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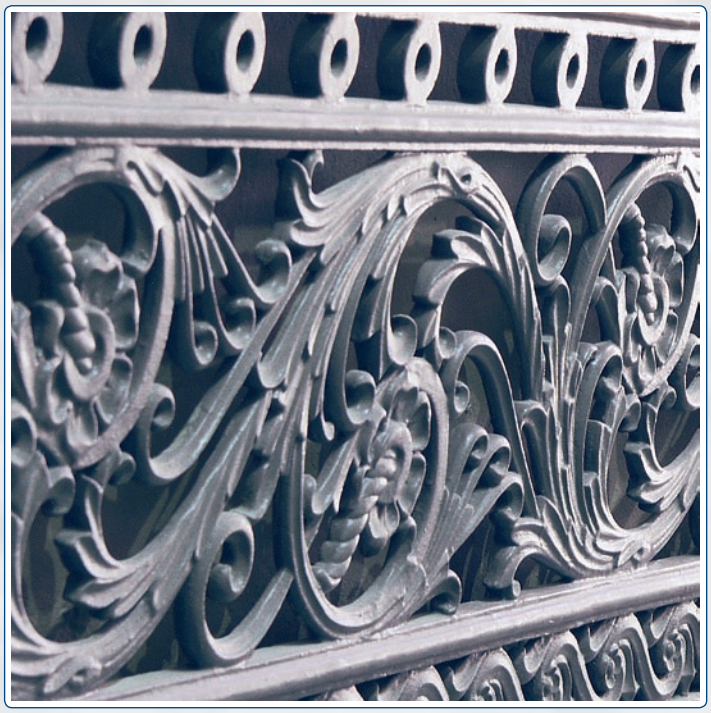

Economic outlook

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FINLANDS BANK
EUROJÄRJESTELMÄ
EUROSYSTEMET

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Preface

The world economy is continuing to grow rapidly for the fourth year in a row. The period of fastest growth would, however, appear to have already passed. Slower growth is forecast for the US economy as household consumption levels off due to the high level of debt, higher interest rates and a quieter housing market. In contrast, rapid growth is continuing in the emerging economies of Asia. Partly as a consequence of this, the prices of oil and other commodities remain historically high. There is also encouraging news from the euro area, with a clear acceleration in economic growth in the first half of this year.

The world economy has grown rapidly during a long period of relaxed monetary policy in most countries. Low real interest rates and abundant liquidity have contributed to rising asset prices. Consumer price inflation has nevertheless been fairly low. Higher prices for oil and other commodities have had little impact on other prices. Industrial goods prices have been stable or even fallen as a result of globalisation and stiffer competition. Wage development has remained moderate.

In the United States, inflation has gathered pace, but tighter monetary policy and the quieter housing market should have a moderating effect. To counter the risk of inflation, monetary policy has also been gradually tightened in the euro area. Even so, short-term real interest rates remain historically low. Euro area monetary policy thus remains supportive of growth, while public confidence in price stability has also remained strong.

In Finland, the economy grew exceptionally quickly during the first half of this year, as a result of which GDP for the year as a whole is forecast to be more than 5% higher than last year. Although there is some uncertainty regarding the preliminary data used in the forecast, the recent performance of the economy has undoubtedly been strong, with upswings in both domestic demand and exports. In the next few years the economy will continue to grow fairly quickly, if not quite at the pace of this year. The pace of growth will suffer somewhat from supply-side restrictions, one of the most significant being problems with matching supply and demand on the labour market. An increasing number of employers have experienced difficulties in recruiting suitable personnel. The problem is exacerbated by the very high increase in housing prices in growth areas. The supply-side restrictions will be reflected in a decline in the current account surplus and a fall in the household saving ratio.

The view of Finland's economic performance has changed in recent months partly as a result of statistical revision. According to the revised National Accounts figures, GDP growth in 2005 was just under one percentage point more than indicated by the earliest preliminary data. The statistical revision has also changed the picture of Finland's service exports, which international comparisons had previously seen as underdeveloped. Service exports' average share of total exports for the period 2001–2005 increased as

a result of the revision from 12% to 18%. This places Finland around the average for EU countries.

The significant changes in key statistics make economic forecasting more difficult, with past trends equally hard to assess as the future. The quality and currency of statistics are vitally important to economic policymakers. Misleading statistics can lead to misdirected measures, even if the figures are corrected later. It is therefore important to ensure adequate resources for the production of key economic statistics.

Since 2004, Finland has had the lowest rate of inflation in the euro area. Over the next few years, the annual rise in consumer prices will remain below 2%. This is both expected and desirable, as Finnish prices remain above the euro area average. The low rate of inflation is largely the result of increased competition.

The Finnish public's perception of inflation has been of higher inflation than that indicated by the consumer price index. As in other euro area countries, in Finland, too, the public perception is that the introduction of the euro as a cash currency has accelerated price rises. According to Statistics Finland's consumer confidence indicator, the public perception is that since 2002 inflation has been above 2%, whereas the actual rate has been just over half this figure.

The consumer price index shows the price of the average household consumption basket. The relative weights of the goods and services included in the index are determined by their rate of purchase by households. The prices of some low-weighted items, such as restaurant and cafeteria services, rose somewhat at the beginning of 2002. In addition, recent years have seen a considerable increase in fuel prices. At the same time, the prices of products such as mobile phone call charges, alcohol, cars and many other consumer durables have come down. Thus the overall trend in consumer prices in the past few years covers a number of very disparate price changes. The average rise in consumer prices has been very moderate.

Growth in housing loans and housing price rises have both continued at a rapid pace, if slightly subdued in recent months by rising interest rates. The 12-month Euribor, in general use as the reference rate for housing loans, at present stands approximately 1½ percentage points higher than in summer 2005. The upward trajectory in housing prices is expected to slow, and by the end of the forecast period it should be slower than the pace of growth in disposable household income. This was last the case in 2001. The continued rise in household indebtedness has led to an increased risk of overindebtedness. In the present environment of low interest rates, positive economic performance and rising housing prices, the potential problems have not materialised. The situation could, however, change rapidly if there were to be a deterioration in the performance of the economy and an increased risk of unemployment. This is still probably a more significant risk for the housing market than

interest rate risk, and in this respect the Finnish situation is similar to many other countries, including the United States.

Due to the positive situation in the economy, the fiscal position of central government is turning out to be better than generally expected at the beginning of the year. There has been brisk growth in tax receipts, and expenditure has remained within the spending limits. The fiscal surplus is estimated to grow this year to approximately 1% relative to GDP. Despite slower growth in the years ahead, the surplus will remain at the same level, provided spending policy continues to be as stringent as it has under the present government. If we take into account the steady surplus in the social security funds and the small deficit in local government, the surplus for the public sector as a whole will rise to around 3½% of GDP. This means it will be possible over the next few years to continue to reduce the stock of the general government debt.

From the perspective of the long-term sustainability of public finances it is vitally important that public expenditure growth continue to be kept under control in the years ahead. This is no easy task, since public expenditure has a tendency to grow faster than GDP for the simple reason that public services production prices rise faster than other prices. This is because the costs in public services production are primarily wages, and productivity growth in these services is weak. Without spending discipline, the public sector's share of GDP would begin to rise again, which would lead eventually to higher taxes. This would, in turn, hamper employment. In contrast, if public expenditure growth remains moderate, this would make it possible to cut taxation on earned income, which is currently high in Finland relative to Europe as a whole.

The favourable developments in the Finnish economy in recent years have been largely the result of increased competition in the markets for various goods and services. Increased competition has boosted output and employment, moderated price rises and encouraged improved productivity. In the case of some goods and services, international competition has been an important factor. The beneficial effects of competition are not evenly distributed geographically or across different population groups, particularly in the short term, which means there is a threat of increased protectionism. This can be combated by developing active labour policies and using public services and income transfers to form safety nets that can both support the creation of new jobs and help people to find their way into them.

24 September 2006

Executive summary

The Finnish economy will grow at a fairly brisk pace over the next few years, if more slowly than the exceptional pace of the first half of this year.[1] The recent surge has been stimulated partly by the briskness of export demand, which has in turn been fed by factors such as the economic recovery in the euro area and higher import demand in Russia fuelled by oil revenues. However, Finnish domestic demand has also been strong. The next few years will see fairly brisk growth in private consumption, investment and exports. Growth will, however, be hampered by problems with matching supply and demand on the labour market, and before long also by the impact of an ageing population.

Household consumption has been growing briskly for several years already, sustained by confidence over future income development. Real incomes have for the most part been rising steeply, on the back of an improving employment situation, tax cuts and subdued inflation. There was slower income growth in 2005, but the upward trend is expected to accelerate again this year. Over the next few years, household consumption growth is forecast to slow slightly from the fast pace of recent years. This is due partly to a slight easing in the pace of growth in real incomes, as a result of slower employment growth and moderate acceleration in the pace of inflation. Interest rates during the forecast period will also be higher than the very low level of recent years. Consumption growth will mean a low household saving ratio.

In addition to consumption, households have in recent years invested a lot of money in housing. This investment is forecast to continue to grow fairly rapidly over the next few years, although, in addition to the recent slight rise in interest rates, growth will continue to be restricted somewhat by shortages in skilled labour and building land. The housing loan stock has continued its brisk growth, although the pace has eased somewhat since the rise in interest rates.

Growth in private non-residential investment (private fixed investment excluding housing construction) has recovered in the past few years. The picture of past trends in this area has become more favourable as a result of the recent statistical revision. With business profitability and future prospects remaining bright, corporate investment growth is forecast to continue in the next few years, if at a slightly slowing pace.

There was rapid growth in exports in 2005 despite the labour dispute in the paper industry. The strong growth in the export sector has continued this year. There has been an increase in mobile phone exports, and the strength of the international economy has also boosted exports of capital goods, metal goods and oil products. This contrasts with the paper industry, where export performance remains rather weak. All in all, Finland's exports will continue to grow rapidly over the next few years, with continued fairly strong growth in export markets.

[1] The cut-off date for data used in this publication is 8 September 2006.

Finland's foreign trade figures have been boosted recently by re-exports (primarily mobile phones and cars) to Russia and other countries. This is reflected in both export and import figures. Import volumes have in recent years also been boosted by the strength of domestic demand, and import values also by the rise in oil and other commodity prices. The export growth figures for 2006 are boosted by the paper industry labour dispute in 2005. In 2007 and 2008, imports are forecast to grow faster than exports in terms of both volume and value. The trade account and current account surpluses will continue to contract somewhat.

Finnish export growth will be supported by continued fairly rapid growth in the world economy and a shift in the geographical focus of this growth to Finland's neighbouring regions. World growth in the first half of 2006 was strong and broadly based geographically. The year as a whole is expected to be similar to 2005, although the quickest phase of growth is already past. US growth is forecast to slow somewhat, but euro area growth will be faster than the average for recent years. Growth will remain particularly rapid in many emerging economies and, for example, in Russia.

The employment situation has continued to improve this year, if somewhat more slowly than in 2005. Employment has improved particularly in construction, which has provided work both for more Finns and for more foreign workers. The employment situation has also improved in private services, partly due to increased demand for social services personnel being met by local authorities purchasing services from the private sector.

The pace of growth in the number of employed is forecast to slow somewhat from the recent rapid pace, and the drop in the unemployment rate is expected to more or less come to a halt next year. Despite continued high unemployment, employers have experienced difficulties in recruiting suitably trained personnel in those parts of the country where they are needed. In the near future, the ageing of the population will also somewhat restrict growth in the number of employed.

The rise in aggregate nominal earnings in Finland has remained relatively moderate compared with past experience, but real earnings have increased fairly quickly due to the subdued pace of consumer price inflation. The pace of increase in nominal earnings is expected to ease somewhat in 2006 and 2007. It is, however, forecast to accelerate a little again in 2008, when the labour market will be marginally tighter and inflation will accelerate slightly.

The favourable economic situation has also been reflected in public finances, with a particularly fast increase in tax receipts from businesses and value-added tax. As a result of the brisk pace of growth, the general government fiscal surplus is forecast to grow in the next few years, and the general government debt to contract, relative to GDP. Central government finances and the social security funds will show a healthy surplus, while the local government fiscal deficit will contract.

During the forecast period, general government revenue will remain more or less unchanged relative to GDP. The tax cuts already implemented this year and planned for next year will slightly reduce the income tax burden on households. For 2008, the forecast assumes merely an inflation adjustment to income tax scales. Due to the progressive nature of income tax, this will, however, be insufficient to prevent a tightening of central government income taxation. Public expenditure is forecast to increase only fairly moderately. Central government expenditure is assumed to increase within the agreed spending limits. Local government expenditure will increase slightly faster than central government expenditure. Relative to GDP, general government expenditure will decline slightly.

Finland's inflation has remained the lowest in the euro area. This has been largely due to increased competition in a number of product markets, and also to some degree because of changes in taxation on some products. Even so, there was a slight acceleration in the pace of consumer price inflation in 2005, and this trend has continued in 2006. Inflation has recently accelerated primarily in energy and services, whereas prices for non-energy industrial goods have been falling more quickly than before.

Inflation is forecast to remain fairly subdued over the next few years, partly due to the moderate trend in earnings. In the immediate months ahead, there looks likely to be an increase in the pace of inflation in energy prices. The continued moderate general inflation expectations and increased competition will, however, prevent higher energy prices from seriously affecting other consumer prices, and the acceleration in inflation will on the whole be modest.

Table 1.

Forecast summary[1]

% change on previous year (unless otherwise indicated)

	2004	*2005*	*2006[f]*	*2007[f]*	*2008[f]*
Gross domestic product	*3.5*	*2.9*	*5.4*	*3.2*	*2.7*
Imports	*7.4*	*12.3*	*9.2*	*7.7*	*6.4*
Exports	*7.5*	*7.3*	*12.0*	*7.3*	*6.3*
Private consumption	*3.2*	*3.8*	*3.9*	*3.4*	*3.0*
Public consumption	*1.7*	*1.6*	*0.6*	*0.8*	*1.8*
Private fixed investment	*4.9*	*5.9*	*6.1*	*3.9*	*2.7*
Public investment	*4.5*	*–10.4*	*2.9*	*2.8*	*1.8*
Harmonised index of consumer prices	*0.1*	*0.8*	*1.5*	*1.8*	*1.7*
Consumer price index	*0.2*	*0.6*	*1.6*	*1.8*	*1.7*
Wage and salary earnings	*3.8*	*3.9*	*3.0*	*3.1*	*3.7*
Number of employed	*0.0*	*1.5*	*1.5*	*0.6*	*0.0*
Employment rate, 15–64-year-olds, %	*67.2*	*68.0*	*68.7*	*68.9*	*68.8*
Unemployment rate, %	*8.8*	*8.4*	*7.8*	*7.5*	*7.5*
Current account, % of GDP	*7.8*	*4.9*	*5.1*	*4.5*	*4.0*
General government net lending, % of GDP	*2.1*	*2.5*	*3.5*	*3.3*	*3.5*
General government debt, % of GDP	*44.3*	*40.5*	*38.0*	*36.5*	*34.4*

f = forecast

[1]The figures are presented more fully in table 14 on page 70 and on the Bank of Finland website at: www.bof.fi/eng/ under the heading 'Forecast'.

Sources: Statistics Finland and Bank of Finland.

Financial markets

Spring 2006 saw unease in the financial markets as share prices declined and the currencies of many countries outside the main economic areas depreciated. There was no single salient reason for the turbulence. It was most probably due to a reassessment among investors of the risks related to future inflation and interest rate developments in the United States, which led to a decrease in the appetite for risk. However, the financial markets have stabilised in recent months and stock prices have regained their upward momentum. All in all, developments on the financial markets continue to be in line with the view that global economic growth will continue at a solid, albeit slightly moderated, pace.

Interest rates

The Governing Council of the ECB has continued raising its policy rate during spring and summer 2006 (Chart 1). The interest rate has been raised since December 2005 by a total of one percentage point, and now stands at 3%. It had previously remained unchanged for more than two years. Euro area money market rates have also continued to rise at a moderate pace.

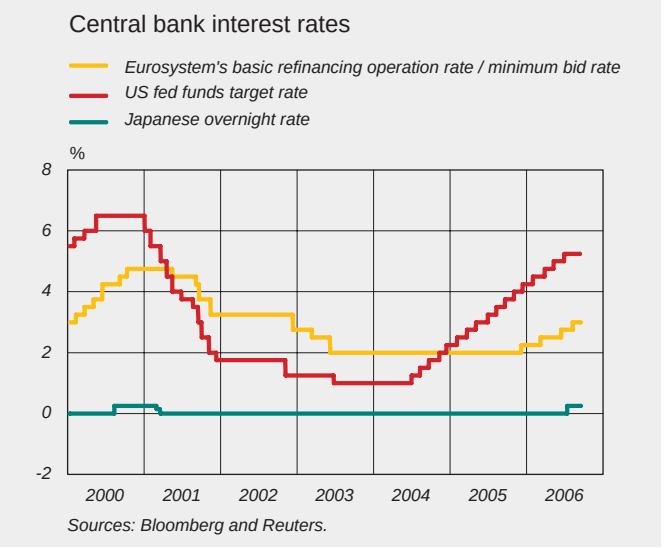
Policy rate hikes have been used to ward off the risks of accelerating inflation in the longer term. These risks have been increased by the rise in capacity utilisation rates in the economy and the appreciation of oil and other commodity prices. The rapid growth of monetary and credit aggregates also suggest that monetary policy has been relaxed.

Despite the policy rate rises, money market rates in the euro area continue to be relatively low. This applies to both nominal rates and real rates in different maturities. Thus, monetary policy has continued to support growth. The financial markets are expecting the ECB Council to resume rate hikes towards the end of 2006 and at the beginning of 2007.

The US Federal Reserve has continued to tighten its monetary policy to the effect that its policy rate now stands 4.25 percentage points higher than in April 2004 (Chart 1). In its August meeting the Fed's open market committee decided to keep the rate unchanged, since there were increased signs of a moderation in the rapidity of economic growth and previous rate hikes are expected to slow the inflation rate. The financial markets are expecting the policy rate hike cycle to end and even be reversed next year.

In June 2006, the Japanese central bank increased its overnight rate to 0.25%, thus giving up its zero interest

Chart 1.



rate policy that had continued for almost five years. At the same time, the discount rate was raised from 0.1% to 0.4% (Chart 1). The policy rate was raised on the basis of a perceived end to the prolonged deflation in the country. The financial markets are still expecting rates to rise further, albeit only slowly. Japanese monetary policy is discussed in more detail in Box 5.

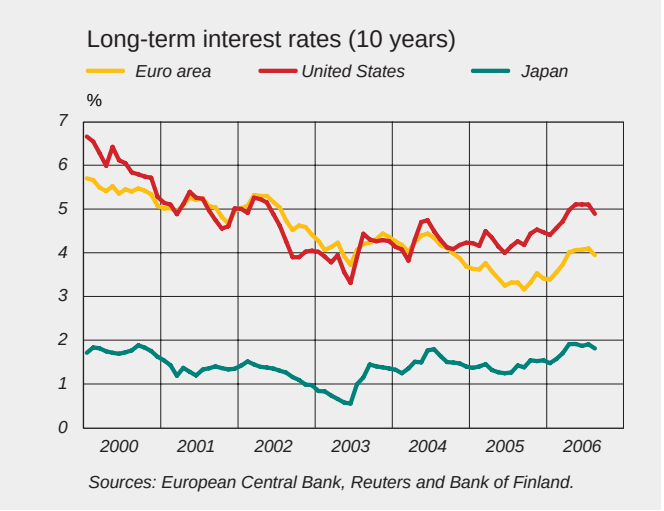
In Sweden, the Riksbank has continued to tighten its monetary policy. In the summer, it raised its policy rate by 0.50 percentage points. In August, the Bank of England also increased its policy rate by 0.25 percentage points after a two-year break. In both countries, the rate hikes were aimed to curb accumulated inflation pressures for the next few years due to a strengthening in the economic outlook of these countries.

The Chinese central bank increased its one-year lending rate, functioning as the main policy rate, during the summer by a total of 0.54 percentage points. It also raised the minimum reserve ratio in June and July by a total of one percentage point. The rises took place amid very steep investment-driven economic growth. At the same time, the central bank has urged commercial banks to exercise caution in lending to sectors where overcapacities have been found, essentially construction and basic metals. Central banks have also been raising their policy rates in many other countries in non-Japan Asia, and in the new EU member states. The primary reason for the rate hikes has been concern over accelerating inflation.

The development of long-term interest rates in the major economies in 2006 has been bipolar (Chart 2). Rates rose in the first half of the year, but the rise has not continued in recent months. Long-term interest rates have begun to decline in the United States, and their rise has also come to a standstill in Europe. Based on the yields of index-linked bonds, the interest rate increases earlier this year can be considered to have reflected first and foremost an increase in real interest rates. Inflation expectations also seem to have strengthened somewhat. More recently, the weakening US growth outlook has contributed to a decline in long-term interest rates, which have not risen in Europe either, despite the improvement in growth prospects.

The halt in the rise of long-term interest rates during the summer is also partly related to the unease experienced in the financial markets in May, and possibly also the increase in geopolitical tensions. Investors' appetite for risk seems to have decreased. This has benefited especially the values of

Chart 2.



Sources: European Central Bank, Reuters and Bank of Finland.

relatively risk-free investments in the major economies.

The yield spreads between long-term corporate and government bonds have stayed fairly narrow in both the United States and the euro area. However, yield spreads on riskier corporate loans have begun to widen slightly in recent months due to the decrease in investors' appetite for risk. However, the terms of corporate bank loans have remained relatively lax in both the euro area and the United States, and all in all the conditions for debt finance continue to be favourable.[1]

Exchange rates

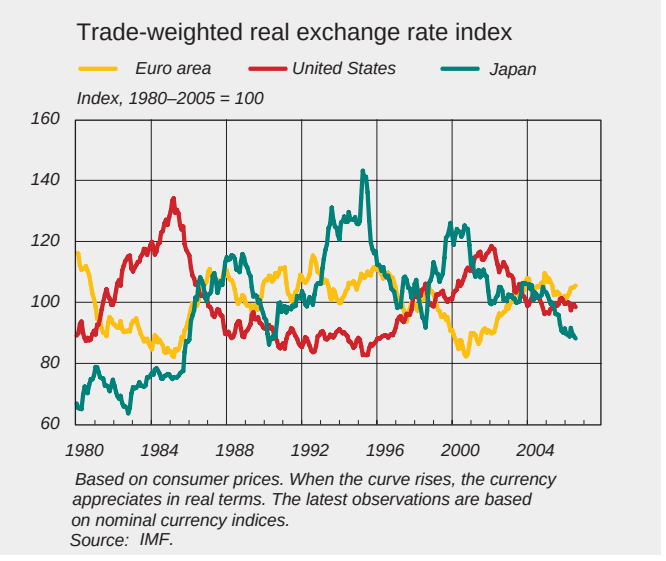
As measured by the trade-weighted exchange rate index, the euro has appreciated in real terms in the course of this year (Chart 3). The appreciation appears to be rooted partly in increased expectations of interest rate rises and an improvement in the euro area economic outlook, which have enhanced the attractiveness of euro-denominated investments. The current account deficit of the euro area has gradually increased this year. However, it continues to be relatively low, at only around ½% of GDP.

The US dollar has depreciated in recent months. The primary reason appears to have been a dampening of interest rate rise expectations as the signs of a moderation in economic growth have increased. The US current account deficit has remained large, but so far there have not been any problems in financing it.

In the past half year there have been no major changes in the external value of the Japanese yen. However, the weakening of the yen over the past few years seems to have come to a halt. This is due to the end of the zero interest rate policy of the Japanese central bank and to the fact that expectations of further rate rises have strengthened. At any rate, measured by the trade-weighted real exchange rate index, the yen's value is lower than the average for the past 10 years, and the current account surplus of the country has remained large.

Among the non-euro area EU member states, the Swedish krona has appreciated since the beginning of the year, as measured by the trade-weighted nominal exchange rate index. The currency has been supported by

Chart 3.



Based on consumer prices. When the curve rises, the currency appreciates in real terms. The latest observations are based on nominal currency indices.
Source: IMF.

[1] Banks' lending policies in both the United States and the euro area are monitored regularly through surveys conducted with the banks. See the results of the July Bank Lending Survey for the euro area (ECB Monthly Bulletin, August 2008) and the July 2006 Senior Loan Officer Opinion Survey on Bank Lending Practices (www.federalreserve.gov/boarddocs/surveys).

expectations of an upturn in interest rates from their present low levels at a time of continued strong economic growth and export momentum. Changes in the external value of the British pound have been relatively minor for almost a decade, and there were no large shifts this past year either.

Among the currencies belonging to ERM II, the Danish, Estonian, Lithuanian, Slovenian and Maltese currencies have remained almost unchanged against the euro at their central rates within the mechanism, and the other currencies have also stayed near to their central rates. The highest fluctuations have been in the Slovakian koruna, which has this year averaged 2% above its central rate. However, the koruna weakened temporarily during the financial market turbulence in the spring, when the country's central bank made support interventions in the FX markets. Among other new EU member states, the Hungarian currency has depreciated significantly this year, as willingness to invest in the country seems to have waned due to continued growth in the current account and general government deficits. As regards the Polish and Czech currencies, the fluctuations have been more moderate.

