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**Economic Forecast  
2010–2011**

## **Sharp turn in Finland's economic development**

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**Economic Forecast 2010–2011**

# Sharp turn in Finland's economic development

*Finland's GDP growth picked up significantly in the second quarter of this year despite the persistent uncertainty prevailing in the international economy. While total production still fell in the first quarter of this year, according to the monthly GDP Indicator it increased in the second quarter by more than three per cent from the beginning of the year and about five per cent year-on-year. The jump will affect the figures depicting the annual change in production until the first quarter of next year, even if growth slows down from this point onwards. The Labour Institute for Economic Research anticipates that Finland's economic growth will remain moderate. Gross domestic product will grow by 3.7 per cent this year, while the spring forecast (April 8) was 3 per cent. Next year GDP growth is forecast to be 3.7 per cent, i.e. only 0.2 percentage points higher than last spring's forecast.*

Although uncertainty about the international economy has subsided in recent months, the downside risks are still greater than normal. Recent economic developments have been characterized by wide swings in the sentiment prevailing in the equity and financial markets. In addition to international economic uncertainty, unusual weather conditions such as severe winter conditions and the volcanic eruption in Iceland as well as prolonged and difficult labour disputes have had an impact on Finland's total production.

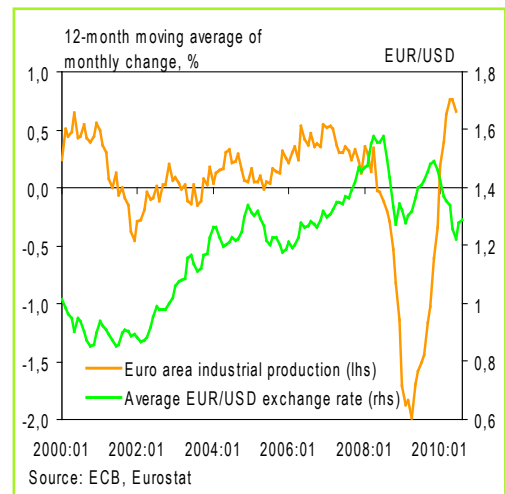
The hardest challenge for economic development was the financial market crisis in May, when the status of Greece and some other European countries deteriorated sharply in the financial markets. At times it seemed that the crisis would affect investment and the real economy. Thanks to actions taken by Euro countries and the ECB the crisis was nevertheless averted, but for a prolonged time it weakened the euro's external value. The depreciation of the euro has nonetheless boosted Finland's exports to the extent that the net effect of the overall crisis on the economy has so far been positive rather than negative.

## European economic growth increasingly divergent

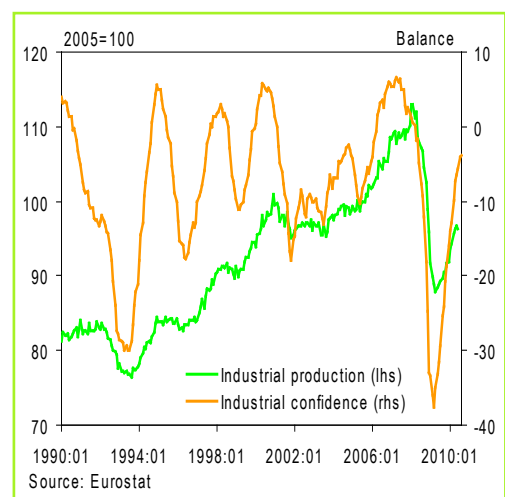
The economy of the euro zone and the EU as a whole grew by one per cent in the second quarter of this year compared to the first quarter, which is already boosting this year's European growth figures closer to two per cent. For the time being European growth has been driven by foreign trade. The signs of a pick-up in domestic demand in the EU region are nevertheless becoming clearer. In the second quarter of this year private consumption already increased by 0.5 per cent from the previous quarter and private investment increased even more substantially. For instance, based on figures from June it appears that construction has accelerated extensively in the entire EU region.

It is clear that the domestic demand of EU countries will continue to strengthen in the future. The outlook for private consumption is bolstered by the fact that in several countries the labour market situation has already improved and the unemployment rate is falling. This view is also supported by consumer confidence and the outlook for the retail trade in the EU region in July-August. The growth of private consumption will also be rather strong in the latter half of this year in Germany and

**Euro area industrial production and EUR vs. USD exchange rate 2000:01–2010:08**



**Industrial confidence and industrial production in euro area 1990:01–2010:08**



other rather swiftly recovering countries. Next year growth in the EU region will indeed be even more dependent on the recovery of domestic demand. However, the phasing out of fiscal stimulus will nevertheless weaken this development. The impact of expanding private consumption and investment is more dominant, however, than the effects of the waning fiscal policy stimulus. GDP in the EU region is expected to increase by 1.8 per cent this year and 2.1 per cent next year.

Different countries in the EU region have developed rather divergently. While output in some of the southern countries of the euro zone – such as France, Spain, Portugal and Greece – decreased distinctly less than the euro zone or entire EU average, the economic growth of these countries has in turn fallen behind the rest of Europe in the beginning of this year. Germany, Sweden, Estonia and Slovakia have been the fastest to recover. Finland, Holland and Belgium are also among this group of countries. It looks as though the countries with the rapidest growth at present have suffered from the temporary collapse of demand for investment goods and markets of developing countries. As exports to Asia, South America and the EU's neighbouring regions such as Turkey and Russia are once again picking up, these countries are recovering rapidly thanks to their strong exports.

US economic growth is slowing down again during the course of this year, which raises the question of whether this will impact more widely on the world economy and Europe. Based on trade statistics from the beginning of the year, it can be concluded that, for instance, trade from the EU to the US has grown significantly more slowly than to other foreign countries. Even the absolute increase of EU exports to China in January-May was EUR 12.8 billion in comparison to the previous year, which is distinctly more than the EUR 7.5 billion growth of exports to the US. EU exports to Turkey alone increased by almost as much as to the US.

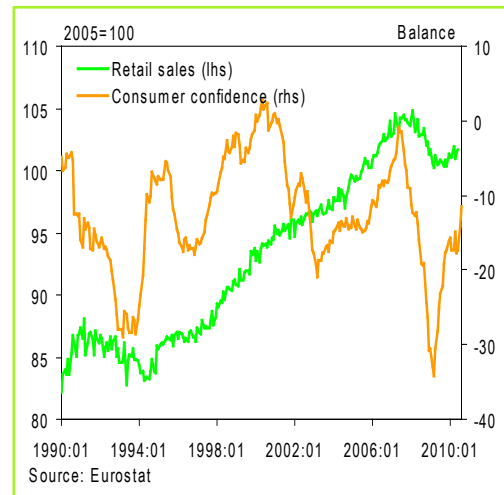
Based on developments in the beginning of this year, it seems that the acceleration of economic growth in the EU has been fuelled primarily by the growth of exports to Asia and South America. It does indeed look as though the direct demand influences brought about by US growth decelerating in addition to the effects realized through Asia will not yet be enough to derail other countries into a world of extremely slow growth.

Moreover, it does not appear that the slackening of US growth would be leading to such a financial market disruption and a weakening of banks' lending ability that it would spawn a new downturn in investment. This is due to the fact that although the possibilities for monetary policy to stimulate the economy are relatively modest at the present low level of central banks' interest rates, the central banks still have rather extraordinary schemes by which to prevent the outbreak of a new financial crisis. It is exceptional that banks have taken on the tasks of private banks and other such financial institutions for themselves. For instance, the ECB has eased the terms of short-term central bank funding, e.g. regarding terms for collateral, and has started to grant long-term funding to banks and even distraught countries in the euro zone. These exceptional schemes will continue at least until the beginning of next year.

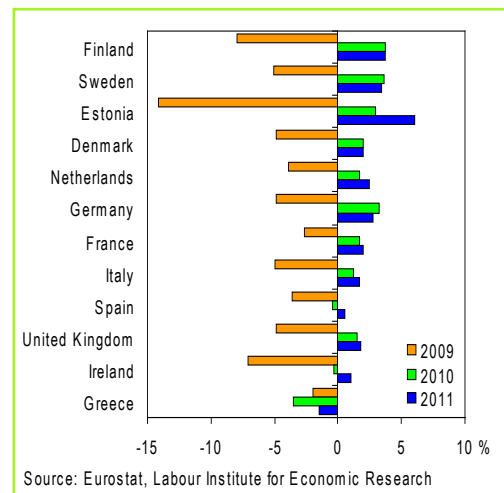
### Unpredictable changes in euro exchange rate are still a risk factor for real economy

The possible deceleration of US growth may also affect Europe through the weakening of the exchange rate of the euro against the dollar. In the course of 2008, before the collapse of the financial markets, it was already evident how easily the growth of the area could decelerate due to the euro strengt-

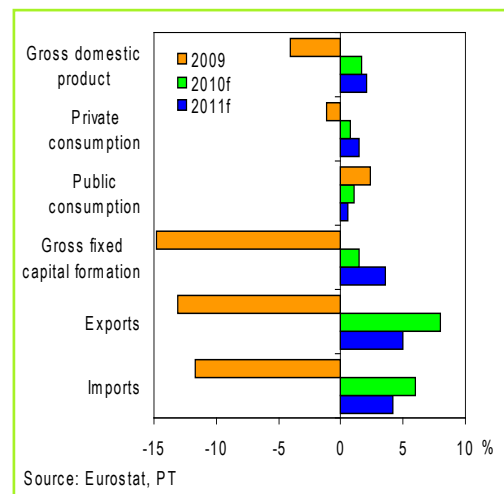
### Consumer confidence and retail sales in euro area 1990:01–2010:08



### GDP growth rates in 2010 and 2011



### Eurozone economic growth 2009–2011



hening excessively. Therefore it is obvious that if US growth remains slow and European growth becomes stronger and proves to be relatively stable, the euro will once again begin to strengthen against the US dollar. An opposite tendency, however, is being brought about by the non-unified nature of the euro zone and the mistrust of financiers in the ability of Greece and some other euro countries' governments and banks to cope with their debt.

