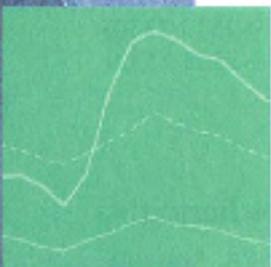


March 18, 2013



**Economic Forecast  
2013–2014**



**Finnish economic  
growth this year  
remaining at  
0.6 per cent –  
next year already  
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**Additional information**

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**Economic Forecast 2013–2014**

# Finnish economic growth this year remaining at 0.6 per cent – next year already will be better

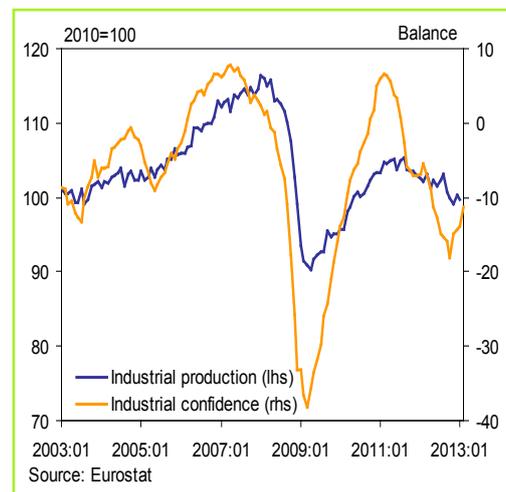
*The euro zone fell last year into a recession that continued to deepen towards the end of the year. This inevitably had an impact on Finland, although the economic situation in our most important European export countries, such as Germany, Sweden and Russia, was clearly better than in the euro area on average. Our capital-goods weighted export problems were exacerbated by the steep decline in investments not only in the European crisis countries but in the EU area as a whole, even in Germany. Finnish economic growth was also dampened by the downturn in residential construction and weakening of domestic demand in other respects toward the end of the year. This year's production figure is reduced merely by the poor starting point to which the economy fell in last year's fourth quarter. Our economic situation will nevertheless already start to get better during this year. The European debt crisis has eased, which will stimulate investment in those European countries where fiscal policy is not extremely tight. The export-driven up-swing in Europe and Finland will be fuelled above all by the fact that economic growth remains reasonably strong outside the EU. European and Finnish growth continues to be curbed by the European crisis countries' tight fiscal policy. Finland's GDP will grow this year by only 0.6 per cent. Next year the recovery of the European economies and the recovery of investments in Finland will spur GDP growth of 2.5 per cent.*

The risks with respect to the recovery and strengthening of the international and Finnish economies stem from the inability of various countries – such as Italy and the United States – to make decisions to stabilize their economies. Finland's own economic policies may also continue to have a negative impact on our economic recovery if adherence to the government's programme leads to a significant fiscal tightening already next year.

## European debt crisis easing and economic growth picking up

The European debt crisis has cast a shadow over the entire EU's economic development in the last couple of years. The ECB's announced readiness to support the euro zone crisis countries via bond purchases under certain conditions began to ease the financial turmoil in Europe's crisis countries starting already last August. This is evidenced by the fact that the long-term interest rates on these countries' government bonds have been declining. In spite of this, the caution of households and businesses in their consumption and investment decisions increased towards the

**Industrial confidence and industrial production in euro area 2003:01–2013:02**



end of last year. This was reflected in the collapse of car sales. Germany, Sweden and Finland – euro area exporters of capital goods – all witnessed a decline in industrial orders and weak development of industrial output last year. In this respect the situation has remained weak in early 2013. All in all euro area GDP shrank by an average of 0.6 per cent last year. The slump was attributable primarily to the plunge in investment by nearly 7 per cent. Private and public sector demand also declined.

In December 2012 and the beginning of 2013 the confidence of European countries' households and businesses in the economy has begun to stabilize and strengthen, mainly in non-crisis countries. So far this has been reflected in, among other things, the retail trade, although car sales were still down in February. The strengthening of German confidence in the economy according to, for example, the CesIfo Business Climate indicators gives reason to believe that German domestic demand will strengthen significantly early in the year, so that growth will no longer rely on foreign trade alone. Sweden's economic growth may now also get a boost from private consumption and investment growth. The tightening of fiscal policy in the European crisis countries has been so severe that the domestic demand in these countries cannot be expected to pick up appreciably this year. Their aggregate production is forecast to contract still this year.

This year all components of domestic demand – investment as well as private and public demand – will fall to the euro area average. Only foreign trade will contribute to economic growth. The GDP of the euro area will contract by one tenth of a per cent this year. Next year the growth rate will pick up to 1.5 per cent. The fastest growth will be in Northern and Central Europe, with the exception of the Netherlands. The Dutch economy has been in a downward spiral, as the government has been trying to stabilize the general government's financial position with excessively stringent austerity measures.

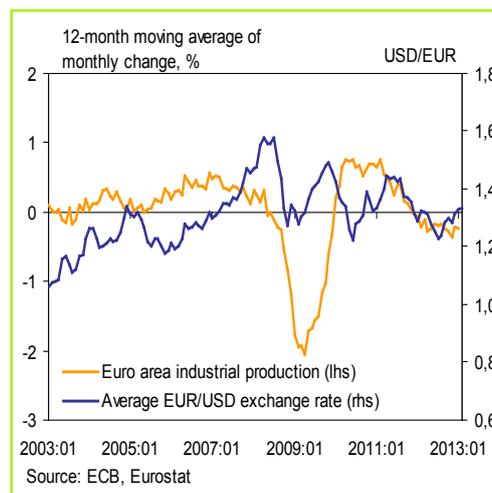
### Euro area employment weakening

Last year the euro area's unemployment rate averaged 11.4 per cent. Towards the end of the year the labour market situation deteriorated sharply. At the beginning of this year the unemployment rate rose to well over 25 per cent in Spain and Greece. The labour market situation has split countries in the EU region into two groups: crisis countries, whose tight fiscal policy has increased the number of the unemployed, and countries in which the labour market situation has remained relatively strong. The latter countries have avoided substantial fiscal tightening, so that domestic demand has been able to support the labour market. This group includes e.g. Germany, Czech Republic, Belgium, Denmark, Romania, Sweden and Finland. The unemployment rate has not been on the rise in the UK either, although a relatively tight fiscal policy has been exercised there. It appears that euro area unemployment rate will rise to an average of 12.2 per cent this year. Next year, the unemployment rate will fall by a few tenths of a percentage point.

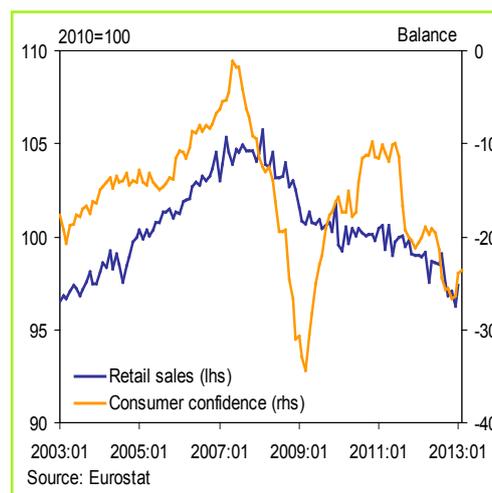
### Waiting for ECB to cut interest rates

The European Central Bank lowered its key interest rate a quarter of a percentage point to 0.75 per cent last July, but contrary to the expectations of many, it has not changed rates since then. The ECB's own inflation forecast for 2013 is 1.6 per cent and 1.3 per cent for 2014. The latter figure in particular would seem to suggest an early interest rate cut, in order to get closer to the slightly less than 2 per cent inflation

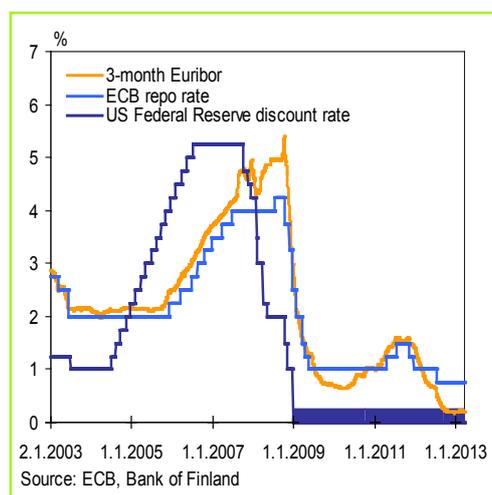
### Euro area industrial production and EUR vs. USD exchange rate 2003:01–2013:02



### Consumer confidence and retail sales in euro area 2003:01–2013:02



### Short-term interest rates 2.1.2003–14.3.2013



target. Director General Draghi has recently announced that the monetary policy will be kept accommodative as long as necessary, and that the Governing Council has discussed an interest rate cut. The decision is evidently a difficult one since it means that the interest rate on central bank deposit rates will be negative. The ECB might also be waiting for the outcome of German wage negotiations and its spill-over effects elsewhere, even though there are no signs of this in its inflation forecast.

The three-month Euribor rate has recently fluctuated around 0.2 per cent, which is significantly below the ECB's key interest rate. This is a reflection of the money market's strong liquidity situation more than interest rate cut expectations. Our forecast assumes the ECB's key interest rate will be lowered in the near future and that 3-month Euribor rates will remain on average at their current level throughout the year. Next year as the euro area gradually starts to grow, the 3-month interest rate will rise to an average level of 0.5 per cent since the liquidity situation will begin to tighten and the expectations of an interest rate cut fade. This scenario could change if the euro strengthens significantly, which would dampen the rise in import product prices and inflation to the extent that it would prompt a further cut in the key interest rate.

Long-term interest rates for government bonds in Finland, Germany, Sweden and the United States are not expected to experience any significant changes during the forecast period. Japan's 10-year interest rate has already been at a level of about 0.6–0.8 per cent, from which it could decline somewhat further if the central bank begins to pursue a more aggressive policy of bond purchasing.