The Russian rouble has continued to strengthen on the back of rapid growth in oil revenues. At the same time, the country's current account surplus and foreign reserves have reached record levels. The Russian central bank has made only moderate interventions in the markets, allowing the currency to strengthen in an attempt to slow down inflation. However, the country's inflation rate continues to be about 9%.

Appreciation of the Chinese yuan has continued to be moderate, while the country's foreign reserves have ballooned to become the largest in the world as a result of interventions conducted by the central bank. After the revaluation of about 2% that took place in connection with the reform of the currency mechanism in July 2005, the yuan has been allowed to strengthen this year by a further couple of percent against the US dollar. Based on futures markets, expectations of further revaluation of the yuan have not strengthened in the course of the year (Chart 4).

The impacts of the financial market turbulence in the spring have been relatively limited and temporary in nature. There was a marked depreciation in the currencies of certain countries outside the main economic areas, such as Brazil and Turkey, but the turbulence was not reflected in, for example, Asian currencies. All in all,

Chart 4.

The forward quote is based on non-deliverable forwards.
Source: Bloomberg.

the attractiveness to investors of currencies outside the main economic areas may have suffered due to a decrease in investors' appetite for risk, interest rate hikes and expectations of further rate rises. For example, the use of cheap yen finance for higher-risk and yield investments outside Japan is no longer as appealing as it used to be.

Stock markets

The stock markets have seen more fluctuations this year than in the past few years. Stock prices dipped on a large scale in connection with the financial market turbulence in the spring, particularly outside the main economic areas. Subsequently, stock prices have, however, continued to climb on the back of strong global economic growth and the positive corporate profit outlook.

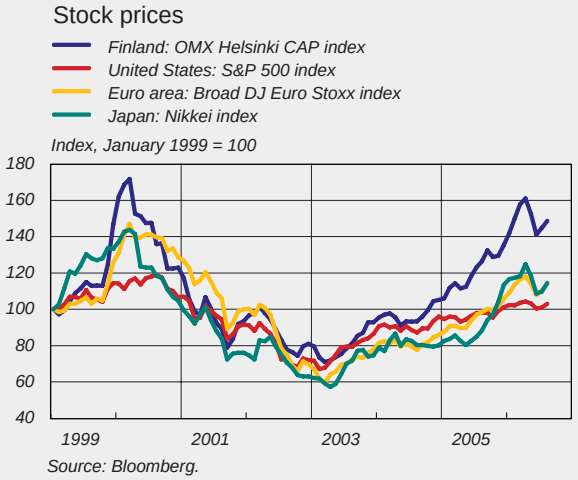
Stock market performance has been mixed in the main economic areas (Chart 5). In the United States, prices are not much higher than at the end of last year, although they suffered least in the spring's financial market turbulence. In the euro area, stock prices have recovered from their dip in the spring, and prices have risen well above the levels at the end of last year. In Japan, stock prices have fluctuated steeply and are now near the levels at the end of last year.

Stock prices have still been supported by investors' reliance on strong profit performance, particularly in the United States and the euro area. Based on national accounts data, growth in corporate profits has accelerated in the United States in the first half of this year, and it has also remained strong in the euro area. At the same time, analysts' profit forecasts for the next few years have also remained relatively strong. Increase in M&A activity may also have supported stock prices recently, particularly in the euro area.

All in all, developments in the stock markets have remained fairly favourable, although the support for stock prices from low interest rates has recently waned in pace with the tightening of monetary policy in the main economic areas. The low level of interest rates is good news for stock prices, since it decreases the yield on alternative investments, thus boosting the attractiveness of equities. Expectations of an increase in interest rates seem to have had a significant impact on the Japanese stock markets, where prices have fluctuated and the rise has come to a halt.

In addition, the recent decrease in investors' appetite for risk may also have dampened the rise in stock prices. During the financial market turbulence in the spring, investors reassessed their

Chart 5.



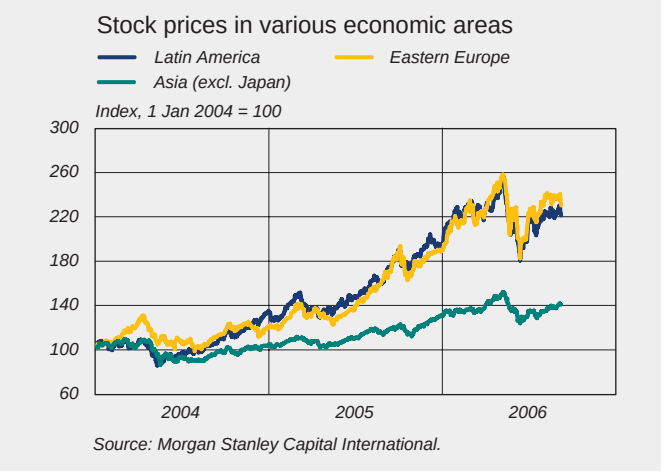
willingness to take risks, particularly on the stock markets, which was also shown by various risk indicators. One such indicator is the implicit volatility derived from options prices, which illustrates the uncertainty experienced in the financial markets with respect to future stock price developments in general. The values in such volatility indicators jumped significantly in the spring in all main economic areas. In the US stock markets, the jump was short-lived, and the values have resumed their historically very low levels. In the euro area and Japan, however, the increase in implicit volatility was more permanent, although volatilities are still at levels showing relatively low uncertainty.

The decrease in the appetite for risk in the spring's financial market turbulence was reflected particularly strongly in stock prices in many countries outside the main economic areas (Chart 6). Stock prices dipped markedly in many Latin American and eastern European countries. However, the stock markets have since regained their upward momentum, while the growth prospects in countries outside the main economic areas have for the most part remained very favourable.

Finnish stock prices also declined towards the end of the spring (Chart 5). However, the dip was short-lived, and prices have regained their upward momentum, as measured by both the OMX Helsinki and the OMX Helsinki CAP indices. The latter index limits the weight of one stock to a maximum of 10%. Stock prices have continued to benefit from companies' strong profit performance, which was also reflected at the beginning of the year in strong growth of the gross operational surplus in the national accounts. However, relative to actual earnings, stock prices on average continue to be at relatively moderate levels.

Among the sectors represented in the OMX Helsinki index, the best performers in terms of stock prices have been companies manufacturing and retailing consumer non-durables as well as the basic metal industry. The increase in stock prices in the consumer non-durables industry probably reflects the continued rapid growth of private consumption, while basic metals companies have most probably capitalised on the steep rises in the prices of commodities on the world market.

Chart 6.



Housing prices

The housing market is slowly adjusting to a period of rising interest rates. The housing price index of Statistics Finland stood about 7.7% higher than a year

earlier in the second quarter of 2006. Although house prices have still risen relatively rapidly, the rate of increase has gradually eased during the first two quarters of the year (Chart 7). Growth in the housing loan stock has also slowed this year.

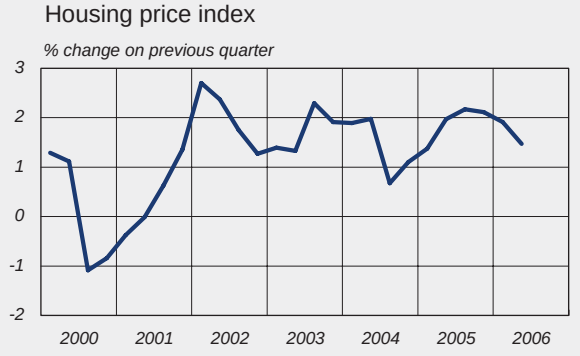
The prices of detached houses have risen since 2000 more in general than those of other types of housing. In the first quarter of 2006, the prices of detached houses stood at 6.3% higher than a year earlier, which means they rose more slowly than the prices of other types of housing. This was mainly due to developments at the end of 2005, when the prices of apartment houses increased steeply.

Housing prices have continued to rise more rapidly than rents, as the low level of interest rates and long maturities of housing loans have led many to consider owner-occupied housing more economical than rental housing. In the second quarter of 2006, the rents on privately financed apartment houses stood at 1.7% above the levels of a year earlier.

According to preliminary data, this year has been characterised by a decrease in the number of housing purchases. At the same time, surveys indicate that households' intentions to buy housing have remained high (Chart 8). If the preliminary information on a decrease in housing purchases is proven correct, this would indicate that households considering a housing purchase have delayed the purchase decision. It may be that this reflects partly the rise in interest rates on housing loans, but from the viewpoint of many households the asking prices may also have soared too high.

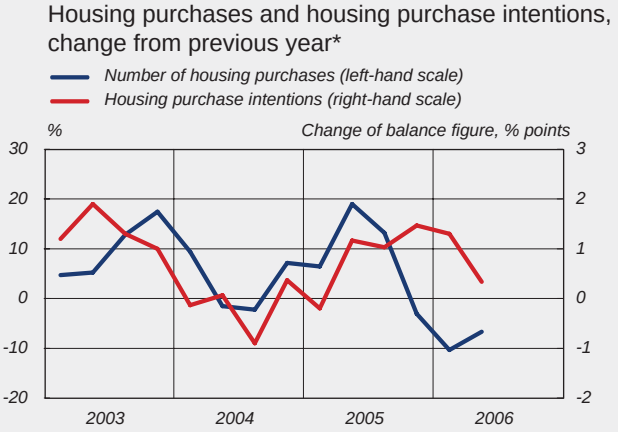
As a consequence of interest rate rises, the rate of increase in housing prices is expected to slow during the forecast period from 7% this year to 3% in 2008. Thus, at the end of the forecast period the rate of increase in housing prices would be lower than the rate of increase in household income for the first time since 2001.

Chart 7.



Source: Statistics Finland, seasonally adjusted by the Bank of Finland.

Chart 8.



**The number of housing purchases in 2006Q2 is the percentage change in the preliminary figure from the previous year's preliminary figure.*
Source: Statistics Finland.

MFI loans and deposits

As a result of the interest rate increases, the pace of growth in deposits with credit institutions has picked up and growth in their lending has eased slightly. In June 2006, the rate of growth in euro-denominated deposits with Finnish credit institutions accelerated to 8%. At the same time, growth of the stock of euro-denominated loans granted by credit institutions slowed to about 10%.

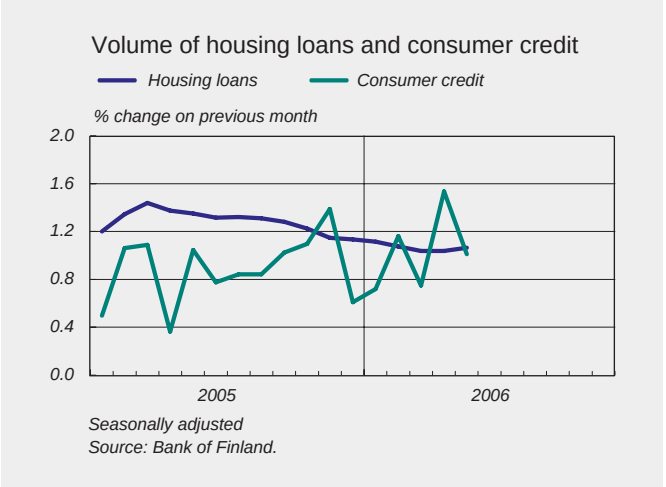
On the deposit markets, there has been increased demand for fixed-term deposits, in particular. In June, companies' and households' fixed-term deposits were a fifth larger than a year earlier. At the same time, the stock of overnight loans, ie assets on checking accounts, was only a couple of percent higher than a year earlier.

On the corporate loan markets, growth in short loans (less than 5 years) in particular has been slow. According to observations on bank lending, there has been a decrease in the loan demand specifically from large corporations, which is explained by the strength of corporate cash reserves. The rapidity of investment growth lends support to the growth in long-term corporate loans.

Growth in the housing loan stock has slowed from its recent very high pace (Chart 9). At the same time, demand for consumer credit has increased. The seasonally adjusted growth rate in the housing loan stock has already been slowing down for the past year, ie about the same period as money market rates have been on the rise. The growth in consumer credit is partly the result of a rapid increase in demand for consumer durables. Banks are also marketing consumer credit more actively than before.

A major change in the household loan market in the first half of 2006 has been the gain in popularity of loans linked to banks' own reference rates as opposed to other types of loan. In the first half of the year, about one third of loans granted to households has been linked to the banks' own reference rates, ie prime rates, whose stock has grown by almost a quarter. The stock of housing loans linked to Euribor rates as well as fixed-rate loans and other housing loans granted to households has remained broadly unchanged. This change in the structure of the loan market is a result of banks' pricing. The average interest rate on new loans linked to banks' own reference rates has decreased, while the interest rates on other new loans have increased. The decrease of the average rate on loans linked to the banks' own reference rates is mainly due to the fact that the proportion of housing loans (which

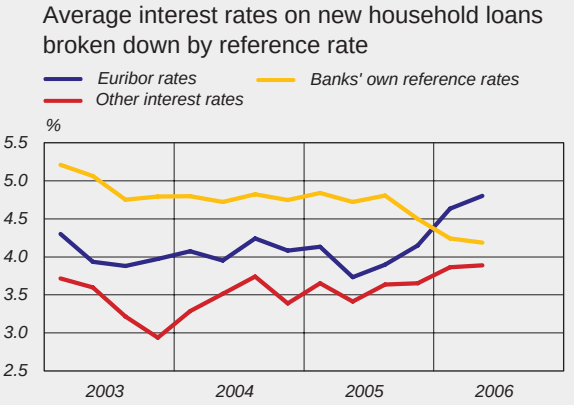
Chart 9.



have lower interest rate margins than other loans) of all loans linked to the banks' own reference rates has increased. The interest rates on loans linked to the banks' own reference rates generally follow the development of markets rates with a short time lag (Chart 10).

The loan market is expected to gradually calm down further. According to the household barometer of Statistics Finland, the number of households planning to borrow within the next 12 months has come down from the peak levels of last year. The banking barometer of the Finnish Bankers' Association expects the demand for both household and corporate loans to dampen gradually. The Bank of Finland's forecast, too, envisages a gradual slowing of growth in the loan stock as a result of interest rate increases.

Chart 10.



Source: Bank of Finland.

Box 1.

Forecast assumptions

World trade

The world economy has already been growing at a robust pace for several years. In 2005, world GDP grew by 4½%. The prospects for 2006 appear to be similar to 2005, as growth in the first six months has been strong and exceptionally broadly based across economies when compared to recent historical trends. Growth has been driven mainly by Asia, with China as prime mover, and the United States. US growth has, however, decelerated since the start of the year and is forecast to remain slower than average growth over the last few years. On the other hand, growth in a number of emerging economies and in Europe is expected to remain brisk. The world economy is estimated to continue growing buoyantly, at around 4% in 2007–2008.

World trade growth remained strong in the first six months of 2006. For the year as a whole, growth is predicted to clearly exceed 8% and to slow only moderately, to close to 7%, in 2007–2008. Growth in Finnish export markets is forecast to outperform world trade growth by 1 percentage point, mainly thanks to strong growth in Russian imports (Table 2).

Commodity prices

The world market price of crude oil has already been rising quickly for a few years now, fuelled particularly by robust world growth and rapidly increasing oil consumption in emerging economies. The forecast expects the price of Brent crude to follow the price trend in oil futures until September 2007. Thereafter, oil prices should fall to USD 60 per barrel by the end of 2008 in an environment of gradually increasing supply and spare capacity. The price of oil is thus assumed to decline somewhat from recent levels during the forecast period, but to nevertheless remain at historically high levels. There will be downward pressure on prices due to higher investment in the oil industry, which will gradually expand production capacities for crude oil and oil products. The sustained relatively strong world growth and continued geopolitical uncertainties are, however, expected to slow the decline in prices.

The prices of industrial raw materials (excl. energy) are also estimated to start falling progressively as temporary production shocks fade and high prices stimulate gradual increases in raw-material output. Brisk world growth is, however, predicted to sustain relatively strong demand for raw materials.

Table 2.

Forecast assumptions

	2004	*2005*	*2006f*	*2007f*	*2008f*
Import volume in Finnish export markets, % change	*9.7*	*8.0*	*9.2*	*8.0*	*7.9*
Finnish import prices, % change	*2.2*	*4.5*	*4.1*	*2.2*	*1.2*
Oil price, USD per barrel	*38.3*	*54.4*	*68.1*	*72.2*	*64.9*
Euro export prices of Finland's trading partners, % change	*–0.8*	*2.2*	*3.0*	*1.6*	*1.1*
3-month Euribor, %	*2.1*	*2.2*	*3.1*	*3.8*	*3.8*
Yield on Finnish 10-year government bonds, %	*4.1*	*3.4*	*3.7*	*3.7*	*3.7*
Finland's nominal competitiveness indicator[1]	*101.6*	*101.6*	*101.9*	*102.3*	*102.6*
US dollar value of one euro	*1.24*	*1.24*	*1.25*	*1.29*	*1.31*

[1] Narrow plus euro area, January–March 1999 = 100
f = forecast
Sources: Statistics Finland, Bloomberg and Bank of Finland.

Foreign trade prices

The substantial elevation of commodity prices has gradually started to feed through to the export prices of Finland's competitor countries; in fact, the upward trend in these prices has been strengthening since the beginning of 2005. Continued buoyant demand has made it easier to transfer cost pressures to final product prices. The rise in export prices is, however, expected to gradually ease during the forecast period. Stiff international competition and the reversal of the upsurge in commodity prices should keep the rise in foreign trade prices in check over the next few years.

The forecast foresees the fastest pick-up in competitor countries' export prices in 2006, when they should rise by about 3%. The pace of increase is however expected to recede markedly, to just over 1½% in 2007 and close to 1% in 2008.

Higher foreign trade prices have also gradually started to be reflected in Finnish import prices for goods and services. The fastest upturn in import prices in the forecast period is expected in 2006, when they should rise by a good 4%. Their rise should slow to just over 2% in 2007 and 1% in 2008, in response to a levelling off of commodity prices.

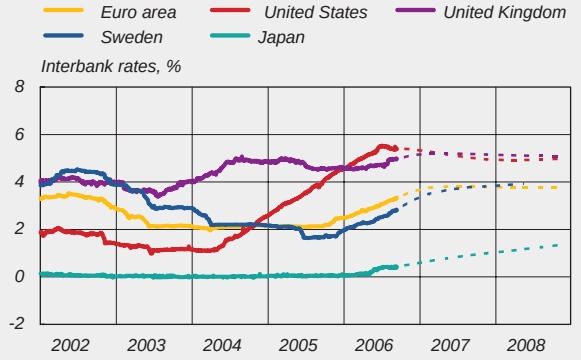
Interest rates and exchange rates

The interest and exchange rate assumptions in the forecast are derived from market expectations as at 8 September 2006. The underlying assumption is purely technical and does not anticipate the interest rate policy of the ECB Governing Council nor entail an estimate of equilibrium exchange rates. The assumption is for a broadly-based rise in short-term interest rates, except in the United States (Chart 11).

The euro is predicted to appreciate slightly vis-à-vis the US dollar in the forecast period, in line with interest rate differentials and the uncovered interest rate parity (Chart 12). It is further assumed that Finland's competitiveness, as reflected in the trade-weighted exchange-rate index, will weaken to some extent in 2006–2008.

Chart 11.

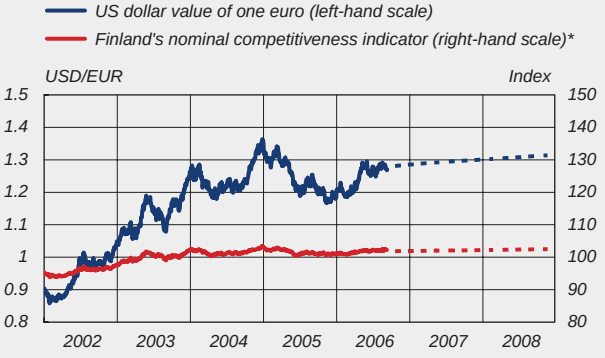
Short-term interest rates and interest rate expectations*



* 3-month market rates and interest rate expectations based on interest rate futures
Sources: Bloomberg and Bank of Finland.

Chart 12.

Exchange rate assumptions



* Narrow plus euro area, January–March 1999 = 100
Sources: European Central Bank and Bank of Finland.

Box 2.

Household indebtedness

Finnish households' debts have grown rapidly throughout the current decade, particularly after 2003, ie during the period of exceptionally low interest rates and stiff interbank competition in the housing loan market. Since 2003, the annual rate of growth of the stock of loans to households has fluctuated between 13% and 15%. The growth of indebtedness has slowed slightly in 2006. In June and July, the seasonally adjusted annualised rate of growth of loans to households was approximately 10–11%.

Despite the rapid growth of indebtedness, households in general do not seem to have become overburdened by debt at the current level of interest rates. At the end of 2005, Finnish households' debt-to-annual disposable income ratio was on average 90%, ie slightly below average by European standards (Chart 13).[1] This figure covers all households, including those that have no debts. In 2004, approximately 52% of households had debt and approximately 30% had a housing loan. The average debt ratio was approximately 115% for households with debt and 150% for households with a housing loan.

Due to lower interest rates and shorter repayment periods the ratio of capital and interest payments to disposable household income is still considerably lower than it was 10 years ago. Moreover, in Finland, loan losses caused by households are low and indicators of excessive indebtedness are at a moderate level.

Service data on income distribution compiled annually by Statistics Finland allows an analysis of the type of households that have become most indebted in recent years and of the impact of indebtedness on households' financial situation. The latest available information covers 2004.[2]

In 2004, slightly over half of Finnish households had debts (Table 3). The proportion of indebted households was highest for the younger age groups, high income groups, and families with children. In contrast, the proportion of indebted households varies only slightly by major regions. The proportion of indebted households and its distribution by population group has remained fairly stable since 2000.

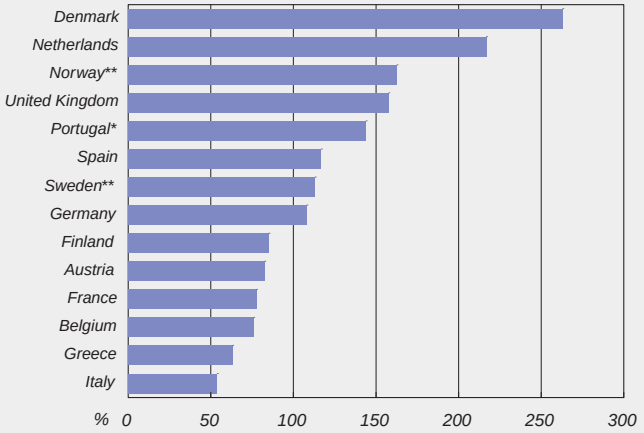
In 2004, median household

[1] *This figure was calculated on the basis of figures for households' disposable income available from national accounts statistics issued by Statistics Finland and figures for the stock of household debt available from the Bank of Finland's financial market statistics.*

[2] *Long-term developments in household indebtedness are examined on the basis of the service data on income distribution for 1989–2003 in Risto Herrala's article 'Household indebtedness', Bank of Finland Bulletin 1/2006.*

Chart 13.

Household debt ratio in selected countries in 2004



Debt ratio = Total debt / disposable income.
** Data for 2003/ ** Data for 2002*
Source: Eurostat.

Table 3.
Household indebtedness in 2004

	Proportion of households with debt, %	*Median debt, EUR*	*Disposable household income, EUR*	*Debt ratio, median, %*	*Debt service ratio, median, %*	*Debt payments, median, EUR*	*Proportion of of over-indebted, %*	*Debt-servicing difficulties, %*
All households	*52.9*							
				Indebted households				
Total sample		*21,727*	*34,546*	*67.0*	*8.0*	*2,769*	*5.8*	*7.6*
Age of head of family, years								
Under 35	*72.1*	*14,571*	*26,616*	*68.6*	*4.5*	*1,249*	*5.5*	*8.4*
35–44	*75.3*	*45,864*	*41,654*	*106.1*	*12.2*	*4,867*	*6.3*	*7.5*
45–54	*65.2*	*26,365*	*40,041*	*66.6*	*8.6*	*3,464*	*5.6*	*8.1*
55–64	*43.0*	*12,839*	*35,497*	*38.8*	*4.2*	*1,516*	*5.2*	*6.5*
Over 65	*12.7*	*7,983*	*22,264*	*32.5*	*2.4*	*626*	*7.0*	*4.5*
Income decile								
Less than 20%	*28.3*	*5,000*	*14,493*	*37.8*	*1.3*	*186*	*14.3*	*15.0*
20–39.9%	*40.7*	*14,000*	*24,099*	*57.4*	*6.1*	*1,485*	*6.8*	*8.3*
40–59.9%	*52.7*	*30,567*	*34,577*	*88.5*	*10.4*	*3,570*	*3.8*	*6.7*
60–79.9%	*69.1*	*45,398*	*44,688*	*103.7*	*11.6*	*5,122*	*3.0*	*5.4*
80–89.9%	*74.4*	*42,500*	*55,289*	*75.7*	*10.7*	*5,883*	*1.2*	*2.6*
90–100%	*72.6*	*50,859*	*71,865*	*68.2*	*9.0*	*6,863*	*0.9*	*2.9*
Major region								
Helsinki	*54.1*	*14,977*	*30,866*	*51.8*	*5.1*	*1,531*	*9.7*	*10.5*
Helsinki commuter area	*60.8*	*18,074*	*37,246*	*55.1*	*6.5*	*2,691*	*3.9*	*4.3*
Other major municipalities with a university	*50.4*	*13,816*	*28,542*	*51.3*	*5.1*	*1,560*	*5.7*	*8.4*
Other major municipalities	*50.6*	*20,000*	*30,312*	*69.7*	*8.8*	*2,599*	*3.2*	*6.6*
Other	*52.5*	*27,900*	*36,404*	*76.4*	*9.2*	*3,240*	*5.6*	*7.5*
Type of household								
Single person	*50.5*	*8,224*	*18,478*	*51.6*	*4.4*	*696*	*10.4*	*12.0*
Couples with no children	*62.7*	*19,637*	*37,485*	*52.7*	*5.7*	*2,266*	*3.6*	*4.2*
Single parents	*65.5*	*17,148*	*25,927*	*62.1*	*7.7*	*2,491*	*11.2*	*10.6*
Couples with children	*80.9*	*50,000*	*45,235*	*104.9*	*11.8*	*5,293*	*2.9*	*6.4*
Seniors	*11.1*	*7,983*	*21,175*	*38.0*	*2.7*	*664*	*6.7*	*3.1*
Not disclosed	*57.9*	*20,000*	*46,559*	*45.7*	*4.4*	*2,280*	*6.8*	*11.7*

Source: Statistics Finland, service data on income distribution.

debt amounted to approximately EUR 22,000, and median income to approximately EUR 35,000. The median debt ratio of indebted households was approximately 70%. The debt ratio was highest for early-middle-aged (35–44) households, for households with high incomes, and for families with children. It can thus be concluded that changes in interest rates affect particularly these population groups.