**Table 1. International economy**

| GDP growth (%) | 2009 | 2010f | 2011f |
|----------------|------|-------|-------|
| United States  | -2.6 | 2.7   | 2.5   |
| Eur-16         | -4.1 | 1.7   | 2.1   |
| Germany        | -4.9 | 3.2   | 2.8   |
| France         | -2.6 | 1.7   | 2.0   |
| Italy          | -5.0 | 1.2   | 1.7   |
| EU27           | -4.3 | 1.8   | 2.1   |
| Sweden         | -5.1 | 3.6   | 3.4   |
| United Kingdom | -4.9 | 1.5   | 1.8   |
| Japan          | -5.0 | 2.0   | 2.0   |
| Russia         | -7.9 | 5.0   | 5.0   |
| China          | 8.7  | 10.0  | 9.0   |

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

In any case it would be very unfavourable from Europe's standpoint if US growth decelerating was linked with the dollar's euro exchange rate weakening without the devaluation of the dollar pegged against the currencies of China and certain other Asian countries. For instance, while the direct impact of the deceleration of US growth on demand is likely to remain small, it is still possible that the effects realized via the currency market may prove significant and in the worst case hinder European growth at least in the short term.

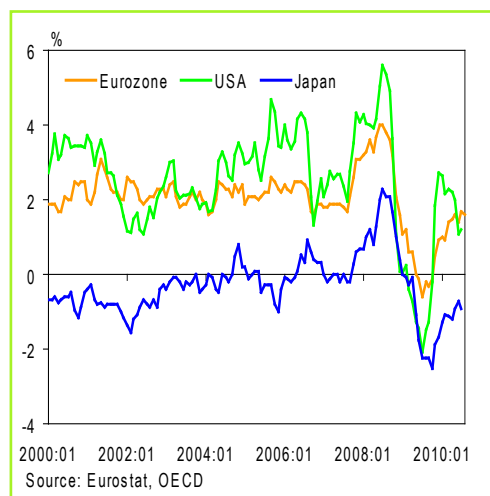
The recovery of European countries is also threatened by the relatively abrupt turnaround in fiscal policy from expansionary to slightly contractionary already in 2011. Fiscal policy's change of direction would be significantly more justified if the growth of the region's private consumption and investments were on more stable ground than at present and real output was not so far below potential output as it still is during this year.

The European Central Bank will most likely continue until the beginning of next year extraordinary measures via which the funding of the region's banks and the availability of financing to the governments in the direst situations is safeguarded through financial market interventions of the central bank. Inflation in the euro zone will remain under 2 per cent still in 2011 and the possible tightening of the ECB's monetary policy will be postponed to the year 2012. Therefore The Labour Institute's interest rate forecast assumes that reference rates will not yet be raised during 2011. ECB decisions are indirectly influenced by the weakening of the US economic outlook and also by the Federal Reserve keeping its interest rates unchanged next year.

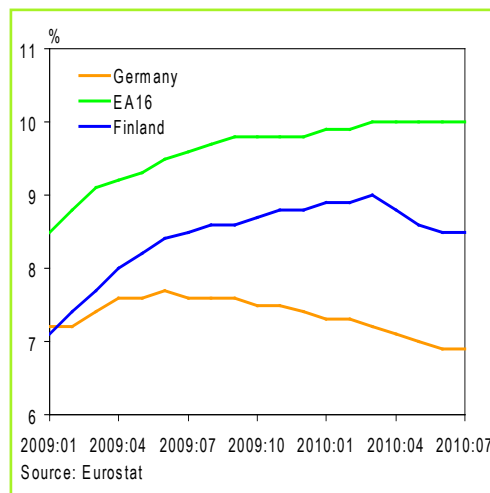
### US economic growth only 2.5 per cent next year

In the first quarter of this year the total production of the US still increased by 0.9 per cent from the previous quarter. Growth was boosted especially by inventory investments. In the second quarter growth decelerated to 0.4 per cent. At this point the effects of the change brought on by stockbuilding weakened, while the growth enhancing effects of public demand strengthened. The net impact of foreign trade

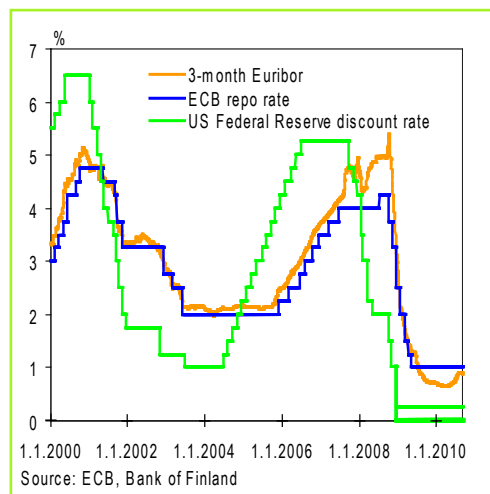
### Inflation in assorted countries 2000:01–2010:08



### Unemployment in assorted countries 2009:01–2010:07



### Short-term interest rates 3.1.2000–3.9.2010





was already distinctly negative, which has in part been influenced by the dollar strengthening in relation to the euro. Private consumption has been rather anaemic in bolstering economic growth and its impact is not anticipated to strengthen appreciably as the labour market situation of the US has continued to deteriorate.

It appears that the US growth rate will still remain rather sluggish in the latter half of this year, accelerating to slightly less than 3 per cent in the latter half of next year. A new turn for the worst has been brought about by the discontinuation of central government tax relief for home buyers. Next year the boost from fiscal policy to total production will also begin to weaken in other respects. All in all GDP will increase in the US by 2.7 per cent this year and 2.5 per cent next year. The intra-year acceleration of the annual growth rate in the latter half of next year is facilitated by the expected strengthening of the labour market situation in addition to strengthening of export markets in Europe and Asia.

The US central government deficit will increase this year to about 10 per cent of GDP. The huge central government deficit and debt, which already almost 100 per cent of GDP, will restrict opportunities to boost economic growth with fiscal policy in the coming years. In turn, the recession trimmed the deficits in the current account and balance of trade significantly. The budding growth is threatening, however, to return the deficits back to their pre-slump levels. It is clear that this trend will also curb US economic growth in the medium term.

### Growth of developing economies still swift

China's GDP growth rate is accelerating to 10 per cent this year. The growth rate of industrial output has decelerated in the last few months from slightly less than 20 per cent to 13-14 per cent, but it should be noted that the growth of the retail trade has risen to about 18 per cent this year. Private consumption is also finally starting to speed up in China. So far domestic demand has been bolstered by investments. The investment rate has remained at about 25 per cent also this year. The Chinese economy will grow at a rate of about 9 per cent next year, i.e. only slightly slower than this year.

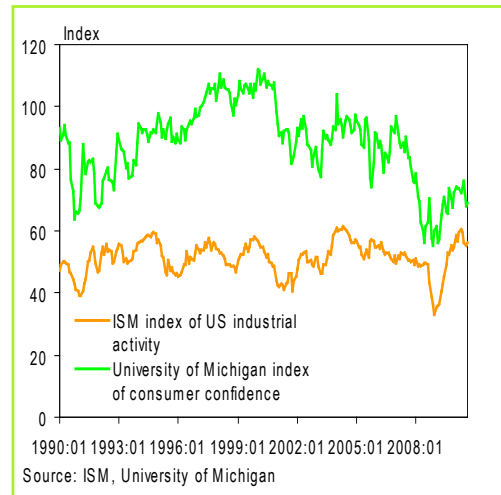
Except for Japan, the economic growth of the developed countries of Asia will remain relatively fast, averaging 6 per cent this year and 5 per cent next year. In addition to China, growth will be rather swift in other Asian developing countries such as India, Indonesia and Vietnam. Despite the deceleration of economic growth in North America, total production will increase in most South American countries. Brazilian growth will be 5 per cent this year and 7 per cent next year.

The Russian economy has recovered this year from its rather deep 8 per cent downturn in output. Their economy will grow by 5 per cent both this and next year. Growth has been driven largely by foreign trade. Still in the first half of this year investment was even lower than last year and private consumption was up by only about a percentage point from last year. However, both investment and private consumption are expected to recover already in the latter half of this year. Next year the growth rate will level off. Oil prices remaining at least at this year's level and a steep increase in natural gas prices will ensure that the income formation of the economy will stay positive in the next few years.