### Euro area inflation slowing down

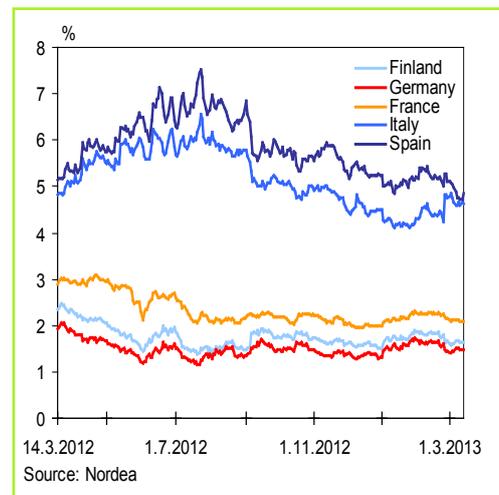
The eurozone's harmonized index of consumer prices dipped to 1.8 per cent in February, after an averaging 2.5 per cent last year as a whole. Core inflation excluding food, energy, alcohol and tobacco prices fell to 1.3 per cent in January. It should be noted that despite the weak economic development of many of the member states, none experienced deflation in 2012, and this is expected to be the case also in 2013, with the exception of perhaps Greece. The rise in producer prices has also slowed down considerably, but the same cannot be said of labour costs per hour worked. The price of oil in euros has not changed much from last year's average level, and in the future it may even decrease slightly while other commodity prices start to rise slightly. The external value of the euro is not expected to change from current levels. Eurozone inflation is projected to be 1.7 per cent this year and 1.5 per cent next year.

### Raw material prices remain in check

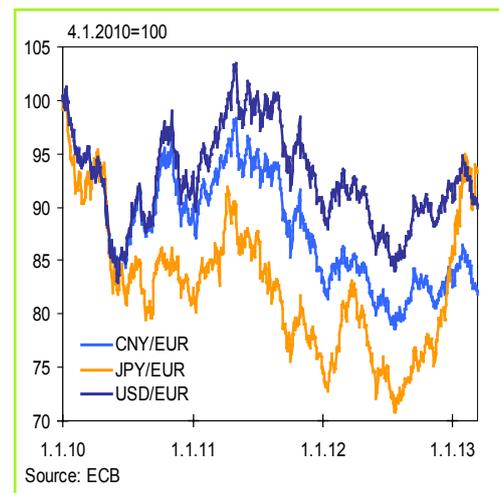
In 2012, the growth rate of world trade was cut in half to less than three per cent, and growth almost came to a complete halt in the third quarter. The main reasons for this were in the weakening of both the euro area and economic growth of China, as well as poor harvests. The weakening of trade growth was nevertheless a short-lived phenomenon, because towards the end of last year it picked up again, particularly in many developing economies.

Growth of the global economy is not expected to pick up very strongly and partly because of this, only slight increases in commodity prices are projected in the near future. Crude oil (Brent) has to be mentioned as an exception, the price of which has fluctuated around USD 110 a barrel since last summer. Unless oil production-related

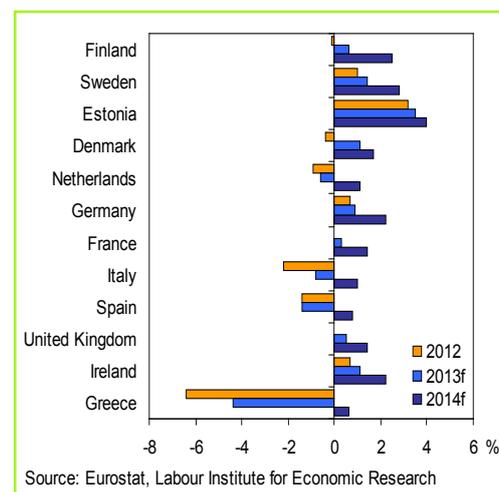
### Government bond yields 14.3.2012–14.3.2013



### Exchange rates 4.1.2010–14.3.2013



### GDP growth rates in 2012, 2013 and 2014



geopolitical risks materialize, the price of oil is likely to exhibit a slightly downward trend from the afore-mentioned level, averaging about 5 per cent lower next year. This is affected foremost by the rapid growth of the United States' own shale oil production as it is improving its distribution network, thanks to which it will no longer need to purchase the same amounts of Brent oil. Therefore the rise of key raw material prices will be clearly more modest than in recent upturns.

### Spending cuts in the United States curb growth

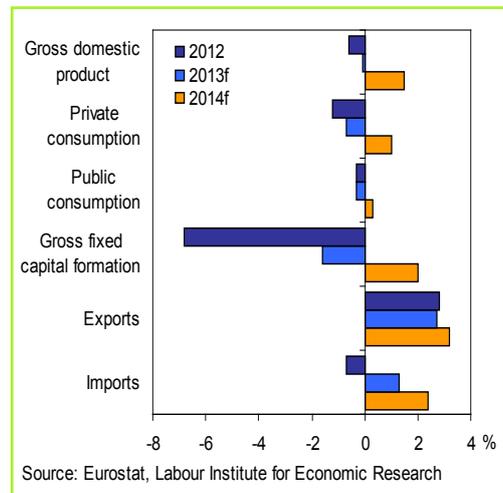
GDP increased by 2.2 per cent in the US last year. For the last three years the country's economic growth has been fairly steady, averaging 2.1 per cent. At the same time, the employment rate has remained virtually unchanged. Last year, new jobs were created mainly at the same pace as the growth of the working age population. The unemployment rate has fallen, however, from 9.6 per cent in 2010 to 7.7 per cent in February 2013. This has been possible because people exiting the labour market have reduced the size of the work force.

US economic growth will continue to be fuelled by a lax monetary policy aimed at a two per cent inflation rate and a maximum unemployment rate of 6.5 per cent. The Federal Reserve will keep its Federal funds rate close to zero and continue its so-called quantitative easing, at least until the end of next year.

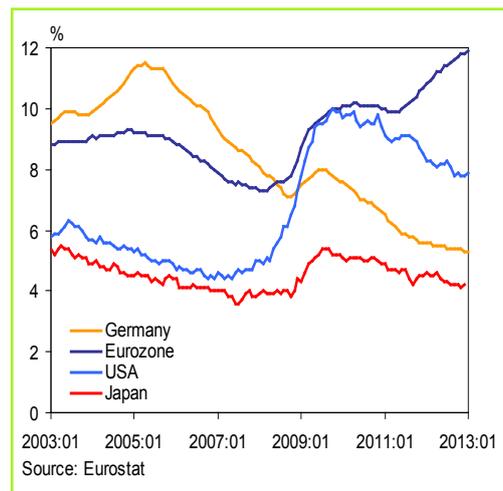
At the same time, a significant change in households' position in the financial markets is about to take place: as a result of the rise of equity and housing prices in addition to debt reduction, the net wealth of households has already risen back to the level prevailing 10 years ago. Total debt servicing expenditures in relation to disposable income have fallen from their peak at the onset of the financial crisis by already 3.5 percentage points to the level of 20 years ago. The taking of consumer loans using housing as collateral has indeed been increasing strongly, which is reflected in the robust growth in sales of consumer durables. Overall, the growth of private consumption has picked up. This and the clear expansion of residential construction, which is also linked to the improvement in the financial position of households, are spawning a positive upswing in the US economy.

GDP is expected to grow by 1.7 per cent in the US this year. The increase would be clearly stronger, if it were not undermined by the

### Eurozone economic growth 2012–2014



### Unemployment in assorted countries 2003:01–2013:01

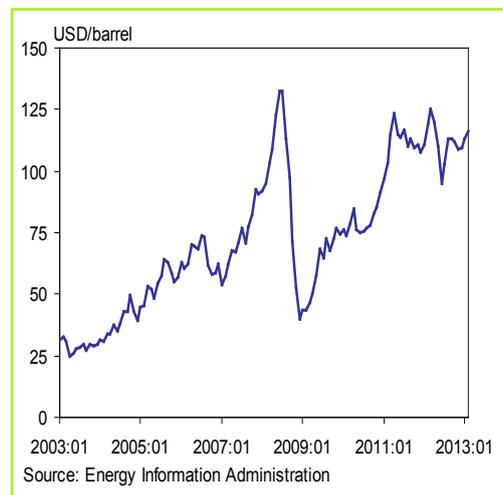


**Table 1. International economy**

	Share of world GDP (%)	GDP growth (%)		
		2012	2013f	2014f
United States	18.9	2.2	1.7	2.5
Eur-17	13.7	-0.5	-0.1	1.5
Germany	3.9	0.7	0.9	2.2
France	2.7	0.0	0.3	1.4
Italy	2.2	-2.2	-0.8	1.0
EU27	19.4	-0.3	0.1	1.6
Sweden	0.5	1.0	1.4	2.8
United Kingdom	2.8	0.0	0.5	1.4
China	15.0	7.8	8.0	8.0
India	5.7	4.5	5.5	6.5
Japan	5.6	1.9	2.0	2.5
Russia	3.0	3.4	3.5	4.0
Brazil	2.9	0.9	3.2	4.5

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

### World market price of crude oil (Brent) 2003:01–2013:02



recent increase in taxes and employers' payroll contributions at the end of last year and the significant spending cuts that took effect in the beginning of March, which will reduce overall output by about half a per cent. In 2014, economic growth is expected to be significantly faster than recent levels, rising to 2.5 per cent. Inflation has been slowing down to less than 2 per cent, but next year it is expected to accelerate slightly.

### China cannot curb investments enough

China's economic growth slowed last year by 1.5 percentage points to 7.8 per cent, just slightly above the official target of 7.5 per cent. In accordance with the new growth strategy, the government was able to curb investment growth significantly, but it was not so successful at boosting private consumption. Towards the end of the year, however, economic growth picked up again, which is evident in, for example, electricity production and consumption figures, car production, industrial orders and purchasing manager indexes. China's economic growth is forecast to remain at around 8 per cent this year and next. So far inflation is clearly below the 4 per cent target – averaging 2.6 per cent in January–February – but is expected to accelerate.

### Japan implementing stimulus package

Japan's GDP rose by 2 per cent last year. Growth slowed in the second half, but many indicators suggest it will re-accelerate during this year. The new government which came to power in December has launched strong fiscal stimulus measures and convinced the central bank to raise its inflation target to two per cent. Economic growth is forecast to accelerate to a 2 per cent level again this year and 2.5 per cent next year.