The proportion of households considering themselves overindebted in 2004 was approximately 6%. Moreover, 8% of households reported having at least occasional problems with loan payments. The service data on income distribution shows that the highest debt ratios and the biggest debt-servicing difficulties are found in different population groups. Overall, the debt ratio seems to be a poor indicator of households' debt-servicing difficulties. Debt-servicing difficulties do not accumulate in households with a high amount of debt. They accumulate in households with the lowest amount of disposable income after capital and interest payments.

Supply

Output

The revised methodologies for the compilation of national accounts data have led to changes in GDP statistics. The annual growth rates of GDP in volume terms for 2001–2005 have been revised upwards by 0.2 percentage points on average compared with national accounts data released in March last year. According to the new statistics, output increased by 2.9% in 2005. There was also an upward revision of GDP value compared with the old statistics. Box 4 discusses in more detail the changes caused by the methodological revision.

The sectoral breakdown indicates continued rapid growth in trade and in transport and communications in 2005 (Table 4). Slower-than-average growth was recorded in construction, for which growth figures were revised downwards in connection with the national accounts adjustment. The largest correction was made to manufacturing value added, which under the revised national accounts analysis registered an almost 4% growth in 2005, in contrast to –1.9% according to the earlier statistics. But for the lost output caused by the labour dispute in the paper industry, growth would have been significantly stronger still. The labour dispute is estimated to have subdued GDP growth at market prices by just under 1 percentage point.

In the first half of 2006, growth has been particularly robust in the metal industry, driven by increased exports of mobile phones and lively global demand for capital goods and metal raw materials. By contrast, growth in forest industries output has been muted despite the end of the labour dispute in the paper industry. The problem in this sector arises from weak development of paper prices on the world market. For industry as a whole, the Business Tendency Surveys by the Confederation of Finnish Industries conducted in the summer point to strong first half output growth and positive near-term prospects (Chart 14).

In 2006, economic growth is forecast to pick up to 5.4%. This figure is amplified by the base effect stemming

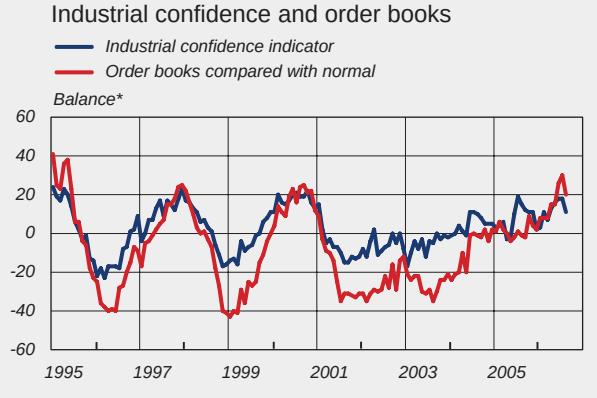
Table 4.

Real output growth

	Value weight for 2005 *%*	*2004* *%*	*2005* *%*
Primary production	*2.8*	*1.8*	*0.5*
Manufacturing	*25.4*	*4.4*	*3.9*
Construction	*5.9*	*2.6*	*2.5*
Trade	*10.6*	*5.7*	*2.8*
Transport and communications	*10.4*	*6.6*	*5.0*
Other services	*44.9*	*1.6*	*1.7*
Total output	***100***	***3.5***	***2.8***
GDP		*3.5*	*2.9*

The difference between total output and GDP stems from the calculation of GDP at market prices and total output at producer prices.
Source: Statistics Finland.

Chart 14.



from the paper industry labour dispute in 2005. 2006 looks likely to be the record year of the current cyclical upturn, as output growth is expected to normalise at some 3% towards the end of the forecast period. Even these figures are higher than what lies ahead in the years immediately following the forecast period. A deceleration in the growth rate of labour supply will already hamper output growth during the forecast period – especially when the problems with matching labour market supply and demand are not expected to become any easier. An elevated capacity utilisation rate looks likely to lead to the increasing substitution of domestic supply by imports during the forecast period.

Apart from the base effect related to last year's labour dispute in the paper industry, the forecast for very strong GDP growth in 2006 is attributable to robust performance in the first half of 2006, as growth is predicted to slow in the latter part of the year. The strong growth figures for the first six months are in line with the preliminary quarterly national accounts data. As preliminary data releases are often subject to major revisions later, the growth forecast for 2006 is naturally surrounded by uncertainty due to potential statistical corrections. Even so, a number of independent indicators also suggest that the first half of 2006 was a period of vigorous growth.

Employment and labour supply

The employment situation has continued to improve, albeit somewhat more slowly than in 2005. In January–July 2006, the number of employed was on average about 40,000 higher than in the corresponding period last year. Part-time employment has stabilised at about 16% of total employment. The structure of the labour market has remained unchanged also in that the increase in the number of jobs has not been reflected in a corresponding decrease in the number of unemployed. A major part of employment growth continues to come from outside the active labour force, which is normal in an improving employment situation.

Viewed across sectors, employment gained momentum especially in construction in the first half of 2006. Housing investment and construction investment in the trade sector have given employment not only to Finns but also to a large number of foreign workers. Some estimates already point to the presence of several thousand foreign workers in the construction sector.

Employment in private services has continued to increase rapidly. Gains in employment have been particularly pronounced in insurance, banking and business services. In reality, some employment growth in these sectors is simultaneously reflected in a weaker employment trend in industry, where tasks have been outsourced to companies providing business services. Strong growth in exports has also increased employment in transport and communications. Other private services have also given more work than earlier, mainly due to increases in social services. Local authorities have scaled up their purchases of privately

produced services (see Box 3). Of private service sectors, the number of employed in the trade sector has remained broadly unchanged. Employment in trade grew rapidly at the end of 2004 and the beginning of 2005.

The number of industrial jobs has slightly increased in January–July 2006, with an average of 5,000 more jobs than in the first half of 2005.

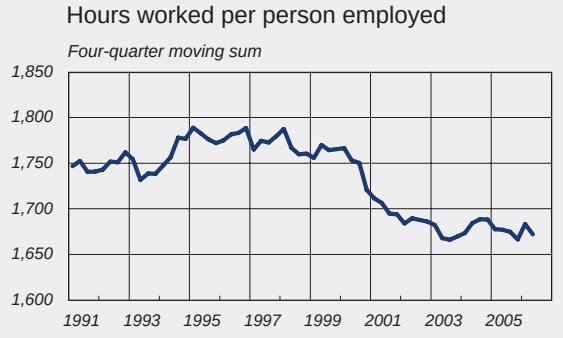
Employment is forecast to pick up only moderately in the latter part of the year. Growth still hinges primarily on services, although industry, too, should see marginal gains in employment in the next few months. The number of employed should increase by a total of 1.5% on average in 2006. Only about ½% growth in the number of employed is foreseen for 2007, and employment growth is estimated to come to a halt in 2008 (Chart 15).

Labour input in 2006 will grow somewhat faster than could be expected from the number of employed, as hours worked per employed person will increase slightly. The reduction in average annual working hours has not continued over the last few years (Chart 16). This is partly because the number of persons receiving part-time pension has stopped increasing. Another underlying cause is that employment in the trade sector, which uses a lot of part-time work, has also stopped increasing. Average hours worked per employed person are assumed to remain unchanged in 2007–2008. Given the declining rate of growth in the number of employed, this means that GDP growth in these years will increasingly depend on gains in labour productivity.

Chart 15.

Four-quarter moving average
Sources: Statistics Finland and Bank of Finland.

Chart 16.



Source: Statistics Finland.

The number of unemployed should stabilise at about 200,000 towards the end of the forecast period, corresponding to an unemployment rate of about 7.5%.

Despite continued high unemployment, the labour market is expected to become much tighter during the forecast period. The availability of labour is already thought to be slowing growth in a number of sectors. The situation is particularly difficult in construction, where, according to the

latest survey by the Confederation of Finnish Industries, more than half of employers already perceive shortages of skilled labour as constituting a constraint on growth (Chart 17). Labour market is not so tight in industry and services, but the situation appears to be rapidly deteriorating, as indicated by the Business Tendency Survey. Population ageing will somewhat restrict the labour market already during the forecast period, although population forecasts do not suggest an actual reduction in the size of the working-age population until the turn of the decade.

The tightening of the labour market should accelerate wage increases towards the end of the forecast period. (For a more detailed discussion on earnings developments, see the section 'Costs and prices'.)

Chart 17.

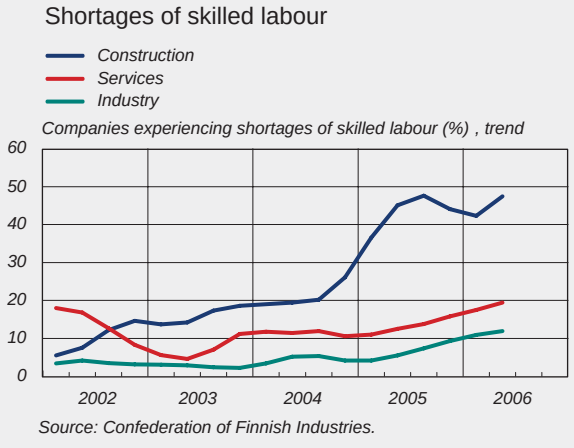


Table 5.

Labour productivity in the private sector

% change on previous year

	2003	2004	2005	2006^f	2007^f	2008^f
Labour productivity	2.0	4.5	1.4	4.8	2.8	3.5
Capital intensity	1.2	1.0	-0.3	0.0	0.4	0.8
Total factor productivity	0.8	3.4	1.6	4.9	2.4	2.7

f = forecast
Sources: Statistics Finland and Bank of Finland.

Productivity and capital

Owing to limited labour input growth, economic expansion in the long run will have to be based mainly on growth in labour productivity. Labour productivity growth is often divided in growth accounting into growth in capital intensity (capital stock per labour input) and growth in total factor productivity. Of these factors, growth in total factor productivity describes the share of labour productivity growth that cannot be explained by capital deepening. Accordingly, total factor productivity is used to explain a number of factors that are difficult to measure, such as advances in production techniques, organisation of work, intangible capital stock and a wide range of qualitative changes.

Table 5 breaks down growth in average labour productivity (output per employee) in the private sector into contributions from capital deepening and total factor productivity. An assessment of developments in labour productivity growth for last year and this year is obscured by the effects of the forest industry labour dispute. These effects are reflected in output growth rather than in employment growth, as employees involved in the dispute are statistically included in the number of employed. Hence, the statistically recorded labour productivity growth in 2005 was exceptionally low; conversely, it is exceptionally high this year.

Growth figures for investment volume in the last few years were significantly revised upwards in connection with the national accounts revision. The method for calculating capital stock was also adjusted. Thus, the revised capital intensity figures for the early 2000s point to stronger growth than in earlier accounts.

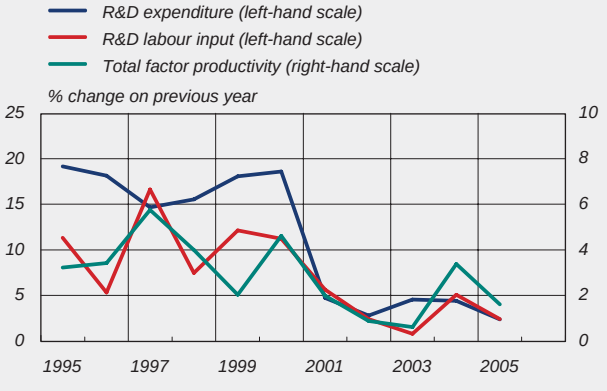
Labour productivity in the private sector has grown by 2.5% on average year-on-year over the period 2000–2005, and productivity is forecast to increase at a fairly strong pace in the next few years. The economy as a whole will see much lower labour productivity growth, at 2% in annual terms, on account of the public sector's weaker productivity performance. The role of capital deepening as a source of productivity growth is greater than in the 1990s on average.

Average annual growth in total factory productivity in the private sector amounted to about 3.3% in 1996–2000. In 2001–2005, however, it was only about 1.3%. The deceleration in the growth rate has been considerable. One explanation is that the structure of growth has changed from high-productivity technological industries into low-productivity service industries. At the same time, there has been a pronounced decline in the rate of growth for R&D expenditure (Chart 18). R&D investment is believed to improve production techniques and thereby to be reflected in total factor productivity growth.

National accounts record R&D expenditure as intermediate product inputs, in which case it does not have any impact on statistically captured capital intensity. Using constraining assumptions, however, it is possible to make a calculation that enables cumulation of this expenditure as R&D capital stock. The calculation uses the average of wage costs and the deflator for private-sector output as a proxy for prices of R&D investment. The annual depreciation coefficient is assumed to be 20%. Based on these assumptions, it can be assessed that 0.3 percentage points of total factor productivity growth in 2000 can be attributed to R&D capital intensity, in contrast to only 0.05 percentage point last year. This direct impact is still small in quantitative terms. If the deflator for R&D investment is composed so as to include prices of computers and computer software, the figures stated above will be higher, 0.5 percentage points and 0.1 percentage points, respectively. If the analysis is restricted to cover only manufacturing, R&D investment becomes an important determinant of

Chart 18.

Total factor productivity and R&D expenditure in the private sector



Sources: Statistics Finland and Bank of Finland.

labour productivity growth. The contribution of R&D capital intensity rises to almost 1 percentage point at the start of the millennium, playing a bigger role than ordinary capital intensity in the post-recession period. Over the economy as a whole, productivity growth would be boosted by the expansion of R&D activity to areas outside manufacturing, such as services.

The new national accounts methodologies have led to changes in the calculation of public-sector output so that the output of a sector is computed partly on the basis of output indicators (Box 4). As a consequence, labour productivity growth in the public sector diverges from the previously assumed zero growth. The new statistical data point to a 1% average annual reduction in labour productivity in the public sector in the 2000s. These figures are similar to those contained in many studies of public-sector productivity, indicating a trend decline in productivity. This stems to a considerable degree from improvements in the quality of public-sector services, among other factors, which means that service provision requires more labour input. Measuring performance on a comparable basis, however, continues to prove difficult. Public-sector productivity is expected to decline by about 0.2% annually in the forecast period.

Box 3.

Local government services outsourcing and employment statistics: difficulties in distinguishing between private and public employment

Employment in 'public and other services' has increased rapidly in recent years. In 2005, the social services component of this sector saw an increase in employment of 15,000 persons. Employment growth in the sector has continued at a fast pace also in 2006 (Chart 19). The Labour Force Survey, however, indicates no improvement in employment in the public sector per se in 2005. In fact, combined central and local government employment has remained practically unchanged since 2000 (Chart 20).

The different employment trends in, on one hand, the social sector and, on the other hand, the public sector make it necessary to consider the background to employment in private provision of social services. Of key concern is to determine the extent to which employment in private provision of social services reflects market demand for these services and the extent to which it represents outsourcing of public service provision.

Chart 19.

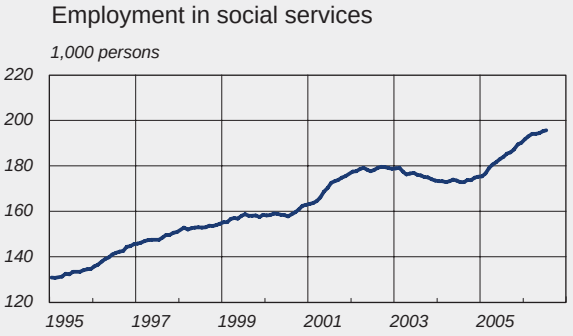
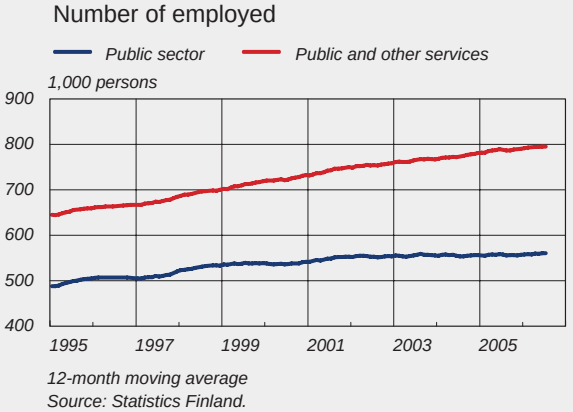


Chart 20.



Private activity increases in both health care and social services

National Accounts suggest that the contribution of the public sector to social-sector employment has been declining for about ten years. A particularly clear reduction has been seen since 2000. In contrast to the social sector's employment growth of 26,000 in 2001–2005, the public sector recorded an increase of only 5,000. By way of comparison, the contribution of the public sector to employment in health care and education has scarcely changed (Table 6).

A key role in the private provision of social services is played by the third sector. In 2005, about one fifth of jobs in the sector were in non-profit organisations, ie statistically classified as belonging to the non-profit sector. The figure for health care was about 3%. Non-profit organisations account for about half of private employment in social services.

Employment trends in the third sector do not, however, explain the lower contribution of the public sector to employment in social services. In recent years, creation of jobs in private enterprises has increased much

faster than in non-profit organisations in respect of both social services and health care. Enterprises providing social and health care services created about 13,000 new jobs in 2001–2004. Growth has focused particularly on new specialist enterprises. According to a report by the National Research and Development Centre for Welfare and Health (STAKES), private provision of services is most widespread in the area of service flats and other housing, followed by children's day care and home-help services. Private health care includes, besides medical and dental care, physiotherapy services and other health-related care.

Services purchased by local authorities decisive for private social-sector employment

A breakdown of 'private' social and health-care services into actual private activities and factual public activities can be made on the basis of the sources of finance for the services. There are basically three aspects that need to be considered in the provision of financing: who the purchaser of private services is, how the client is subsidised and how the service provider is subsidised. All these aspects are of importance for an assessment of how large a share of the employment is market-based. The most important determinant for a distinction between private and public activity is, however, the purchaser of services.

The available evidence on the division of private social and health-care clients into private and public categories is in part contradictory. The largest client group for private social services is local authorities (local government). According to their financial statistics, local authorities purchased in 2002 about 60% of privately provided social services. However, these statistics underestimate the real situation. Service providers indicate that about 70% of their clientele comprise local authorities or joint municipal boards.[1]

The largest client group for private health services is households and employers. Public clients, apart from the local authorities, are the Social Insurance Institution, the State Treasury, employment pension

[1] *Local authority financial statistics record costs for purchased client services only when an entire service package is purchased. Laboratory and X-ray services and 'jobbing' services by doctors, for instance, are registered as other purchased services. In addition, purchased services are recorded on a net basis (paid services minus client fees, if charged by the service provider). This explains why services purchased by local authorities, as recorded in national accounts statistics, have not correlated with employment in private provision of social services.*

Table 6.

Number of employed in selected services, 1,000 persons, and public sector contribution (%)

	Education		*Health care*		*Social services*		*Other social and personal services*	
	Total	***Public-sector contribution***	*Total*	***Public-sector contribution***	*Total*	***Public-sector contribution***	*Total*	***Public-sector contribution***
1975	*103*	***81.0***	*97*	***82.8***	*91*	***46.5***	*58*	***18.3***
1980	*113*	***86.3***	*122*	***84.8***	*112*	***58.4***	*69*	***20.3***
1985	*123*	***87.9***	*146*	***85.1***	*132*	***65.7***	*83*	***22.7***
1990	*135*	***88.7***	*161*	***84.1***	*147*	***74.6***	*95*	***22.8***
1995	*136*	***87.5***	*149*	***84.0***	*134*	***74.9***	*90*	***21.2***
2000	*152*	***83.0***	*157*	***82.8***	*154*	***69.0***	*106*	***18.6***
2001	*154*	***83.2***	*162*	***82.0***	*162*	***67.6***	*108*	***18.6***
2002	*157*	***83.2***	*165*	***82.1***	*169*	***66.0***	*111*	***18.4***
2003	*160*	***83.2***	*168*	***81.7***	*173*	***64.0***	*113*	***17.8***
2004	*161*	***83.0***	*170*	***81.3***	*177*	***63.0***	*116*	***17.5***
2005	*161*	***82.9***	*171*	***80.7***	*180*	***62.0***	*118*	***17.3***

Source: Statistics Finland.

institutions and insurance companies, whose combined purchases were estimated at a total of about EUR 0.5 billion in 2002. No precise information is available on purchases by private-sector clients. Calculated on the basis of indemnities paid by the Social Insurance Institution, private-sector purchases were of the same magnitude as public-sector purchases in 2002. On the other hand, they only include items that qualify for compensation. Information on purchased services, as recorded in local authority financial statistics, also underestimates the use of private health services.

Public and other services not entirely classifiable as public

Public-sector employment has occasionally been assessed starting from the assumption that the public sector comprises the whole category of public and other services. Accordingly, all private health-care and social services have been interpreted as constituting part of the public sector. This has also been the case for private education and for other social and personal services. This easily leads to an overestimation of public-sector employment.

Nor do such analyses provide a correct interpretation of employment if only staff on the payrolls of local and central government and the Social Insurance Institution are included in the public sector. As local authorities start using purchased services on a wider scale, there will be a danger that the resultant employment increase in private services is misinterpreted as, for instance, a sign of structural change in the economy.

It is difficult to draw a line between private and public purchases and their corresponding employment effects, particularly when the statistical compilation of services purchased by local authorities prevents the use of local authority financial data as benchmarks. Another problem for interpretation arises from the more widespread use of service vouchers. As payment obligations replace direct service provision by the local authority, a statistical criterion based on the purchaser of services is no longer useful in distinguishing between private and public service provision and employment.

In the end, the choice of employment category depends after all on how the question is formulated. A private social service may also be interpreted as constituting genuine private activity, even if directed at satisfying a service need guaranteed by the public sector. As local authorities use tender procedures in the selection of service providers and enterprises bear financial responsibility for their own business, this can be interpreted as constituting market-based provision of services.

Box 4.

National accounts revision changes picture of Finnish economy

This year, Statistics Finland has published revised national accounts data for 1975–2005. There have been several changes to the statistical calculation methods, including the introduction of a changing base year and double deflation. Data collection has also been improved, with important implications for Finnish economic statistics.

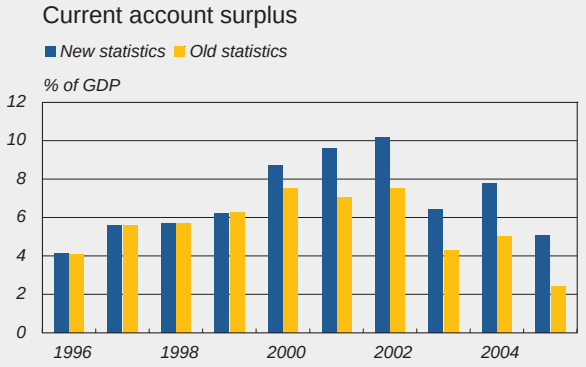
The most important change relating to data collection concerns foreign trade in services. As a result of an upward revision of services exports, the value of exports increased by 7% and that of GDP by 1.8% in the new statistics, when considering average figures for 2001–2005 (Table 7). Similarly, the share of services exports in total exports was revised from an average 12% to 18.5% for the same period. Since the upward revision of the value of net exports was relatively larger than that of GDP value, the trade account surplus, and hence the current account surplus, are also much larger than previously estimated (Chart 21). Correspondingly, the upward revision of the value of GDP means downward revisions in many other indicators, such as the central government debt-to-GDP ratio.

As an example of the effects of the national accounts revision on annual growth figures, the data on volume growth in private consumption and particularly in private gross capital formation deviate considerably from the earlier data (Table 7). The growth figures are stronger for both components, largely as a result of changes in deflators, ie price statistics.

Changes in national accounts compilation methods

The most important changes in calculation methods are the introduction of a changing base year (ie chain indices) in the measurement of volume aggregates, and the introduction of double deflation. A new method for calculating output was also introduced that enables

Chart 21.



Sources: Statistics Finland and Bank of Finland.

Table 7.

