5 per cent. In 2016, housing investment will finally stage an upswing of around 1.5 per cent.

Investments in non-residential construction contracted 4.3 per cent last year. This year construction of non-residential buildings will decline by 2 per cent. In 2016, they are projected to increase by one per cent annually.

Civil engineering investment only declined by 0.7 per cent in 2014. The sharp decline in land construction costs in the beginning of this year is expected to encourage investment in land structures and in 2015, construction investments will increase by 0.2 per cent. In 2016, their growth will reach 1.5 per cent.

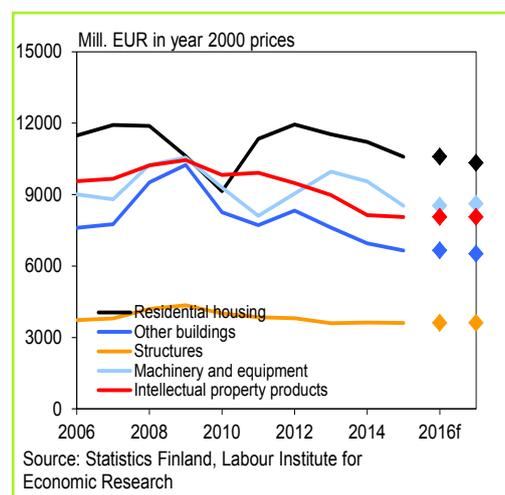
### Current account surplus relative to GDP by components 2005–2016



### Trend indicator of output 2005:01–2015:01



### Investments 2005–2016



Machinery, equipment and transportation investment (including weapon systems) fell in 2014 by more than 10 per cent. The idle capacity of businesses dampened machinery and equipment investment. This year, however, machinery and equipment investments are nevertheless picking up to one per cent growth due to large acquisitions of aircrafts and ships. Next year, these investments will already be increasing at an annual pace of 3 per cent.

Public investment increased in 2014 by 0.6 per cent. This trend will remain similar in 2015 and 2016. Private investment, on the other hand, shrank last year by 6.5 per cent. This year it will still fall over one per cent, but next year it is expected to grow by a total of 1.9 per cent.

### Unemployment will not decrease until next year

During the course of 2014, employment declined by 0.4 per cent. The shaky growth of production will increase employment slightly this year, however, only by an average of 0.3 per cent. Next year, the employment situation will improve at a slightly faster average rate of 0.5 per cent.

Regionally, there are quite clear differences in employment and its development. Employment in southwestern Finland has been shrinking for quite some time, whereas in eastern, western and central Finland employment increased slightly last year. In January, however, employment declined in eastern Finland by 2.9 per cent, although it turned to a slight increase in February. The sudden drop could have been influenced e.g. by sanctions against Russia. In southern Finland employment increased in both January and February.

The labour participation rate of the working-aged population changed very little last year, decreasing by 0.1 percentage points. The labour participation rate is influenced by employment and the age structure of the population. The growing share of older age groups has a somewhat dampening effect on the labour participation rate, although in these groups' labour participation has increased in recent years. During the recession, participation rates also decreased in some of the younger age groups. In this respect, as prospects are becoming brighter, a return to the labour force is taking place as people are moving from outside the labour force into active job seeking, which balances out the effect of employment variations on the unemployment rate. As a result of changes in employment and the size of the labour force, the unemployment rate will rise this year to an average of 8.9 per cent and fall next year to 8.7 per cent.

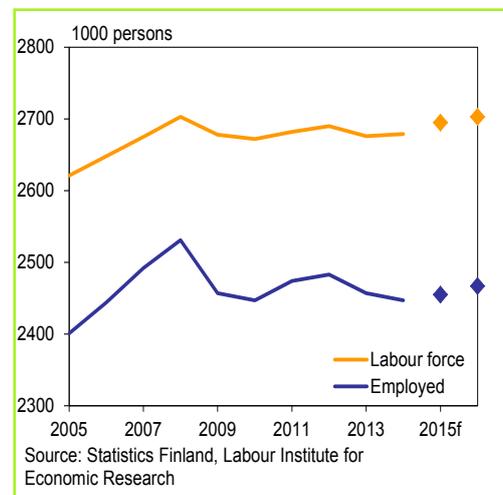
**Table 2. Demand and supply**

	2014	2014	2015f	2016f
	Bill. €	Percentage change in volume (%)		
Gross Domestic Product	204.0	-0.1	0.8	1.6
Imports	76.9	-1.4	1.4	2.7
Total supply	280.9	-0.5	1.0	1.9
Exports	76.0	-0.4	1.9	3.6
Consumption	163.7	-0.1	0.6	0.9
private	112.7	-0.2	0.9	1.2
public	51.0	0.2	0.0	0.1
Investment	40.8	-5.1	-0.8	1.6
private	32.3	-6.5	-1.2	1.9
public	8.5	0.6	0.5	0.6
Change in stocks <sup>1</sup>	0.4	0.1	0.3	0.2
Total demand	280.9	-0.5	1.0	1.9

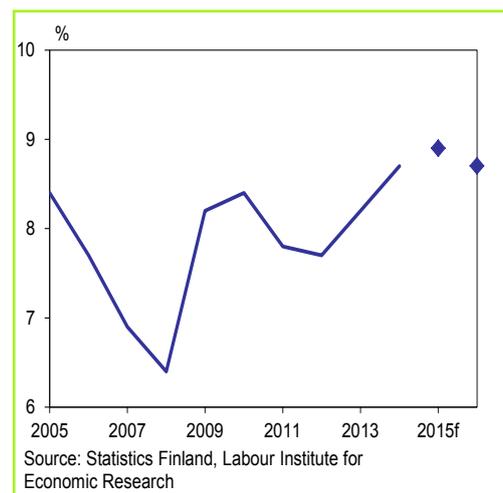
<sup>1</sup> Volume change is in percentage points of GDP.

Source: Statistics Finland, Labour Institute for Economic Research

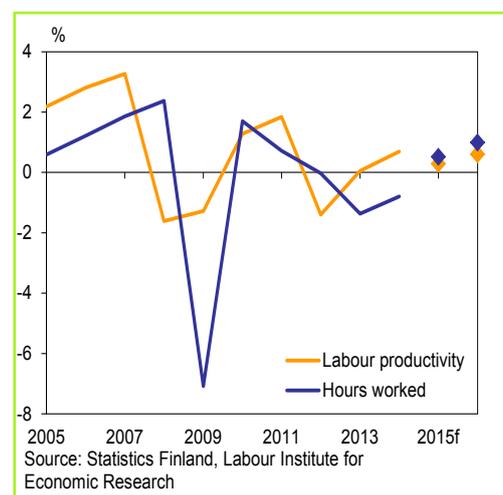
### Supply of labour and employment 2005–2016



### Unemployment rate 2005–2016



### Change in labour productivity and hours worked 2005–2016



In 2014, the number of hours worked fell by 0.2 per cent. Typically in a recession, the number of hours worked declines initially more than employment, and as output turns back to growth they start to rise before employment figures. As growth proceeds, the development is reversed before long, and employment will grow more than the number of hours worked. This year, work hours will increase by 0.6 per cent and 1.1 per cent next year.