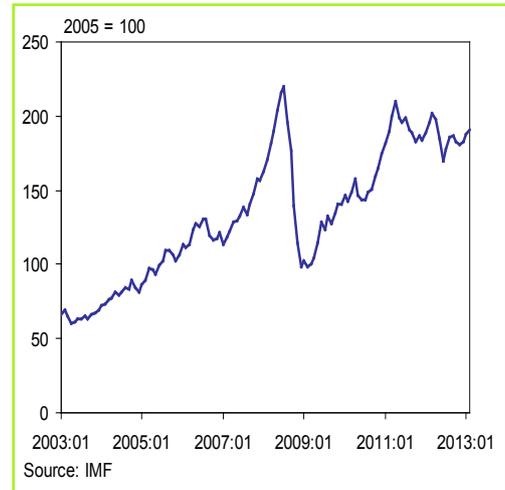
### Russia's growth accelerating slightly

According to preliminary figures Russia's economic growth remained at 3.4 per cent last year. Faster growth would have required an increase in the price of oil and a lower interest rate level, which the central bank did not allow due to high inflation (6.6 per cent) and the fast growth of bank lending (19 per cent). Private consumption continued to grow fuelled by debt financing, slowing down just slightly. The outlook is not good in the future either if the decline in oil prices occurs as forecast. The country could well afford fiscal stimulus, but so far there have not been any visible signs that this will take place. Also, households still have room to take on more debt, even if they are hit by high interest rates. Economic growth is projected to accelerate slightly, to 3.5 per cent this year and 4.0 per cent next year.

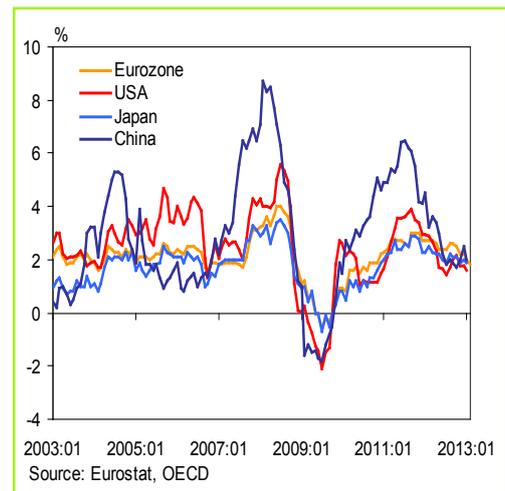
### Brazil expected to show strong growth

Brazil's economic growth was disappointing last year, being only 0.9 per cent. Towards the end of the year exports and investment declined sharply, whereas private and public consumption continued to grow. An upturn appears to have taken place at the end of the year, when both the industrial and service sector purchasing managers' indexes proved to be very strong,

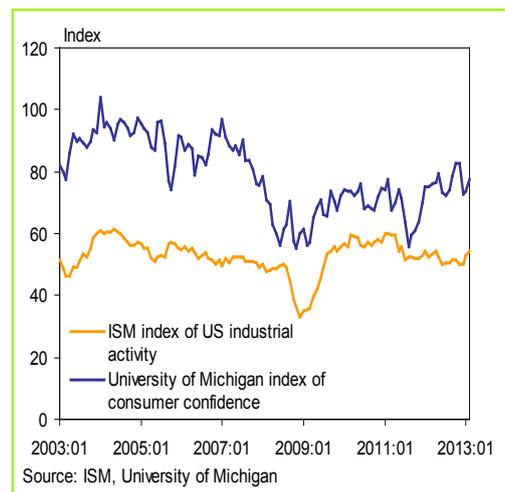
### All commodity price index 2003:01–2013:02



### Inflation in assorted countries 2003:01–2013:02



### US economic indicators 2003:01–2013:02



new orders rose significantly and exports began to increase strongly. Brazil will reach 3.2 per cent growth this year and 4.5 per cent already next year.

### India's economy picking up

According to unconfirmed data, India's economic growth last year was only about 5 per cent, which was a much slower rate compared to previous years. In early 2013, industrial production, exports and the purchasing managers' index of the service sector already showed clear signs of improvement. However, economic growth is hampered by the fight against high inflation (about 10 per cent) and government debt falling into the junk-bond category. For this reason, interest rates will continue to be held high and the budget deficit reduced. There will only be a slight upturn in economic growth to 5.5 per cent this year and to 6.5 per cent next year.

### Finnish exports starting to grow

Last year exports of goods and services decreased by 1.4 per cent compared to the previous year. The deepening recession in the euro area in the fourth quarter was clearly reflected in our exports. Only 53.6 per cent of Finnish exports were headed towards the EU area, which is 2 percentage points less than in 2011. Export of Finnish goods to developing countries increased by 8 per cent last year. Thus, the developing countries' share of Finnish goods exports is on the rise, but the growth of exports to these countries has not been sufficient to compensate for the contraction of exports to our key European export markets.

It can be said that particularly the reduction of investment in the euro area by nearly 7 per cent cut our capital goods-weighted exports significantly. The amount of both exports and imports was reduced in part last year by the flow of intermediate products drying up as Nokia's Salo plant was closed and the Baltic Sea gas pipeline project was completed. Goods and services imports declined last year by as much as 3.7 per cent. Thus, foreign trade bolstered the growth of GDP. Imports were reduced among other reasons by the collapse of car sales after the car tax was raised. On the other hand, imports of services increased by 4.6 per cent, whereas exports of services fell by 1.8 per cent.

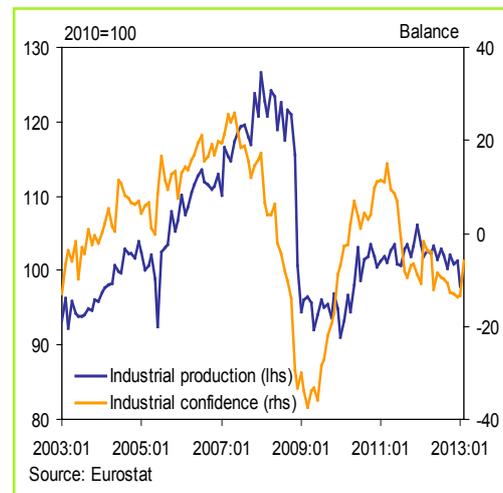
**Table 2. Demand and supply**

	2012	2012	2013f	2014f
	Bill. €	Percentage change in volume (%)		
Gross Domestic Product	194.5	-0.2	0.6	2.5
Imports	78.4	-3.7	1.3	4.1
Total supply	272.9	-1.2	0.8	2.9
Exports	77.3	-1.4	2.3	4.9
Consumption	157.8	1.4	0.5	1.0
private	109.5	1.6	0.4	1.2
public	48.3	0.8	0.6	0.5
Investment	37.8	-2.9	-1.6	3.6
private	32.7	-3.4	-1.7	4.1
public	5.0	0.5	-1.0	0.0
Change in stocks <sup>1</sup>	0.1	0.1	0.1	0.6
Total demand	272.9	-1.2	0.8	2.9

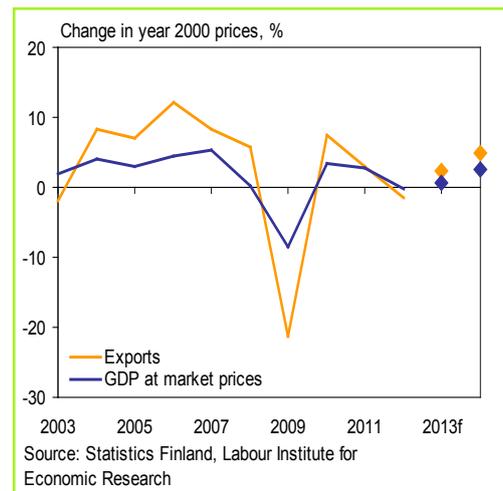
<sup>1</sup> Volume change is in percentage points of GDP.

Source: Statistics Finland, Labour Institute for Economic Research

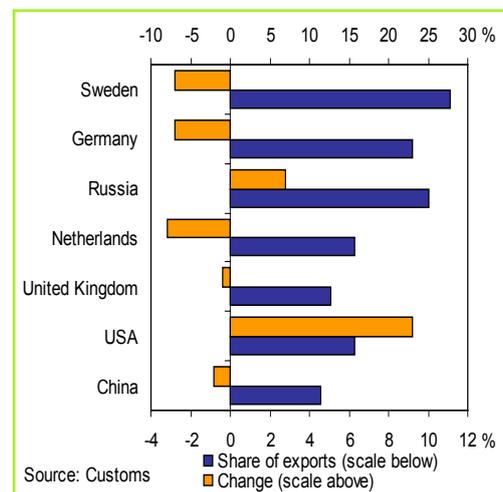
### Industrial confidence and industrial production in Finland 2003:01–2013:02



### Changes in total production and exports in 2003–2014



### Finnish merchandise exports in January–December 2012



Once again import prices rose faster than export prices. Despite the weakening of the Finnish terms of trade, there was a slight surplus in the balance of trade last year. Because the services and production factor income account nevertheless continued to run a clear deficit, the current account deficit widened to about 3 billion euro.

A slight turn for the better in Europe as well as economic growth in the rest of the world continuing at least at last year's pace will spur Finnish export growth of 2.3 per cent this year. During the first half of the year exports will be increased especially by strengthening export demand for products of the forest industry, chemical industry and metal processing. At the end of the year the machinery and equipment industry will start to be get export orders again, which will initially be evident mainly in inventory investment growth and only later in increasing export deliveries. Nokia's situation will no longer deteriorate. The stabilization of its output and even slight growth will support the growth of Finland's export of services. Service exports are projected to grow by three per cent this year compared to last year. Next year, the clear upturn in our major export markets will increase the size of total exports by 4.9 per cent year-on-year.

The slow growth of domestic demand this year will keep import growth at only one per cent. Next year, especially the pick-up in investments in Finland and a significant recovery in car sales will boost growth figures for imports to almost four per cent. Finland's trade balance will remain in surplus this year and next, but the current account deficit will not shrink. It will remain close to 3 billion euros.