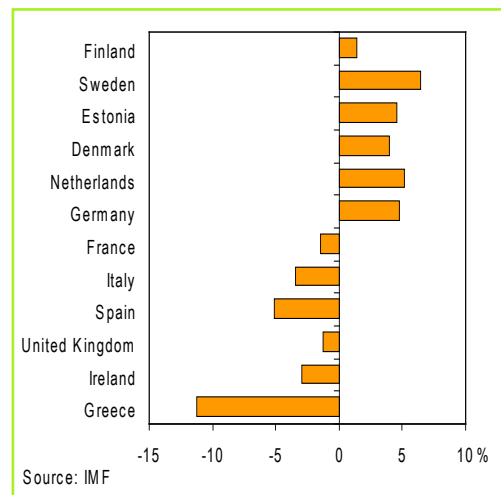
### Finnish exports returning to pre-recession level

Finnish exports fell by 20.3 per cent in 2009. The abrupt collapse stems from our exports' emphasis on investment goods and the development

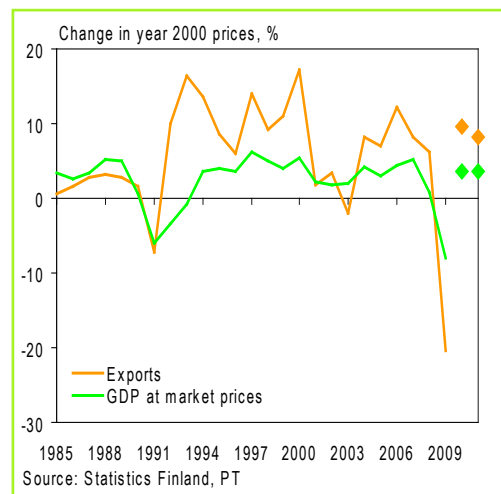
### US economic indicators 1990:01-2010:08



### Current account deficit relative to GDP in 2009



### Changes in total production and exports in 1985-2011



of our export markets themselves. The size of the export markets can be evaluated based on Finnish export shares and the GDP of the destination countries. Evaluated in this manner these markets contracted by 4.1 per cent in 2009, i.e. by the same magnitude as the GDP of EU countries, but far more than the output of the entire world, which only fell by 0.6 per cent last year. Finnish export markets shrank, however, more than the average export markets of an EU country. This difference was due to the exceptionally deep recession of countries surrounding the Baltic Sea and the importance of these markets to Finnish exports.

**Table 2. Demand and supply**

|                               | 2009<br>Bill. € | 2009<br>Percentage change in<br>volume (%) | 2010f | 2011f |
|-------------------------------|-----------------|--|-------|-------|
| Gross Domestic Product        | 171.3           | -8.0                                       | 3.7   | 3.7   |
| Imports                       | 59.8            | -18.1                                      | 8.3   | 7.2   |
| Total supply                  | 231.1           | -11.1                                      | 4.9   | 4.7   |
| Exports                       | 64.0            | -20.3                                      | 9.6   | 8.2   |
| Consumption                   | 137.0           | -1.0                                       | 2.3   | 1.8   |
| private                       | 94.0            | -1.9                                       | 3.0   | 2.5   |
| public                        | 43.0            | 1.2  | 0.7   | 0.2   |
| Investment                    | 33.4            | -14.7                                      | 1.8   | 7.3   |
| private                       | 28.6            | -17.4                                      | 2.4   | 9.0   |
| public                        | 4.8             | 6.1  | -1.9  | -2.5  |
| Change in stocks <sup>1</sup> | -3.4            | -3.6                                       | 0.9   | 0.3   |
| Total demand                  | 231.1           | -11.1                                      | 4.9   | 4.7   |

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

Source: Statistics Finland, Labour Institute for Economic Research

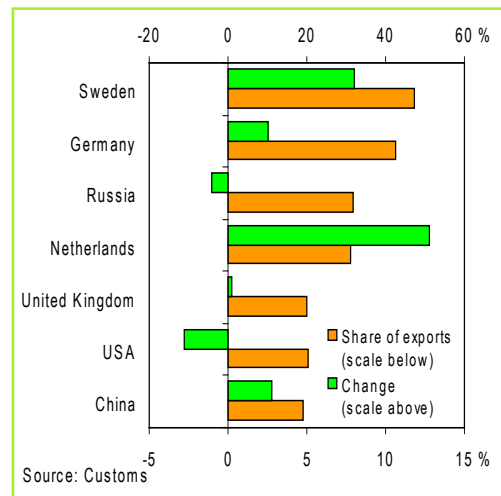
This year and next year the Finnish export market will increase by 3.1 per cent and 3.7 per cent, respectively, and therefore distinctly faster than the output of the EU region. The growth of the export market is sustained by the swift growth of developing economies and above all the rather quick recovery of the Baltic countries from the recession. Finnish exports are also given a push by the change about to come about in the change in the growth structure of our most important export countries towards a higher investment rate.

As PT forecasted already in autumn of 2009, Finland's exports and economy began to pull out of the slump in tandem with the growth of the output of the process industry and the export of its products. Accordingly the volume of exports of the forest industry in the beginning of 2010 was already up by 24 per cent from the previous year. The exports of basic metals grew even more than this, and the exports of the chemical industry are also achieving brisk growth. The exports of the machinery and equipment industry have showed a clear increase in the second quarter of this year. The exports of the electro-technical industry are not anticipated to speed up until the latter half of this year.

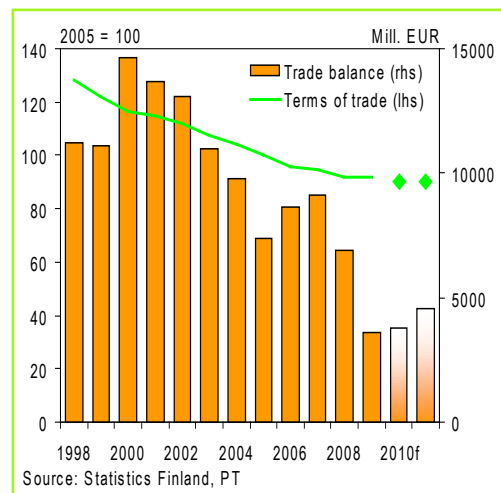
Last year the exports of both goods and services fell in terms of both value and volume more than imports so that even the surplus of goods and services decreased. This year the trend is already the opposite: exports are growing more than imports and the balance of trade is growing. The Labour Institute for Economic Research forecasts that the volume of exports of goods and services will increase by 9.6 per cent this year and 8.2 per cent next year, whereas imports will increase by 8.3 per cent this year and 7.2 per cent next year. Both years the terms of trade will weaken somewhat, but despite that the balance of trade and services will improve both years.

In the beginning of the year 2010 Finnish exports to EU countries grew at a rate of 10 per cent. These countries account for some 58 per

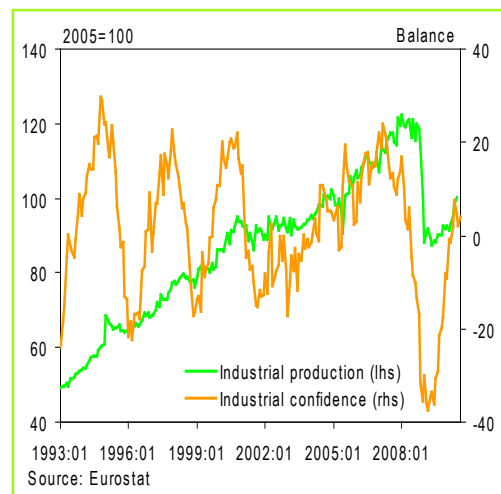
### Finnish merchandise exports in January–June 2010



### Terms of trade and trade balance 1998–2011



### Industrial confidence and industrial production in Finland 1993:01–2010:08



cent of Finland's total exports. Our exports to East Asia increased just as quickly. Exports to other relatively important export markets, such as Russia, Europe outside the EU and North America, performed much more weakly than this. Of the individual export countries Sweden has become one of Finland's most important export destinations. Germany has also retained its key, but Holland becoming one of Finland's most important export destinations is noteworthy. It appears that towards the end of this year and particularly next year China's and Russia's share of Finnish exports will increase when export deliveries of the machinery and equipment industry build momentum. The same is also true for South America, the exports to which were still falling in the beginning of the year.

### Heavy industry once again engine of growth

It was already anticipated in the Labour Institute's sector-specific forecast of last November that the output of Finnish industry and services geared toward manufacturing activities would increase briskly this year. At that point it was forecast that the manufacturing industry and manufacturing-related services would grow by slightly less than 6 per cent this year and about 7 per cent next year. Now it appears that these forecasts are coming true as overall output has recovered in several sectors after the weak growth in the first quarter of this year.

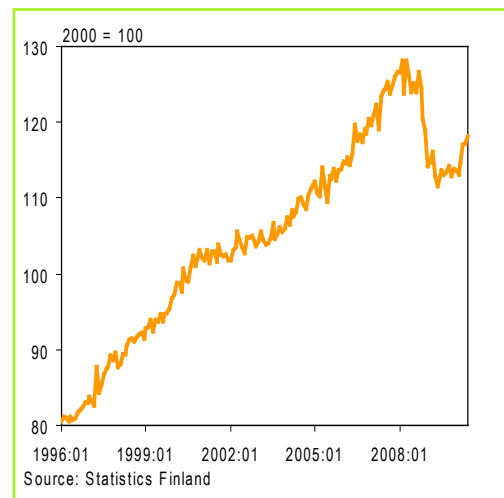
As we already anticipated last year, growth got under way and has been the quickest in the forest industry, manufacturing of basic metals and the chemical industry. Manufacturing of basic metals was up by 60 per cent in June in comparison to the same month last year. The growth of forest industry output will already level out during this year, and next year growth will be especially dependent on the machinery and equipment industry and the electro-technical industry. The fact that the output of the machinery and equipment industry has already distinctly recovered during this year can be regarded as surprising. The outlook for this sector is nevertheless overshadowed by the shipyard industry drifting into a crisis, which is raising unemployment sharply in the Turku region. All in all the manufacturing industry will grow by about 7 per cent this year and next. In business related services growth will be considerably faster next year than this year. Boosted by the upswing in industry, growth in transport services will likewise pick up to about 3 per cent.

The high growth figures of industry are partly attributable to the weakness of last year, i.e. the figures used as the basis for comparison last year are very low. In personal services growth will continue to be relatively slow, although the improvement of the labour market situation has raised the growth expectation of this sector. Next year's tightening of the fiscal policy, which will cut the purchasing power of households, will nevertheless dampen the growth of this sector. Construction will continue to accelerate while industrial, office and retail construction will also begin to recover after hitting rock bottom. Until now the sharp upturn in construction has been fuelled by the increase of housing construction.