Both this year and next year employees' share of total working hours will be slightly lower while entrepreneurs' share will be slightly higher than before. In recent years, the share of hours worked has fallen slightly for employees. In 2005, employees' share of working hours was 84.2 per cent while last year it was 83.6 per cent.

From a historical perspective, productivity growth has been relatively weak since 2008. Productivity increased last year by 0.1 per cent. This year, the GDP growth of 0.8 per cent and 0.6 per cent growth in the number of hours worked only represents a 0.2 per cent increase in productivity. Next year, productivity will increase by 0.5 per cent.

### Level of earnings bogged down

Last year, the average earnings index rose by an average of 1.4 per cent compared to the previous year. Of this 0.7 percentage points are contract wage increases, and the rest is wage drift. The Employment and Growth Pact signed in the autumn of 2013 was largely responsible for the growth of earnings, covering a large majority of employees. Wage settlements in sectors excluded from the agreement also widely adhere to the aforementioned agreement. In 2014, the agreement raised wages by 20 euros per month, with the moment of the increase varying by sector.

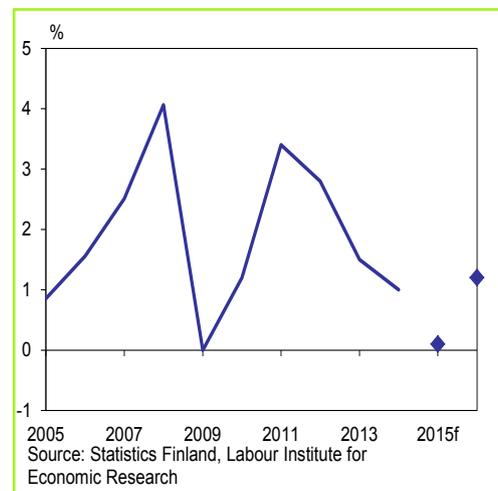
Still this year, the growth of contract wages is largely determined by the Employment and Growth Pact. The increase for the second year is 0.4 per cent. Earnings will also increase additionally thanks to very moderate wage drift. Due to the combined effect of contract increases and wage drift, the earnings level index will rise by 1.1 per cent. Therefore the rise in the level of real earnings this year is one percent. Total average earnings in accordance with the wage bill and number of work hours will increase marginally more than the earnings level, by 1.2 per cent.

Next year contract increases will most likely remain moderate. According to the Employment and Growth Pact, central organizations will have negotiations on the second term in June. Next year, we forecast the earnings index as a whole will rise on average slightly faster than this year, i.e. 1.5 per cent in nominal terms and 0.3 per cent in real terms. The nominal increase of average earnings is 1.8 per cent, respectively.

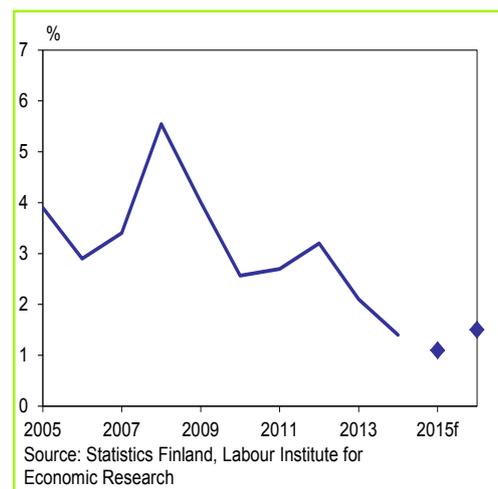
### Finnish consumer prices will remain steady this year

Last year, Finnish consumer prices rose by an average of one per cent. Above all, as a result of the cheaper cost of energy, food and owner-occupied housing, inflation slowed significantly towards the end of the year and turned to mild deflation. In February, prices fell by 0.14 per cent. If consumer prices were to remain at their current level for the rest of the year, then the average decline would be around 0.7 per cent. The continuous price increases of some products, and in particular the effects of the weakening of the euro on import prices, the slight rise in the price of oil and increases of certain excise duties, however, have the effect that inflation will return to positive figures, i.e. 0.1 per cent. Such

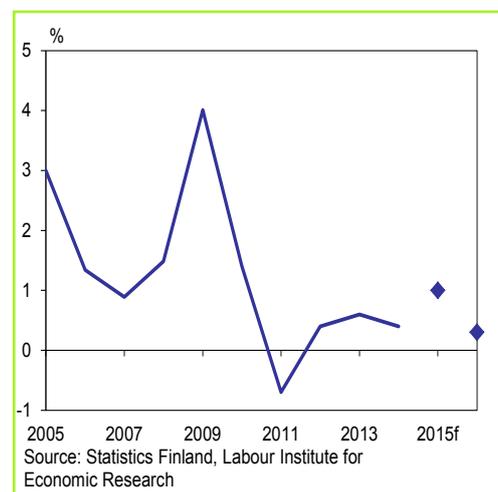
### Change in consumer prices 2005–2016



### Change in level of earnings index 2005–2016



### Change in level of real earnings 2005–2016



large changes in the euro as well as oil and other commodity prices are expected for next year that the inflation rate will rise to 1.2 per cent.

### Positive signs for household income

Households' wages and salaries have risen only very moderately in the past two years, by 0.5 per cent in 2013 and 0.6 per cent in 2014. In 2015 the wage bill is projected to grow approximately 1.7 per cent. The growth of the wage bill is affected by both the slight increase in the level of earnings and the upward turn in the number of hours worked. Some 2.8 per cent growth is forecast for 2016.

In property income, interest income and expenditure will continue to decline clearly, following the general reduction in interest rates. Considerable growth is expected in dividend income. Corporate tax relief of 4.5 per cent came into effect on January 1, 2014, so its effects on dividend income will be largely visible this year. All in all, property income will grow this year by 3.9 per cent, while as recently as last year, it fell by 1.4 per cent. In 2016, property income is expected to grow at a slightly slower rate, at an annual rate of approximately 2.9 per cent.