### Basic services growing more slowly than rest of economy

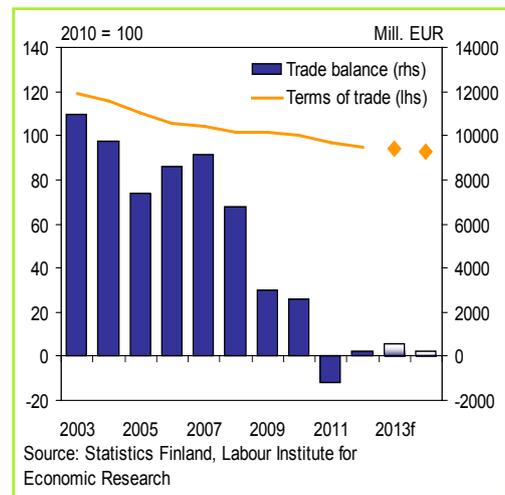
Industrial production fell last year by two per cent from the previous year. Construction also decreased, and its rate of decline accelerated towards the end of the year. Trade also contracted in the last three quarters of last year due to the impact of car sales. Information and telecommunications services and other business services (professional, scientific and technical activities, etc.) were clear growth sectors.

There will be no significant growth in any sector this year either. The situation will change, however, to the extent that industrial production will begin to recover, although it will grow by slightly less than one per cent from the previous year. Services geared toward domestic demand will also expand only moderately, or even decline. Information and telecommunication services and other business services will grow again this year. Construction, on the other hand, will continue to decline. Next year even construction will begin to rise significantly. The growth rate of industry will also accelerate. The same trend will be seen in private services. Only the growth of public services will be sluggish.

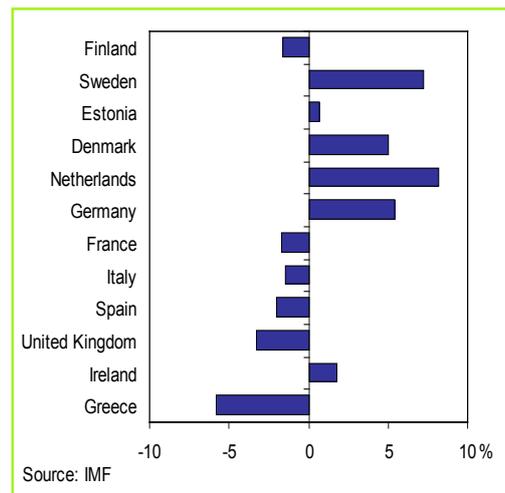
### Inflation will drop below two per cent

Finnish consumer prices rose by 2.8 per cent on average last year. The biggest increases were in alcoholic beverage, tobacco, food and transport prices. The decline in interest rates on housing loans had a notable dampening effect on inflation. In January, the rate of inflation was only 1.6 per cent and 1.7 per cent in February, compared to December's 2.4 per cent, although a one percentage point increase in VAT and other indirect tax increases went into effect at the beginning of the year. Price increases of some commodities would have spurred list price changes to such an extent that they were not carried out yet

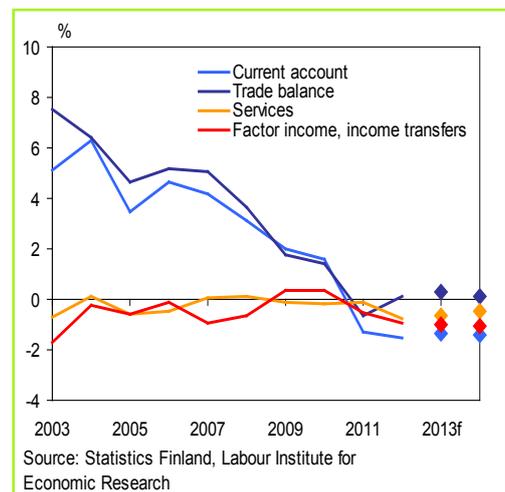
### Terms of trade and trade balance 2003–2014



### Current account deficit relative to GDP in 2012



### Current account surplus relative to GDP by components 2003–2014



at the beginning of the year, but they will appear later. This is likely to raise the inflation rate slightly in the future.

Consumer prices are forecast to rise by 1.8 per cent both this year and next. Inflation in 2013 will remain lower than previously due to the cost of living (particularly interest rates on housing loans) becoming cheaper. The forecast does not expect any tax increases affecting the consumer price index for 2014, so to that extent inflation will slow down, but this will be offset by the rebounding of housing prices. It should be noted that an increase in housing loan margins usually does not have much of an impact on old loans and the share of new loans out of total loans is quite small. The development of different reference interest rates is more important when estimating the impact of housing cost changes.

### Investments falling this year – picking up next year

Total investment declined last year by about 2.9 per cent. During the year, investment activity changed so that in the first quarter investments were still clearly on the rise, but in the last three quarters the trend was negative and in the fourth quarter the rate of decline was already quite steep. We predict that the beginning of this year will still be weak due to the grim economic outlook, but towards the end of the year investments will begin to increase. The change in investments in the current year will remain relatively small, i.e. 1.6 per cent, but next year investments will exhibit substantially stronger growth of 3.6 per cent.

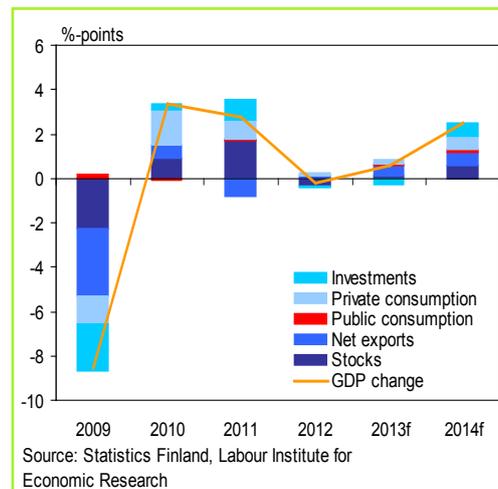
Of the investment subcomponents, housing construction fell in every quarter in comparison to the previous year. The decline became slightly steeper towards the end of the year. However, low interest rates are maintaining a reasonable level of housing sales despite the weak economic outlook. The volume of residential construction will therefore decline rather moderately this year, at an average of about 2 per cent. Next year, the volume of residential construction will rebound to about 4 per cent.

In the first quarter, non-residential building construction was still increasing slightly in comparison to the previous year. However, the second quarter saw a decline that accelerated and in the fourth quarter, non-residential building construction was 13.6 per cent lower than a year earlier. The downturn will continue in the first half of this year, but the trend will turn positive by next year. All in all, non-residential building construction will contract this year by three per cent and grow by four per cent next year. Civil engineering construction remained relatively unchanged last year, although growth weakened towards the end of the year. Output will continue to contract this year, at a rate of one per cent annually, but next year civil engineering construction will already grow at a rate of 2.5 per cent.

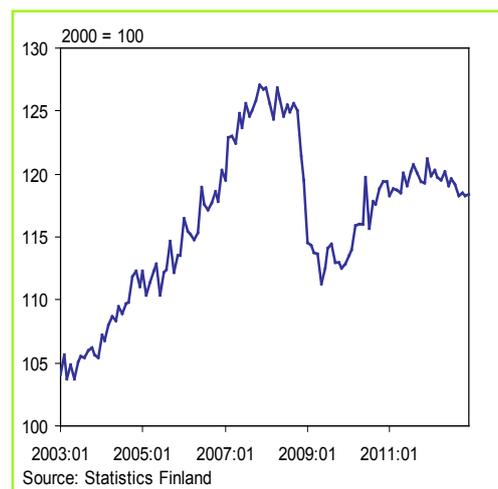
Machinery, equipment and transport equipment investment decreased last year by less than one per cent. Poor economic prospects are slowing these investments, particularly in the beginning of the year. In transport vehicles, investment will already increase particularly towards the end of the year due to last year's comparatively low level. Machinery and equipment investment will fall moderately, however, for the year as a whole by one per cent. Next year, the improving outlook will boost the real growth of machinery and equipment investment to 4 per cent.

Overall the level of private investment is projected to decline this year by 1.7 per cent and to grow by 4.1 per cent next year. Public investment will fall by one per cent this year and remain unchanged next year due among other things to the weak situation of municipalities.

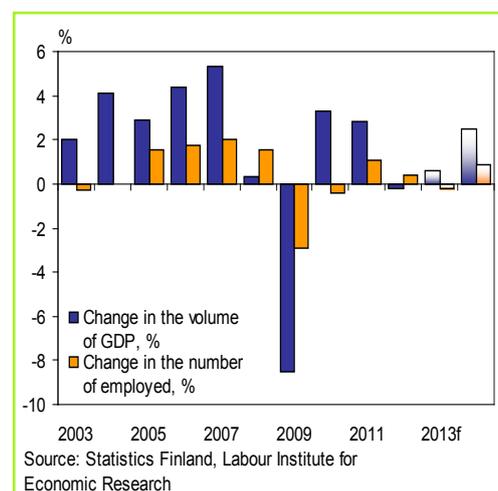
### Production growth subcategories 2009–2014



### Trend indicator of output 2003:01–2012:12



### GDP and employment 2003–2014





### Employment falling in 2013 and rebounding next year

Employment grew marginally last year by 0.4 per cent. There was some variation on a month-to-month basis, but with the exception of January and November, employment did not decrease. In January 2013, employment decreased, but very little. The weak development of output will lead to a steady descent of employment, which will continue until the end of this year. During the last months of the year employment will already start to rise and the average employment loss for the year as a whole will be relatively low, at 0.2 per cent. Next year, employment will improve by 0.9 per cent.