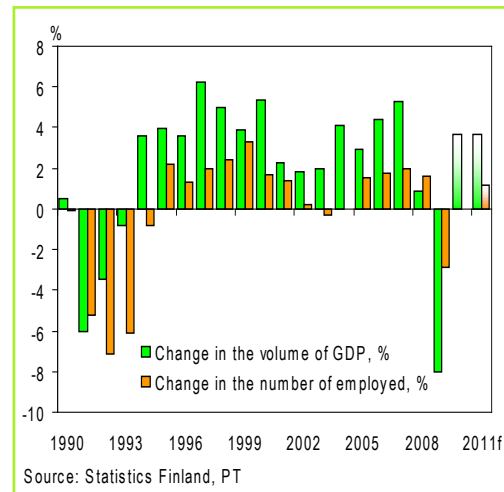
### Housing construction picking up again

Investment continued to decrease in the first quarter of this year. The fall was steep in retail and office construction. Machinery and equipment investment was also in a clear descent. Central government stimulus measures were not apparent in civil engineering construction, which plunged by almost 19 per cent on an annual basis. Housing construction, on the other hand, already showed signs of picking up in the beginning of this year and its pace has only accelerated in the

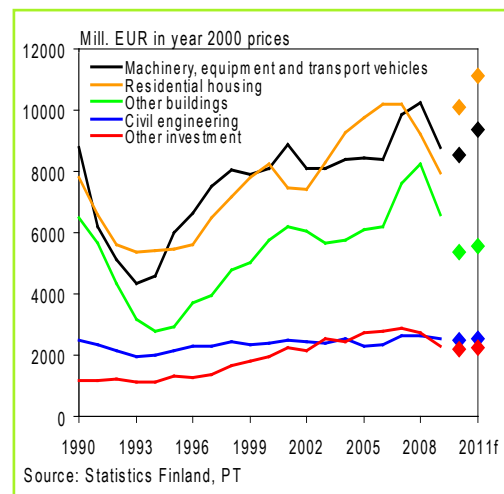
### Trend indicator of output 1996:01–2010:06



### GDP and employment 1990–2011



### Investments 1990–2011



last few months: the construction of new housing was up by almost 80 per cent in May compared to the level at the same time last year. The growth of housing construction is indeed so robust this year that by itself it will propel the growth figure for investment into positive figures.

Other investments, on the other hand, will continue to fall: the level of non-residential construction in particular will fall this year distinctly below last year's level. Civil engineering construction is expected to pick up towards the end of this year when central government-funded projects gain momentum, but this will not be enough to make the growth figure for the entire year positive. Machinery and equipment investment will continue to decrease as businesses settle for increasing their capacity utilization rates instead of making new investments.

Private investment as a whole is predicted to increase by 2.4 per cent this year. Next year cyclical trends will spawn non-residential building construction so that private investment is predicted to increase by a total of 9.0 per cent. The rigorous growth in housing construction will begin to subside next year, which is partly due to the phasing out of central government stimulatory measures. Construction activity will be boosted by non-residential construction, which will begin to recover slowly from its low starting level. Substantial growth is predicted for machinery and equipment investment, which will begin to expand next year by about 10 per cent after two years of steep decline.

### Employment staging modest upswing next year

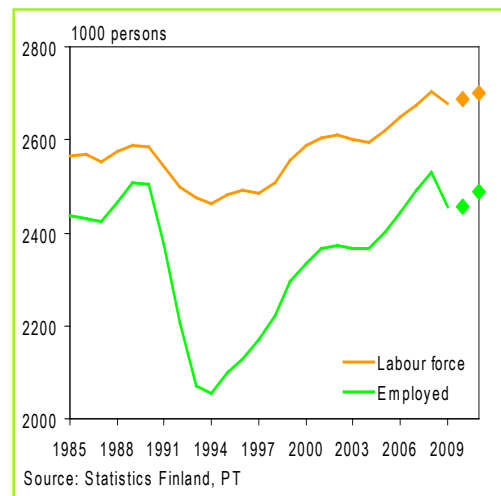
The downturn was clearly visible in last year's employment figures and still in the first few months of this year. The number of employed persons decreased in comparison with figures from the previous year until June, although changes in employment in April, May and June were quite small in comparison to figures from last year. For the first time since January 2009, employment increased in July 2010 in comparison to figures from a year ago. We predict that in the last few months of 2010 employment will increase slightly, but on average employment will remain unchanged in comparison to 2009. In 2011 employment will begin a more discernable ascent. The average annual growth of employment in 2011 is forecast to be 1.1 per cent, i.e. about 30 000 jobs.

During a recession the labour force participation rate typically decreases, because those left without jobs exit the labour force when they quit actively seeking a job. That was the case also this time. During the course of 2009 the labour force participation rate fell significantly: on average it was 66.5 per cent, i.e. a percentage point lower than in 2008. The slump was more clearly reflected in the labour force participation rate of men than women. In July of this year the labour force participation rate was 0.2 percentage points higher than a year ago, but during the first half of the year it was still lower each month than in the corresponding month last year. Improving employment will bring a stop, however, to the exiting from the labour force. We predict the labour force participation rate will be only 0.1 per cent lower in 2010 than in 2009, i.e. 66.4 per cent.

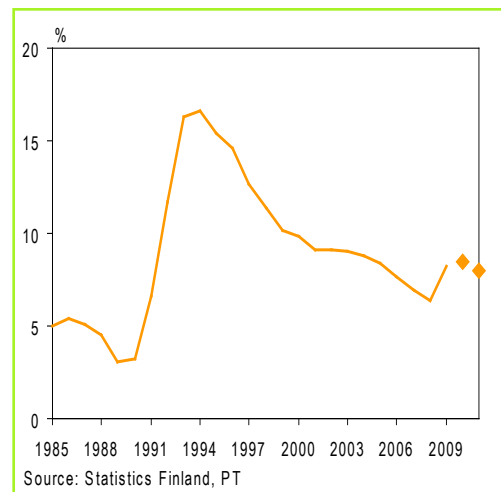
In 2011 participation in the labour force will once again increase in the age groups that have exited the labour force during the recession, but simultaneously the aging of the population will slightly weaken the average labour force participation rate. The overall labour force participation rate will nevertheless increase by 0.1 percentage points to 66.5 per cent. The size of the labour force will increase by 0.6 per cent due to the rise in the labour force participation rate and population growth.

Due to the combined effects of changes in employment and the size of the labour force, the number of unemployed persons will increase this year by 8000 persons from the average level of last year. The unemployment rate will thus rise to an average of 8.5 per cent in 2010. Next year

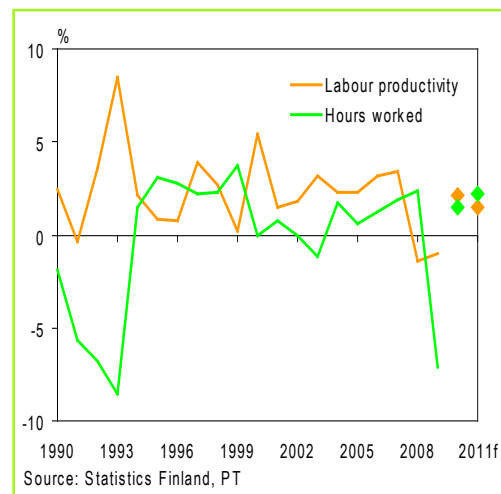
### Supply of labour and employment 1985–2011



### Unemployment rate 1985–2011



### Change in labour productivity and hours worked 1990–2011





the number of unemployed persons will decrease by 14,000 persons and the unemployment level will decrease to an average of 8 per cent.

Adapting to the slackening of labour demand has occurred not only via a decline in employment but also a decrease in the number of hours worked. As an economy enters a recession, the number of hours worked typically falls more than employment, and in turn as production stages an upswing they also begin to rise before the employment figures, because the hours are easier to adjust than the number of persons employed. Reduced layoffs and more widespread use of overtime contribute to growth in the number of hours worked. We predict that this year the number of hours worked will increase by 1.5 per cent, even though employment will still remain unchanged. Economic growth will also be spurred by a rise in productivity, which will begin to rise again this year after declining in 2008 and 2009. In 2010 productivity will grow by 2.2 per cent per hour worked. In 2011 the number of hours worked will increase by 2.2 per cent, which together with GDP growth of 3.7 per cent per year will mean 1.5 per cent productivity growth per hour worked.

There are some factors regarding the structure of employment that should be taken into account in economic policy. Even though total employment has now begun to increase, the number of persons unemployed for over a year has risen sharply, as a portion of the persons who became unemployed already in the early stages of the recession have still not managed to find jobs. The same fate awaits some of those who became unemployed at later stages of the recession, although some will find jobs as economic growth picks up. In order to prevent unemployment from becoming structural, labour market activation measures should be focused on those likely to face prolonged unemployment. The employment of young people must also be safeguarded, although unemployment of 15 to 24-year-olds has already eased slightly in just the last few months compared with the situation last year.

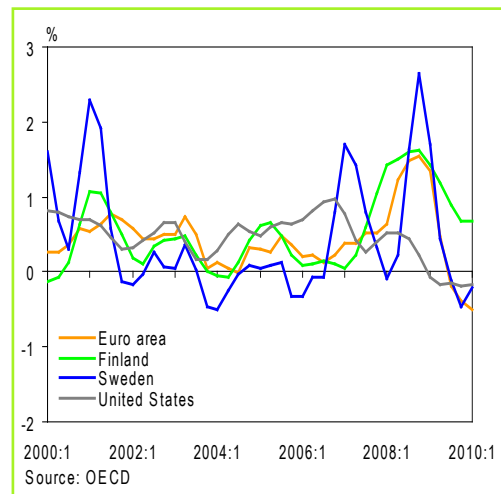
The number of highly skilled unemployed job-seekers has also risen sharply over the past year. Although unemployment of highly skilled workers is typically lower than in other groups, it leads to a waste of resources if their unemployment becomes prolonged and they are therefore unable to get a job corresponding to their education. In addition to offering employment services, the employment situation of highly skilled workers can be improved by easing the staff reduction requirements stipulated by the central government's productivity programme.