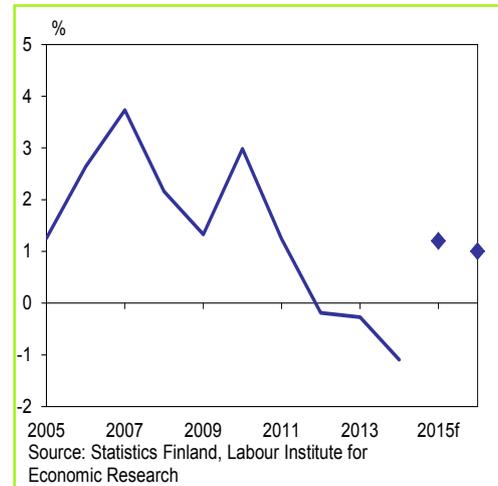
Pension income will continue to climb at a slower pace than last year although still faster than wage and salary income growth. Pension income growth is slowed down by a decrease in inflationary index increases, but due to the population structure, the number of pensioners will continue to increase over the forecast period. The slight increase in unemployment will also keep other income transfers growing, which will nevertheless be dampened by moderate inflationary index adjustments.

**Table 3. Key forecasts**

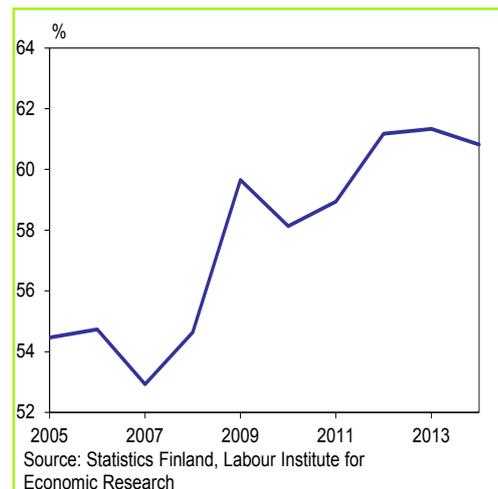
	2014	2015f	2016f
Unemployment rate (%)	8.7	8.9	8.7
Unemployed (1 000)	232	240	236
Employed (1 000)	2447	2455	2467
Employment rate (%)	68.3	68.6	69.1
Inflation, consumer price index (%)	1.0	0.1	1.2
Wages, index of wage and salary earnings (%)	1.4	1.1	1.5
Real disposable income of households (%)	-1.1	1.2	1.0
Current account surplus (Bill. €)	-3.7	-1.4	-1.1
Trade surplus (Bill. €)	0.7	3.1	3.5
Central government financial surplus			
Bill. €	-8.0	-7.2	-6.1
% / GDP	-3.9	-3.4	-2.8
General government financial surplus			
Bill. €	-7.0	-5.9	-4.7
% / GDP	-3.4	-2.8	-2.2
EDP debt			
% / GDP	59.3	60.7	61.3
Tax rate (%)	44.1	44.2	44.4
Short-term interest rates (3-month Euribor)	0.2	0.0	0.0
Long-term interest rates (10-year gov't bonds)	1.4	0.4	0.5

Source: Bank of Finland, Statistics Finland, Labour Institute for Economic Research

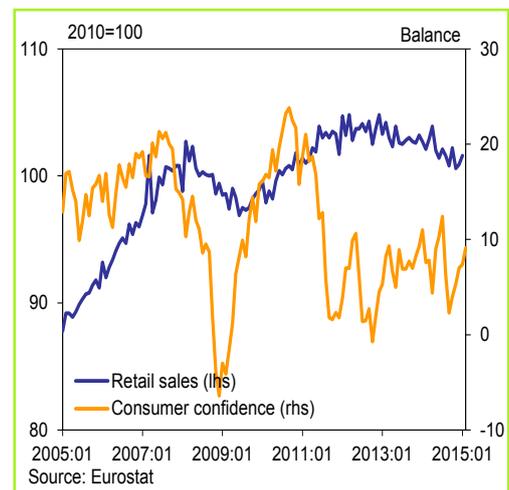
### Change in households' real disposable income 2005–2016



### Functional distribution of income in business activities 2005–2014



### Consumer confidence and retail sales in Finland 2005:01–2015:02



The burden of capital income taxation will increase slightly in 2015. Municipalities are expected to raise earned income tax rates, while central government taxation is expected to remain almost unchanged over the forecast period. Direct taxes paid will grow an estimated 2.5 per cent in 2015 and 3.7 per cent in 2016.

Thus, the nominal disposable income of households will grow 2.0 per cent this year and 2.6 per cent next year. Real purchasing power is expected to grow by 1.2 per cent this year. The improvement of real purchasing power in comparison to last year is mainly due to the estimated slowdown in the rise of prices. Next year, the real purchasing power of households is expected to grow by one per cent.

### Private consumption picking up slightly

The volume of private consumption continued to decline last year by 0.2 per cent. The subdued trend in prices spawned more purchasing power, which was reflected in faster growth in consumption volumes. According to Statistics Finland's consumer survey, consumers expected prices to rise in February slightly more slowly than in February next year, which will encourage consumption already this year.

Consumer confidence has also strengthened in January and February, even though the consumer confidence indicator in February was still slightly below the long-term average. The previous two years' decreased consumption has boosted this and next year's consumption demand, thus contributing to an increase in consumption and keeping the savings ratio low. This year, the growing number of hours worked and a slight rise of the average hourly earnings will spur an upturn in private consumption to 0.9 per cent growth.

Private consumption growth is expected to pick up in 2016 in the wake of moderate household income growth. A slight recovery in economic growth will boost consumer confidence. In 2016, private consumption will grow by 1.2 per cent in volume.

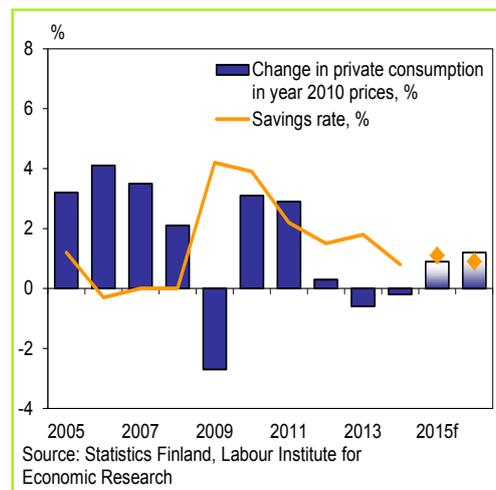
### Central government's financial position gradually improving

The general government deficit's increased last year by 8 billion last year to 7.4 billion euros. Relative to GDP, the deficit was 3.9 per cent. The weaker-than-anticipated performance was particularly attributable to the more modest than expected increase in tax revenues on goods. VAT revenue stagnated and other taxes increased by just over one per cent in spite of, among other things, hikes in taxes on energy as well as alcohol, tobacco and soft drinks. The low proceeds from VAT were caused by the moderate decrease in private consumption as well as a slight drop in the inflation rate toward the end of the year. The central government's income tax revenues, on the other hand, increased by three per cent, despite the lowering of corporation tax rates from 24.5 per cent to 20 per cent. Corporate tax receipts fell by about 800 million euros.