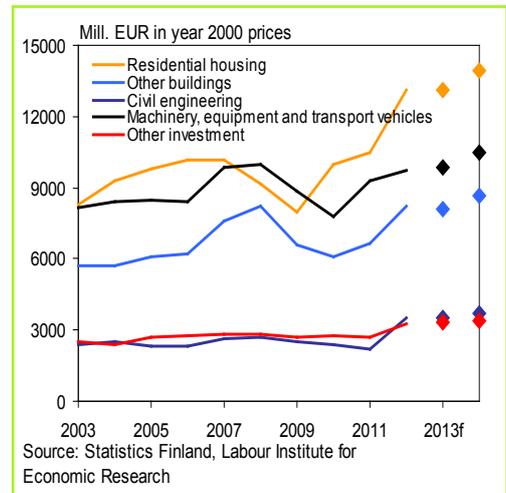
**Table 3. Key forecasts**

	2012	2013f	2014f
Unemployment rate (%)	7.7	8.3	8.2
Unemployed (1 000)	207	225	222
Employed (1 000)	2483	2478	2500
Employment rate (%)	69.0	69.0	69.8
Inflation, consumer price index (%)	2.8	1.8	1.8
Wages, index of wage and salary earnings (%)	3.5	2.4	2.4
Real disposable income of households (%)	0.1	0.6	1.7
Current account surplus (Bill. €)	-3.0	-2.7	-3.0
Trade surplus (Bill. €)	0.3	0.6	0.2
Central government financial surplus			
Bill. €	-6.7	-5.9	-4.6
% / GDP	-3.4	-2.9	-2.2
General government financial surplus			
Bill. €	-3.7	-3.8	-2.7
% / GDP	-1.9	-1.9	-1.3
Emu debt			
% / GDP	53.0	55.9	57.1
Tax rate (%)	43.6	44.5	44.9
Short-term interest rates (3-month Euribor)	0.6	0.2	0.5
Long-term interest rates (10-year gov't bonds)	1.9	1.8	1.9
Source: Bank of Finland, Statistics Finland, Labour Institute for Economic Research			

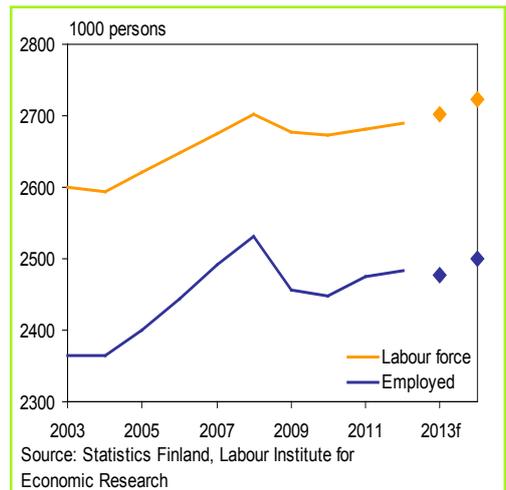
The labour participation rate was still lower last year than in 2008. The aging of the Finnish population is spawning changes in labour force participation. In the expanding highest age group (65–74 years), the labour force participation rate is rising in a trend-like manner, but it is nevertheless still at a lower level than in younger age groups on average. The 15–64-year-old population will decrease, although this will be offset somewhat in our forecast by a slight increase in their labour participation rate. Therefore the labour force will grow as a result of the combined effects of labour force participation and population growth by 0.5 per cent this year and 0.7 per cent next year. Owing to the combined effects of changes in employment and the size of the labour force, the unemployment rate will rise to an average of 8.3 per cent this year and fall to 8.2 per cent next year.

The adjustment of the amount of labour in an economy takes place not only through changes in employment but also in the number of hours wor-

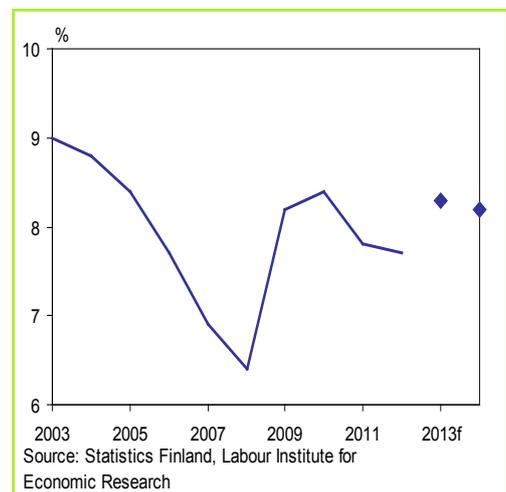
### Investments 2003–2014



### Supply of labour and employment 2003–2014



### Unemployment rate 2003–2014



ked. Working hours are easier to adjust than employment, and typically in a shrinking economy hours worked initially decline more than employment. As production starts to grow again hours worked will also begin to rise before the employment figures. As growth proceeds, the trend will turn in the opposite direction sooner or later, so that employment increases more than the number of hours worked. According to the Labour Force Survey, the number of hours worked remained almost unchanged in 2012. This year, employment will adjust partially through hours worked again, which will decrease more than the number of employed, i.e. by 0.6 per cent. Next year the number of hours worked will increase almost as fast as employment, i.e. by 0.8 per cent.

Economic expansion and contraction also partly take place through productivity growth. The real GDP growth of 0.6 per cent and the 0.6 per cent fall in hours worked this year represent a 1.2 per cent increase in productivity per hour worked. In 2014, productivity will grow slightly faster, at a rate of 1.7 per cent per hour worked.

### Wage hikes in line with framework agreement will boost real earnings also this year

Real earnings rose last year by 0.7 per cent, while the rate of increase of nominal earnings accelerated to 3.5 per cent and inflation slowed to 2.8 per cent. Real earnings thus returned to the level prevailing in 2010, since real wages in 2011 fell by exactly the same margin of 0.7 per cent.

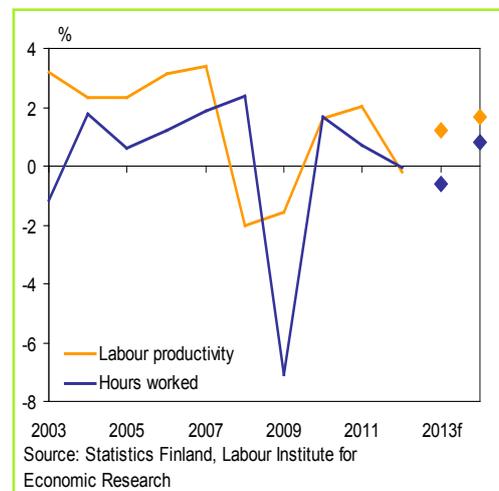
The framework agreement signed in November 2011 called for contract increases of 2.4 per cent in the first contract year in addition to a one-off payment of EUR 150 during the first year. The collective settlements include one-off measures that are included in the index of wage and salary earnings in addition to earnings for regular working hours and bonuses paid. Last year, wage drift remained at roughly half a per cent while contract increases as well as one-off items and wage drift together produced a 3.5 per cent rise in the level of earnings. The most pronounced increase in wages occurred in the beginning of the year and the carry-over for this year was 0.8 per cent, i.e. in earnings in the fourth quarter were that much higher than the annual average. Average wages, which show among other things the impact of overtime, rose again slightly faster than the index of wage and salary earnings, i.e. 3.6 per cent.

Real earnings will continue to climb this year, even though growth in nominal earnings will slow down. In the second year of the framework agreement, contract wage increases will remain below those of last year, i.e. 1.9 per cent. The anaemic economic performance will keep wage drift moderate. Nominal earnings are expected to rise this year by 2.4 per cent while average earnings will climb slightly faster than this, i.e. 2.5 per cent. The considerable slowdown in forecast inflation, however, will bolster real earnings development. Real earnings will rise at almost the same rate as last year, i.e. 0.6 per cent.

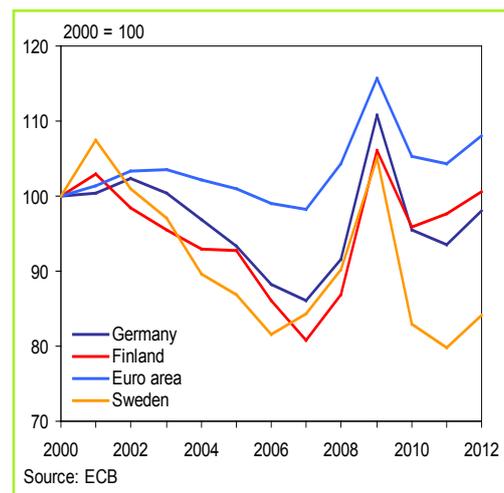
Next year's earnings will be affected, above all, by the coming wage settlements, the form and content of which are not yet known when this forecast is being made. The economic situation suggests that the wage round is aiming towards a moderate pay settlement to support employment. On the other hand, the tax burden of employees appears to be rising, among other reasons due to trends in municipal taxes and because will be no adjustment of central government income tax for inflation next year. In the forecast, earnings are expected to increase next year by 2.4 per cent, i.e. at the same rate as this year. Average wages will rise slightly faster, by 2.6 per cent.

Manufacturing unit labour costs, i.e. labour costs incurred to produce one unit of output, increased in Finland in 2011, while they fell on average in Germany, Sweden and the euro area. Last year, however, the rise in manufacturing unit labour costs was slightly faster in these countries than in Finland.

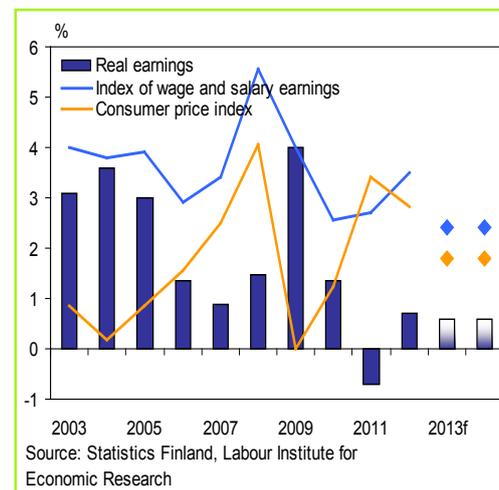
### Change in labour productivity and hours worked 2003–2014



### Unit labour costs in national currency (manufacturing) 2000–2012



### Changes in level of earnings and consumer price index and real earnings 2003–2014



## Total real household income growing modestly as inflation subsides

Households' real disposable income grew by only 0.2 per cent last year, after not growing at all the previous year. The purchasing power of households was thus only slightly better than in 2010. During the same period, however, private consumption grew by about 4 per cent.