### Growth in purchasing power slowing down in 2011

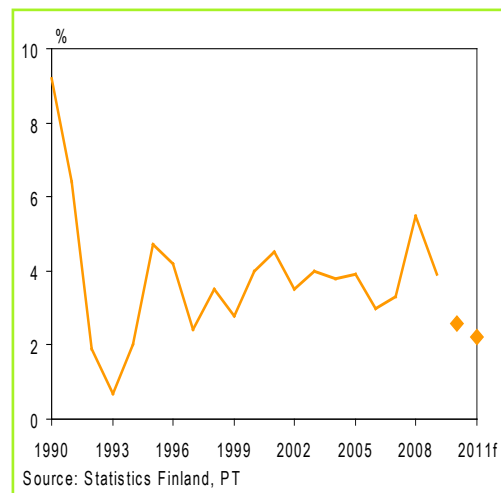
The collective agreements signed during the past year foretell a moderate rise in nominal wages in 2010 and 2011. Contract wage increases in 2010 are about one per cent. Next year's increases may be slightly higher as the economy recovers and employment improves. Owing to carry-over from the previous year, earnings will rise slightly more in 2010 than in 2011. As has occurred in previous years, contract wages increases in the export industry will be slightly smaller than in the service sector. Wage drift will be very low in both years. The index of wage and salary earnings will climb by an average of about 2.6 per cent in 2010 and only 2.2 per cent in 2011. The rise in average hourly earnings is of the same magnitude.

Despite the slowdown in the rate of increase of earnings, the growth in the wage bill will accelerate in 2010. This is due to the upswing in the number of hours worked, which will continue in 2011. For this reason, the wage bill will grow this year by 4.0 per cent and next year 4.6 per cent. The wage bill will nevertheless increase in 2010 and 2011 more slowly than national income, which means that the share of wages and salaries within national income will start to fall.

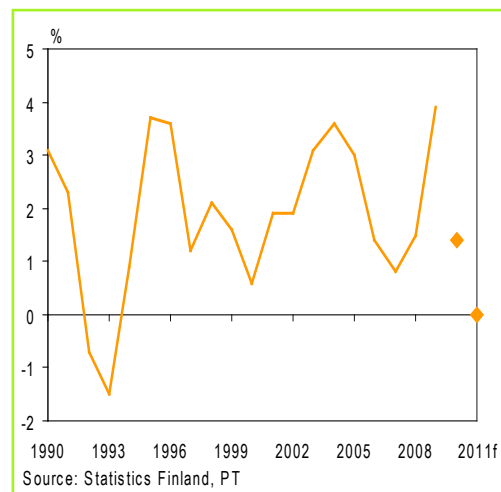
### Changes in unit labour costs 2000:1–2010:1



### Change in level of earnings index 1990–2011



### Annual changes in real wages 1990–2011



Household property income will increase significantly this year, and the growth will continue also in 2011. Income from forest sales will increase considerably after falling sharply in 2009 as a result of the economic downturn. In 2010 and 2011 property and entrepreneurial income will return to pre-recession levels, which means a relatively fast rate of growth. Property income is growing significantly faster than wage income.

The central government's policy of boosting purchasing power via tax cuts is beginning to come to an end. Significant cuts in earned income taxation are not foreseen. On the other hand, municipal taxes will be increased and social insurance contributions will rise. In addition, the indirect tax burden will increase, especially as VAT and energy taxes are raised. Hikes in indirect taxation will spawn an acceleration of inflation in 2011. For this reason, growth in employees' real earnings and purchasing power will subside to around zero in 2011. Owing to rapid growth in property income and the upturn in employment in 2011, household real disposable income will nevertheless grow by 3.3 per cent in 2010 and 1.6 per cent in 2011.

**Table 3. Key forecasts**

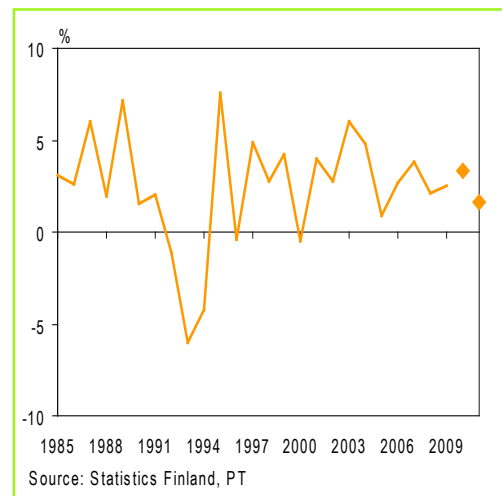
|  | 2009 | 2010f | 2011f |
|--|------|-------|-------|
| Unemployment rate (%)                          | 8.2  | 8.5   | 8.0   |
| Unemployed (1 000)                             | 221  | 229   | 215   |
| Employed (1 000)                               | 2457 | 2457  | 2487  |
| Employment rate (%)                            | 68.3 | 68.0  | 68.8  |
| Inflation, consumer price index (%)            | 0.0  | 1.2   | 2.2   |
| Wages, index of wage and salary earnings (%)   | 3.9  | 2.6   | 2.2   |
| Real disposable income of households (%)       | 2.5  | 3.3   | 1.6   |
| Current account surplus (Bill. €)              | 2.1  | 2.2   | 3.0   |
| Trade surplus (Bill. €)                        | 3.6  | 3.8   | 4.6   |
| Central government financial surplus           |      |       |       |
| Bill. €  | -8.3 | -9.4  | -6.6  |
| % / GDP  | -4.9 | -5.3  | -3.5  |
| General government financial surplus           |      |       |       |
| Bill. €  | -4.7 | -4.8  | -0.4  |
| % / GDP  | -2.7 | -2.7  | -0.2  |
| Emu debt                                       |      |       |       |
| % / GDP  | 43.9 | 49.0  | 50.2  |
| Tax rate (%)                                   | 43.1 | 43.0  | 43.8  |
| Short-term interest rates (3-month Euribor)    | 1.2  | 0.8   | 1.2   |
| Long-term interest rates (10-year gov't bonds) | 3.7  | 2.9   | 3.2   |

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

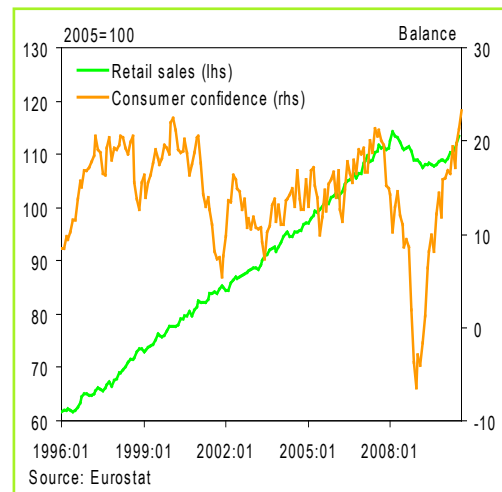
### Private consumption recovering this year

The deep recession of 2009 brought about an increase in households' saving and a decrease in private consumption. The decrease in consumption was most prominent in durable goods, especially cars. The expectations of households and the improving economic situation have, however, changed the situation to a clearly more positive direction during the past year. The change is visible in retail trade growth, the housing market brightening up and

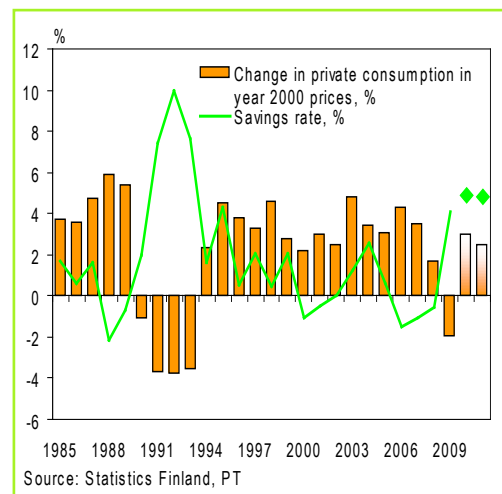
### Change in household's real disposable income 1985–2011



### Consumer confidence and retail sales in Finland 1996:01–2010:08



### Private consumption and savings rate 1985–2011



the extremely strong recovery of the automobile trade. The volume of private consumption is anticipated to increase by 3.0 per cent in 2010 and 2.5 per cent in 2011. The emphasis of the increase of private consumption will be on durable goods and the automobile trade. The nominal growth of consumption expenditures will pick up again during the forecast period, but this is due to the acceleration of the rate of increase of consumer prices in 2011.

Despite the improvement of consumer confidence the saving rate of households is expected to remain relatively unchanged during 2009-2011. This is due to the expected gradual rise of interest rates during the forecast period, which in part will decrease willingness to incur debt during the year 2011.

### Inflation will accelerate clearly in 2011

Consumer prices are rising this year, but the growth rate so far remains low. In the beginning of the year, inflation was still near zero. The rate of price increases is nevertheless gradually picking up. Cost pressure on the economy is triggered by the upswing in world market prices of raw materials, especially oil. As the economy recovers, it is expected that commodity prices will continue to increase relatively fast also in 2011.

Domestic price pressures will remain less pronounced than international pressures in 2010 and 2011. Price pressures are dampened by the slowdown in the rise of labour costs. This is attributable to the small increases in contract wages, low wage drift and the elimination of employers' national pension contribution. Owing to a rise in labour productivity, unit labour costs will decline slightly during 2010 and 2011.