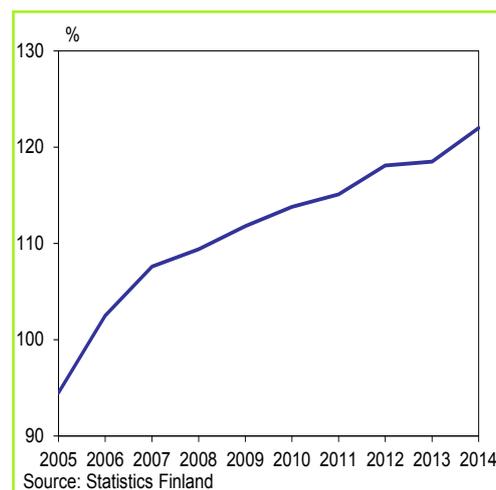
Central government consumption expenditure grew last year by 0.8 per cent in nominal terms and declined in real terms. The growth of expenditure was limited by the central government's productivity growth target of 0.5 per cent and low wage increases. Last year, the central government's budgetary cuts amounted to approximately EUR 500 million, with most of the savings being generated this year. All in all, government spending increased slightly faster than consumption expenditure, i.e. 1.8 per cent.

This year the central government's budget deficit is projected to decline to EUR 7.2 billion or 3.4 per cent of GDP. The central govern-

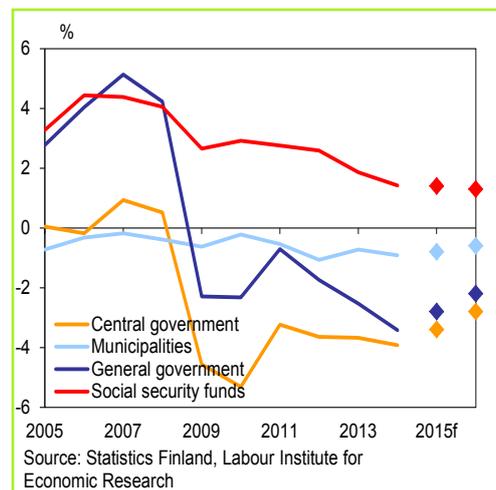
### Private consumption and savings rate 2005–2016



### Household debt ratio 2005–2014



### General government financial surplus as percentage of GDP 2005–2016



ment budget savings will amount to about EUR 2 billion, but sluggish economic growth will spur only a slight improvement in the fiscal balance of the central government.

Expenditure cuts will be carried out on a wide basis by various public authorities. Significant cuts will be focused on, among others, central government revenue sharing with municipalities, development expenditure and child allowances. In contrast, however, there will also be increases in, for example, support for renewable energy and industrial start-up companies while outlays will also be increased by price and cost adjustments. Low interest rates curb the growth of interest on the central government debt both this year and next year. Government consumption expenditure is expected to grow in nominal terms by 0.7 per cent and in real terms it will fall slightly. On the whole, central government spending is expected to grow by 0.8 per cent in nominal terms, i.e. one percentage point less than last year.

This year, the implemented tax changes are estimated to increase central government tax revenues in net terms by approximately EUR 200 million. Tax increases are being carried out mainly for excise duties and other indirect taxes. Household income taxation is subject to both hikes and cuts. The cuts in child benefits were offset by introduction of a deduction for families with children and an increase in the earned income deduction. On the other hand, the threshold for the highest income bracket was lowered and progressivity was introduced into capital income taxation. Inflation amendments were made to the three lowest income thresholds. As sluggish economic growth dampens the growth of the tax bases, central government revenues will grow by 2.5 per cent.

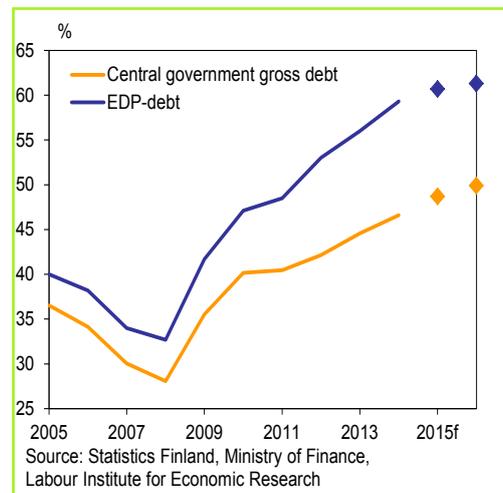
Next year, developments in central government finances will be marked by still relatively modest economic growth and the new government's fiscal policy decisions. Owing to previously implemented tax hikes, further tightening is expected to remain relatively small. The forecast assumes that excise taxes will be increased by EUR 200 million. Government revenues will increase at the same rate of growth as the tax base, and therefore central government revenue is expected to grow by 3.5 per cent next year. Owing to the persistent deficit in central government finances, policy will continue to be aimed at dampening spending growth next year. Consumption expenditure is expected to grow by 0.5 per cent and total expenditure by 0.7 per cent while in real terms both types of spending will fall. The central government deficit will decline to EUR 6.1 billion.

### Municipal finances remain under pressure and surplus of social security funds is dwindling

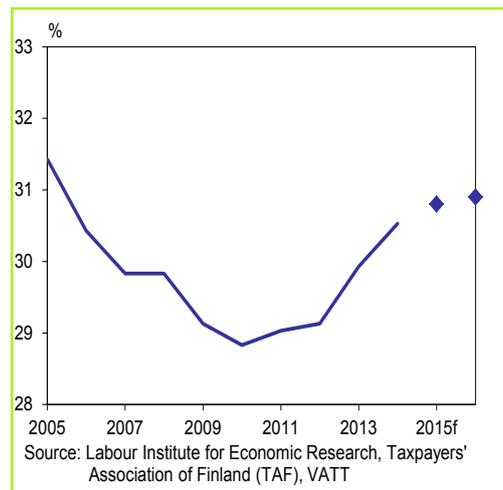
Municipal economies are being squeezed on both sides by rising spending pressures and weak revenue growth. The municipal sector's deficit last year was almost two billion euros, i.e. 0.9 per cent of GDP. Municipal revenues grew by over one per cent. Municipal tax revenue increased by 2.2 per cent, but their other key source of revenue, i.e. central government revenue sharing, declined slightly. The average municipal tax rate increased by 0.36 percentage points as a record number of 156 municipalities raised their tax rates. At the same time, the gap between the lowest and highest municipal tax rates widened to 6 percentage points. Property tax revenue increased by EUR 150 million. Expenditure grew slightly faster than revenue, i.e. 1.9 per cent.