Nominal disposable income increased by 2.8 per cent. The wage bill grew by 3.2 per cent. The growth primarily stemmed from the increase of earnings as the number of hours worked by employees fell slightly. Entrepreneurial income only increased slightly and property income received by households, i.e. rental, interest and dividend income, contracted and weakened the development of purchasing power. Pension benefits, however, increased clearly faster than the wage bill reflecting, among other things, growth of the number of pensioners and the fact that other social security benefits also grew faster than the wage bill. Income taxes increased by 3.3 per cent, only slightly faster than nominal household income growth. On the other hand, social insurance contributions were significantly higher than in the previous year.

This year the rise of earned income will slow down and the number of hours worked by employees will continue to fall. Wage bill growth will thus be 1.9 per cent. Property income is expected to increase at approximately the same rate and entrepreneurial income a little faster, by 3 per cent. Strong structural growth of pension income will continue and other social benefits will grow faster than the wage bill.

Direct taxes will grow briskly this year, by about 5 per cent, due to a higher central government and municipal tax burden. Taxation will be tightened, among other things, by the solidarity tax, i.e. the central government's new income category for people with higher incomes, and inflation adjustments not being carried out. Collection of the broadcasting tax will also begin this year with the discontinuation of the TV license fee, and this change will be reflected in a tightening of income taxation. Employee pension contributions were not increased for the current year and overall social insurance contributions are expected to increase at the same pace as wage income.

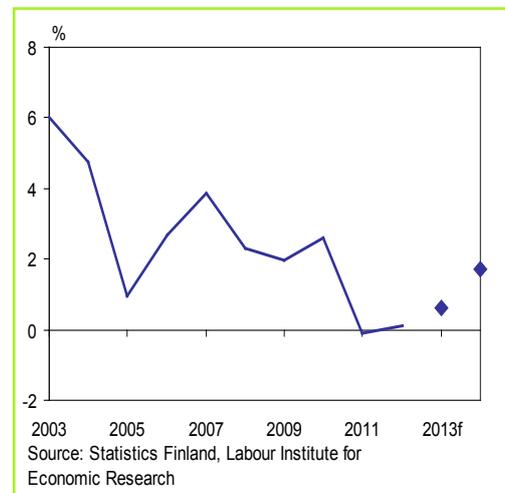
In 2013 total household disposable income is expected to increase by 2.4 per cent in nominal terms. The decline in inflation to 1.8 per cent will boost real purchasing power, which will increase by 0.6 per cent. The real purchasing power of wage earners is expected to weaken in such a way, however, that real disposable income will decrease by approximately one per cent.

Next year the purchasing power of households is projected to strengthen more than this year. The reason behind this is an increase in labour input by approximately one per cent, which will boost the growth of the wage bill. Property and entrepreneurial income are also expected to pick up slightly from the current year. Additionally, the development of pension incomes will continue to bolster the development of total household purchasing power. The development of income taxation and social security contributions will nevertheless have the opposite effect. The growth of purchasing power is weakened by the projected tightening of municipal taxation and the fact that inflation adjustments will not be made in central government income taxation. Employment pension contributions will return to the rising path agreed upon previously. The total nominal disposable income of households is expected to grow by 3.5 per cent and real purchasing power by 1.7 per cent.

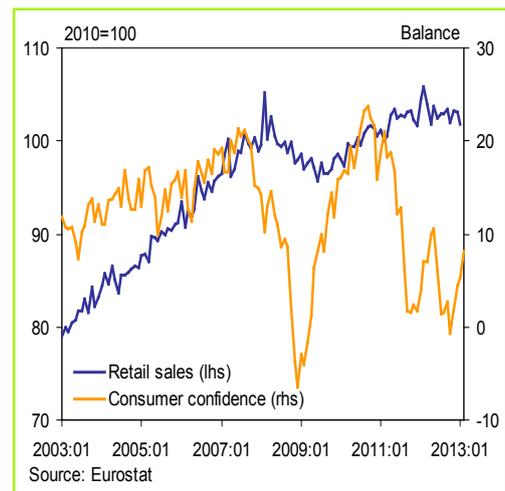
## Private consumption growth slowing down considerably this year

Private consumption has continued to grow despite the fact that real household income growth has stagnated in recent years and consumer

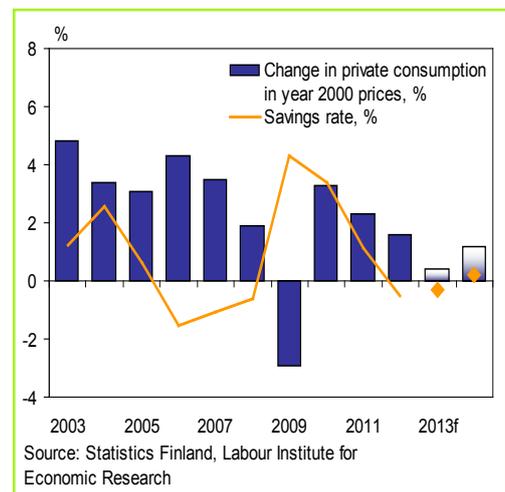
## Change in households' real disposable income 2003–2014



## Consumer confidence and retail sales in Finland 2003:01–2013:02



## Private consumption and savings rate 2003–2014



confidence indicators have fluctuated sharply. Simultaneously, the household savings ratio has dropped by almost five percentage points from 4.3 per cent in 2009 to -0.5 per cent last year. Therefore consumption expenditures were already higher last year than disposable income. Household loans have also increased sharply, and the debt ratio (loans / disposable income) was 119 per cent at the end of last year, having increased by 2.9 percentage points during the year. Low interest rates have in part contributed to the willingness of households to borrow.

Last year private consumption grew by 1.6 per cent, thereby sustaining aggregate demand. Services and semi-durable goods purchases showed the strongest growth. The demand for consumer durables was dampened by the development of car sales, which decreased significantly after a spurt at the beginning of the year due to car tax reforms. The demand for non-durable goods continued to grow at a rate of about one per cent.

Consumer confidence has strengthened somewhat in the beginning of the year. However, the modest growth of the real disposable income of households over several years only enables a very small increase in consumption. Expectations of modest developments in private consumption are also supported by the weakened confidence indicators of the services and the retail trade. Private consumption will only grow by 0.4 per cent this year. Private consumption will pick up next year as household disposable income increases due, among other things, to higher employment rates. Strengthening cyclical trends will contribute particularly to increased demand for consumer durables, such as cars. Next year, private consumption is expected to grow by 1.2 per cent. The savings rate will turn slightly positive during the forecast period.

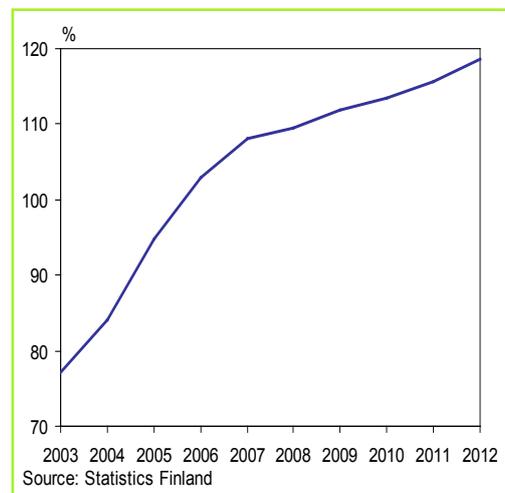
### Central government financial position will improve slowly

The burden of indirect taxation increased at the beginning of this year when all VAT rates were increased by one percentage point. The impact of the fiscal tightening amounts to some EUR 830 million. The motor vehicle tax was also increased at the beginning of the year, the fiscal impact of which was approximately EUR 140 million. Together with the widening of the tax base, these changes are expected to increase the revenue from production and import taxes by 6 per cent this year.

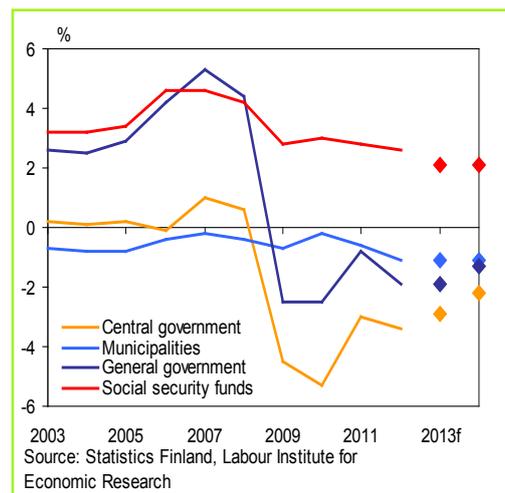
Next year, energy taxes are slated to be increased, the fiscal impact of which will be EUR 117 million. Decisions on changes in VAT rates have not yet been made. Private consumption and car sales are forecast to recover next year to such an extent that the central government's revenue from production and import taxes will climb at a rate of 5 per cent.

At the beginning of 2013 the broadcasting tax went into force with a fiscal impact of 440 million euros. The tax will boost direct central government tax revenue, even though it will have no effect on central government finances as a whole since its proceeds are passed on to the state-owned broadcasting company. Direct tax revenue will also be increased by the fact that there will be no inflation adjustments made in earned income taxation, which will increase effective income tax rates. On the other hand, additional revenue will be collected from solidarity taxes: the income taxes of persons earning more than 100,000 per year have been raised, the tax on inheritances exceeding one million euros has been increased and taxation of large pensions has been tightened to correspond with taxation of wage income. These taxes are estimated to generate revenues of about 100 million euros on an annual basis. A bank tax was also implemented this year. It is expected to generate annual revenues of about EUR 150 million. In addition, in the beginning of March, a broader based and higher transfer tax went into force. There were also changes made having the opposite effect: the taxation of low income persons was

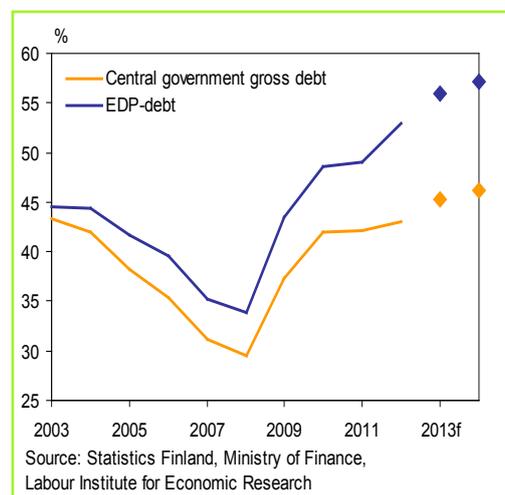
### Household debt ratio 2003–2012



### General government financial surplus as percentage of GDP 2003–2014



### Central government gross debt and general government EDP-debt as percentage of GDP 2003–2014



eased by increasing the deduction for earned income in central government taxation and the basic deduction in municipal taxation, deductions for R & D expenditures were increased and industry's depreciation rights were expanded. As wages and salaries continue to grow slowly, total direct tax revenues are projected to grow by slightly more than 9 per cent this year.