Revisions to National Accounts statistics

	Revision to annual change in volume, new–old, % points	*Revision to annual change in deflator, new–old, % points*	*Level of value, new–old %*
GDP	*0.2*	*–0.1*	*1.8*
Imports	*1.0*	*0.0*	*0.8*
Exports	*0.1*	*1.1*	*7.0*
Private consumption	*0.5*	*–0.4*	*0.0*
Public consumption	*-0.5*	*0.6*	*–0.6*
Private investment	*1.6*	*–1.5*	*–1.0*
Public investment	*0.3*	*–0.6*	*–2.9*

Average figures for 2001–2005 based on working-day-adjusted quarterly national accounts data published on 1 March 2006 and 16 August 2006.
Source: Statistics Finland.

the measurement of changes in general government productivity.

The use of a changing base year means that constant price data for each year are calculated using the prices of the previous year, whereas in the old method the base year was changed every five years. Constant price time series are chained by cumulating the volume changes of successive years. As a result, the effects of changes in relative prices will be recorded more accurately in GDP and its subcomponents at reference year prices. This is important for gaining a true picture of structural changes in the economy.

When using the double deflation method, both output and intermediate consumption are deflated according to their own price trends, and value added at constant prices is obtained as their difference. The previously used single deflation method was based on the assumption that the volume of value added developed in line with output volume, and hence the volume of intermediate consumption also followed developments in output volume. This methodological change will be reflected especially in sectoral data.

Impact on productivity estimates

The revised national accounts statistics also aim at measuring productivity in public service sectors. Statistics Finland estimates output in individual public services, such as education and health care, by using output indicators. In the previous method, the volume of public sector productivity was estimated mainly on the basis of labour input, and changes in productivity were assumed at zero.

The productivity of publicly produced services, derived with output indicators, has decreased in recent years. Labour productivity in public services declined annually by 1.1% on average in 2001–2005. This is not surprising, since many studies had already come to the same conclusion.

The statistical revision left annual labour productivity growth in the economy as a whole unchanged at about 2% on average in 2001–2005. Annual productivity in industry was revised from an average 4.1% to 5.7%.[1] Conversely, the revised data showed weaker productivity growth in private sector services than previously expected: average annual growth in labour productivity was a mere 0.8% instead of the previously measured 1.5%.

Positive general impression

Overall, it would appear that the revised statistics give a more accurate picture of the Finnish economy and particularly the impact of corporate restructuring in recent years. On the other hand, it is difficult to analyse the significance for macroeconomic trends of the revisions to service exports data, since the statistics do not show the precise sector-specific developments in service exports.

[1] *This data refers to years 2001–2004 only, since there is no sufficiently detailed data available for 2005.*

Demand

Economic growth is expected to even out somewhat in the forecast period without any dramatic changes in the structure of demand (Chart 22). Private consumption growth has been very brisk in recent years, and fairly rapid growth is expected to continue in the next few years. Private investment growth has also been on the increase since 2003, and in this forecast this growth will continue. While net exports made a negative contribution to GDP growth in 2005 mainly due to the paper industry labour dispute, the contribution is expected to be positive in the next few years.

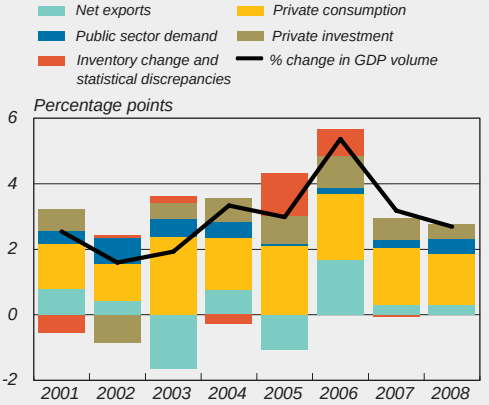
Private consumption

Private consumption growth has increased in Finland since 2003 by an average of 4% a year. In the accounts revision carried out by Statistics Finland in July, estimated private consumption growth in 2005 was revised upward to 3.8% from the preliminary data released in March. In the first half of 2006, private consumption growth continued at a rate of approximately 4% on the previous year.

Robust demand growth is underpinned by household confidence in income development. Improvements in employment and cuts in income tax have boosted income growth over a number of years, while slow inflation has augmented consumers' real purchasing power. At the same time, interest rates have been low and household assets have increased in the wake of rising housing and share prices. As a result, household consumption and investment in housing have accelerated rapidly in recent years (see Box 2 on household indebtedness). Consumption growth is expected to slow slightly in the forecast period, with lower growth in both income and employment, and the period of exceptionally subdued inflation drawing to a close. In addition, interest rates will be somewhat higher in the forecast period compared to the very low level observed in recent years.

In 2005, growth in aggregate wages accelerated to nearly 5% as a result of improved employment. Growth in households' real disposable income was nevertheless dampened by tighter taxation, as only inflation adjustments were made to tax schedules. Furthermore, due to the corporate and capital tax reform, effective as of the beginning of 2005, some dividend income was reflected in households' real disposable income in 2004. Even so, consumption growth did not slow at the same pace as the deceleration of growth in disposable

Chart 22.



This chart is merely indicative. The GDP growth contribution of each demand item has been calculated on the basis of its volume growth and its value share in the previous year. The figures for 2006–2008 are forecasts.
Sources: Statistics Finland and Bank of Finland.

Chart 23.

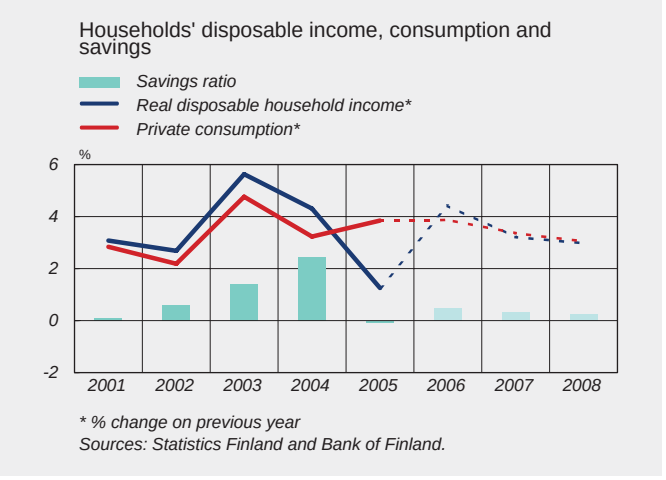


Chart 24.

Chart 25.

income, as purchases were increasingly financed through savings and loans.

According to national accounts figures, the household savings ratio fell to almost zero in 2005. Although last year's decline in households' disposable income is, to a large extent, partly temporary, the savings ratio is expected to remain low throughout the forecast period, as consumption growth is unlikely to slow much from the rapid pace witnessed recently. In 2007 and 2008, private consumption is forecast to grow by about 3% per annum.

The latest data on the retail trade support the view that fairly robust private consumption growth will continue in the current year (Chart 24). The registration of new cars has decreased somewhat, and Statistics Finland's consumer confidence indicator shows that consumers' confidence in their own finances weakened slightly over the summer (Chart 25).

Consumers' caution is likely to be heightened by rising interest rates and a slight acceleration of inflation to around 1½%. The weakening of employment growth in the forecast period will slow growth in aggregate wages, thus reducing consumer purchasing power. In the first half of 2006, aggregate wages were still growing at a rate of nearly 5%, but in 2006–2008 wages are expected to rise at an annual rate of approximately 4%. The tightening labour market is expected to make a modest contribution to accelerating the pace of earnings growth towards the end of the forecast period. The tax cuts carried out this year and planned for next year will reduce households'

income tax. The forecast assumes that only inflation adjustments will be made to tax schedules in 2008. Owing to the progressive nature of income tax, inflation adjustments alone are not enough to prevent a rise in household income tax, which will dampen growth in households' disposable income.

The acceleration of inflation in 2006 has slowed growth in consumers' real income, as energy product prices in particular have increased. In contrast, the downward trend in the price of consumer durables, especially electronics products, has continued, thus strongly boosting demand for these products. Consumer interest in the purchase of home entertainment systems has also remained strong due to the transition to digital television broadcasts in 2007.

General government

Buoyed by rapid economic growth, the general government fiscal surplus will grow substantially in the current year and remain around 3½% until the end of the forecast period. This will reduce general government debt to around 35% of GDP. Central government finances are clearly in surplus, while the local government fiscal deficit will contract. The surplus in social security funds will remain at around 2½% of GDP. Despite the tax cuts already implemented this year and decided on for next year, the impact of fiscal policy on economic activity is neutral and the total tax ratio is not likely to change much in the forecast period (Table 8).

The favourable economic situation has been reflected in public finances, especially through the rapid growth of corporate taxes and VAT revenue. Corporate profits are set to increase rapidly, especially this year, and private consumption growth will remain robust throughout the forecast period. Central government's and the employment pension funds' dividend income will be exceptionally high this year.

The tax cuts carried out this year and planned for next year will alleviate households' income tax burden. Central government income tax is expected to

Table 8.

General government revenue, expenditure, financial balance and debt, % of GDP

	2002	*2003*	*2004*	*2005*	*2006f*	*2007f*	*2008f*
General government revenue	*52.9*	*52.4*	*52.4*	*52.6*	*52.8*	*52.4*	*52.5*
General government expenditure	*48.8*	*50.0*	*50.3*	*50.1*	*49.3*	*49.1*	*49.0*
General government primary expenditure	*46.7*	*48.2*	*48.6*	*48.5*	*47.8*	*47.6*	*47.6*
General government interest expenditure	*2.1*	*1.9*	*1.8*	*1.7*	*1.5*	*1.5*	*1.4*
General government net lending	***4.1***	***2.3***	***2.1***	***2.5***	***3.5***	***3.3***	***3.5***
Central government	*1.4*	*0.5*	*0.4*	*0.4*	*1.0*	*0.8*	*1.2*
Local government	*–0.2*	*–0.6*	*–0.8*	*–0.7*	*–0.2*	*–0.1*	*–0.1*
Social security funds	*2.9*	*2.5*	*2.5*	*2.7*	*2.7*	*2.6*	*2.4*
General government primary balance	*6.2*	*4.2*	*3.8*	*4.1*	*5.0*	*4.8*	*4.9*
General government debt	***41.3***	***44.3***	***44.3***	***40.5***	***38.0***	***36.5***	***34.4***
Central government debt	*41.2*	*43.4*	*42.0*	*38.2*	*35.5*	*34.1*	*32.0*
Tax ratio	*44.5*	*43.8*	*43.5*	*43.8*	*43.7*	*43.5*	*43.6*

f = forecast
Sources: Statistics Finland and Bank of Finland.

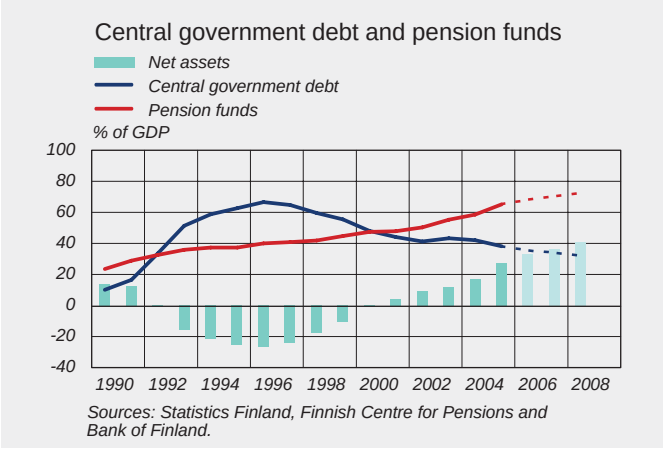
shrink in line with the government's decision relating to the outcome of negotiations on the general incomes policy settlement. The negative impact of tax cuts on central government tax revenue will nevertheless be alleviated by improvements in employment and growth in aggregate wages. In 2008, inflation adjustments alone will not be enough to prevent the tightening of central government income tax. The average local government income tax rate will increase this year, but it is expected to remain unchanged thereafter. Apart from the temporary reduction in employees' employment pension contributions this year, social security contributions are not expected to undergo any major changes in the forecast period. Based on the robust growth in the tax base and tax revenue, the total tax ratio will remain more or less unchanged in the forecast period.

General government expenditure is projected to grow at an average annual rate of 4% in the forecast period. Central government expenditure is expected to increase within the agreed spending limits, while local government expenditure is forecast to accelerate slightly faster than central government expenditure. Looking at general government expenditure relative to GDP, a small decline can be expected.

The downward trend in general government interest expenditure is forecast to continue. The effective interest rate on the debt is expected to increase in the forecast period, but the declining debt stock will hold back growth in interest expenditure. Relative to GDP, interest expenditure will continue to decrease. Expenditure growth in categories other than interest expenditure will be sustained by growth in the sum paid out in employment pension and general government salaries. The increase in employment pension will accelerate in the forecast period as the number of pensioners and average pensions paid out increase. In contrast, growth in general government salaries will subside as the number of employees in central government declines. Expenses arising out of unemployment will fall along with the declining number of unemployed. Local and central government investment expenses are expected to rise more slowly than GDP throughout the forecast period.

The central government debt ratio is expected to shrink to approximately 32% in 2008. Indebtedness has thus more or less halved from the peak level recorded in 1996 after the recession. In the forecast period, the reduction in central government debt is expected to be smaller than the surplus would suggest, because, according to the budget proposal for 2007, more funds will be channelled to the State Pension

Chart 26.



Sources: Statistics Finland, Finnish Centre for Pensions and Bank of Finland.

Fund than has been the established practice to date. Assets in private sector and local government pension funds are expected to grow in line with surplus revenue. All in all, the total asset portfolio of the pension funds is expected to increase by approximately EUR 15bn from the level posted in 2005. In 2008, total assets in pension funds are expected to account for 74% of GDP (Chart 26). In total, general government net assets relative to GDP are expected to rise by approximately 13 percentage points in the forecast period. In 2008, total assets in pension funds are expected to exceed government debt by some 40 percentage points relative to GDP.

Investment

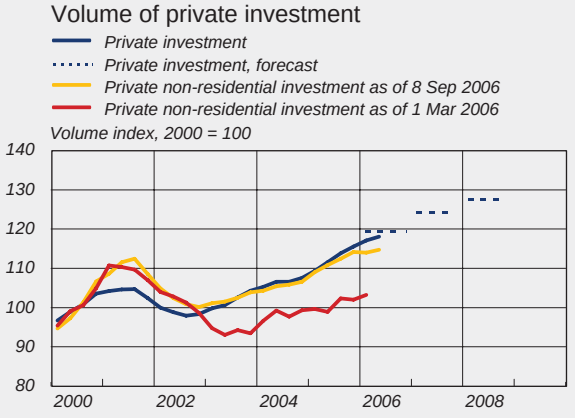
In recent years, fixed investment growth has exceeded GDP growth to some extent. The growth rate of housing investment has remained brisk, and private fixed investment has accelerated. Following the revision of national accounts compilation, the outlook for private investment became more positive, as volume growth in investment was revised upwards. In contrast, the GDP share of private investment was revised downwards.[1]

The upward revision of volume growth was due to the downward revision of the growth rate of the price of investment. The quality of investment, as indicated by the new statistics, has improved from earlier statistics, as declining prices have enabled acquisition of better capital goods with smaller investment in monetary terms. In practice, the faster volume growth is due to more ICT goods being included in investment in equipment and machinery, with the quality-adjusted price of ICT goods considerably smaller than before.

The revised statistics indicate that private fixed investment grew at an average annual rate of approximately 4½% in 2003–2005. In the wake of the recent statistical revisions, the general concern felt previously over the small amount of investment in productive capacity in the national economy now seems partly exaggerated (Chart 27). The statistical revisions affected this investment and especially investment in equipment and machinery. In contrast, the outlook for investment in housing and other construction investment has not changed since our previous forecast.

In the current year, private investment growth is expected to continue as both investment in productive capacity and investment in housing are progressing well. Investment growth is nevertheless expected to taper off in the next few

Chart 27.



Sources: Statistics Finland and Bank of Finland.

[1] More details on the changes in national accounts compilation by Statistics Finland can be found in Box 4.

years, and by the end of the forecast period should be close to the GDP growth rate. The private sector investment ratio is estimated to rise to slightly less than 17% in the forecast period.

The favourable forecast on corporate fixed investment is largely a reflection of strong corporate investment growth in sectors other than manufacturing industry. According to the June 2006 investment survey by the Confederation of Finnish Industries, growth in fixed investment in the manufacturing industry at market prices is estimated to reach just over 1% this year, whereas R&D expenditure is expected to grow by around 3½%. A sectoral breakdown of fixed investment in the survey shows that investment in equipment and machinery will rise to approximately 5%, but investment in non-residential buildings and structures – especially in civil engineering – will be well below the level reached in 2005.

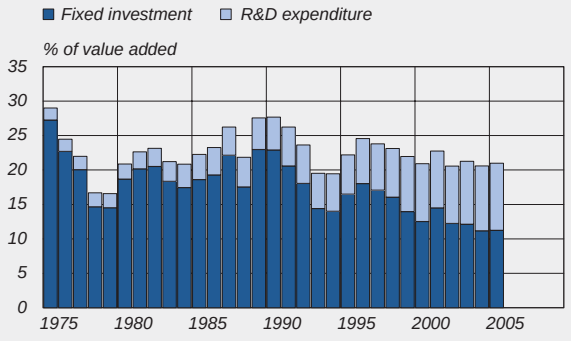
Private investment growth rate is expected to taper off next year, even though corporate profitability is likely to remain good in the next few years. Large fixed investment projects in Finland by manufacturing companies are slowly coming to an end, with new production capacity likely to be sought outside Finland via acquisitions or fresh investment. Increased R&D expenditure is nevertheless set to boost domestic income generation by increasing exports of services and raising the price of export products. The problem with R&D investment is its concentration primarily on one sector. R&D investment excluding investment in electronics has in recent years taken a much smaller share of value added than in previous decades (Chart 28).

Service sectors are characterised by major pressures regarding investment in public transport infrastructure projects. However, neither these projects nor the investment projected by the private transportation and information technology sectors are likely to substantially increase the investment ratio of the economy as a whole.

Construction investment has grown at a fairly robust pace in recent years. According to the survey by the Confederation of Finnish Industry, construction industry order books are in good shape. The trend in construction costs and contract tender prices has been moderate and the profitability of construction companies has improved. Rising interest rates and labour shortages are nevertheless having an increasingly adverse impact on construction investment. Slow processes in town planning and the bureaucratic permit application procedure are also retarding construc-

Chart 28.

Industrial investment and research and development expenditure



Sources: Statistics Finland and investment survey by the Confederation of Finnish Industries.

tion of new shopping complexes and corporate premises.

Demand for new sites for the construction of housing near employment-generating growth centres is likely to exceed supply in the next few years. In particular, the price of land for the construction of detached houses has in places risen beyond the reach of house buyers, due to shortages of supply. Consequently, housing construction, too, will begin to peter out from the beginning of 2007, despite high housing prices.

The world economy and external demand

The performance of the world economy in 2006 seems to be following the pattern seen in 2005, as early-year growth has been robust and exceptionally broadly based in geographical terms compared to the recent past. The prospects for the near future are also positive, even though growth is expected to slow gradually. In the United States, the economy has already begun to cool down, but rapid growth is expected to continue in the near future in many emerging economies as well as in Europe. Commodity prices are expected to continue to be historically high, thereby sustaining import demand in producing countries. World trade is thus expected to remain brisk.

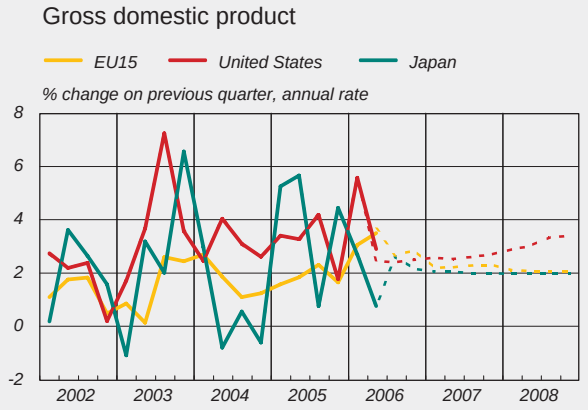
World GDP growth for 2006 as a whole seems set to reach last year's growth rate of approximately 4½% despite the fact that, in real terms, crude oil prices have already risen close to the levels seen in the oil crisis of the 1970s. The solid financial position of companies in the business sector, low real interest rates and an increase in the value of housing assets have continued to boost demand in many industrial countries, while emerging economies' integration into the world economy has continued.

The economic upswing that started at end of 2003 was, at the outset, largely driven by strong growth in the United States and certain emerging economies such as China. Later on, the base for growth was broadened following the recovery of the Japanese economy from its long recession. In contrast, the performance in early 2006 has been characterised by the noticeable pick-up in economic growth in the euro area. In the rest of Europe, too, growth has been rapid, partly as a result of a recent boost from euro area demand. Economic growth in industrialised countries has been supported, among other things, by increased income in many commodity-producing countries, which has resulted in increased import demand in these countries. This has been reflected in an overall rise in the demand for capital goods.

Recent data on economic developments indicate that the geographical unity of growth is slowly being fractured. In the United States, growth began to decelerate in the second quarter of 2006, and signs of a slowdown have also been seen in Japan (Chart 29). In contrast, Europe has been characterised by vigorous economic growth, and all indicators point to favourable developments also in the near term (Chart 30). Many emerging economies are also continuing to perform strongly.

The Bank of Finland forecasts that the outlook for world economic growth in the next few years is still fairly good

Chart 29.



Sources: Eurostat, Bureau of Economic Analysis, Economic and Social Research Institute and Bank of Finland.

Chart 30.

** The Tankan index was restructured in December 2003.*
Sources: Reuters, Institute for Supply Management and Bloomberg.

Table 9.

GDP and import growth rates

% change on previous year

GDP	*2005*	*2006f*	*2007f*	*2008f*
United States	*3.2*	*3.4*	*2.6*	*2.9*
EU15	*1.6*	*2.6*	*2.4*	*2.2*
Japan	*2.6*	*2.5*	*2.1*	*2.0*
World	***4.4***	***4.6***	***4.1***	***4.1***
World trade	*7.3*	*8.1*	*6.9*	*6.9*
Finland's export markets	*8.0*	*9.2*	*8.0*	*7.9*

f = forecast
Source: Bank of Finland.

(Table 9). Growth will, however, fall short of the performance seen in early 2006, but is nevertheless expected to remain at around 4% in 2007–2008. As a counterweight to the expected deceleration in US growth, economic activity remains vigorous in many emerging economies. Brisk growth is also expected to continue in the euro area and Japan, albeit at a slightly lower pace than just recently.

The high prices of oil and other commodities along with rising interest rates will even out this growth somewhat during the forecast period. Their impact is nevertheless expected to be limited. Corporate balance sheets are in good shape, following recent years' consolidation exercises, which will ease companies' adjustment to slightly higher real interest rates. Continued globalisation and intensified competition will keep the prices of many industrial products low, or in part even push them downwards, which will offset the impact of rising petroleum product prices on households' real income. In addition, countries producing crude oil and other commodities will continue to increase their imports from industrialised countries. It is therefore expected that world trade will continue to grow at a brisk pace of approximately 7% throughout 2007–2008. As with production, growth in world trade is nevertheless expected to remain slower than this year, as a result of decelerating import growth in industrial countries.

US economic growth slackened in the second quarter of 2006. Rising interest rates and energy prices as well as

cooling off in the housing market held back domestic demand growth. The deceleration in growth was expected but was stronger than forecast. Quarterly GDP growth for the remainder of 2006 is expected to remain at around the level of the second quarter, as household consumption growth will remain subdued and housing construction modest. Growth for the year as a whole will nevertheless reach nearly 3½%, up on 2005, buoyed by the strong performance at the beginning of the year.

Production growth is expected to accelerate somewhat towards the end of 2007, supported by exports and investment activity. In contrast, the recovery of private consumption growth will be slower, as US households are having to cope with the high debt burden taken on in recent years. GDP growth for 2007 as a whole is thus expected to remain at around just 2½%. In 2008, growth is expected to speed up slightly, facilitated by an expected halt in interest rate rises followed by a slight turn downwards, good corporate performances and continued vigorous world trade growth.

Economic growth in the EU15 countries accelerated in the first quarter to 0.8%. Preliminary data on second quarter developments point to a further acceleration of the quarterly growth rate. Strong export demand in the first quarter was one of the contributing factors to the recovery of the EU15 countries. Domestic growth also gathered speed strongly, following a long period of decline.

Due to strong performance in the first half of the year, the growth estimate for 2006 for the EU15 has been revised slightly upwards from our previous forecast, to approximately 2½%. Fairly strong growth is expected to continue for the remainder of the year, with a slight slowdown to just over 2% being expected towards the end of the forecast period.

Domestic demand in the EU15 is projected to be fairly strong in the second half of 2006. Corporate confidence has remained strong, with surveys indicating that household confidence has also improved. In the first half of 2007, private consumption growth will quieten down because of the VAT reform to be implemented in Germany, but this will be only temporary. Investment is expected to continue to grow strongly throughout the forecast period, driven by improved corporate balance sheets and relatively low interest rates.

Japan's economic growth exceeded 2½% in 2005. It is expected to remain brisk in the forecast period, compared to the recent past, albeit slowing gradually to around 2%. Japan's economic growth has recently been more healthily based than before, since, in addition to exports, domestic demand – corporate investment and private consumption – has also supported growth. At the same time, the need to stabilise general government finances has served to restrict public expenses.