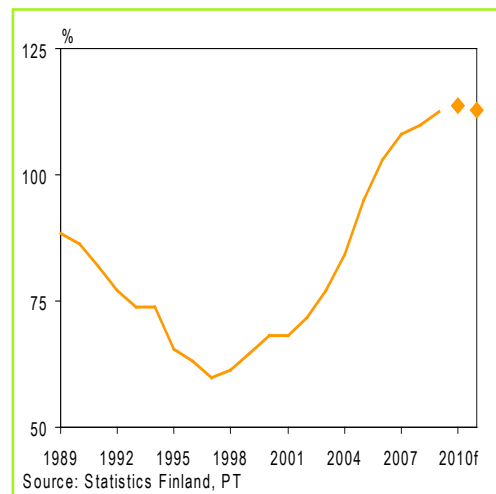
Domestic price pressures are mainly caused by hikes in indirect taxation. This trend began in July 2010, when the standard VAT rate was raised by one percentage point. Next, the government is raising energy taxes in 2011 by approximately EUR 700 million to compensate for the elimination of employers' national pension contributions. Energy tax hikes and the increase in the standard VAT rate will increase the rate of consumer price inflation in 2011. Measured in terms of the consumer price index, inflation is forecast to be 1.2 per cent in 2010 and 2.2 per cent in 2011. The CPI will be boosted by the anticipated rise in interest rates and housing prices.

### Economic upturn will boost tax revenues this year

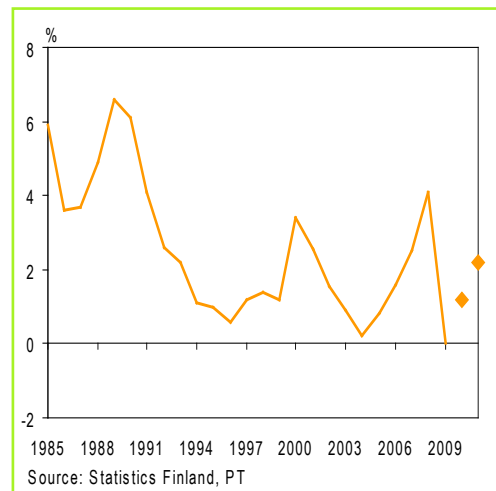
The development of central government revenues was weak in early 2010, but the strong cyclical upturn that has already occurred will improve the revenues for the year as a whole substantially. On the other hand, cuts in household income taxes will curb their growth, and VAT proceeds will rise by just over 2 per cent because the one percentage point increase in the standard VAT rate, which went into force in the beginning of July, is not enough to compensate for cuts to VAT for food, restaurants and cars. Car tax and corporate tax revenues combined will grow by slightly over EUR 1 billion. Indirect taxes will climb by more than 3 per cent and direct taxes by about 6 per cent.

Interest expenses on the central government debt are projected to fall by about one-fifth this year, because despite the increase in the amount of outstanding debt interest rates will fall substantially. Revenue sharing with local government is projected to grow relatively moderately by 5 per cent, but the central government's transfers to social security funds will rise by approximately 20 per cent as a consequence of the elimination of employers' national pension contributions and increases in social expenditure. Government consumption and investment expenditures are remaining almost unchanged. The central government

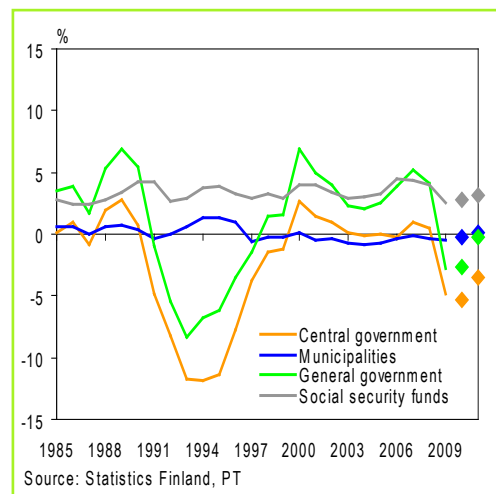
### Household debt ratio 1989-2011



### Change in consumer prices 1985-2011



### General government financial surplus as percentage of GDP 1985-2011



deficit will increase only slightly to EUR 9.4 billion, i.e. EUR 0.8 billion lower than in PT's forecast last spring.

In spite of a 0.39 percentage point rise in the average rate of municipal tax, its revenue growth this year will remain less than one per cent due to tax relief. Owing to higher corporate and real estate tax revenues, municipal income tax revenues will nevertheless climb by 4.4 per cent. Municipalities' investment will decline slightly, but their consumption spending growth will pick up slightly from last year's exceptionally low rate. Municipalities' aggregate fiscal deficit will be halved to approximately EUR 400 million.

Revenues of pension institutions and other social security funds will increase this year by a total of 4.3 per cent. Although the discontinuation of the employers' national pension contributions causes a big dent in revenues, the central government fully compensates Kela (The Social Insurance Institution of Finland) and earnings security insurance and health insurance premiums as well as employment pension and unemployment insurance premiums will rise substantially. On the other hand, social aid and benefits paid will be about 5.5 per cent higher than last year, mainly due to unemployment-related expenditure. This sector's financial surplus will increase by EUR 600 million.

### Public finances almost balanced already next year

Energy taxes will generate a total of nearly EUR 900 million more for the central government in 2011 than this year owing to rate hikes and economic growth. VAT revenues will climb by slightly over EUR 1 billion. Compared to these figures, the additional revenues generated from hikes in taxes on sweets and waste are very low. Total revenues from indirect taxes will increase by 10.5 per cent. Income taxes are not experiencing any substantial real cuts. Corporate taxes will generate almost EUR 700 million more in revenues for the central government, but they will still be about EUR 1 billion less than in 2008. The central government's direct tax revenues will increase by about ten per cent.

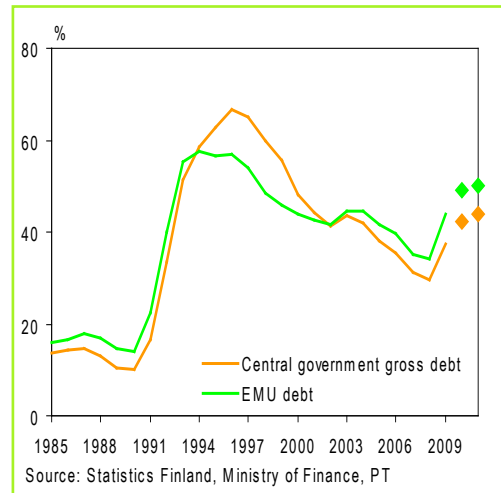
Interest expenses on the central government debt will start to rise slightly next year, but at the same time the proceeds from the central government's property income will grow appreciably. Unemployment-related expenditure will stop increasing, and revenue sharing with the local government will increase by about EUR 400 million. As consumption and investment expenditures will increase only slightly, the central government deficit will shrink to EUR 6.6 billion.

In this forecast municipal tax rates are assumed to increase by 0.2 percentage points in 2011. Since no tax cuts are foreseen and corporate tax revenues will continue to rise substantially, municipal tax revenues will grow by 7 per cent. The growth in municipal consumption spending will accelerate slightly, but investment will remain at last year's level. As a whole, municipal finances will achieve an almost EUR 300 million surplus already next year.

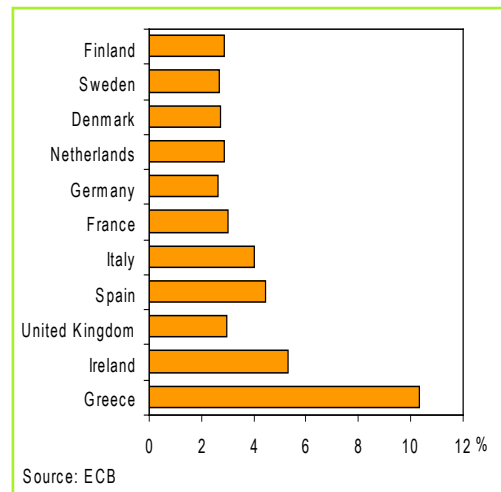
Pension and unemployment insurance increases will spawn revenues growth of slightly over six per cent in 2011. Since outlays for social aid and benefits will grow substantially more slowly, the surplus of pension institutions and other social security funds will already be approximately EUR 6 billion, or 3.1 per cent of GDP.

This year and next the financial position of the combined general government will improve, and it will end 2011 almost in balance: the deficit relative to GDP will be 2.7 per cent this year and 0.2 per cent next year. The general government deficit will not exceed the 3 per cent EMU ceiling at any time. Concerns about the public sector's indebtedness and its sustainability have subsided considerably compared

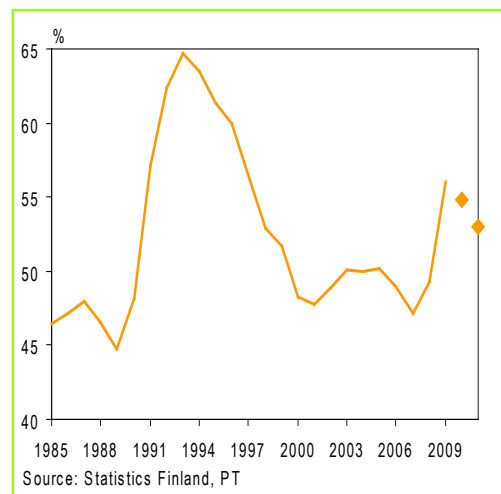
### Central government gross debt and general government EMU debt as percentage of GDP 1985–2011



### 10-year government bonds yields in July 2010



### Public expenditures as percentage of GDP 1985–2011





to the situation prevailing even a few months ago. Gross public debt is projected to be a moderate 50 per cent of GDP. The tax ratio, i.e. the percentage of total taxes relative to GDP, will remain roughly unchanged this year, but next year it will rise by almost one percentage point.