This year municipal expenditure is expected to grow more slowly than previously owing to the constraints posed by modest growth in revenue. The decrease of central government revenue sharing means that total municipal revenues will increase by only just over one per cent. Tax revenues are expected to grow by 2.6 per cent. Almost one hundred municipalities

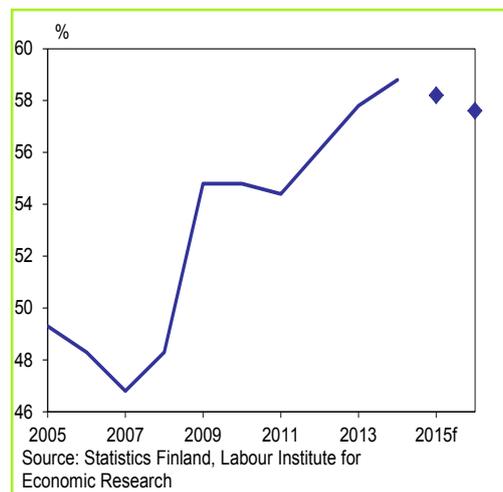
### Central government gross debt and general government EDP-debt as percentage of GDP 2005–2016



### Wage earners' income tax rate 2005–2016



### Public expenditures as percentage of GDP 2005–2016



raised their tax rates, but the average tax rate will rise at a slower pace, i.e. 0.1 percentage points. Consumption expenditure is expected to grow by slightly less than one per cent and its volume will remain at last year's level. The slowdown in municipal spending growth is partly attributable to the sluggish rise in the level of wages. Investment will also climb more slowly than in recent years and is expected to grow in real terms by 0.5 per cent. Owing to slow revenue growth, the municipal sector's deficit will nevertheless decline only slightly from last year's level to EUR 1.7 billion.

The gradual pick-up in economic growth will strengthen the revenue base of the municipalities somewhat next year. The average municipal tax rate is expected to rise by 0.1 percentage points, i.e. the same as this year. The rate of consumption expenditure growth is also expected to accelerate slightly this year. All in all municipal revenues are expected to grow by 2.3 per cent and expenditure by 1.5 per cent. The municipal sector's deficit will continue to decline slightly to EUR 1.3 billion.

The surplus of social security funds fell significantly last year to 2.9 billion euros from the previous year's 3.7 billion euros. Relative to GDP, the surplus shrank by half a percentage point to 1.4 per cent despite the fact that pension contributions rose last year by 0.4 percentage points for both employers and employees. This trend is attributable to the slow growth of the wage bill, the continued strong growth of pension expenditures and the lowering of unemployment insurance contribution rates.

Small inflationary adjustments to incomes transfers made at the beginning of this year will dampen the rise in expenditure this year. The revenue side will be bolstered this year by a 0.4 percentage point increases in total pension contributions and the pick-up in wage bill growth compared to last year. The surplus of the social security funds relative to GDP will remain at 1.4 per cent. According to the labour market organization's pension agreement, pension contributions next year will remain at the same level as for this year, but the growth of the wage bill will accelerate slightly. Low inflation will bring small increases in benefits at the beginning of next year. The surplus is expected to remain at approximately the same level as this year.

### Fiscal position will improve in wake of slow-down in spending growth

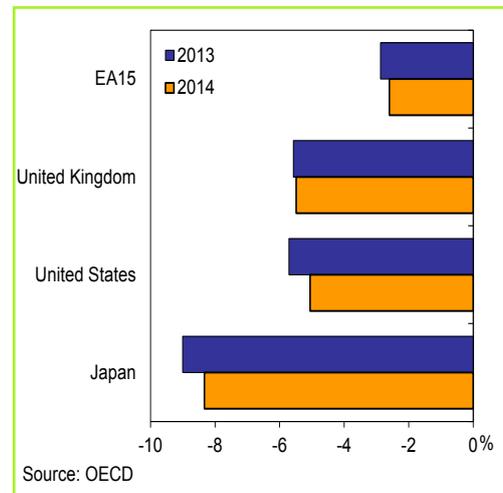
This year, taxes as a percentage of GDP are expected to rise slightly due to increases in excise taxes, municipal taxes and employee pension contributions. The tax ratio is expected to rise slightly also next year owing to the tightening of municipal taxation. Public expenditure growth will subside during the forecast period and expenditure growth will be slower than the increase of revenues.

The general government deficit will fall slowly but steadily by more than two billion euros from last year's peak. Relative to GDP, the deficit will decline from 3.4 per cent to 2.2 per cent next year. The biggest change will occur in the central government, where the deficit will decline from 3.9 per cent to 2.8 per cent. The municipal deficit will decrease more slowly and next year will still be 0.6 per cent of GDP. The dwindling of the surplus of the social security funds is expected to come to a halt.

According to the statistics of the State Treasury, the central government debt amounted to EUR 95.1 billion at the end of last year. The outstanding debt increased during the year of by EUR 5.4 billion and the ratio of government debt to GDP increased by a couple of percentage points. The debt ratio will continue to rise in both forecast years, climbing by a total of more than three percentage points.

The general government consolidated debt (the so-called EDP debt) increased last year by EUR 8.4 billion to EUR 121.1 billion. In

### Public sector deficit-to-GDP ratio in 2013 and 2014



addition to an increase in the central and local government debt, the growth in the EDP debt is attributable to a reduction in the public sector's internal debt by nearly a billion euros. The debt relative to gross domestic product was 59.3 per cent, i.e. it was still below the 60 per cent ceiling stipulated by the EU's Stability and Growth Pact. Over the forecast period the debt will continue to grow at a slower rate. The general government's EDP debt relative to gross domestic product will be 60.7 per cent this year and 61.3 per cent next year.

### Finland's economic problems and economic policy

It is widely estimated that in the EU countries GDP will grow next year by an average of well over 2 per cent. From now on, growth is expected to accelerate. After all, Europe had a long recession, the recovery from which will take years. If you look at the GDP growth of Finland and other European countries, we can say that Finland's development has not diverged greatly from that of its peer countries.

Due to certain special factors, Finnish GDP growth often exceeds or lags behind the average rates in Europe. For example, in 2010–2011, when the developing countries' rapid pace of investment favoured Finland's export industry, GDP grew much faster in Finland than the EU average, although even then Nokia was in deep trouble and the wood processing industry's capacity was being cut. Similarly, in 2013–2014 when slackening investment activity in emerging countries and



Europe limited our exports, our economic growth was slower than the rest of Europe.

During 2014–2016 Russia's economic problems will be the special factor that causes the deviation between Finland and the EU's average development. But even partial normalization of the situation in Russia with respect to sanctions and the price of oil could also be the specific factor that would spur faster growth in Finland's GDP than the rest of Europe in the years 2017–2018.

There is little reason to believe that Finland's growth would remain permanently slower than the rest of Europe. But that is the underlying assumption in the report by the Ministry of Finance's civil servants, according to which the Finnish economy will grow in the coming years by an average of one per cent. The assumption about Finland's growth potential over the medium term is absolutely crucial in the assessment of fiscal policy stance. If it is assumed that Finland will not lag behind the rest of Europe, there is no need for sudden fiscal belt-tightening.