In China, GDP growth speeded up in early 2006, with fixed investment growing at an extremely strong pace. The outlook for the next few years is also positive, with investment activity, household consumption and exports expected to undergo rapid growth. In

the rest of Asia outside China and Japan, growth is expected to remain robust this year, but peter out slightly in 2007. Owing to the strong dominance of exports, many of these countries are rather dependent on US and euro area economic growth.

Russian economic growth in the next few years is expected to slow only slightly from the rate of around 6½% projected for the current year, as the high price of oil ensures export income will remain high. Increased oil revenues will serve to sustain strong private consumption growth, in particular. Disciplined fiscal policy has helped stabilise central government finances, but strong demand is fuelling continued high inflation. This will strengthen the real exchange rate of the rouble and sustain rapid import growth, while the current account will continue in surplus.

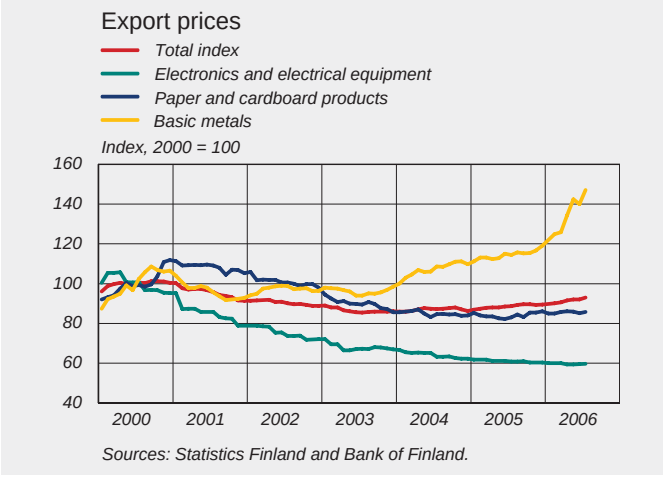
Export markets and export prices

In the last 12 months, developments in the volume and direction of export markets have been driven particularly by changes in the price of oil and other commodities (Box 6). The high price of oil and other commodities, mainly metals, has enabled increasing imports by producer countries. Owing to strong import growth in Russia, Finland's export market has grown faster than those of many other countries. Commodity producers' improved terms of trade and the resultant considerably improved profitability in the mining industry have boosted investment in these countries and hence the demand for capital goods on the world market. Price changes have thus altered the commodity structure of world trade.

Unlike in the past, rapid increases in industrial raw material prices since last autumn have been only slightly reflected in the prices of forest industry products. In fact, only the price of sawn goods has increased somewhat, while paper prices have remained low since last summer despite a slight increase in pulp prices (Chart 31). In metal refining, export prices have risen at an increasing pace since the end of last year. In July, they were as much as 28% higher than last year on average. Higher crude oil prices have in turn raised chemical industry export prices. Export prices in the electronics sector have continued to decline in the current year. Intensive international competition in the manufacturing of machinery and equipment has kept price increases modest.

The market situation will remain good in the immediate future, and no significant changes in export prices are expected before the end of this year. It is forecast that commodity prices will begin to fall next year, but even at the end of the forecast period they are still

Chart 31.



Sources: Statistics Finland and Bank of Finland.

expected to be higher than last year.

The fall in metal prices is also reflected in Finland's export prices. In contrast, paper prices are expected to begin a slight climb due to the low level at the start of the forecast period. Competition will preclude a major increase in the price of capital goods over the next few years. Growth in productivity and reductions in the price of components will keep the price of electronics products on a distinct downward trend.

Finnish export markets (or import volumes in Finnish export markets with Finnish export weights) will expand over the forecast period at a more vigorous pace than world trade (Table 9). Russian imports are expected to increase at an annual pace of 20%, which will more than compensate for slow import growth in the United States over the forecast period. The commodity structure of world trade would also seem to favour Finnish industry, as the focus is shifting from consumer durables to capital goods. The creation of new production capacity for raw materials and in basic industry seems to have been slow so far compared to the pace of import growth in China and other rapidly growing economies. Accordingly, demand for investment goods persists and their trade could continue to be fairly brisk next year at least.

Foreign trade

Growth in Finnish goods exports was only 7% in 2005 due to the labour dispute in the paper industry. Without its adverse impact, the strong performance of the remainder of the year would have increased the value of exports by about 10%. In volume terms, without the adverse impact of the labour dispute, goods exports last year would, after several years of modest growth, have exceeded the approximately 8% growth rate in the export markets (Chart 32). The value of import growth was boosted by the higher price of oil and other commodities, while volume growth benefited from strong domestic demand. Imports were also boosted by the recovery of exports, and particularly by re-exports to Russia.

In the first half of 2006, Finland's exports shot up, with exports in both the ICT sector and the chemical industry, especially petroleum products, increasing substantially. Strong demand on the world market has boosted exports of processed metal products. Engineering works that manufacture investment goods have benefited from the global investment wave. Delivery of a large cruise liner has also elevated export figures for the current year. In contrast, paper industry exports remained

Chart 32.

unchanged in the first half of the year, partly due to low export prices.

Evaluation of the impact of export growth on employment is being hindered by the rapid expansion of re-exports to Russia. This is also reflected in the bulk and retail trade sector now being an important export sector, with a 10% share of total exports. A substantial proportion of exports in this sector is probably accounted for by imported goods such as mobile phones and cars, in which the share of domestic income consists solely of transportation, storage and commission.

Data on industry order books and cyclical expectations indicate that export growth will continue in the second half of the year, albeit much more slowly than in the first half. Near-term prospects for the forest industry have also grown increasingly positive. Overall, growth in the export volume of goods and services will amount to 12% in the current year. Even without the elevating impact of last year's labour dispute, growth in the volume of exports would be forecast to exceed the estimated 9.4% growth rate in the export markets.

Export growth will remain relatively vigorous in 2007–2008, buoyed by the solid demand in export markets. The market for investment goods will remain strong until the end of the forecast period owing to the dynamic mining industry and the strong demand in oil-producing countries. Growth in the volume of exports will probably be slightly slower than the growth rate of around 8% in the export markets, mainly due to capacity restrictions in basic industry such as the forest industries. Known capacity increases in Finnish industry will not be enough to keep exports on a par with market growth. A shortage of skilled labour will also restrict exports in the forecast period.

In contrast, R&D efforts continue to sustain export potential in the electronics industry. Growth in the export volume of this sector is expected to remain vigorous, boosted by new-generation mobile phones. The impact on national income formation of export growth in the electronics industry is nevertheless being dampened by the continued decline in prices of mobile phones.

Import growth will amount to some 9% in the current year, driven by both domestic demand and export demand.

Chart 33.

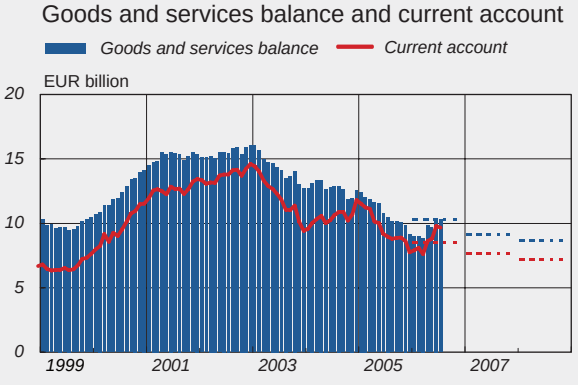


Table 10.

Services account, EUR billion

	2003	2004	2005
Services,	*1.3*	*2.3*	*1.4*
of which			
transportation	*–0.7*	*–0.8*	*–1.3*
travel	*–0.5*	*–0.6*	*–0.7*
other business services	*2.5*	*3.6*	*3.2*

Source: Bank of Finland, Finland's balance of payments 15 September 2006.

Growth in the value of imports will be even faster due to the high price of oil and other commodities. The rapid growth in imports will slow in the forecast period as a result of the deceleration in the pace of investment growth.

Current account

The current account surplus to GDP has halved since 2001, equalling 4.9% of GDP in 2005. The declining trend will continue in the forecast period (Chart 33), albeit more slowly. However, the improved method of compiling balance of payment statistics introduced in the national accounts revision gives a stronger picture of the current account. The revised statistics indicate a surplus in the services account, whereas the statistics previously showed the balance of services to be in deficit.

The improved statistical compilation reveals that in the services account the item 'other business services' has in recent years been strongly in surplus (Table 10). These services include internal services within multinational corporations which the Finnish branches provide for the foreign branches of such corporations. When the balance of payment statistics also include deficits in transportation and travel and the balances of other services, the entire services account surplus has averaged at 1.2% of GDP in 2001–2005. A similar declining trend as in the goods account cannot be observed in the services account, nor is such expected to materialise in the forecast period.

The diminution of the surplus on goods has continued since 2003, and no reversal is foreseen in the next few years. This has largely been due to the weakening of the terms of trade, which is expected to persist (Chart 34). Import prices have risen vigorously, while export prices have been more sluggish. Despite high import prices, imports continue to account for an increasingly larger share of GDP. The high price of oil and other imported energy is not expected to reduce the volume of imported energy relative to GDP to any noticeable extent in the forecast period. Strong import growth in both production inputs and final products reflects the restrictions in domestic supply.

The shrinkage of the deficit on the income account is expected to progress slowly, while the deficit on current transfers to GDP is forecast to remain unchanged. Overall, the current account surplus is expected to contract to approximately 4% of GDP by 2008. Owing to rapid population ageing it is essential that the current account remain in surplus in the next few years, primarily reflecting the general government fiscal surplus.

Chart 34.

Box 5.

Monetary policy reform in Japan

Following the overheating of the late 1980s, the Japanese economy drifted into recession and deflationary pressures. In the early part of the current decade, consumer prices continued to decline at an approximate rate of 1% a year. The fall in asset prices was even more pronounced, which also played a role in Japan's poor economic performance. Real economic growth continued, but it was slower than the fall in prices. Consequently, even in 2004 the value of GDP in Japan was lower than in 1998. Public finances have been characterised by a serious deficit.

In response to the strong deflationary pressures, the Japanese central bank cut interest rates. After the policy rate hit zero, there was no more room for manoeuvre in interest rates, as market rates cannot be negative (Chart 35).

With the interest rate tool now paralysed, the central bank attempted to relax monetary policy by feeding additional liquidity into the banking system. This 'quantitative monetary policy' was begun in early 2001 in an effort to increase banks' funds held in their settlement accounts at the central bank. The growth in central bank funding of commercial banks was at times quite fast. The impact of quantitative monetary policy on overall economic development was nevertheless limited, as the amount of bank loans taken out by consumers continued to decline.

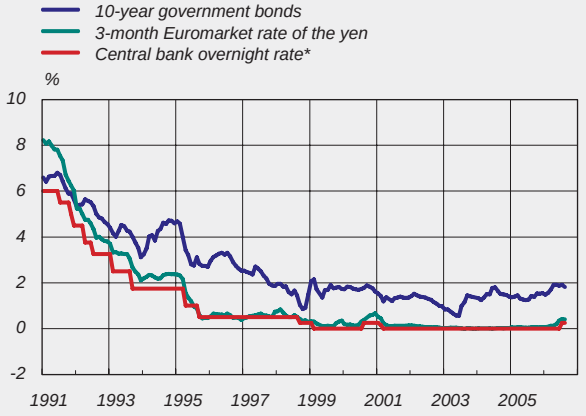
The central bank stipulated three conditions for bringing quantitative monetary policy to an end. Firstly, the fall in consumer prices had to stop for at least a few months. Secondly, it had to be certain they would not start to decline again. And finally, there had to be confirmation of the overall strength of the economy. Recent developments and forecasts are generally weighted in the direction of achieving these objectives. The fall in consumer prices has come to an end, although their annual increase still hovers at only just under 1%.

Following fulfilment of the above conditions, Japan has carefully reintroduced the interest rate tool as a method of steering monetary policy. Since March 2006, the central bank has very rapidly withdrawn the excess liquidity injected in past years without any major problems. This was done by the central bank selling to the markets government securities that had been in its possession and reducing its credit to the banks. In anticipation of an increase in the policy rate, the interest rate on ten-year government bonds rose in spring from around 1.5% to almost 2%. Eventually, in July 2006, the policy rate was raised from zero to 0.25%.

Although Japan's nominal interest rates have been low, due to deflation the long-term real

Chart 35.

Japanese interest rates



** In reality, no central bank overnight rate was defined between March 2001 and March 2006.*
Sources: Reuters ja Bloomberg.

interest rate has remained more or less the same as in western countries, ie unambiguously positive. Just as Japan's low interest rates have in recent years contributed to the decline in interest rates internationally, the rise in Japan's interest rates will play a small role in intensifying upward pressures on international interest rates.

The zero interest rate policy has helped the Japanese banks burdened by loan losses, and especially those of their customers who have suffered a financial crisis in the difficult years. The recent strong performances by Japanese corporations would suggest the banking crisis is over. Banks' financial results and credit ratings have improved. Japanese banks have also paid back some of their government capital support in advance. However, it remains unsure how well corporations, banks and the Japanese economy in general will be able to withstand rising nominal interest rates after a long period of zero rates.

Although quantitative monetary policy did not succeed in speedily restoring growth and pushing up prices, it is well to note that it did not cause any other instabilities. Japan's balance of payments (incl. capital movements) and the external value of the Japanese yen remained relatively calm during the period of quantitative monetary policy compared to their highly unstable history.

Box 6.

Finnish exports to OPEC countries

Reflecting higher oil prices, the dollar-denominated export receipts of petroleum exporting countries have more than doubled since 2003. Higher oil revenues have also facilitated growth in imports: in the past few years, imports to OPEC countries have grown by approximately 20% annually. This is also reflected in the development of euro area exports. Finnish exports to OPEC countries have grown at an even faster rate (Chart 36). Compared with 2002, the value of exports has nearly doubled, rising in parallel with the euro-denominated price of oil. In the same period, the proportion of Finnish exports going to OPEC countries has increased from just under 3% to 4.8%. Of non-OPEC countries, Finnish exports to Russia have grown rapidly.

A sectoral examination shows that the structure of Finnish exports to OPEC countries differs substantially from that of total Finnish exports. In recent years, telecommunications equipment has accounted for approximately two thirds of goods exports to OPEC countries (Table 11); these have consisted almost entirely of mobile phone deliveries.[1] In 2005, Finland exported nearly 4 million mobile phones to the United Arab Emirates alone, at a total value of over EUR 900 million.[2] Other machinery and equipment have accounted for slightly over 10%, and other goods for approximately a fifth of exports to OPEC countries.

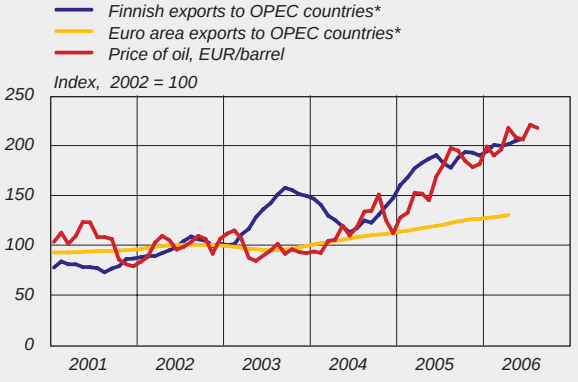
Imports by OPEC countries are expected to increase rapidly in the coming years as well, and Finnish goods exports can likewise be expected to grow rapidly. One factor of uncertainty is the fact that an increasing proportion of mobile phones are delivered from plants in OPEC's neighbouring regions, rather than from Finland.

[1] *In foreign trade statistics, mobile phones are recorded as capital goods. Finnish goods exports do not cover services in connection with network deliveries and network components delivered from plants outside Finland.*

[2] *Some of these mobile phones may have been redelivered to non-OPEC countries.*

Chart 36.

Finnish and euro area goods exports to OPEC countries



** Seasonally adjusted figures and 6-month moving average.*
Sources: National Board of Customs and Eurostat.

Table 11.

Finnish goods exports to OPEC countries

	2002	2003	2004	2005	2006
Changes in value of imports to OPEC countries (EUR), %	*–4.5*	*–4.6*	*19.9*	*22.5*	*..*
Changes in Finnish exports to OPEC countries, %	*20.2*	*43.9*	*–8.8*	*45.3*	*8.3*
Proportion of total Finnish exports going to OPEC countries, %	*2.8*	*4.1*	*3.5*	*4.8*	*4.3*
of which telephones and telecommunications, %	*60.7*	*70.7*	*64.9*	*68.6*	*64.8*
other capital goods, %	*12.6*	*11.1*	*14.0*	*13.9*	*14.6*
other goods, %	*26.7*	*18.2*	*21.1*	*17.5*	*20.6*

Data for 2006 is based on observations for January–June.
Sources: National Board of Customs, WTO and IMF.

Costs and prices

Labour costs

Salary and wage earners' nominal earnings grew by 3.9% during 2005. Increases in negotiated wages contributed 2.5 percentage points, and wage drift almost 1.5 percentage points to this growth. Despite the improved employment situation, the contribution of wage drift to annual growth in total earnings has remained around 1.5 percentage points since autumn 2004.

The slowing of earnings growth to somewhat over 2% in the first half of 2006 will remain temporary, since this year's negotiated increases will not come into effect in the same quarters as last year. Wage drift is estimated to remain at the same level this year as last, and earnings growth will therefore decelerate to close to 3%, owing to the more modest negotiated increases than in 2005. However, stronger growth in the number of hours worked than in the number of employed will mean an increase in average pay per employee of over 3%.

The current incomes settlement comes to an end on 30 September 2007. It does not contain negotiated increases in wages for 2007, and earnings growth in 2007 will therefore remain at this year's level of approximately 3%. Tightening labour market conditions and higher inflation in the forecast period will be reflected in an acceleration of earnings growth to over 3½% in 2008. As there are no major changes to be expected in the number of hours worked per employee, average pay per employee will evolve in line with earnings growth in 2007–2008 (Chart 37).

Public sector earnings have increased faster than private sector earnings in recent years. There are two main reasons for this. Public sector pay policy has in recent years been developed in the direction of performance-related pay, while high levels of retirement and increased outsourcing are changing the structure of the public sector labour force. With regard to the latter, the trend will continue in the next few years.

Unit labour costs in the private sector have risen less than 1% on average in recent years, as labour cost growth has remained modest and labour productivity has increased moderately, by about 2% per annum on average. Productivity growth has been most favourable in industry, particularly in electronics. By contrast, in many segments of the service sector productivity growth has, as usual, been slow. The few exceptions include telecommunications and the insurance and banking sector. Unit labour costs have

Chart 37.

Chart 38.

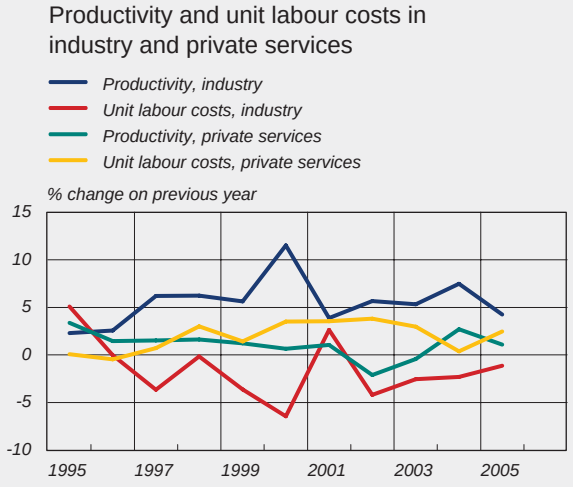


Chart 39.

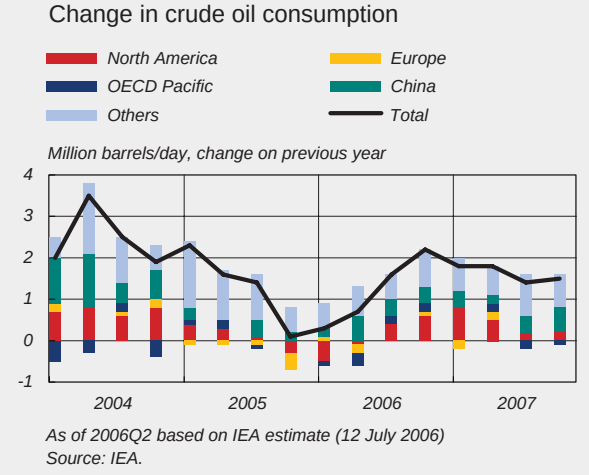


Table 12.

International prices of oil and industrial raw materials

	2004	*2005*	*2006f*	*2007f*	*2008f*
Oil					
USD/barrel	*38.3*	*54.4*	*68.1*	*72.2*	*64.9*
EUR/barrel	*30.8*	*43.9*	*54.2*	*55.8*	*49.6*
Industrial raw materials (excluding energy)					
% change on previous year					
in USD	*24.8*	*14.5*	*31.6*	*0.7*	*–5.2*
in EUR	*13.6*	*14.5*	*30.3*	*–2.2*	*–6.2*

f = forecast
Sources: Bloomberg, HWWA and Bank of Finland.

in consequence risen much more strongly in services than in industry (Chart 38).

Continued moderate earnings development and continued productivity growth at the rates seen in recent years will keep growth in private sector unit labour costs at moderate levels over the forecast period.

Commodity prices

The continued robust pace of world growth has in recent years boosted demand for commodities, particularly in China and other emerging economies. This has contributed to the continued rise in the world market price of crude oil, with an increase of almost 16% from the beginning of the year to August 2006. Prices of other commodities used as raw materials in industry – particularly copper and aluminium – have also risen considerably since autumn 2005. In the next few years, prices of crude oil and other commodities – particularly metals – are expected to fall slightly but remain at elevated levels by historical standards (Table 12).

Demand for oil continues to grow

The International Energy Agency (IEA) estimates that world crude oil consumption will continue to grow moderately this year and next. In the years ahead, consumption is estimated to grow most in Asia, led by China, as well as in the Middle East and North America. The IEA forecasts a slight drop in demand in Europe in 2006 and 2007 (Chart 39).

There continues to be little spare crude oil production capacity. OPEC

production has hardly increased at all in recent times, production growth coming mainly in South and North America and the CIS area. Oil industry investments were relatively modest in the 1980s and the 1990s. However, they have increased during the past couple of years, and continued investment growth is expected to gradually alleviate the tight market conditions.

There is, however, a risk that current investment plans will be insufficient to satisfy growth in demand in the years ahead. Additional investments are already needed, partly because the location of new oil fields means they are more difficult to exploit than the old fields and the profits from new deposits cannot reach the levels of the gigantic deposits discovered last century. In addition, new deposits often contain heavy grades of oil that some refineries cannot exploit without expensive new investment. However, the oil companies have so far been able to increase the production of crude oil and other oil products by using the latest technology in exploration and drilling.

There has recently been a considerable increase in crude oil inventories, reflecting heightened uncertainty. Oil companies are stockpiling supplies in preparation for possible disruptions to production, the main cause being political tensions in oil producing areas. The possible heightening of tension in the dispute over Iran's uranium enrichment programme could cause severe production disturbances in the Persian Gulf.

Oil prices will remain high

Owing to increased consumption and the scarcity of unused production capacity, our estimate of long-term oil prices is higher than in the previous Bank of Finland forecast. The new projection builds on the assumption that the price of crude oil (Brent blend) will follow price developments in crude oil futures up to September 2007, after which prices will fall steadily to USD 60 by the end of 2008, in the wake of gradual increases in production and spare capacity (Chart 40).

Industrial raw material prices at a record high

Prices of industrial raw materials (excl. energy) have recently risen to a record high. In August 2006 they had increased by 40% on the same period a year earlier and by 22% from the beginning of the year. In particular, prices of non-ferrous metals such as copper and aluminium have surged during the past twelve months. Iron ore and scrap metal prices have also

Chart 40.

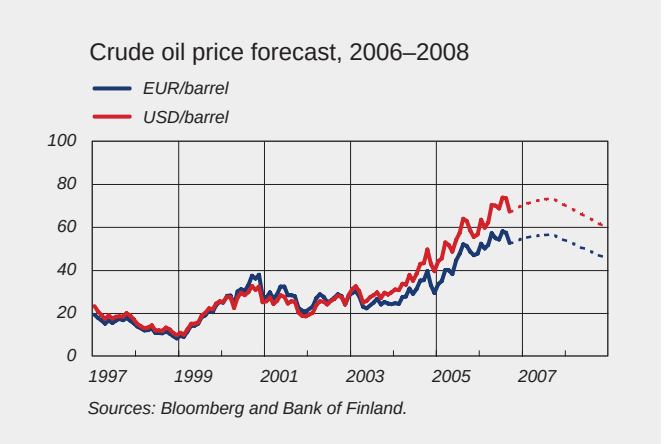


Chart 41.

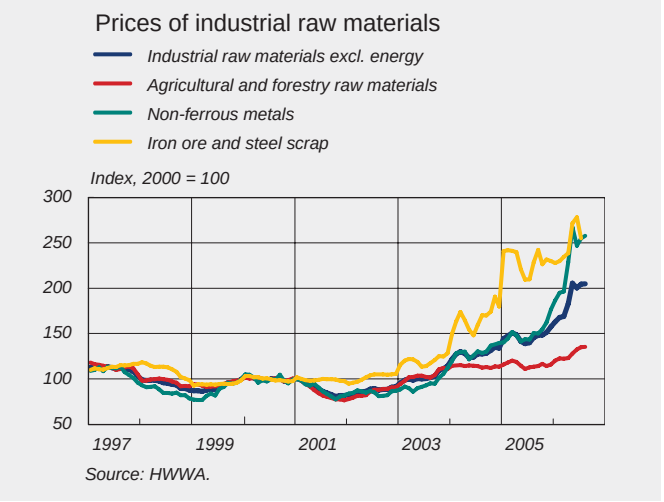


Chart 42.