### Premature exit strategy

The Labour Institute for Economic Research estimates that the government's fiscal stimulus rose to 1.5 per cent of GDP in 2009. Over one third of this is regarded as a spending stimulus. As an indication of the relatively moderate level of the spending stimulus, it can be noted that the Finnish government's consumption grew last year by only 1.2 per cent, which is very modest compared to the euro countries' average of 2.4 per cent growth or even Sweden's relatively low 1.7 per cent growth. The fact that tax cuts did not boost overall demand last year was reflected in the significant decrease of private consumption by nearly two per cent and rising household saving. It seems that tax cuts did not start to have an impact until the second quarter of this year, when the labour market situation improved and the uncertainty felt by households regarding their own livelihood began to ease. This stimulus effect was realized quite late and in a situation where export growth also started to pick up.

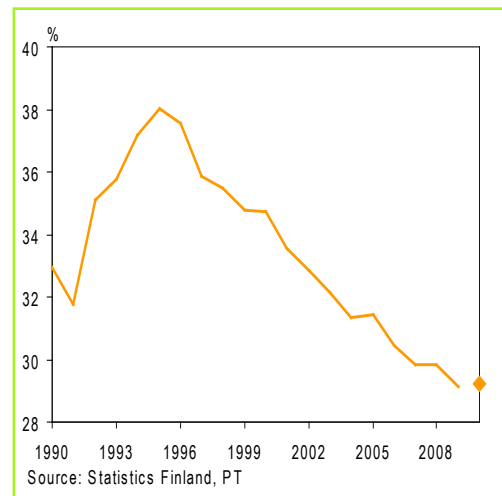
This year, fiscal policy is expansionary with respect to taxes. In terms of increased spending, however, policy is almost neutral. Next year, fiscal policy is contractionary the most clearly with respect to taxes, but it is contractionary also in terms of spending. All in all, fiscal policy could still be at least neutral next year, so that economic policy would not undermine employment. After all, actual production remains well below potential output. The easing of the tax burden could have been offset via job creation by increasing resources for active labour market policy and phasing out the central government's productivity programme, which tightened hiring requirements and weakened the employment situation of graduates from universities, in particular. Likewise, more support than planned could have been channelled to municipalities, which next year will have to cut services unnecessarily.

**Table 4. Central government's active fiscal policy**

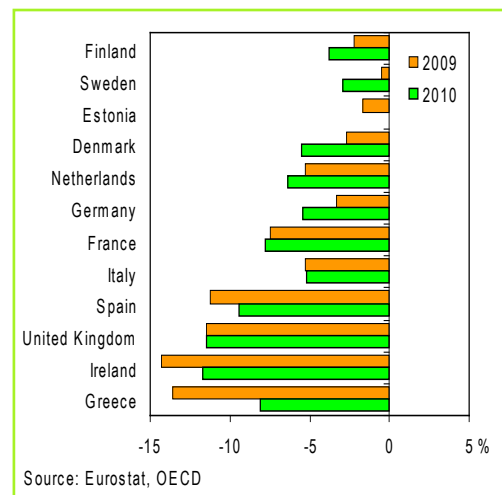
| Impact relative to 2009 nominal GDP, %, expansionary (+), contractionary (-) | Impact relative to 2009 nominal GDP, %, expansionary (+), contractionary (-) |            |             |
|--|--|------------|-------------|
|  | 2009   | 2010       | 2011        |
| Central government budget expenditures                                       | 0.6  | 0.1        | -0.5        |
| Changes in taxes and social spending   | 0.9  | 0.4        | -0.6        |
| <b>Total impact</b>  | <b>1.5</b>   | <b>0.5</b> | <b>-1.1</b> |

It appears that many EU countries are deciding to tighten their fiscal policy earlier than previously planned in light of the Greek debt crisis, regardless of whether they have to do so. Finland, like Germany, should not have been in any hurry to carry out fiscal belt tightening. After all, both countries benefit from strong positions in the financial markets. Finland's public debt and deficit are also among the lowest in the region. The government's policy for next year can nevertheless be regarded as relatively moderate compared to, for example, the exaggerated scale of austerity measures implemented by England's government. ■

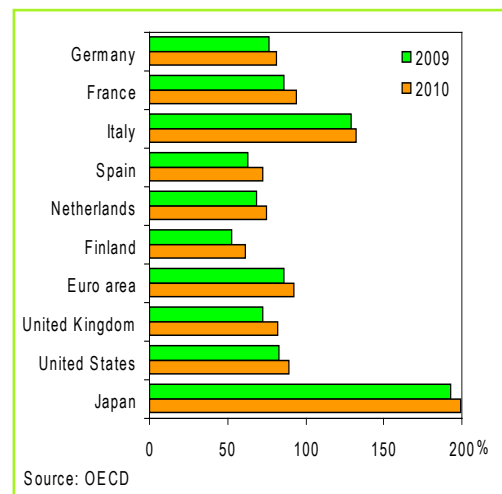
### Wage earners' income tax rate 1990–2010



### Public sector deficit-to-GDP ratio in 2009 and 2010



### Debt-to-GDP ratio in 2009 and 2010

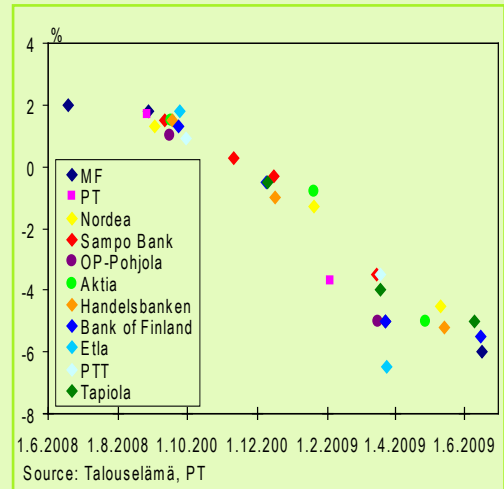


### Forecast comparison

The adjacent chart shows how the GDP forecasts for the year 2009 developed. Last year, GDP ultimately fell as much as 8 per cent. The graph shows that even in early autumn 2008 GDP was quite widely forecast to grow in the following year by slightly less than two per cent. After the outbreak of the credit crisis, the forecasts started to become more pessimistic. The Bank of Finland was the first, already on December 9, 2008, to predict that total production in 2009 would even contract. The drop was not, however, anticipated to be very sharp. The forecast published by the Labour Institute for Economic Research on March 3, 2009 of a 3.7 per cent contraction was the first truly bleak one. From then on, the production drop was projected to be continuously steeper in assorted forecasts until economic data, e.g. on the collapse of exports, began to accumulate.

The forecasts for 2010 published in early 2009 were still relatively pessimistic. For example, PT published its forecast already toward the beginning of 2009 exceptionally on February 3, when the international financial crisis had not yet subsided. Not until the second half of the year 2009 did some of the forecasters begin to conclude that also Finland's real economy was starting to recover as the acutest phase of the financial crisis passed. From the summer of 2009 until mid-2010 there was nevertheless more dispersion in the forecasts for 2010 than normally. In our forecast published on September 1, 2009, PT was already clearly among those projecting that production would rebound substantially in 2010. The difference in views regarding Finland's growth path could also be seen in the spring of 2010 with respect to forecasts for 2011. Among the most optimistic about next year's GDP forecast were ETLA, PT and Nordea. ■

### GDP forecasts for 2009



### Finnish GDP forecasts for 2010 and 2011

|                    | PT   | Median of other forecasts |
|--------------------|------|---------------------------|
|                    |      | 2010                      |
| Winter-spring 2009 | -0.7 | -0.5                      |
| Autumn 2009        | 1.8  | 1.0                       |
| Winter-spring 2010 | 3.0  | 1.5                       |
|                    |      | 2011                      |
| Winter-spring 2010 | 3.5  | 2.1                       |

Source: Talouselämä, PT

## Effects of economic growth on purchasing power of example families

The Labour Institute for Economic Research is publishing now for the third time already calculations assessing the impact of wages, income transfers, taxes, housing loans, rent and children's day-care payments on the purchasing power of different example families. The calculations are based on our forecasts of income and price developments. The calculations regarding taxes and income transfers have been made using the so-called Jutta model.

Example families are the same as last year, and they have been selected to describe Finnish households in a versatilely as possible. A person with the 2009 median income has been selected according to gender and job title or education background as the representative wage receiver. Half of persons in the median wage earner's group earn more than him or her and half less.

The 2009 data for the median income of the example family has been obtained from Statistics Finland's private sector monthly salary statistics. Gross incomes in 2010 and 2011 are based on PT's forecast for wage developments. In 2010, earnings are expected to rise by 2.6 per cent and in 2011 by 2.2 per cent. Pensioners' gross income for those years is calculated by taking into account Ministry of Social Affairs and Health forecasts for changes in the TEL index as well as the pension guarantee going into effect on March 1, 2011. Employment pensions are expected to grow by 0.3 per cent in 2010 and 1.9 per cent in 2011. The guarantee pension will significantly improve the situation of low-income pensioners.<sup>1</sup> The daily benefits for unemployed persons are forecast to grow by 25.79 euro per day in 2011.

The calculation takes into account the government's 2011 budget proposal regarding changes in medical insurance, unemployment insurance and pension insurance contributions. In addition, the calculations incorporate assumptions based on our forecast about increases in rent, municipal tax rates and mortgage rates.

Family-specific inflation forecasts have been made using the same consumption baskets as in 2009. The consumption baskets have been estimated using data from the Finnish Household Budget Survey for 2006 compiled by Statistics Finland. Family-specific inflation has been derived using inflation forecasts for different commodity groups and family-specific consumption baskets. Real income has been obtained by eliminating the impact of inflation on net income.