The forecast assumes that the government will adhere to the 2012 decision made in its budget framework negotiations to forego making inflation adjustments in income taxation also in 2014. In addition, a windfall tax designed to cut the benefits of energy companies resulting from emissions trading is due to go into force in 2014. Next year, Finland's economic growth and employment is forecast to recover to such an extent that direct tax revenues are expected to grow at a rate exceeding 7 per cent in 2014.

The cuts aimed at municipalities agreed upon in the budget negotiations mean that the central government's revenue sharing with municipalities will increase by 3.5 per cent this year but next year by only 2 per cent. The central government's consumption expenditure growth will also remain moderate and subside slightly in 2014. The central government's financial position will improve, but still remain weak: the EDP deficit will shrink from last year's 6.7 billion to 5.9 billion euros this year, while next year it is projected to be 4.6 billion euros.

### Municipalities in a difficult situation

The financial situation in many municipalities deteriorated substantially last year, as a result of which local government ended up more than 2 billion in the red last year. This was attributable to the still rapidly growing municipal consumption expenditure, cuts in central government revenue sharing and a collapse in corporate tax revenues.

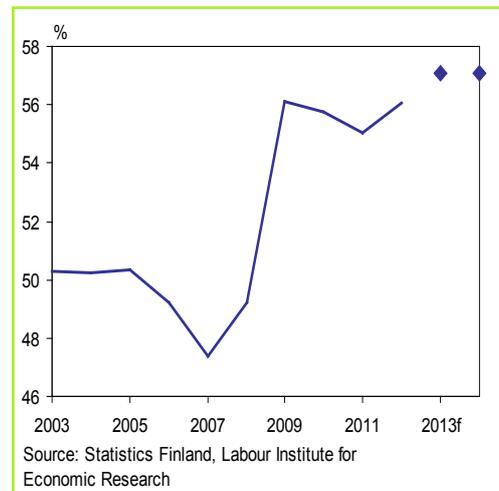
The situation of the municipalities is not looking good in the future either, because the same trends will continue. Tax revenue growth is too slow to be enough to improve the municipalities' financial position despite the fact that they are forecast to raise their municipal tax rates by 0.2 percentage points on average in both forecast years. Property taxes are being raised in many municipalities. Total municipal tax revenues will grow this year by 3.5 and 5 per cent next year. Next year's growth rate being higher than that for this year is attributable to more favourable development of the wage bill. The slow growth in municipalities' transfers received from the central government and continued cost pressures mean that the municipalities' total deficit this year is will be 2.2 billion euros and next year 2.4 billion euros.

The contributions received by employment pension and social security funds will continue to grow, even if the favourable growth will experience a slight slowdown this year due to lower wage bill growth and a freeze on the level of pension contributions. Next year, the growth rate of the wage bill will accelerate, which will spur growth in contributions and bolster the financial position of pension institutions. On the expenditure side, employment pension institutions will remain under pressure as the baby boomers continue to retire. On the other hand, the slowdown of inflation will reduce indexed hikes in pensions slightly next year. Overall, the employment pension institutions and social security funds will remain well in surplus during the forecast period, but the surplus will decline from last year's 5.1 billion euros to 4.3 billion euros this year and next.

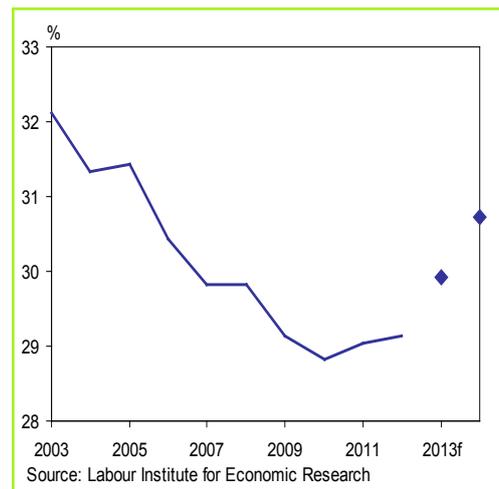
### Financial position of general government will not improve until next year

The increase in VAT and refraining from making inflation adjustments in income taxation will increase taxes as a percentage of GDP to 44.5 per cent,

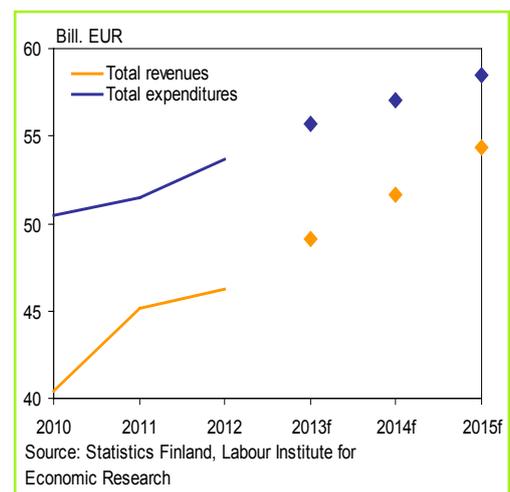
### Public expenditures as percentage of GDP 2003–2014



### Wage earners' income tax rate 2003–2014



### Central government revenues and expenditures 2010–2015



an increase of 0.9 percentage points compared to last year. Next year the tax ratio will continue to rise when it is projected to be 45.1 per cent. The expenditure ratio in turn will increase this year by almost one percentage point from 56.2 to 57.1 per cent, falling next year to 56.8 per cent since next year's nominal GDP will already be growing faster and public spending cuts will take place mainly toward the end of the government's term in office.

The central government's financial position will improve this year, but this will be offset by the weakening financial position of employment pension institutions. Thus, the general government EDP deficit will remain this year at last year's level and it is forecast to be 1.9 per cent of GDP. Next year, the financial position will improve and the EDP deficit will be 1.3 per cent of GDP. The government debt ratio will increase considerably during the forecast period. It is nevertheless projected to start declining in 2015.

### Tightening of fiscal policy – a risk to Finnish economic policy

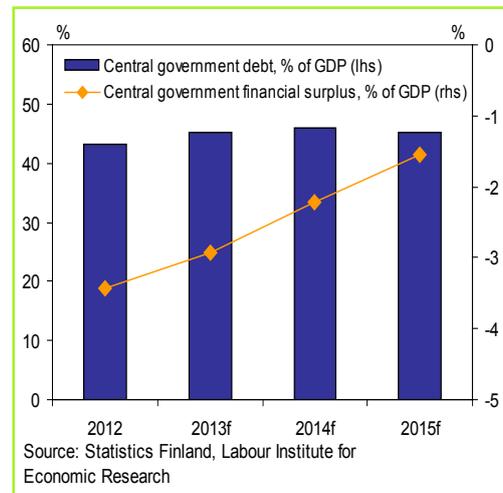
Finnish fiscal policy will tighten this year with respect to taxation. The tightening of fiscal policy will remain comparably modest, because government spending has been cut only slightly. It appears that the central government will continue to run a deficit exceeding one per cent of GDP until the end of the parliamentary term without new fiscal policy measures. Similarly, the central government debt to GDP ratio will still rise next year. In 2015, it can be expected to start declining. The objectives of the government's programme will thus not be fulfilled with respect to the budget deficit.

The recent experiences of the European crisis countries regarding the implementation of austerity measures provide a warning about the dangers of a significant tightening of fiscal policy. The extent to which fiscal belt-tightening is transmitted to the rest of the economy is called the fiscal policy multiplier. If the economy is in a recession and the austerity measures are large in scale, the multiplier effect is large. Trying to reach objectives stipulated in its programme at any cost can result in a weakening of the tax base and the economy falling back into recession. For this reason the belt-tightening measures should not be large-scale. Therefore, we may have to accept the idea that the central government's deficit relative to GDP might be greater than one per cent in 2015.

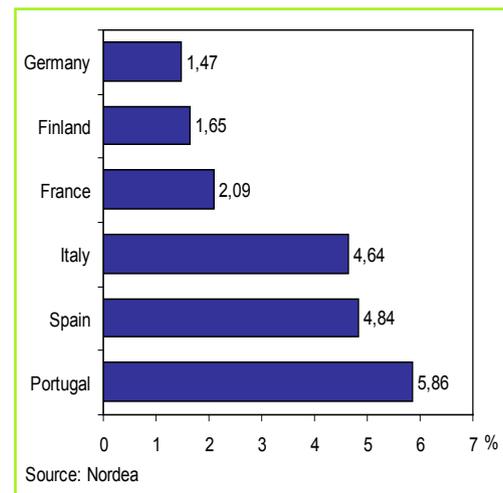
There are no patent recipes to fix the structural problems facing the economy in the short run. The lowering of the company tax rate like Sweden to 22 per cent may have some positive effects, but they are not large-scale. Countries are now forced to fight for foreign investment with the limited means they have at hand. This kind of tax competition between EU countries, however, is an unfortunate development from the standpoint of the region as a whole. A possible lowering of the corporate tax rate should be linked to a change in the tax structure where the focal point of corporate and capital taxation should be shifted from the corporation taxation to capital income taxation on a personal level. The tax cut could be financed by tightening the taxation of dividends and by eliminating various forms of business tax relief.