Also when assessing the quality of the factors of production, production systems and public infrastructure, it is difficult to see that Finland's potential to increase its production would have weakened in recent years in relation to other European countries. The technical analysis focusing on the downside scenario does not recognize the special factors – Nokia's decline in profitability, the cuts in wood processing industry capacity and the collapse of trade with Russia – which explain the recent difficulties. The effect of these factors is not long lasting. On the contrary, in the relatively short term industry will once again be investing in Finland in the form of a nuclear power plant and 1–3 new pulp plants, which will also manufacture by-products such as bio-oil.

One of the main tasks of economic policy is to foster productivity and strengthen conditions for productivity growth. Despite this, the economic means to promote productivity, at least in the short term, are quite limited. Improvements in productivity, for example, take place mainly in companies. Moreover, the improvement in the productivity of both companies and the public sector is modest and it requires constant hard work. Campaigns to boost productivity presented in certain policy programs seem unrealistic.

When it comes to concrete policy measures to promote productivity, the focus should be on public investments in infrastructure. In the current situation when there is excess capacity in the labour and product markets and interest rates are low, the impact of public investment on economic growth and productivity are at their peak. The debt and deficit criteria stipulated by the European Stability and Growth Pact make it difficult to carry out such projects right now when the public sector deficit exceeds three per cent. By funding these measures directly via the central government's budget, we can nevertheless ensure that they entail genuinely new investments, for which the multiplier and growth effects are maximized – and according to the IMF's study so great that these investments finance themselves.

If the central government does not want, however, to finance these investments through its budget or the EU does not allow it, off-budgetary arrangements can be used, for example, so that the responsibility for funding is initially in the private sector or some off-budget public entity. Public investments are in any case the most useful tools for boosting employment levels and promoting economic growth. ■



## Calculation of fiscal policy impact

The financial position of Finland's public sector has deteriorated further. Last year, the general government deficit even exceeded the three per cent ceiling stipulated by the European Stability and Growth Pact. The surprisingly large increase in the deficit occurred under circumstances in which fiscal policy was cautiously tightened: public consumption expenditure growth in real terms last year was 0.2 per cent, but a rise in pension expenditure spurred an increase in public expenditure (consumption expenditure, investment and welfare spending) in real terms by about 0.4 per cent. At the same time, taxes as a percentage of GDP rose slightly.

Dissatisfaction with the fact that the government has not managed to reduce the fiscal deficit and reduce the gross government debt has prompted the most impatient public figures to call for sizable spending cuts already for next year. More moderate ones propose reductions in spending over a longer period of time.

The recession in the last few years and slow economic growth is increasingly seen as generally the consequence of fiscal policy being tightened too sharply in the euro area when Southern Europe and Ireland fell victim to the financial crisis. Criticism of the policy followed has increased, but the EU Commission, EU Member States' governments and the European System of Central Banks have not deemed it necessary to re-evaluate the policy stance.

In the Ministry of Finance's forecast, used recently to justify proposals for spending cuts, public spending cuts equivalent to one per cent of GDP would reduce GDP during the first year by only 0.3 per cent.<sup>1</sup> This figure is reduced by the estimated high crowding out effects. Macroeconomic research indicates that the multiplier effect is ordinarily much higher than 0.3 per cent, especially if public spending is cut under conditions of zero interest rates. Thus, in the academic world, research institutions, the IMF and the OECD, criticism of the policy followed in Europe in recent years has increased.

The use of fiscal policy to smooth out cyclical variations is favoured by those who deem the multiplier effects of public spending increases or tax cuts on GDP to be sig-

nificant. In general, simulations based on traditional Keynesian macro models and empirical macroeconomic research have obtained higher multiplier effects than those based on neoclassical or neo-Keynesian models. On the other hand, the multiplier effects in the simulations based on the neo-Keynesian DSGE model are already fairly high when wage and price rigidity are included in the model.

Below we present the results of Markku Lehmus' empirical VAR analysis<sup>2</sup> regarding the transmission of fiscal policy to the real economy and GDP. These results have been utilized in the calculations of how much of the impact of fiscal belt tightening disappears because of the multiplier effect.

The adjacent table shows the results of Lehmus (2014) regarding how large an impact on GDP there is for an increase in public spending or easing of the tax burden equivalent to one per cent increase in GDP.

Noteworthy in these results is the impact of spending cuts: the absolute value of the multiplier effect is greater than one, although it fades over time. The effects of tax hikes are at their maximum smaller, but they are long lasting. The results presented here do not differ appreciably from those widely reported in the research literature.

When assessing how the multiplier effects of Table 1 feed back to public sector, we rely on the estimates of GDP changes stemming from changes in tax revenue and public expenditure obtained using Finnish quarterly data. It may be thought that the multiplier effects also reflect on public expenditure by curbing local government expenditure and increasing unemployment spending. According to a simple statistical analysis, the feedback effects of a logarithmic change of GDP on public expenditure are practically zero. On the other hand, the impact on the logarithmic change of tax revenue would be as follows:

**Table 2. Impact of one per cent change in GDP on taxes per quarter (Q)**

	0.Q	1.Q	2.Q	3.Q	4.Q
Effect on tax revenues (%)	0.560	0.185	0.007	0.184	-0.134

**Table 1. Impact of fiscal policy tightening on GDP per quarter (Q)**

	1.Q	2.Q	4.Q	8.Q	12.Q	16.Q	24.Q
One per cent cut in spending	-0.18	-1.23	-1.38	-1.40	-0.81	-0.26	-0.13
One per cent increase in tax revenues	-0.24	0.05	-0.14	-0.18	-0.39	-0.47	-0.31

<sup>1</sup> See Ministry of Finance Economic Survey, spring 2014.

<sup>2</sup> Lehmus, Markku (2014), *Finnish fiscal multipliers with a structural VAR model*, The Labour Institute for Economic Research Working Papers 203.

The adjacent figure shows how much of the multiplier effects are offset by the effects of fiscal policy tightening brought about the budget deficit's first phase of contraction.

At its peak five quarters after a spending cut, some 53 per cent of the savings has been wiped out. The dilution of tax hikes reaches its maximum of about 16 per cent after 4 years. This short-term calculation can be turned around to assess how much an increase in public spending or reduction in the tax burden affects public finances. An increase in public spending finances almost half of itself in the first year through the multiplier effects.