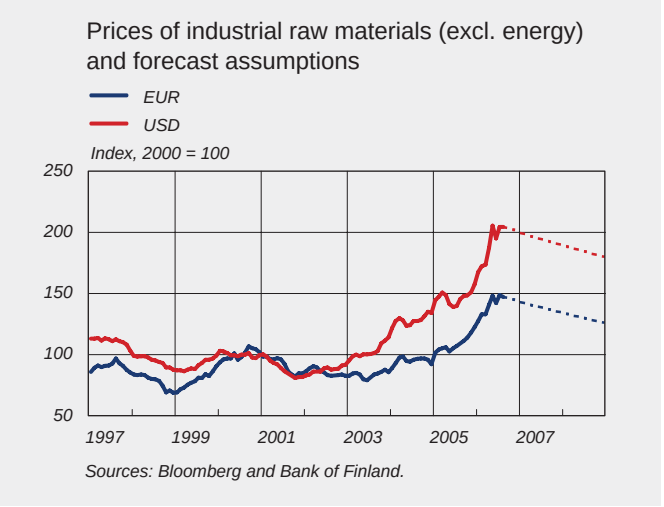
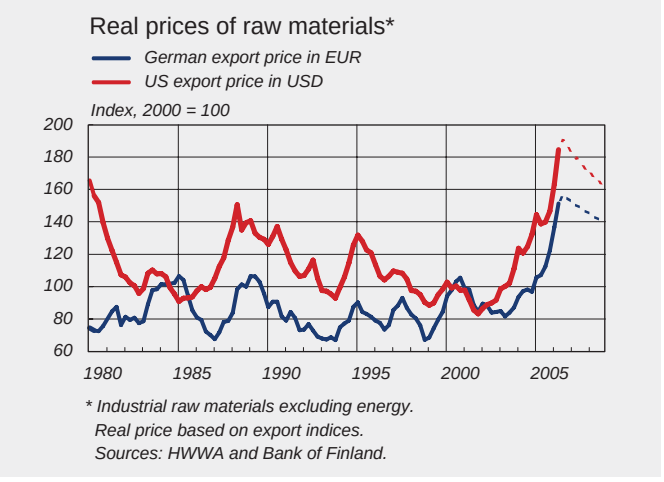


Chart 43.



increased at a faster rate than earlier. The high raw material prices are mainly due to the continued robust pace of world economic growth and demand for metals, particularly in China. Low inventories of non-ferrous metals and strikes in Chile, the world's largest copper producer, have also contributed to the rising prices (Chart 41).

According to the forecast, industrial raw material prices will gradually begin to fall as temporary production disturbances come to an end and high prices begin to induce higher output of raw materials. However, owing to the robust pace of world economic growth, the demand for raw materials is estimated to remain relatively high. Despite their predicted fall, raw materials prices will remain historically high (Chart 42).

Dollar-denominated real prices of raw materials (excl. energy) have already risen well above the peak levels of the 1980s. Euro-denominated real prices are also higher than earlier. As the rise in nominal prices comes to an end real prices will also begin to decline (Chart 43).

Import prices

Finnish import prices have been rising rapidly since the end of 2003.[1] The sharp rise of recent years in world market prices of raw materials has led to considerable increases in import prices, particularly of energy and inter-

[1] Based on the Import Price Index (2000=100) calculated by Statistics Finland. The index comprises import prices of the following commodity goods (classified according to main industrial groupings): energy, intermediate goods, capital goods, durable consumer goods and non-durable consumer goods.

mediate goods (incl. raw materials). Import prices of goods rose by more than 6% in 2005, and the trend has continued in 2006. In the seven months from January 2006, import prices have gone up by over 4%.

Import prices of energy have almost doubled along with the rise in world market prices of crude oil over the past two and a half years. At the same time, prices of intermediate goods have also climbed by over one fifth on account of eg the increase in world market prices of metals (Chart 44).

In addition to raw materials, prices of many other internationally tradable goods have also gone up recently, and export price indices already turned sharply upwards in many industrial countries in 2004. This has been reflected, as regards price developments of goods imported into Finland, especially in capital goods prices: the demand for capital goods has increased internationally, and raw materials often account for a considerable part of their production costs (Chart 45).

Finnish import prices of some consumer goods have also risen, largely for the same reasons as capital goods. Particularly marked has been the rise in import prices of non-durable consumer goods. In contrast, import prices of durable consumer goods have continued to develop fairly moderately, mainly due to the ongoing fall in the import prices of entertainment electronics. Increased imports of consumer goods from China and other emerging Asian economies has also depressed Finnish import prices in recent years. The rate of change in consumer goods import prices has turned from –3% in June 2005 to over +1% in June 2006.

Import price rises gradually easing

The import deflator for goods and services used in the national accounts gives a broader picture of import price developments than the Import Price Index published monthly. The deflator also contains import prices of services and covers all imported goods. During

Chart 44.

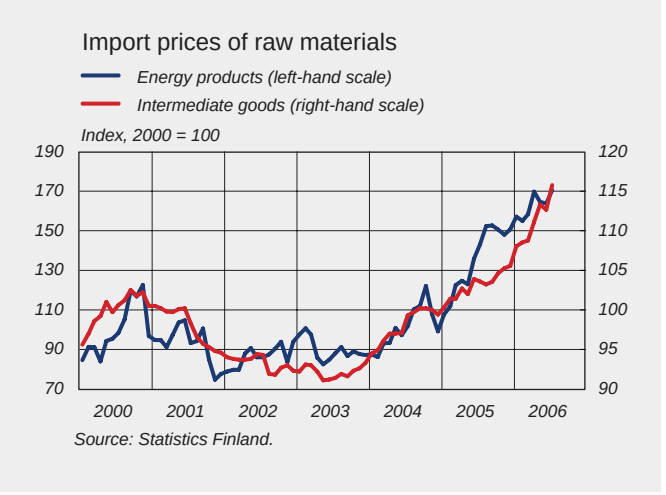


Chart 45.

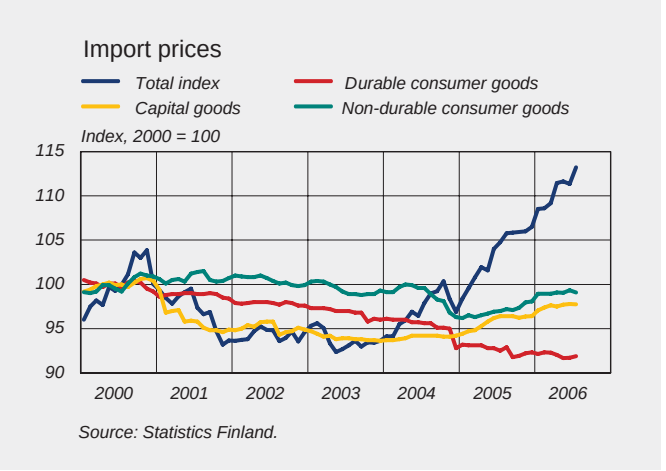


Chart 46.

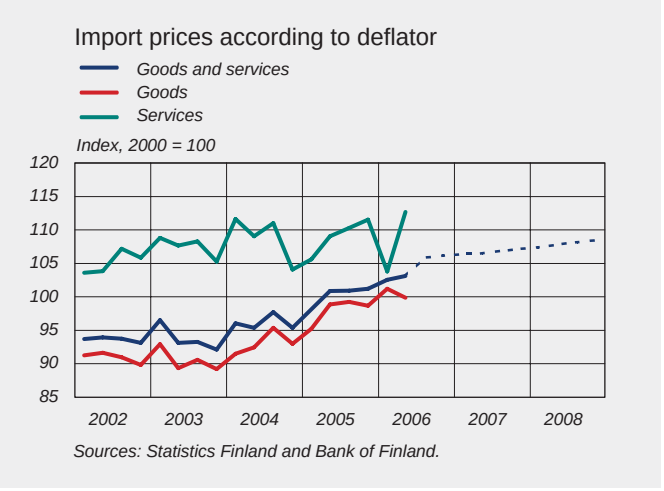


Chart 47.

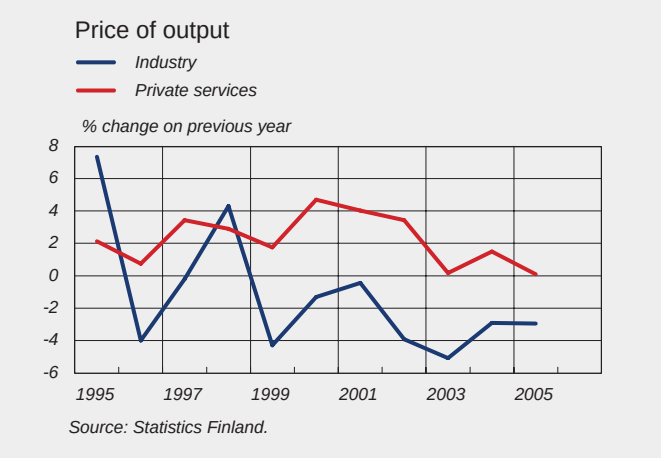
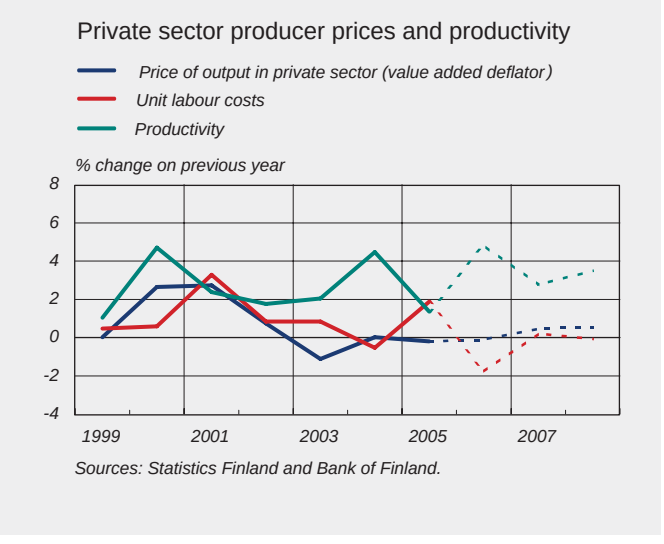


Chart 48.



the past two years the import deflator has risen more moderately than the Import Price Index. This is partly explained by the lower weighting of raw materials in the import deflator than in the Import Price Index. In addition, import prices for services have risen more slowly than those of goods in recent years. The import deflator rose in 2005 by over 4% from a year earlier (Chart 46).

According to the forecast, the import deflator will also rise relatively quickly in 2006, by about 4%. This is mostly the result of increases in the prices of raw materials and other products in international trade in recent years. However, during the forecast period the rise in Finnish import prices is expected to decelerate gradually but significantly, partly on account of the expected levelling off of raw material price increases. The rise in import prices is expected to moderate to just over 2% in 2007 and around 1% in 2008. Stiffer international competition and globalisation will also put a brake on price increases to some extent.

Domestic producer prices

Producer price developments have already been fairly moderate for several years. The rise in the private sector producer price deflator in the national accounts has been around or below zero for quite some time now, although companies' intermediate goods (incl. raw materials) costs have increased markedly in recent years. In the services sector, producer price increases have been more accelerated than in industry (Chart 47).

The moderate pace of growth in unit labour costs will restrict producer price increases in the forecast period, with price margins for goods remaining by and large unchanged (Chart 48). The levelling off of raw material and intermediate goods prices during the forecast period will also ease the pace of growth in producer prices. The rise in the price of private sector production is expected to remain more or less unchanged and to accelerate only modestly in 2006–2008.

Box 7.

Finnish import prices and globalisation

As a result of economic globalisation and the liberalisation of world trade, consumers and businesses are able to purchase goods from countries that offer the most inexpensive prices. This is reflected in Finnish import prices.

An examination of country groups shows the changes in the distribution of Finnish imports of industrial goods in the past decade (Table 13). China's share has increased significantly, as has that of eastern Europe. The countries that have lost market share are mainly high-cost countries.

The impact of the increasing share of low-cost countries on Finnish import prices can be assessed on the basis of import unit value (ie the average price per kilo, in euro). Import unit values differ slightly in method of calculation from the official import price index published by Statistics Finland. The most significant difference between is that the unit values are not quality-adjusted.[1] An increase in import prices calculated on the basis of unit values may thus be higher than one calculated on the basis of the import price index. Unit values are, however, used in this examination because they enable the comparison of country-specific and country group-specific differences in import price developments.

Chart 49 shows developments in the unit value of Finnish imports. The chart also shows an alternative import unit value calculated on the basis of an assumption that all Finnish imports originate from high-cost countries. The difference between the import unit value and the alternative import unit value can be used to calculate an estimate of the decline in Finnish import prices for industrial goods resulting from imports from low-cost countries.

In 1996–2000, imports from low-cost countries did not cause a significant decline in Finnish import prices for industrial goods. Only after

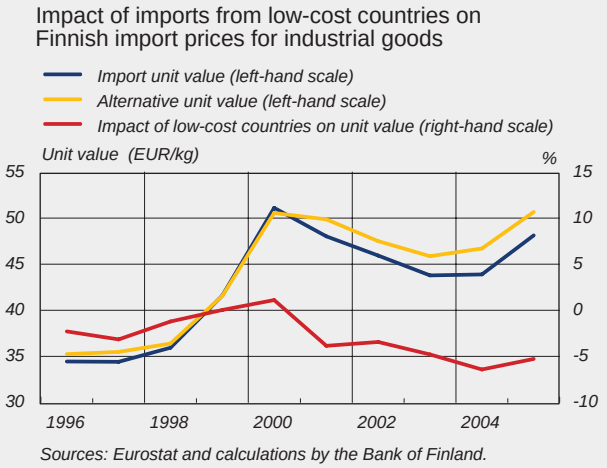
Table 13.

Country distribution of Finnish imports of industrial goods[1]

	Share of imports, %	
	1996	*2005*
China	*1.6*	*6.0*
Southeast Asia	*2.2*	*2.4*
Eastern Europe	*4.6*	*11.6*
High-cost countries	*91.6*	*80.1*

[1] The 26 most important economies exporting to Finland are divided into four groups: (1) high-cost countries (Netherlands, Belgium, Spain, United Kingdom, Ireland, Italy, Austria, Japan, Norway, France, Sweden, Germany, Switzerland, Denmark, United States); (2) Eastern Europe (Poland, Czech Republic, Turkey, Hungary, Russia, Estonia); (3) Southeast Asia (South Korea, Hong Kong, Malaysia, Taiwan); (4) China. These countries account for approximately 93–96% of total Finnish imports per year.
Sources: National Board of Customs and calculations by the Bank of Finland.

Chart 49.



Sources: Eurostat and calculations by the Bank of Finland.

[1] Quality adjustment is a statistical method for adjusting product price changes for rises in price as a result of improved product quality. The remaining proportion of the price change is the genuine, quality-adjusted change in the product price.

2001 has their share of Finnish imports grown so strongly that it has resulted in a fall in import prices. A calculation based on unit values shows that increased imports from low-cost countries have slowed the increase in import prices for industrial goods by approximately one percentage point per annum over the period 1996–2005. Calculations based on the foreign trade statistics of Sweden and Norway give parallel results.[2]

With the increasing integration of developing economies into the global economy and the improved quality of products imported from these countries, the prices of products exported from these countries have also risen. In Finnish imports, this is reflected in the rate of increase in the average unit value of products imported from developing countries, which has exceeded that of products imported from high-cost countries. The rate of increase in prices was particularly high in 1998–2000 and in 2005. Despite the higher rate of increase, the import unit value for low-cost countries was still in 2005 approximately 25% lower than the import unit value for high-cost countries.

This calculation takes into account only the direct effects of the changing structure of industrial goods imports on Finnish import prices. The growing importance of developing countries in the global product market also has indirect effects. Stiffer competition and lower prices for intermediate goods have also dampened the increase in export prices from high-cost countries. At the same time, growing demand, particularly in China, is reflected in higher prices for a number of commodities, which in turn has caused an increase in their import prices and resulted in higher production costs for many products in various countries.

[2] *Sveriges Riksbank (2005) 'Why are Swedish import prices so low?', Inflation Report 2/2005; Norges Bank (2004) 'External price impulses to imported consumer goods', Economic Bulletin 3/2004.*

Box 8.

Service price developments in Finland

In recent years, service prices have had a significant impact on Finnish inflation.[1] A pick-up or easing in the pace of service price rises has often been mirrored by similar developments in headline inflation. The rise in the harmonised index of consumer prices (HICP) has, however, been dampened in recent years not only by service prices, but also by subdued development in non-energy industrial goods and processed food prices as well as by cuts in indirect taxes.

Services inflation was still hovering around 4% in the early years of the present decade (Chart 50). It nevertheless started to slow in 2002, and was only 1.2% in 2005. This rate of increase is exceptionally low by historical standards: the last time it was close to this rate was in the early 1990s.

In the past six months, however, service prices have once again begun to increase substantially. After having been close to or slightly above 1% in the second half of 2005, by July–August 2006 services inflation had reached almost 2%.

One key cause of the recent pick-up in services inflation is the levelling off in the decline of telecommunications prices. Services inflation has also been boosted by recent increases in the prices charged by restaurants and cafes, in transport prices and prices for package holidays, and in rents.

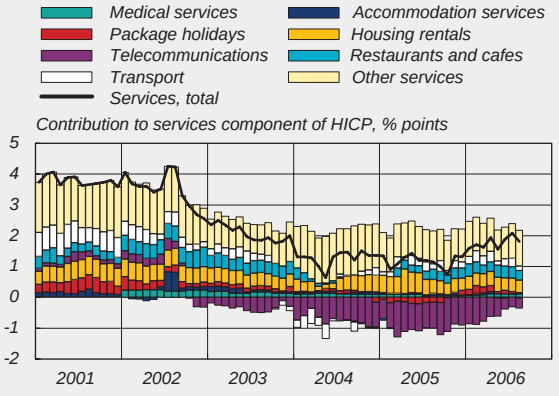
The most important factor slowing the rise in service prices in the past three years has been the marked decline in telecommunications prices.[2] This has slowed the annual rate of growth in service prices by ½–1 percentage points on average, due to the considerable share of telecommunications in total services, at almost 9%. Since 2002, telecommunications prices have fallen by almost 30%. Fiercer competition between telephone operators, and the partly associated growth in productivity, pushed mobile call charges down to a level that is

[1] *The weight of services in the harmonised index of consumer prices (HICP) is 41%.*

[2] *Telecommunications includes not only calls but also telephone equipment, in accordance with European practice. Telephone equipment nevertheless accounts for only a small proportion of telecommunications.*

Chart 50.

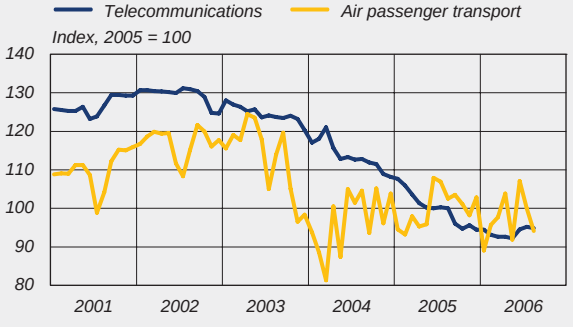
Component breakdown of service price inflation



Source: Statistics Finland.

Chart 51.

Harmonised index of consumer prices



Source: Statistics Finland.

low even by international standards. Telecommunications prices have also declined on average in the euro area, but at a considerably slower pace than in Finland.

Slower decline in telecommunications prices

The decline in telecommunications prices has eased markedly in recent months (Chart 51). In August 2006, telecommunications prices subdued services inflation by only 0.3 percentage points, compared to just over 0.8 percentage points a year earlier (Chart 50). In January–August 2005, they fell by almost 7%, compared to only 0.4% in the same period of 2006.

A clear deceleration or halt in the decline of telecommunications prices, or a permanent upturn would probably cause a considerable acceleration in services inflation. A halt in the price decline would by itself accelerate services inflation by 0.3%, bringing it close to the average rate for 1995–2005. The slower decline in telecommunications prices reflects the fact that competition between telephone operators seems to be easing. The tie-up sales of 3G mobile phone subscriber connections are also likely to affect both the competitive situation and prices.

The price of air travel fell substantially at the turn of the year 2003–2004 and has remained broadly unchanged since early 2004. The arrival in the market of new airlines and increased competition in air transport have kept price rises subdued, despite the fact that higher crude oil prices have meant substantially higher fuel costs for airlines. The recent increases in prices for other transport services are probably due at least in part to the significant rise in energy prices.

Price rises dampened by competition and productivity growth

Services inflation is affected by growing demand for services and increasing wage costs. Wages constitute the biggest single cost item in the services sector. Moreover, while services inflation is dampened by productivity growth, this has been weak in most service sectors, with the exception of telecommunications, which has witnessed rapid growth in productivity.

Although Finnish economic growth has already been robust for a number of years, there has at the same time been a considerable easing in the pace of services inflation. Despite this, growth in demand for services has to some extent maintained the rise in service prices since 2000. Housing rents, in particular, have risen substantially in recent years. In the short term, ie the past six months, the growing demand for services seems to have had only a limited impact on services inflation and has been focused on prices in restaurants and cafes. Growth in wage costs has scarcely accelerated in recent months, and its influence in pushing up services inflation is therefore marginal.

In recent years, the most important factors slowing services inflation have been increased competition and productivity growth, particularly in telecommunications, but to some extent also in air transport. The inflation-subduing impact of stiffer competition is nevertheless temporary and will end once prices have adjusted to the new level of competition. On the other hand, prices may also continue to fall slightly if stiffer competition sustains rapid growth in productivity.

Forecast summary and risk assessment

International economy

Compared with the recent past, world growth in the first half of 2006 was strong and exceptionally broadly based geographically. The year as a whole is expected to be similar to last year, with world GDP growth reaching approximately 4½%. In 2007–2008, the world economy is forecast to grow around 4% per annum. High commodity prices and higher interest rates will moderate growth during the forecast period.

As a counterweight to the forecast slowing of US growth, economic activity will continue to be brisk in many emerging economies. In Europe and Japan, too, growth is expected to continue at a brisk pace, if somewhat slower than in recent times. Commodity prices are expected to remain historically high, which will sustain import demand in producer countries and world trade growth. Strong import growth in Russia will mean Finland's export markets will grow faster than world trade during the forecast period. The commodity structure of world trade would also appear to favour Finnish industry, as the balance of demand growth is swinging from consumer goods to capital goods.

Although the outlook for the world economy over the next few years is undoubtedly bright, the risks have recently increased somewhat. The deceleration of the US economy could be stronger than forecast and could perhaps even lead to major adjustments in the financial markets. In China, meanwhile, the risks of overinvestment have increased again, and strong growth in export revenues in many raw-material producers could endanger the balanced development of their economies.

In the United States, the household saving ratio remains low, and the current account deficit large. Moreover, the possibility of a dramatic adjustment in the housing market has not disappeared. At present, however, the financial markets do not appear particularly concerned over the redressing of imbalances in the economy, and the cooling of the housing market has not caused any serious problems. If accelerating inflation or stronger inflation expectations were to push up interest rates, the trend in the housing market could become decidedly weaker. Falling housing prices and a rise in the household saving ratio could in a worst-case scenario push the United States into recession, which would of course also impact negatively on the rest of the world economy.

There is now a clearer risk that growth in the EU15 countries, and to a lesser extent in Japan, could be stronger than expected. The strengthening of household and business confidence in the EU15 could in the near future lead to stronger-than-expected domestic demand, as happened in the first quarter of this year.

There has recently also been an increase in the risk of lower-than-expected growth in emerging economies. This applies particularly to China, where the pace of growth has continued to be very strong. The risk of overinvestment and a growth in bad debts has again increased. The Chinese authorities have attempted to stabilise

the situation by, for example, raising the key central bank rate and using administrative provisions to restrict lending. A sudden slowing of investment activity in China would probably have serious implications, not just for Chinese growth, but for world trade as well.

Other countries facing a particularly strong threat of overheating are the many raw-material producers who have in recent years received considerably higher export earnings as a result of rising commodity prices. Although there has been a notable increase in domestic demand and imports in these countries, they have until now been restrained and cautious in using their higher earnings. Examples include some countries using their earnings to build up oil funds and pay off debts. Continued growth in export earnings would, however, inevitably increase the risk of overheating.

Chart 52.