Finnish municipalities have not been able to produce or acquire sufficiently high-quality basic health services to meet the needs of citizens. The availability of services has also been a problem. Significant cost savings can be achieved for the whole economy by carrying out proposals currently being worked on for municipal, social welfare and health care reforms. At the same time the quality and availability of these services can be improved. The fact that sufficiently large municipalities might not be formed should not pose an obstacle to this development. The supervisory role of the central government should be emphasized, at least regarding the creation of the

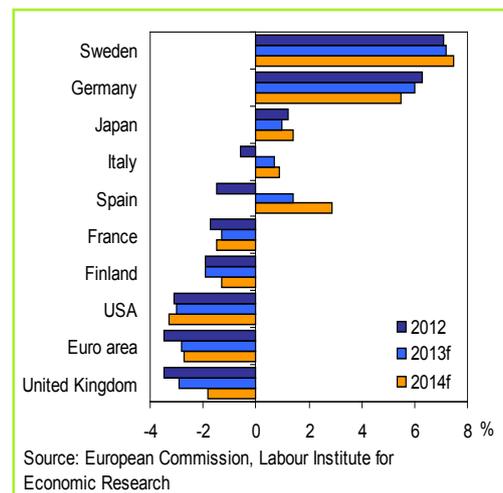
### Central government gross debt and net lending 2012–2015



### 10-year government bonds yields in March 14, 2013



### Public sector deficit-to-GDP ratio in 2012–2014

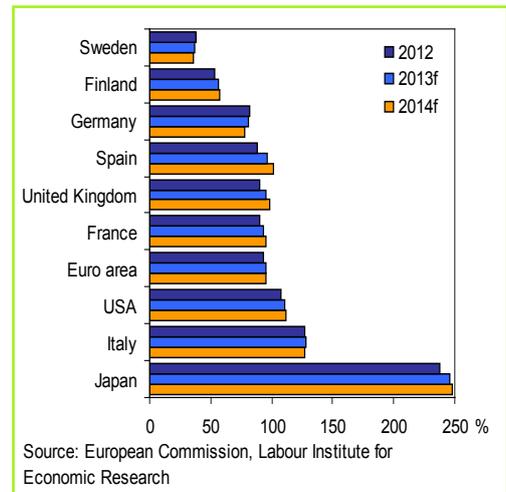


national patient- and customer-database system. If municipal reforms get bogged down, zoning may be deficient and housing production inadequate, which would also dampen the development of urban regions.

Filling the vacuum created by the contraction of Nokia and the paper industry will require the creation of new small businesses and expansion of current small and medium-sized businesses. Business policy should ensure that there are no funding bottlenecks hindering the launch and expansion of businesses. The focus of public R&D support should shift to financing of small and medium-sized enterprises' development projects.

Moderation is needed in the new wage settlement for 2014, which may possibly extend to 2015. The wage agreement should strengthen Finland's international price competitiveness. It appears that it is possible to find a solution that also keeps the real purchasing power of wages unchanged. This opportunity is created by the fact that wage hikes in our main competitors Sweden and Germany clearly exceed the rate of inflation. ■

**Public debt relative to GDP 2012–2014**



**EU's fiscal policy**

In 2009 European countries reacted to the outbreak of the financial crisis by easing their fiscal policies. Italy was the only country where the economy is not stimulated via fiscal policy (Figure 1). The change in the fiscal policy stance is estimated here based on the European Commission's spring forecasts. It is assumed that difference between the estimate for the current and the previous years' cyclically adjusted net lending reflects the Commission's implicit estimate of how much the change in the fiscal policy stance affects the cyclically-adjusted net lending.

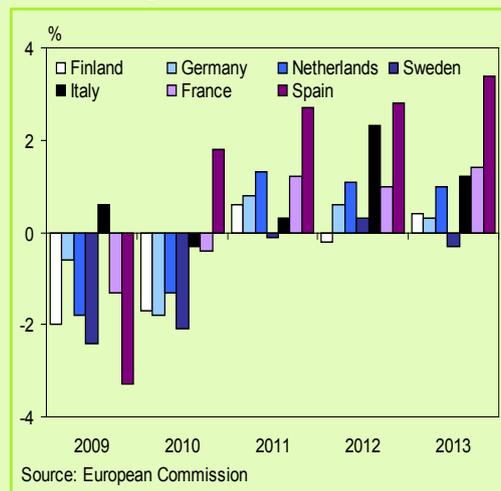
Figure 1 shows how fiscal policy has become clearly more restrictive in many countries during the period 2011–2012. In the case of Finland, Sweden and Germany fiscal policy has not, however, been tightened appreciably according to Figure 1. It has become clear that interest rates rose to artificially high levels in the capital markets in the countries with the highest debts and deficits especially between the summer of 2011 and the summer of 2012.<sup>1</sup> The capital market panic prompted economic policy decision makers to implement a change of direction, which later turned out to be exaggerated. A change in the fiscal policy stance – for example, tightening – is transmitted to the rest of the economy through the multiplier mechanism. If the multiplier is greater than one, a spending cut of a certain amount (or equivalent tax hike), reduces total production more than the original spending cut. According to Blanchard and Leigh (2013)<sup>2</sup>, the fiscal policy multipliers during the crisis years of 2008–2009 were greater than one, at least higher than expected. They have subsequently declined somewhat. It should also be noted that the current low interest rates, which prevent the lowering of interest rates as a consequence of the tightening of fiscal policy and recession in the real economy, increase the fiscal multiplier.

The adjacent figure above clearly shows how the recession in the real economy has been associated with tight fiscal policies. Here attention is drawn in particular to the Netherlands, where fiscal policy changes including spending cut packages one after another

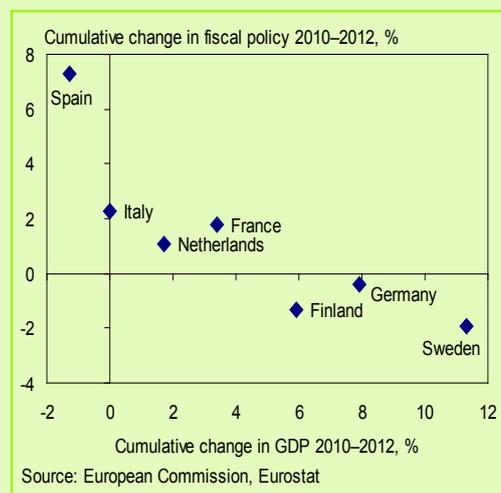
<sup>1</sup> De Grauwe, P. and Ji, Y. (2013), *Panic-driven austerity in the eurozone and its implications*, Vox, February 2011, www.voxeu.org.

<sup>2</sup> Blanchard, O. and Leigh, D. (2013), *Growth forecasts and fiscal multipliers*, IMF Working Paper WP/13/1.

**Figure 1. Impact of change in fiscal policy on public sector net lending 2009–2013**



**Figure 2. Cumulative changes\* in assorted countries' fiscal policy and GDP 2010–2012**



\* Positive figure = tightening.

have eroded the tax base and weakened the real economy without the public finances improving as expected. It is said that in the case of the Netherlands the effect of the fiscal multiplier would be increased by the low household savings rate. The fact that the funding of pensions is even greater than the GDP has reduced the need of households to save for the future. But the consequently low savings rate has made household consumption increasingly more dependent on disposable income, which in turn boosts the fiscal multiplier.<sup>3</sup> In this respect, the situation in Finland is similar. A sharp tightening right now when interest rates are low and low household saving constrains the possibilities to smoothen out consumption over time would increase the fiscal multiplier effect in Finland.

Based on Figures 1 and 2, the Finnish fiscal policy was not restrictive in the years 2010–2012. We gauge Finland's fiscal policy stance separately for the fiscal impact of tax decisions and for developments in the public sector's total consumption and investment expenditure. If the change in public nominal spending is smaller than the change in nominal GDP, fiscal policy is interpreted to be restrictive.

**Table 1. Impact of Finnish fiscal policy in 2010–2012**

	2010	2011	2012
Public spending, % / GDP	2.8	1.4	-2.0
Taxation, % / GDP	0.4	0.6	0.5
* Positive figure = tightening.			

According to Table 1, Finland's fiscal policy has been equally restrictive during the years 2010–2012 with respect to taxes. As regards expenditure, this effect is more difficult to determine, because the selected expenditure rule is always to some extent arbitrary. It is clear, however, that the policy was restrictive in terms of public spending during 2010 – 2011, while it was expansionary last year.

The EU's Stability and Growth Pact ratified in 1997 requires euro area countries to keep their annual budget deficits below 3 per cent of GDP and their public debt (the so-called EDP debt, originally EMU debt) below than 60 per cent of GDP. Many euro countries do not even now meet these criteria. Finland and Estonia are among the few euro countries which abide by the goals of the Maastricht Treaty. The eurozone countries have subsequently agreed on specific timetables (the so-called sixpack agreement), under which, among other things, the central government debt will be reduced below 60 per cent of GDP.

At the beginning of this year, a new agreement (known as the Fiscal Compact) went into force requiring that the euro countries' public sector structural deficit is no more than 0.5 per cent of GDP – or a maximum of one per cent if the EDP debt of the country in question is below 60 per cent GDP. This latter criterion is valid in the case of Finland. It should be noted, however, that countries may set more

<sup>3</sup> *Mind the fiscal speed limit, February 2013, Economic Research Department, Rabobank.*

demanding targets for themselves regarding the structural deficit. In its stability programmes update (February 4, 2010) Finland set a medium-term target of 0.5 per cent for its structural surplus relative to GDP.

The structural surplus of the public sector is nearly the same as the cyclically adjusted balance. It is determined on the basis of national estimates of potential output (and thus the potential tax base). The structural net lending of the public sector is very difficult to estimate when the fiscal policy for the next fiscal year is approved. The root cause of this difficulty is the fact that at that time it is still not known to what extent the development of GDP is affected by short-term cyclical shocks and to what extent they are attributable to long-term structural shocks.

Figure 3 shows how cyclically the European Commission's assessment of Finland's structural net lending has developed. It has followed the real net lending fairly cyclically. If the Commission's assessment would have been valid, the structurally adjusted deficit would have been flat or it would have been declining or rising in a trend-wise manner. If fiscal policy is measured on the basis of the prevailing assessment of the structural net lending, there is a risk that the policy will become increasingly pro-cyclical and thus augment cyclical fluctuations. ■

**Figure 3. Finnish public sector's structural and real net lending (excl. impact of fiscal policy) 2008–2013**