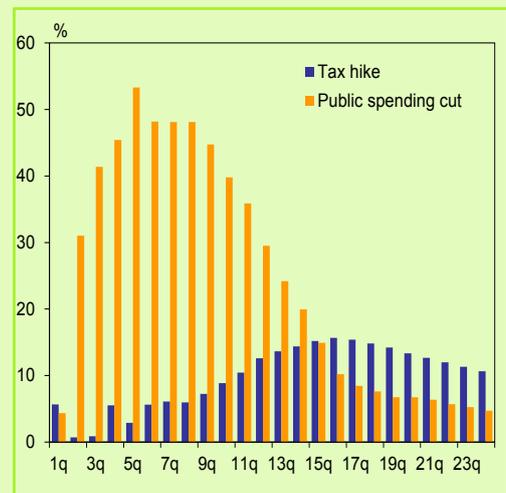
Just at the current moment when the labour and goods markets face a shortage of demand and when monetary policy is quite light, fiscal multiplier effects are at their greatest. The calculations underlying VAR analysis and estimates of the feedback effect of GDP on taxes do not, however, take into account the cyclical phase, which right now is weak. Estimates of the multiplier effects of fiscal policy actions may be somewhat conservative under the current circumstances. Correspondingly, the cost impact of the spending cuts on taxes could be somewhat higher than the estimates presented.

Overall the results presented are not exceptionally high with respect to the multiplier effects. In a recent report<sup>3</sup> the IMF estimates that in developed countries a one per cent increase in public investment spurs a two per cent rise in GDP in the same year when money market rates are close to zero. Even if interest rates normalize, the long-term effect would be 2.5 per cent of GDP. This is true in countries where the government knows how to implement investment efficiently. In Lehmus (2014) the public expenditure multiplier effect increased if the expenditure was carried out in the form of public investment.

The above simulations of fiscal policy for short-term effects of Finland and the results obtained by the IMF on the GDP effects of public investment suggest that sudden budgetary cuts threaten to push the economy into a recession without the public sector's financial position improving significantly in the short term. Policies where public consumption and social security spending is allowed to grow slowly in the short and long term and where public investment is increased when the economy is in recession, when the financing costs are low and the labour and goods markets have idle capacity, not only smooth out cyclical fluctuations but also support the consolidation of public finances over the longer term. ■

*Eero Lehto*

**Reduction of public spending savings via multiplier effect, per cent**



<sup>3</sup> See IMF, *World Economic Outlook, October 2014, Chapter 3.*

### Price competitiveness

The term price competitiveness denotes the ability of export industries and import-competing sectors to compete with the cost level of their peers. This means that it is primarily a question of the competitiveness of industry and a few of the service sectors. On the grounds that the above-mentioned industries are buying intermediate products from service sectors, the cost level of sectors supplying intermediate products can also be considered relevant for the purposes of international competitiveness. But it should be noted that only a small part of the service sector - mainly IT services, technical services and transport - fall into this category. The majority of services and the construction industry are domestic sectors, the cost level of which is indeed reflected in national price levels and therefore the purchasing power of those working in the open sector. If this causes pressure on wages in the open sector, it shows up in the labour costs of the open sector.

Considering how much complete and comparable information, for example, Eurostat produces on the price competitiveness of different countries and Finland, it is amazing how little of this information is used. The main shortcoming of studies on competitiveness recently highlighted in the public debate is the vagueness of statistical sources. Often the time period and what is shown are selected on the basis of the aims of the study. For example, the study by Borg and Vartiainen (2015), which aims to prove that Finland's competitiveness has weakened, focuses on labour costs, unit labour costs and productivity of the economy as a whole when the attention should be limited to the open sector and industry in particular.

Below is a graph based on Eurostat's quarterly reports depicting how industrial labour costs per hour have developed in Finland and European competitors in the last ten years. Noteworthy is the moderate rise in costs in Finland, especially in the last couple of years.

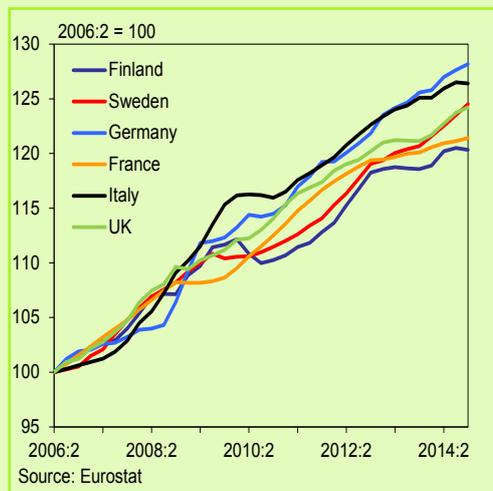
If we take the year 2000 as the basis for comparison and we look at labour costs per employee (not per hour), the situation changes somewhat. The cost level in Germany would have risen by less than in Finland by the year 2013. It should be mentioned that we get a totally different picture of the development of Finnish costs if we include services and construction. In these sectors, Finland's cost level has risen faster than in other comparable countries.<sup>1</sup>

Unit costs depict nominal costs per unit produced. Unit costs are obtained by dividing the nominal labour costs by labour productivity. The adjacent graph, which extends only up to 2013, shows that the competitiveness of Finnish industry has remained relatively stable compared to competitors.

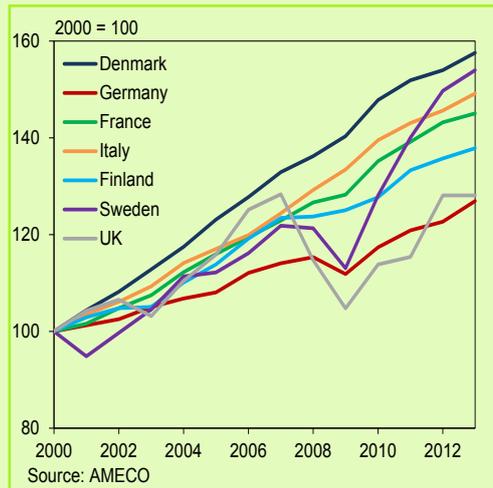
Productivity, which is one of the components of unit costs, is a conceptual and contractual quantity. It is a pure measure of quantity adjusted for the effects of price variability. This also makes its measurement difficult. It should also be remembered that from the standpoint of the welfare of citizens, it is inconsequential whether the standard of living stems from export prices rising fas-

<sup>1</sup> See Palkansaajien tutkimuslaitoksen toimialaennuste 27.11.2014.

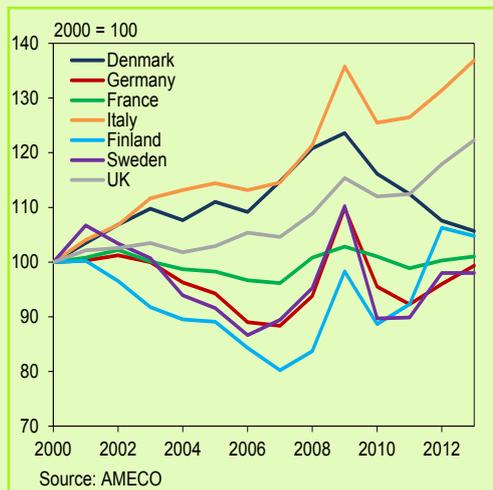
### Industrial labour costs 2006:2–2014:4



### Nominal labour costs per employee in manufacturing 2000–2013



### Nominal labour costs in manufacturing 2000–2013



ter than import prices or the fact that productivity is developing favourably.