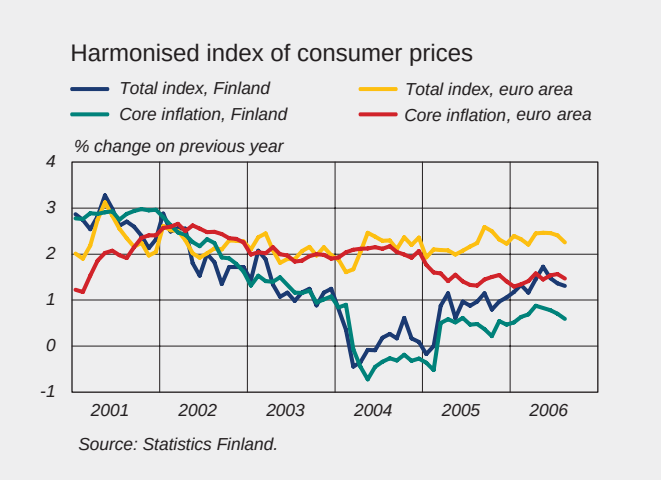
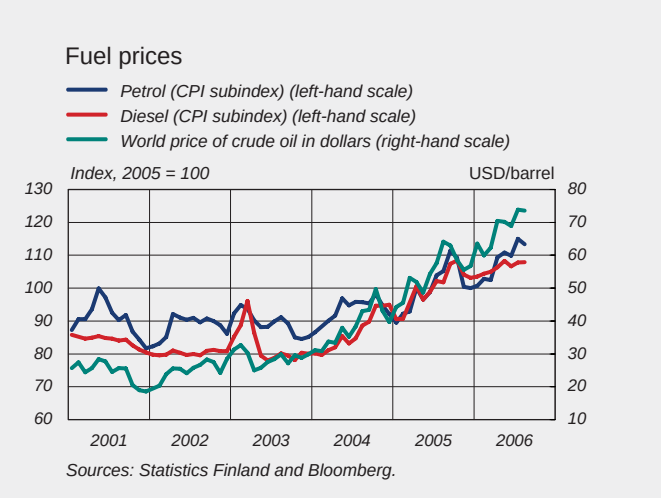


Chart 53.



Inflation

As measured by the harmonised index of consumer prices (HICP), inflation in Finland gathered pace to 0.8% in 2005 and was 1.3% in August 2006.[1] The rise in consumer prices has in recent months been accelerated by the faster pace of price rises in energy and services, whereas the prices of non-energy industrial goods have been falling more quickly than before.

Finnish inflation has in recent years been among the lowest in the euro area. Despite recent acceleration, it remains around one percentage point below the euro area average. Core inflation is also lower than the euro area average. In August 2006 it was 0.6%. Core inflation refers to HICP inflation minus the effects of energy and unprocessed foods prices (Chart 52).

Inflation as measured by the national consumer price index (CPI)

[1] The HICP shopping basket is composed of five main categories, each of which influences the overall index according to its own weighting. These are (weightings in brackets): services (41%), non-energy industrial goods (30%), energy (7%), processed foods (16%) and unprocessed foods (6%).

was 1.9% in August 2006. CPI inflation is higher than HICP inflation because of the increase in interest rates on housing loans and rising housing prices. Unlike the HICP shopping basket, the CPI shopping basket includes the costs of home-ownership.

In 2006, inflation has been driven particularly by services and energy prices (Chart 53). The impact of energy prices (vehicle fuels, heating oils and electricity) on HICP inflation has in recent months been in the region of one percentage point. In August, the impact of services prices was just over 0.7 percentage points.

Industrial goods prices subdue inflation

The price trend in non-energy industrial goods has been slowing for several years (Chart 54). In 2005, industrial goods prices fell on average almost half a percent from 2004 prices. A similar trend has continued through 2006. In August 2006 industrial goods inflation was –1.2%, slowing HICP inflation by approximately 0.4 percentage points.

Non-energy industrial goods prices have fallen fairly much across the board. However, there has naturally been some movement in relative prices within the category as a whole. For example, car prices began to come down after the reduction in car tax at the beginning of 2003. Used car prices, in particular, have been falling continuously for several years. Constantly increasing imports from China and other countries with low production costs and fiercer domestic competition in retail clothing have already been depressing clothes prices for a sustained period. Moreover, prices of consumer electronics have already been falling for several years as product quality improves. Since the beginning of this year industrial goods inflation has been further subdued by a drop in medicine prices.

In the other direction, non-energy industrial goods inflation has in 2006 been driven most by rising prices for watches, jewellery and magazines. The prices of watches and jewellery have been pushed up by the higher world market prices of precious metals. The impact of higher prices for watches, jewellery and magazines on average inflation in the industrial goods category is, however, marginal.

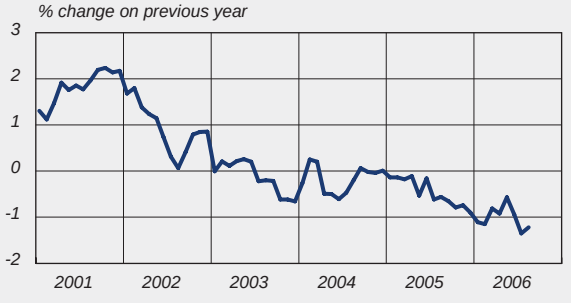
Short-term inflation outlook[2]

Inflation in 2006 will be clearly higher than the figure of slightly under 1% last

[2] The Bank of Finland prepares forecasts for the monthly trends in the HICP and its five main categories for a year ahead. These forecasts are used in monitoring inflation trends, and their focus is on estimating the trend over approximately the following six months.

Chart 54.

Harmonised index of consumer prices, non-energy industrial goods



Source: Statistics Finland.

year, but it will nevertheless remain moderate. HICP inflation in 2006 is forecast to average 1.5% (Chart 55).

The short-term inflation outlook is affected above all by the prospect of considerable fluctuations in energy prices. Changes in the world market prices for crude oil are rapidly reflected in vehicle fuel and heating oil prices in Finland. It is assumed that the rise in crude oil prices will gradually taper off during the next 12 months. The energy price rise that has already occurred is, however, expected to cause a further slight acceleration in HICP inflation at the end of 2006, if other inflation factors remain unchanged. This reflects the effect of the price trend in the comparable period of 2005, as there was a marked drop in energy prices in the last quarter of the year, when there was a return to the price levels prevailing before the sharp rise in the immediate aftermath of Hurricane Katrina.

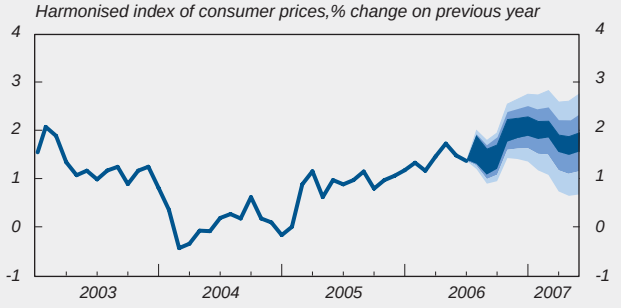
Service prices are strongly affected by the state of competition between companies in different product markets, and this can change very quickly. Over the next 12 months, the pace of increase in service prices is estimated to pick up slightly from the present rate of approximately 2%. The main reason for this is the distinct levelling off in recent months of the decline in telecommunications prices (Box 8). In addition, transport prices are expected to rise slightly more quickly, as pressure grows for companies to pass higher fuel costs on to ticket prices.

The decline in non-energy industrial goods prices is expected to level off during the course of 2006. Import prices for consumer goods began to rise in 2005 following several years of decline. This is estimated to impact on consumer prices with a delay of around ½–1 year. On the other hand, fiercer competition in the retail trade will subdue the pace of price rises.

Inflation in food prices has been low in recent times, at around 1.5% or less. In the near future, the pace of inflation is forecast to accelerate slightly in processed foods, and slightly more in unprocessed foods, due to the unusually dry summer both in Finland and in Europe.

Chart 55.

Short-term inflation forecast



The fan chart demonstrates the uncertainty of the short-term inflation forecast. Inflation is estimated to be within the coloured area with 90% probability, and to be within the darkest area with 50% probability.
Sources: Statistics Finland and Bank of Finland.

Long-term inflation outlook

Inflation is forecast to remain moderate over the next few years. HICP inflation is estimated to accelerate to 1.8% in 2007, easing back to 1.7% in 2008. Inflationary pressures in the years ahead will be reduced particularly by an assumed levelling off in the energy price trend. In similar manner to HICP inflation, the pace of rise in the private

consumption deflator calculated according to National Accounts statistics is also forecast to accelerate slightly over the next few years (Chart 56).

Rising world market prices for raw materials are reflected more quickly in the prices of capital and intermediate goods than in final product prices. Producers will seek before long to transfer their higher raw-material costs on to their final product prices, but fierce competition in many markets limits the extent to which they can do this at present. The contribution of raw materials to the production costs of final products has declined in recent decades at the same time as the contribution of design costs has increased. Therefore the strong rise in raw-material prices is not reflected as much as before in the prices of final products. Inflationary pressures will also be reduced during the forecast period by the moderate pace of increase in unit labour costs.

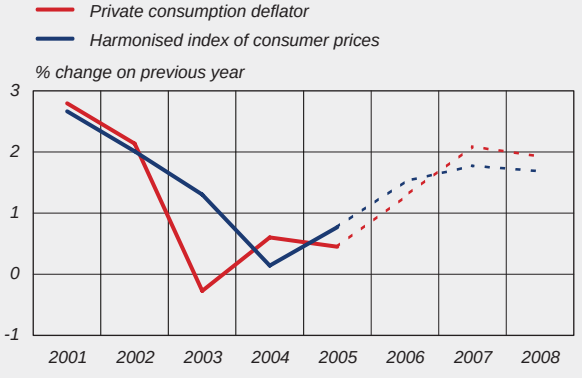
Prices in Finland are well above the euro area average. The gap has narrowed somewhat in recent years despite the fact that Finnish wages have risen faster than the euro area average. The price gap is expected to continue to narrow slowly over the next few years.

Uncertainties

The risks in the inflation forecast, which comprise both external and domestic factors, are more or less in balance. Of the external factors, the most significant is the price of crude oil. Increases in the world market price of crude oil are quickly reflected in consumer prices for energy. On the other hand, the price of oil could also come down quickly if there were to be a slowing in demand growth. This could happen if there were to be a serious cooling off in the US economy, for example. The price of crude oil is also attended by numerous other possible sources of uncertainty. Due to the present lack of unused production capacity, any heightening of geopolitical tensions in important oil-producing areas, or other possible temporary breaks in production, could quickly push up crude oil prices much higher even than their current level. Higher prices for other commodities – for example, metals – could have little impact on the prices of final products if fierce international competition prevents companies from passing on their higher costs to customers. This would be reflected in lower inflation, particularly in non-energy industrial goods. In addition, further growth in imports from China and other emerging economies could reduce final product prices more

Chart 56.

Finnish harmonised index of consumer prices and the price of private consumption



Sources: Statistics Finland and Bank of Finland.

than has been estimated, especially in the longer term.

Of the factors of uncertainty in respect of domestic inflation, the most important is possible changes in the competitive situation between companies. Very rapid changes are possible. Looking particularly to the longer term, other factors of uncertainty in relation to inflation are wage development and productivity growth. If the pace of increase in wage costs were to accelerate significantly from the present level, this would increase the pressure on companies to pass their higher costs on to customers in the form of higher prices for final products. Faster growth in wage costs combined with slower productivity growth would accelerate the pace of inflation beyond the level forecast. This could happen particularly in services, where prices are more sensitive to rises in wage costs than in other sectors.

Finland's growth outlook

Finland experienced brisk GDP growth in 2005 despite the labour dispute in the paper industry. According to revised preliminary figures published by Statistics Finland in July 2006, GDP growth in 2005 was 2.9%, with strong growth in both private consumption and private investment. The strength of domestic demand was also reflected in a vigorous increase in imports. The labour dispute in the paper industry cut export growth by around 2–3 percentage points, and the growth impact of net exports was as a result decidedly negative. The dispute is estimated to have reduced GDP growth by almost one percentage point. There was a clear improvement in the employment situation in 2005, with the employment rate rising to 68% and the unemployment rate coming down to 8.4%.

The positive economic performance continued in the first half of 2006. GDP growth is forecast to accelerate this year to 5.4%. In addition to the positive economic picture, the growth figures for 2006 as a whole are further improved by the fact that the labour dispute in the paper industry depressed output in 2005. The forecast for 2007 and 2008 is for the economy to continue to grow fairly strongly, at around 3% per annum. The pro-growth effect of domestic demand will remain strong throughout the forecast period. The growth contribution of net exports will, in contrast, subside after 2006.

Private consumption is forecast to increase over the forecast period by approximately 3% per annum, although growth in real household incomes will slow somewhat towards the end of the period. The fairly positive employment trend is sustaining household confidence in the future and hence supporting growth in consumption expenditure. In the first half of 2006, private consumption was up a further 4% on the same period last year. The pace of growth is, however, forecast to ease slightly in the second half of the year, and the pace for the year as a whole is estimated at slightly under 4%. In 2007 and 2008, private consumption growth will slow to around 3%.

Private investment is forecast to grow faster in 2006 than it has for many years, at around 6%. Investment growth is being driven by both the liveliness of housing construction and the strength of fixed non-residential investment. There will be a levelling off in investment growth towards the end of the forecast period. A shortage of skilled labour and rising interest rates will constrict growth in housing and other building investment. In industry, the recent period of major expansions in capacity is almost over. The investment ratio will, however, rise to almost 20% during the forecast period.

Finnish exports grew very quickly in the first half of 2006, and strong growth will continue until the end of the year. In 2007–2008, export growth will be slower and will lag behind growth in Finland's export markets. This is due mainly to insufficient capacity in basic industries (eg the forest industries).

The current account surplus will decline during the forecast period, but more slowly than in recent years. Its erosion is still due to the weakening trade balance, as the terms of trade will continue to deteriorate. Finland's export prices will develop only moderately during the forecast period. In contrast, import prices will rise fairly briskly early in the period, although this is forecast to level off towards the end. By 2008, we estimate the current account surplus will have contracted to around 4% of GDP. In the near future, the rapid ageing of the Finnish population means it is essential for the current account, and the general government net financial position, to remain in surplus.

There has been a further slight improvement in the employment situation since the beginning of 2006. The number of employed has risen, especially in private services, and above all in industrial services and in social services production. The growth in private social services is based largely on increased use of outsourcing by local government. Numerous new companies have been established to meet the growing service needs of an ageing population. The employment situation in the construction sector has also improved, while there has similarly been a slight improvement in present employment and the employment outlook in manufacturing.

Despite continued high unemployment, increasing numbers of employers have reported difficulties in recruiting suitably trained personnel. The labour shortages in the construction sector have become even worse, and the situation in service sectors has also deteriorated. During the forecast period, recruitment difficulties will already seriously restrict output growth. Therefore, the forecast GDP growth will already in 2007 and 2008 be based almost entirely on productivity growth. The forecast average GDP growth of 3% for 2007 and 2008 is higher than the estimated potential growth in output. In the future, the ageing of the population will further hinder output growth.

The prospects for public finances in the immediate years ahead have become increasingly bright as the year

Table 14.

Forecast summary

Supply and demand

	2004	*2005*	*2006f*	*2007f*	*2008f*
Volume, % change on previous year					
Gross domestic product	*3.5*	*2.9*	*5.4*	*3.2*	*2.7*
Imports	*7.4*	*12.3*	*9.2*	*7.7*	*6.4*
Exports	*7.5*	*7.3*	*12.0*	*7.3*	*6.3*
Private consumption	*3.2*	*3.8*	*3.9*	*3.4*	*3.0*
Public consumption	*1.7*	*1.6*	*0.6*	*0.8*	*1.8*
Private fixed investment	*4.9*	*5.9*	*6.1*	*3.9*	*2.7*
Public investment	*4.5*	*–10.4*	*2.9*	*2.8*	*1.8*

Key economic indicators

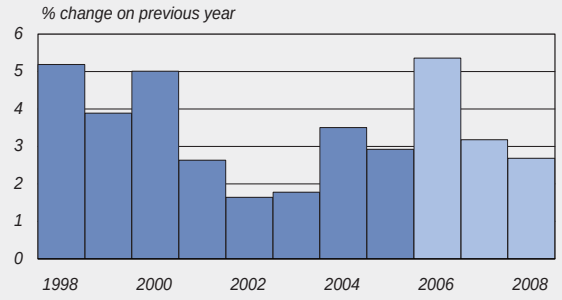
	2004	*2005*	*2006f*	*2007f*	*2008f*
% change on previous year					
Harmonised index of consumer prices	*0.1*	*0.8*	*1.5*	*1.8*	*1.7*
Consumer price index	*0.2*	*0.6*	*1.6*	*1.8*	*1.7*
Wage and salary earnings	*3.8*	*3.9*	*3.0*	*3.1*	*3.7*
Labour productivity[1]	*3.5*	*1.3*	*4.1*	*2.2*	*3.4*
Unit labour costs[1]	*0.5*	*2.2*	*–0.6*	*0.6*	*0.1*
Number of employed	*0.0*	*1.5*	*1.5*	*0.6*	*0.0*
Employment rate, 15–64-year-olds, %	*67.2*	*68.0*	*68.7*	*68.9*	*68.8*
Unemployment rate, %	*8.8*	*8.4*	*7.8*	*7.5*	*7.5*
Export prices of goods and services	*0.5*	*0.9*	*1.9*	*–0.2*	*–0.1*
Terms of trade (goods and services)	*–1.6*	*–3.5*	*–2.1*	*–2.3*	*–1.3*
% of GDP, national accounts					
Ratio of taxes to GDP	*43.5*	*43.8*	*43.7*	*43.5*	*43.6*
General government net lending	*2.1*	*2.5*	*3.5*	*3.3*	*3.5*
General government debt	*44.3*	*40.5*	*38.0*	*36.5*	*34.4*
Goods and services account	*8.1*	*5.7*	*6.3*	*5.4*	*4.9*
Current account	*7.8*	*4.9*	*5.1*	*4.5*	*4.0*

f = forecast
[1] Labour input measured by number of employees
Sources: Statistics Finland and Bank of Finland.

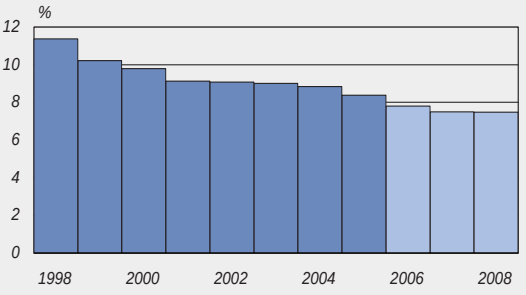
Chart 57.

Key economic indicators

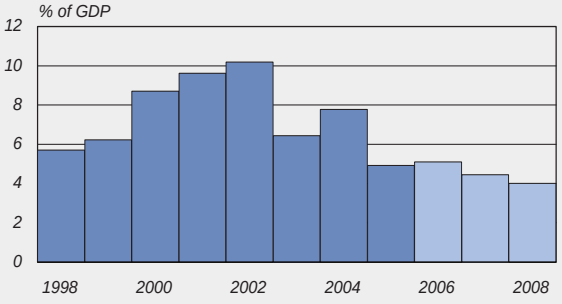
Gross domestic product



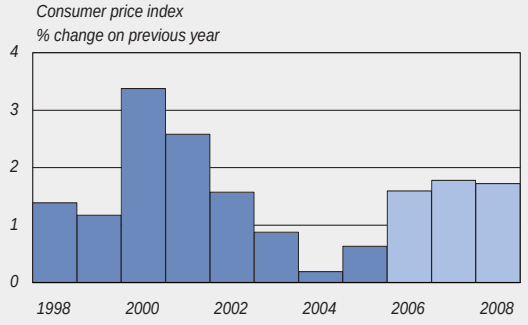
Unemployment rate



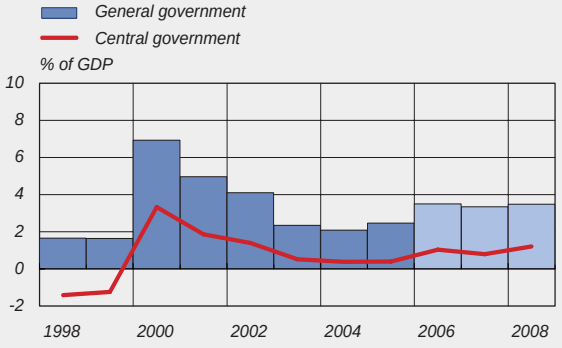
Current account



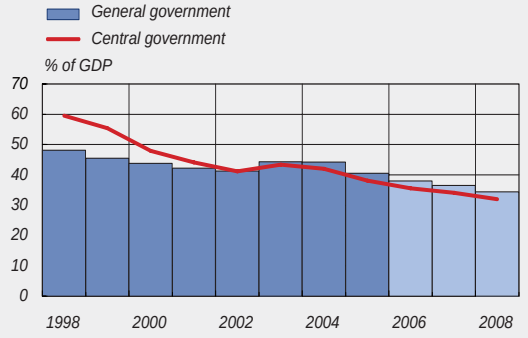
Inflation



General government fiscal position



General government debt



Sources: Statistics Finland and Bank of Finland.

has progressed. Brisk economic growth has meant higher tax receipts for both local and central government. In addition, central government expenditure growth is moderate, in line with the spending limits, and central government finances will show a significant surplus in 2006. Despite the tax cuts ahead in 2007, the fiscal surplus will continue through the forecast period. Local government finances will benefit from faster-than-expected growth in central government transfers. The present government's term of office, which is just coming to an end, has thus enabled a faster-than-forecast reduction in government debt. This has in turn created room for manoeuvre in fiscal policy over the next few years. Preparation for future increases in pensions expenditure will mean significant growth in the size of the employment pension funds relative to GDP by the end of the forecast period.

Risk assessment: Slower growth in labour productivity in the world economy outside the euro area

Despite a slight slowing in the pace of US and Japanese growth, the world economy is forecast to continue growing strongly in the next few years, with prospects remaining bright in many emerging economies. The outlook is, however, overshadowed by the possibility of a stronger-than-forecast deceleration in US growth as well as other factors, such as a damping of the very positive trend of recent years in the Chinese economy.

The risk assessment below considers how slower-than-forecast economic growth in the world outside the euro area would affect the Finnish economy when the cause is assumed to be a slowing in the pace of labour productivity growth. The assessment draws on models developed in the Bank of Finland for describing the behaviour of the economy.[3]

Annual growth in labour productivity in the world economy outside the euro area is here assumed to slow by just under one percentage point. The slowdown begins in the last quarter of 2006 and is temporary. Return to the normal level is assumed to be slow, with the pace of growth in labour productivity still half a percentage point below baseline after 4 years. Economic agents are assumed to be able to anticipate that the slowdown will eventually prove to be temporary.

The growth impact of weaker productivity development is naturally considerable in the world outside the euro area. Labour productivity steers the development of real wages, and hence both household income formation and asset accumulation. It is of central importance to companies' success on the export markets, particularly through the price competitiveness of their products. Economic agents notice the slower pace of growth in labour productivity and respond

[3] The assessment is based on the EDGE model – developed to describe economic relations between the euro area and the United States – and Aino, a model of the Finnish economy. For more on these models see Tarkka and Kortelainen (2005), 'International economic spillovers and the liquidity trap', Bank of Finland Discussion Paper 18/2005, and Kilponen, Ripatti and Vilmunen (2004), 'Aino: the Bank of Finland's new dynamic general equilibrium model of the Finnish economy', Bank of Finland Bulletin 3/2004.

immediately to this change in the growth outlook.

In the world outside the euro area, households do indeed reduce the pace of their consumption growth to match the expected slower pace of growth in real wages. Contraction of the required return on investment leads in turn to slower investment growth. Companies production costs increase. There is a clear drop in the pace of growth in domestic demand, but inflation nevertheless accelerates. This also leads to currency depreciation in countries outside the euro area, leading to improved price competitiveness in these countries and export growth. The situation presents a challenge for monetary policy, as higher inflation is combined with lower growth. The slower pace of real growth dominates monetary policy responses, and central banks outside the euro area cut their policy rates.

Relative to developments in the rest of the world, the euro area benefits in this scenario from labour productivity growth not slowing as much within the euro area as elsewhere. Although, demand for euro area exports weakens considerably, in relative terms the euro area becomes the engine driving world growth. Thus, output growth does not slow nearly as much in the euro area as elsewhere. Inflation accelerates within the euro area as well as elsewhere, because the slowdown in labour productivity growth in the rest of the world pushes the whole world into higher inflation.

In this risk assessment, the effects on Finland of the weaker trend in the world economy are not straightforward. On one hand, the relative competitiveness of Finnish production improves due to the 'misfortune' of economies outside the euro area. On the other hand – and more relevantly – Finland's export market growth suffers. Finland's response is similar to the rest of the euro area.

The higher global inflation also means higher prices for the goods competing with Finnish exports. For the same reason, the prices of imports to Finland denominated in foreign currency also rise. In our assessment, the exchange-rate reaction is insufficient to compensate for this rise in import prices. The relative price competitiveness of Finnish exports thus improves. The slowdown in export demand growth is, however, so marked that the improved competitiveness is insufficient to compensate for it. The combined effect of all these factors is a 0.2 percentage point reduction in export growth in 2006, and a further 0.6 percentage point reduction in 2007 compared to the baseline forecast scenario (Table 15).

The rise in import prices caused by the higher global inflation also leads to

Table 15.