### Family descriptions

#### White collar couple with high income

The family is a childless couple belonging to AKAVA (Confederation of Unions for Professional and Managerial Staff). The man is an economist by education and the woman has studied law. Monthly wages are 6100 euro and 4800 euro. The family lives in owner-occupied housing with no debt.

#### White collar family, 2 children

The parents of the white collar family are an engineer and a nurse, both of whom belong to STTK (Finnish Confederation of Professionals), The monthly

wages are 3200 euro and 2700 euro. The family has two children. The family lives in owner-occupied housing with a mortgage of 150,000 euro.

#### Blue collar family, 2 children

The parents of the blue collar family are a truck driver and a store sales person, both of whom are members of SAK (Central Organization of Finnish Trade Unions). Monthly wages are 2100 euro and 1900 euro. The family has two children and lives in a rented flat (80 square metres).

#### Low-wage single parent's family, 1 child

The family consists of a single parent mother and one child. The mother works as a cleaner for a monthly wage of 1700 euro. The family lives in a rented flat (60 square metres).

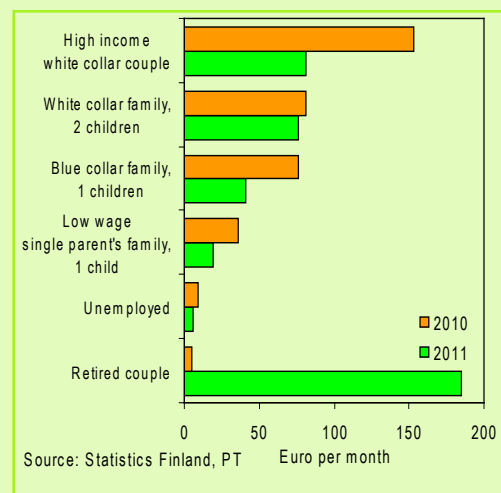
#### Single unemployed

The household consists of one unemployed person, who receives labour market support, housing support and welfare benefits. He lives in a rented flat (40 square metres).

#### Retired couple

The household consists of two retired persons, one of whom receives an employment pension and the other a national pension. The couple lives in owner-occupied housing with no debt.

#### Family-specific changes in nominal net income in 2010 and 2011



<sup>1</sup> Since the version of the Jutta model used to make the calculations does not explicitly include the guarantee pension, it has been taken into account by setting the parameter for the full national pension at 685 euro per month for the year 2011. The guarantee pension will be incorporated into the new version of the Jutta model.

## Impact of economic developments on purchasing power of the example families

According to the model family calculations, the nominal incomes of all the families will increase in 2010 and 2011. The growth of nominal incomes is greater in 2010 than in 2011 due to the assumed faster increase in the wage index. Taking into consideration both years, nominal income increases the most for the high-income couple and the least for the unemployed person. The impact of the guarantee pension on the retired couple is clear, and their nominal income increases by 185 euro from 2010 to 2011.

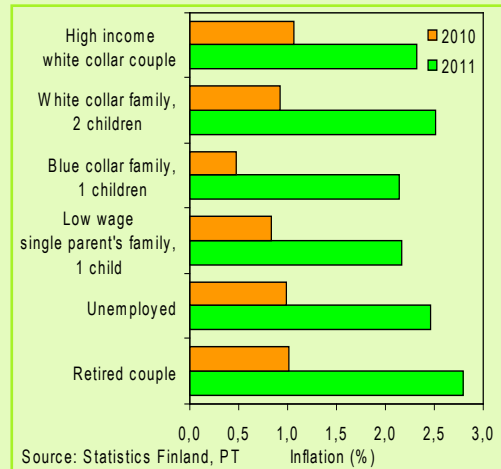
Family-specific inflation will remain moderate, at around one per cent in 2010. Inflation will accelerate clearly in 2011 as housing (rent), energy and food prices rise. The cost increase is the steepest in the case of the retired couple's consumption basket, which has an annual inflation rate of 2.8 per cent. This hike is mainly due to increases in housing and energy costs. The lowest inflation rate is experienced by the blue collar family, whose consumption basket inflation in 2010 is 0.5 per cent and 2.1 per cent in 2011.

Inflation-adjusted net income or real income will increase or remain unchanged for all families except the retired couple in 2010. In euro terms, the real income of the high income couple increases the most. The real income of the retired couple decreases. Real income growth is due to low inflation and growth in earnings. In 2011 the real incomes of all families will fall except for the retired couple. The growth in the income of the retired couple stems from the adoption of the guarantee pension. For other families the fall in real income is attributable to inflation.

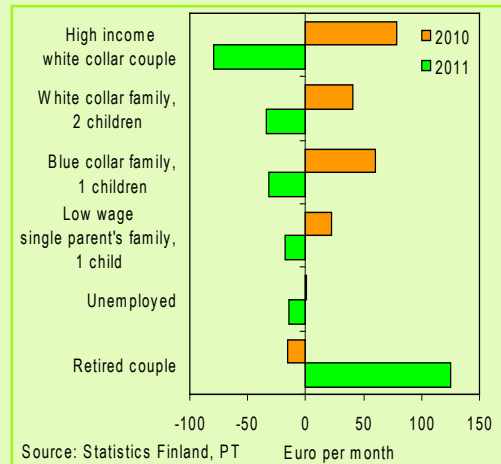
The purchasing power of all example families grows in 2010 except for the unemployed person and retired couple. The purchasing power of the blue collar family increases the most, by about 1.8 per cent. The relative change in the real income of the retired couple is negative, about -0.8 per cent. In 2011 the real income of the example families declines by about one per cent, except for the unemployed person, whose relative fall in real income is about -1.7 per cent. The retired couple is again an exception, as its real income increases by 6.5 per cent in 2011.<sup>2</sup> As regards 2008 and 2009 it can be observed that the retired couple and the white collar family have prospered well in terms of growth in real income. The blue collar family has fared the worst as its real income growth has been negative in 2008 and 2009. The increase in the purchasing power of the unemployed person has also been weak, and it is projected to remain unchanged or decrease in 2010 and 2011. ■

<sup>2</sup> The retired couple lives in owner-occupied housing with no debt. The calculations do not explicitly take into account the possibility that they live in a house, which would mean they incur higher than average increases in heating costs and property tax in 2011. In the worst case, these hikes could cut a large part of the retired couple's real income growth.

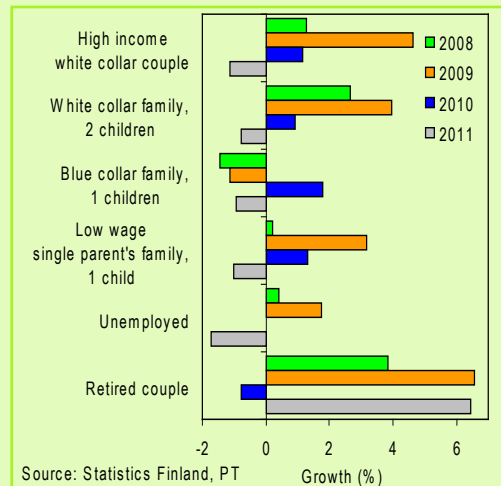
## Family-specific inflation rates in 2010 and 2011



## Family-specific real income changes in euro in 2010 and 2011



## Family-specific relative changes in real income in 2008–2011





**Appendix table 1. Wage income and taxation 2009 (€/month)**

| Example families                          | Gross income | Received income transfers | Taxes | Net income | Taxes share of gross income |
|---|--------------|---------------------------|-------|------------|-----------------------------|
| High income white collar couple           | 10900        | 0                         | 4006  | 6894       | 36.8                        |
| White collar family (2 children)          | 5900         | 211                       | 1556  | 4554       | 26.4                        |
| Blue collar family (2 children)           | 4000         | 211                       | 844   | 3366       | 21.1                        |
| Low wage single parent's family (1 child) | 1750         | 283                       | 338   | 1695       | 19.3                        |
| Unemployed                                | 551          | 416                       | 103   | 864        | 18.7                        |
| Retired couple                            | 2318         | 0                         | 363   | 1956       | 15.6                        |

Source: Statistics Finland, Labour Institute for Economic Research

**Appendix table 2. Wage income and taxation 2010 (€/month)**

| Example families                          | Gross income | Received income transfers | Taxes | Net income | Taxes share of gross income |
|---|--------------|---------------------------|-------|------------|-----------------------------|
| High income white collar couple           | 11184        | 0                         | 4137  | 7047       | 37.0                        |
| White collar family (2 children)          | 6053         | 211                       | 1629  | 4635       | 26.9                        |
| Blue collar family (2 children)           | 4104         | 211                       | 872   | 3443       | 21.2                        |
| Low wage single parent's family (1 child) | 1796         | 286                       | 350   | 1731       | 19.5                        |
| Unemployed                                | 551          | 413                       | 91    | 873        | 16.5                        |
| Retired couple                            | 2323         | 0                         | 363   | 1960       | 15.6                        |

Source: Statistics Finland, Labour Institute for Economic Research

**Appendix table 3. Wage income and taxation 2011 (€/month)**

| Example families                          | Gross income | Received income transfers | Taxes | Net income | Taxes share of gross income |
|---|--------------|---------------------------|-------|------------|-----------------------------|
| High income white collar couple           | 11429        | 0                         | 4301  | 7128       | 37.6                        |
| White collar family (2 children)          | 6187         | 211                       | 1686  | 4711       | 27.3                        |
| Blue collar family (2 children)           | 4194         | 211                       | 921   | 3484       | 22.0                        |
| Low wage single parent's family (1 child) | 1835         | 286                       | 370   | 1751       | 20.2                        |
| Unemployed                                | 554          | 417                       | 92    | 879        | 16.6                        |
| Retired couple                            | 2524         | 0                         | 379   | 2145       | 15.0                        |

Source: Statistics Finland, Labour Institute for Economic Research