The adjacent graph shows how the total productivity of the Finnish manufacturing industry (VAT-based) - in which the inputs are labour and capital input - has developed in recent years. After the reform of Eurostat statistics that went into force last September, the imputed productivity of Finnish manufacturing industry (excl. the electronics industry) has started to rise gradually in recent years.

The imputed productivity of the electronics industry, on the other hand, has measured mainly Nokia's profitability. Even when the mobile phone operations were part of Nokia, the gains and subsequent losses were allocated to the headquarters of the Nokia Group in Finland by recording the compensation paid by Nokia to other localities as an intermediate product. Under this methodology, the Finnish telecommunications industry's value added turned negative (2012) and the imputed productivity also collapsed. This strongly influenced by the imputed productivity of Finland's total manufacturing.

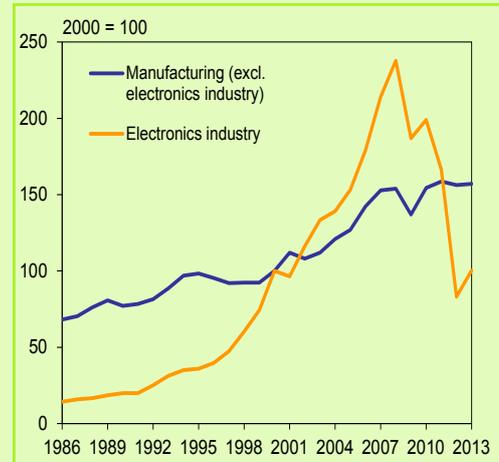
In relatively developed countries such as Finland where firms are large relative to the size of the country and where the R & D costs may be significant, fluctuations in the profitability of one or two companies may trigger significant changes in productivity. If a product innovation fails, the company will not be able to cover its innovation costs with its sales revenue, which is reflected in the weakening of productivity. In large countries such as the USA and Germany, where there are a number of large companies whose success does not correlate with each other, sharp swings in profitability do not just occur at the aggregate level. The recent setbacks affecting Finnish industry are easily seen as a symptom of some general weakness. This is not necessarily the case.

Finally, we will take look at the level of labour costs in Finland and its European competitors. The cost of labour per hour in Finnish industry was 34 euros in 2012. If we consider that the main competitors of our country in the EU are Sweden, Germany, France, the Netherlands and Austria, of these Germany, France and Sweden have higher costs than us, while the Netherlands and Austria are approximately at the same level as Finland. The cost level of Norway and Denmark is already much higher than that of Finland. Italy's cost level is below that of Finland, but owing to Italy's geographical bipolarization, it appears that the cost level of industry in the more advanced northern Italy is already close to that of Finland. The low cost level of the Baltic countries and Poland continues to encourage Finnish industry to carry out certain stages of projects via subcontracting in these countries.

The relative cost level of construction is higher in Finland than in industry. It is clearly above, for example, the cost level of Germany. In private services (excl. education and health) Finnish labour costs are on the same level as in Germany and thus below the level of the other Nordic countries.

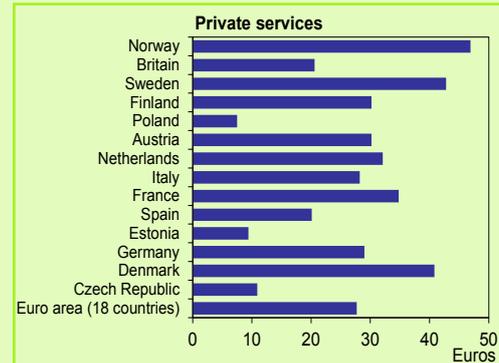
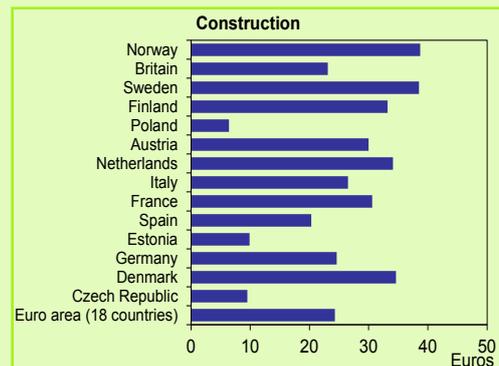
It is often argued that a low cost level in industry is not sufficient to safeguard our price competitiveness if the services that industry buys are expensive. But the cost level of Finland's private services is not appreciably higher than the level of most of our competitor countries. Secondly, if we look at labour services in more detail, we see that labour costs in Finland are often relatively low precisely in services that industry buys via subcontracting. Transportation labour costs are indeed above those prevailing in Germany and France, but in expert services - e.g. information services as well as technical services - Finland's cost level is very competitive.

### Productivity in industry 1986-2013



Source: Statistics Finland

### Labour costs per hour in industry, construction and private services 2013



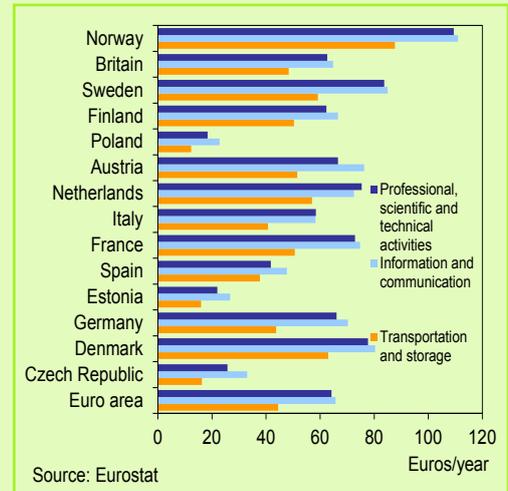
Source: Eurostat

All in all Finland's labour costs in non-business services are higher than those in Germany. This merely reflects Finland's more homogeneous distribution of income than in Germany and the fact that we lack the low-wage service sectors that are prevalent in Germany and the United Kingdom at the moment. It is also said that this too burdens Finland's competitiveness, as it raises the level of prices and erodes purchasing power by forcing the export industries to demand higher wages. But just a moment ago we found that this is not the case.

Finnish industrial employees have agonized with the fact the purchasing power of their wages is worse than in many other European countries. The adjacent graph presenting industrial hourly earnings in euros and adjusted for purchasing power parity, where the euro salary is allocated to an imaginary basket of consumer goods at the average price level, shows that the purchasing power adjusted wage level of Finnish industry falls well short of the euro wage level prevailing in the central and southern European countries. This stems from Finland's high price level. It is partly attributable to the lack of a low-wage sector and partly due to high logistic costs caused by our remoteness and sparse population. Whether or not this is affected by a lack of competition in retail and wholesale trade is a more difficult question to answer. ■

*Eero Lehto*

### Labour costs in 2012



### Hourly earnings in industry in 2010