Deviations from forecast, % points

	2006	*2007*	*2008*
GDP, %	*–0.03*	*–0.07*	*0.02*
Exports, %	*–0.17*	*–0.55*	*–0.10*
Imports, %	*–0.02*	*–0.13*	*–0.22*
Consumer prices, %	*0.00*	*0.03*	*0.11*
Goods and services account, % of GDP	*–0.05*	*–0.23*	*–0.23*
Number of employed	*–1 585*	*–5 089*	*5 094*

Deviations in growth rates, % points.
Deviations in employment level, number of persons.
Source: Bank of Finland calculations.

slower import growth and improved competitiveness of domestic production relative to imported goods. The slowdown in export growth is, however, stronger than the slowdown in imports. The trade balance surplus, and hence also the current account surplus, contracts by a good 0.2 percentage points relative to GDP. The slowdown in export growth is also reflected in domestic income formation, as a result of which consumption and investment remain below the baseline scenario in the long run, although their growth during the forecast period barely differs from the forecast. For the same reason, employment declines only marginally relative to the forecast. The trend in international inflation feeds domestic inflation via higher import prices, and inflation in the forecast period is around 0.1 percentage points higher.

The relatively muted impact on the Finnish economy of the risk assessment factors outlined above is due mainly to the improvement in the price competitiveness of Finnish output relative to those parts of the world with weaker productivity growth. If this were not the case, the slowdown in growth in Finland would be much stronger than estimated above.

The models used in this assessment make it possible to analyse many of the responses of economic agents, government and monetary policy to an assumed external growth shock. It is nevertheless worth noting that it is hard to assess with the use of models variables such as the extent to which this sort of growth slowdown would increase general uncertainty. Models also involve considerable uncertainty in relation to how economic disturbances are transmitted from country to country. For example, models in their present form cannot take full account of changes in the prices of commodities (especially oil). In this respect, the results described here could be rather optimistic.

Why does consumers' perceived inflation differ so much from actual inflation?

Samu Kurri, Economist, Monetary Policy and Research

Survey results suggest that, since the changeover to euro notes and coins in 2002, consumers' perceptions of inflation have differed substantially from actual inflation[1] (Chart 1). Earlier, from the end of the 1990s until 2001, consumers had a fairly accurate perception of inflation and misperceptions tended to be short-lived. But since the start of 2002 consumers' perceived inflation has been considerably higher than measured inflation.

The gap between perceived and actual inflation rates has been quite persistent. In June 2006, after four and a half years of euro cash, the gap was still in the region of a full percentage point. Moreover, there are similar differences between perceived and actual inflation in many other countries that have changed over to euro notes and coins.

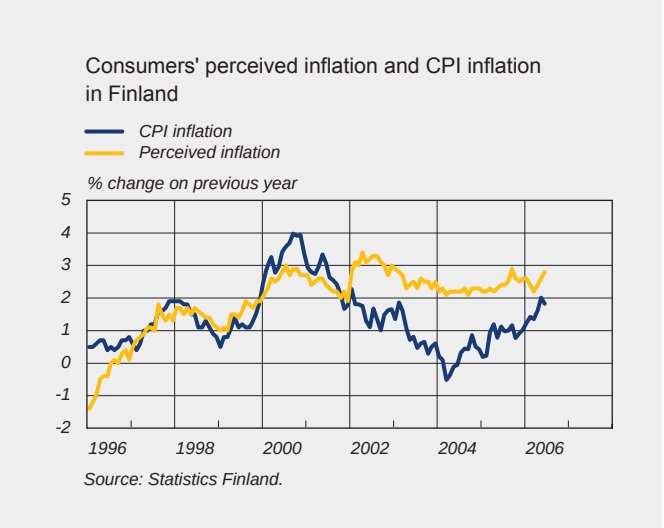
The statistics show that there was no notable change in Finnish inflation with the changeover to euro cash. In fact, the rate of increase in consumer prices in 2002 was slightly lower than in 2001. This is scarcely surprising, since there were no major changes at the time in key underlying factors such as the rise in production costs and competitive conditions. While it is true that many product prices were rounded upward at the time of the changeover, the impact on overall inflation was modest and short-lived. Statistics Finland estimated the changeover effect on Finnish inflation in January 2002 as small and noticeable mainly in gaming and some services. According to Eurostat, the price-rise effect of the changeover for the whole euro area in 2002 was about 0.1–0.3 percentage points.

Because of the size and notable persistence of the gap between perceived and actual inflation much research has been done on the issue, using data from both the euro area and Finland[2]. According to published studies, there are several possibilities for explaining the gap. Firstly, it seems that consumers form price perceptions on the basis of much smaller composites of goods and services than that included in the CPI. Secondly, the changeover to euro cash has obscured the comparison of prices, and consumers are now apparently less informed than before about price developments. Sellers' pricing practices have also changed: 'psychological prices', eg

[1] The euro was introduced as account money on 1 January 1999 and as notes and coins at the start of 2002.

[2] See eg ECB (2002a, 2002b, 2003), Aalto-Setälä and Nikkilä (2005) and Kangassalo and Takala (2005).

Chart 1.



those ending in the digits 5–9, now account for a smaller proportion of nominal prices as a result of the euro-cash changeover. Moreover, the fact that consumers have generally used an even six as the euro-to-markka conversion coefficient has resulted in a slight (0.9%) overestimation of prices.

Table 1.

Weights of CPI commodity groups in 1995 and 2005 CPIs

Heading	*2005 = 100*	*1995 = 100*
Food and non-alcoholic beverages	*13.3*	*15.8*
Alcoholic beverages and tobacco	*5.2*	*6.2*
Clothing and footwear	*5*	*4.6*
Housing, heat and light	*21.3*	*22.1*
Furnishing, household equipment and routine maintenance of the house	*5.5*	*4.7*
Health and medical care	*4.8*	*4.2*
Transport	*14.6*	*13.6*
Communications	*3.5*	*2.2*
Recreation and culture	*12*	*11.9*
Education	*0.5*	*0.2*
Hotels, cafes and restaurants	*6.9*	*6.5*
Miscellaneous goods and services	*7.3*	*8.2*
Total	*100*	*100*

Source: Statistics Finland.

Table 2.

CPI commodity-group price changes, 1996–2006

Heading	*2006 price level relative to 1996 price level*	*Average of annual inflation rates 1996–2006*	*Average inflation in 2002*
Total	*115.4*	*1.4*	*1.6*
Food and non-alcoholic beverages	*115.3*	*1.1*	*2.9*
Alcoholic beverages and tobacco	*100.5*	*0.3*	*1.8*
Clothing and footwear	*96.4*	*–0.3*	*–0.9*
Housing, heat and light	*124.9*	*2.1*	*0.4*
Furnishing, household equipment and routine maintenance of the house	*108.4*	*0.8*	*1.5*
Health and medical care	*130.5*	*2.6*	*4.9*
Transport	*118.1*	*1.9*	*1.2*
Communications	*75.1*	*–2.8*	*0.6*
Recreation and culture	*114.5*	*1.4*	*2.2*
Education	*147.0*	*3.7*	*3.2*
Hotels, cafes and restaurants	*126.2*	*2.2*	*2.3*
Miscellaneous goods and services	*114.8*	*1.2*	*1.0*

The figures for 2006 are based on data for January–June.
The comparison between 1996 and the first half of 2006 is based in respect of the CPI commodity groups on chained time series of the indices from the base years 1995, 2000 and 2005. The annual inflation figures for 2001 and 2002 are based on data from the CPI base year 2000.
Source: Statistics Finland.

Structure of the CPI and changes in inflation

Statistics Finland calculates the CPI as a broad measure of changes in prices of goods and services purchased by households residing in Finland. More precisely, it measures the change in the cost of a basket of commodities that reflects the consumption of the average household. The CPI is fixed-weighted, meaning that the consumption basket and commodity weights are fixed throughout the index-calculation period. Because consumption habits change over time, the contents of the basket must be adjusted from time to time, in line with actual consumption of the average household. When prices change, the true cost of the consumption basket changes in two ways: directly as a result of the price changes and because the amounts of the commodities change. The composition of the Finnish CPI is updated roughly every five years.[3]

The biggest changes between 1995 and 2005 in CPI weights (Table 1) are in the decrease in the share of food in total consumption expenditures and the increase in the share of transport and communications. The consumption-share of alcohol and tobacco also decreased, by about one percentage point, during the same ten-year period.

According to the CPI, the price level in the first half of 2006 was about 15% higher than in 1996 (Table 2). Of the main commodity groups, the most extreme price changes were in education and communications. The

[3] For more details on the CPI see Statistics Finland (2006a).

groups in which prices rose most were education, and health and medical care. Education ranked first with a price rise of 47% between 1996 and the first half of 2006. Other above-average price rises occurred in the housing, heating, and lighting group and the hotels, cafes and restaurants group. On the other hand, prices in communication products and services were on average nearly 25% lower in the first half of 2006 than in 1996. Other product groups in which prices rose by less than the average were clothing and footwear, where prices have actually declined since 1996, and alcohol and tobacco, which was affected by a reduction in alcohol taxes in 2004. Furniture prices also rose by less than the average.

Of individual products, one of the biggest price rises was in transport fuels (Chart 2). These prices were over 50% higher in June 2006 than at the start of 1996. But one can also find individual examples of falling prices. Prices of mobile phones (quality-corrected) were only a tenth as high as at the start of 1996.

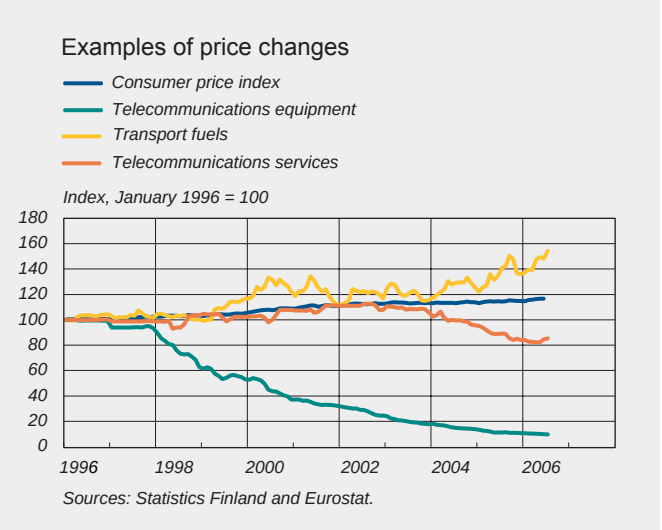
Table 2 also shows the actual inflation connected with the euro-cash changeover, ie the amount (1.6%) by which prices in 2002 exceeded on average those in 2001. Again, the commodity groups in which prices rose most were health and medical care (+4.9%) and education (+3.2%). Food prices also rose (+2.9%) by almost double the overall inflation rate. The only product group that posted a price decline was clothing and footwear (–0.9%). Of individual products, transport fuel prices fell on average by 2½% in 2002.

Euro changeover and consumers' perceived inflation

Using survey data, the European Commission and the Finnish National Consumer Research Centre studied changes in consumers' price perceptions since the euro-cash changeover. One of the things explained in the Commission's yearly Eurobarometer survey is the change that occurred in connection with the euro-cash changeover in how consumers think about prices. The National Consumer Research Centre studied the public's price awareness at that time by interviewing individuals about changes that had occurred in prices of certain basic foods. The results[4] indicated that consumers' price awareness – ie whether they have any idea about the selected prices and how accurate they are – had notably diminished with the changeover. Perhaps the most surprising finding was that price awareness had not noticeably

[4] See eg Aalto-Setälä and Nikkilä (2005).

Chart 2.



improved by 2005, three years after the changeover.

In its consumer survey, Statistics Finland has been asking consumers about their inflation perceptions for over ten years.[5] Generally speaking, up to January 2002 (euro-cash changeover), consumers' perceptions were reasonably close to measured inflation and the gaps between perceived and measured inflation were generally short-lived (Chart 1). Average perceived inflation in 1996 was negative, as consumers apparently sensed a general decline in prices when Finnish food prices fell in connection with EU membership. On the other hand, in 2000–2001, costs of fuel and housing pushed up overall inflation by more than consumers' perceptions. Since the euro-cash changeover, consumers have continuously perceived inflation to be higher than CPI inflation.

It seems that consumers form their perceptions of general inflation on the basis of a much smaller commodity basket than that of the CPI. It has been argued[6] that consumers pay most attention to prices of goods and services that they buy often and ignore prices of items purchased less often. Thus inflation perceptions may be formed on daily food purchases, petrol and cafe services while eg descending prices of home electronics products elude the radar screen.

Table 3 presents correlation coefficients to illustrate the connection in Finland between CPI inflation for different commodity groups and perceived overall inflation. A similar comparison is presented for one individual item – fuels and lubricants for transport equipment. For the period January 1996 to June 2006, the highest correlations with CPI inflation were for the following product groups: foods and non-alcoholic beverages, health and medical care, and hotels, cafes and restaurants. When the markka and euro eras are examined separately, the correlations for many of the subgroups are rather unstable . The connection between the rate of price rise for transport fuels and lubricants and perceived inflation is surprisingly weak – actually negative since 2001.

The correlation coefficients shown in Table 3 do not tell the whole story about average changes in the relationship between actual and perceived

[5] For more details on the consumer survey see Statistics Finland (2006b).

[6] ECB (2002a, 2002b, 2003); Koskimäki (2004); Kangassalo and Takala (2005); Aalto-Setälä (2006).

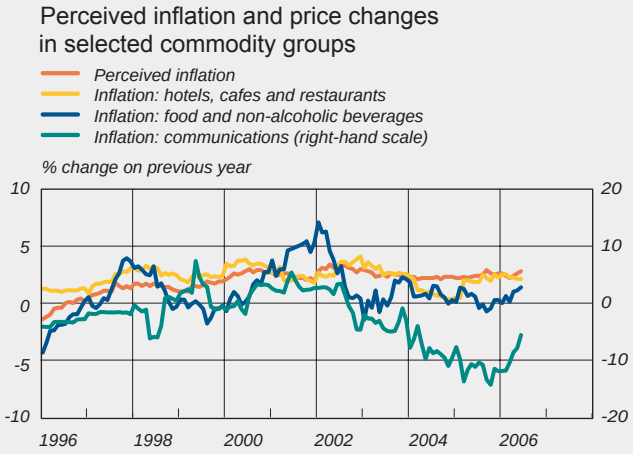
Table 3.

Correlation between perceived and CPI inflation in CPI commodity groups and transport fuels

Heading	*1996–2006*	*1996–2001*	*2002–2006*
Total	*0.4*	*0.84*	*0.67*
Food and non-alcoholic beverages	*0.5*	*0.65*	*0.42*
Alcoholic beverages and tobacco	*–0.13*	*0*	*0.56*
Clothing and footwear	*–0.15*	*0.07*	*–0.3*
Housing, heat and light	*0.37*	*0.72*	*–0.27*
Furnishing, household equipment and routine maintenance of the house	*0.19*	*0.24*	*0.64*
Health and medical care	*0.48*	*0.58*	*0.67*
Transport	*–0.05*	*0.16*	*–0.04*
Communications	*–0.01*	*0.6*	*0.67*
Recreation and culture	*0.23*	*0.52*	*0.37*
Education	*0.32*	*0.33*	*–0.45*
Hotels, cafes and restaurants	*0.5*	*0.8*	*0.66*
Miscellaneous goods and services	*0.63*	*0.79*	*–0.1*
Fuels and lubricants for transport equipment	*0.21*	*0.49*	*–0.24*

The correlations are calculated from monthly data. The figures for 2006 cover only January–June.
For transport fuels and lubricants the first observation is from January 1997.
Sources: Statistics Finland and calculations by the Bank of Finland.

Chart 3.



inflation. For example, while the correlation between actual furniture price increases and perceived inflation is quite high for the euro era, the group's price movements diverge substantially from the path of perceived inflation. While perceived inflation rose by nearly a percentage point between the end of 2001 and the end of 2002, the average price of furniture fell by 1.3 percentage points. Looking at the overall inflation situation since the euro-cash changeover, one sees that, except for the last year, movements in perceived inflation have broadly tracked only two groups: hotels, cafes and restaurants, and health and medical care (Chart 3).

At least one explanation for the jump in perceived inflation in 2002 would seem to be the sharp rise in food prices, especially unprocessed foods, which occurred prior to the euro-cash changeover and peaked precisely in January 2002.[7] But even the switch of food inflation to the negative side in 2003 was not enough to lower perceived inflation.

Distributions of consumers' perceived inflation

Chart 4 shows the distributions of consumers' perceived inflation for January of every second year over the period 1996–2006. The responses in each graph are split into ½ percentage point intervals and limited to the range of –11% to +11%. Only a small portion of responses breached the limits. Overall, the perceptions were fairly accurate, most falling in the range of 0 to 5%.

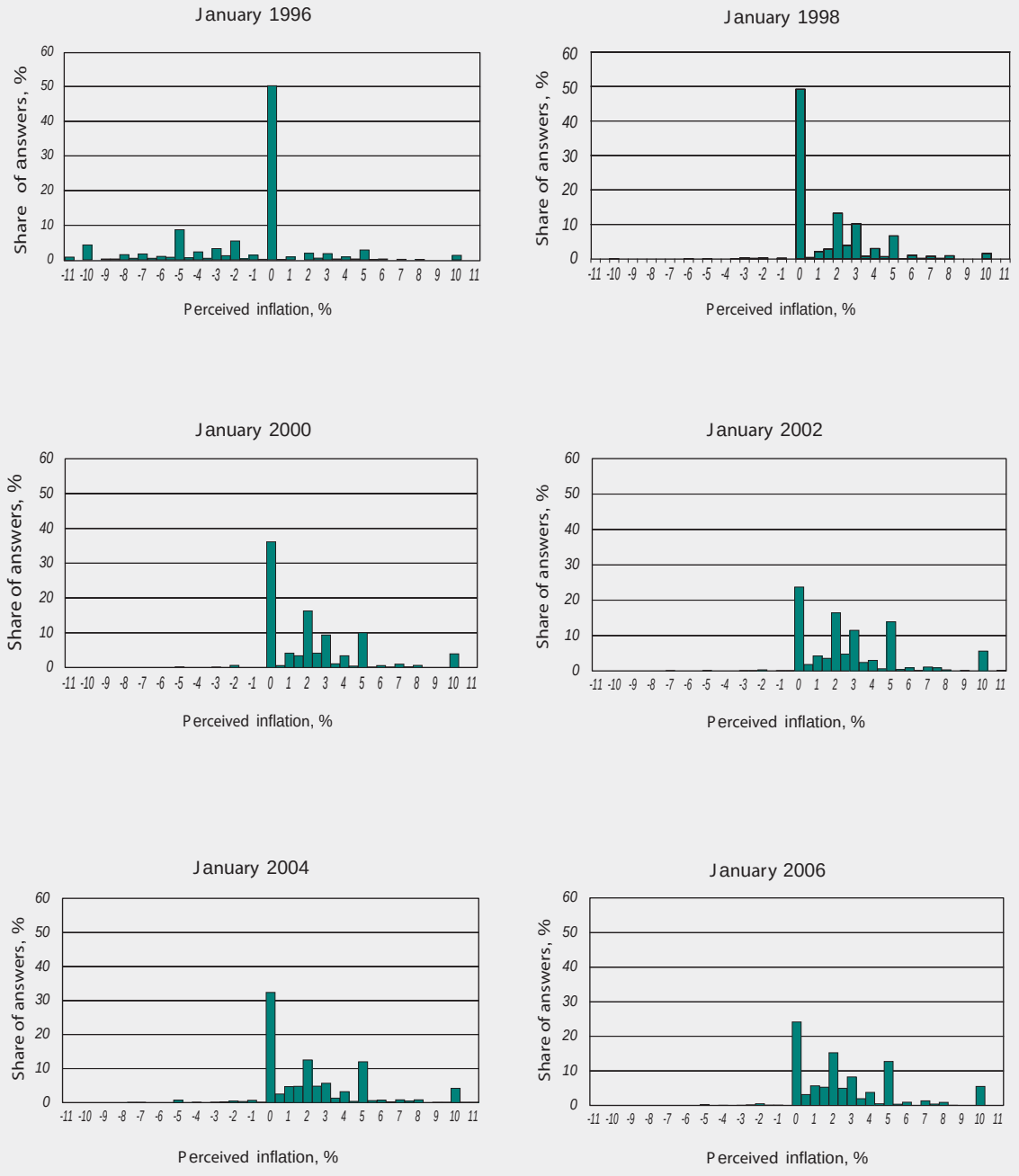
Every graph peaks sharply at the zero interval, meaning that many responders perceived the general price level as unchanged from a year earlier. In fact, in January 1996 about half of the responders saw the price level as unchanged. However, since 2000 zero-responses have been considerably less frequent.

Following the zero response, the next most frequent responses for perceived inflation were (except for 1996) 2%, 3% and 5%; for January 1996 the most frequent nonzero responses were –2 and –5%. The most frequent response above +5% was 10%. The widest variations in average perceived inflation frequencies seem to be at zero, 2% and 5%, as well as the changes in relative frequency of 3%. The decrease in the portion of zero responses implies that consumers have demonstrated a keener price awareness

[7] The factors lying behind the rise in food prices were animal diseases and the poor weather conditions in southern Europe.

Chart 4.

Distribution of consumers' perceived inflation in selected years



Source: Statistics Finland.

since 2000.[8] Extreme observations, on the other hand, had a very minor impact on average perceived inflation during the period studied. These extreme responses – removed from Statistics Finland's data – were mainly round figures such as 20%, 25% and 30%; higher responses were extremely rare.

Conclusions

It is not easy to give an airtight explanation for the gap between consumers' perceived inflation and measured inflation. The perhaps most usual explanation, that consumers pay attention only to certain groups of goods and services (eg daily food purchases), seems to hold only in part at the commodity-group level. Nor do movements in transport fuel prices appear to explain changes in perceived inflation. It is also worth noting that price developments in products whose prices are declining, eg mobile phones and phone calls, do not correlate closely with consumers' perceived inflation.

A reason for this might be that the CPI measures the price of consumption using fixed commodity weights whereas a consumer's spending on a given commodity may remain constant from year to year even while actual quantities are changing. For example, it is possible that many consumers will buy a new telephone of roughly the same price every few years but fail to notice the periodic quality improvements. In contrast, measurements of consumer prices attempt to take such quality improvements into account. Another example is where a consumer's telephone bill remains roughly constant from month to month despite a declining price per minute. The consumer fails to perceive the fall in price because, with the help of expanding phone conversations, her telephone bills hardly change at all.

An explanation that has been offered for the rise in perceived inflation in 2002[9] – based on consumer psychology – receives tentative support in this study. The idea is that consumers had advance beliefs that the euro-cash changeover would raise prices and paid most attention to prices of goods and services that did in fact rise, while ignoring commodities whose prices declined then or later. One can readily find products whose prices rose in connection with the euro-cash changeover, whereas it is difficult to find product groups where easing inflation had a dampening influence on consumers' perceived inflation.

[8] The difference may also be due to changes in survey procedures effected in 2000.

[9] See eg Aalto-Setälä (2006) and ECB (2005).

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Spending rules bring stability to fiscal policy in Finland

Helvi Kinnunen, Economist, Monetary Policy and Research

During the electoral period currently drawing to a close, the government spending rules have played a key role in Finland's fiscal policy. Spending limits have, admittedly, been used to regulate fiscal policy since the early 1990s, but they have not previously steered budget policy as clearly as they do now.[1] The spending limits became more important in the budget process when the spending rules were reformed at the start of the present government's term of office in 2003. Expenditure has, additionally, been held within the limits, even though the boundaries set for expenditure covered by the limits have been rather tight. Thus, economic policymakers have evidently considered the spending limits and the levels they have been set at as well-founded. The credibility of the spending rules has, therefore, clearly improved.

There are, however, a number of factors associated with the spending limit agreement that in reality make expenditure policy more relaxed than would appear based solely on the formal spending limits. One potentially relaxing factor is that the limits are defined at constant prices. This means that government expenditure's share of GDP value will typically grow even when expenditure is held within the spending limits. This is because public services production prices tend to rise faster than prices in general. It is also possible the spending limits could 'leak', since the spending rules do not cover all public expenditure. Consequently, savings in central government can simply mean increased expenditure in other areas of general government expenditure. Although central government governs some parts of local government expenditure, altogether only around half of combined central and local government primary expenditure is funded by central government. We could well ask, therefore, whether the success in holding expenditure within the spending limits is due to the limits themselves not being particularly tight relative to the performance of the economy at any given moment.

The Finnish system of spending limits is considered below from the perspectives outlined above. But we shall first assess the system in the light of economics literature and compare it with the practices current in other EU member states.

Expenditure rules reduce the deficit bias caused by the political process

Expenditure rules, and fiscal policy rules in general, are necessary because some features in political decision-making tend to create pressures for excessive increases in expenditure. In fact, economics literature talks of a deficit bias caused by the political process.[2]

One possible factor contributing to the deficit bias is the electoral cycle. As the elections approach, political decision-makers could have an incentive to increase expenditure (or cut taxes). This would give a short-term boost in support for the ruling coalition,

[1] On adherence to spending limits see Brunila and Kinnunen (2002) and Ministry of Finance (2003).

[2] See European Commission (2006).

assuming the electorate cannot see far enough ahead to understand the costs accruing later as a result of the increased expenditure.

Another factor contributing to the deficit bias could be party-political calculations on the part of the government. If a change in government seems probable, it could be advantageous to the governing party to increase the deficit prior to the elections. This would leave the incoming government to bear the costs of its predecessor's irresponsible policies.

A third factor that is considered to contribute to the deficit bias is the common pool problem familiar to economic theory. When the representatives of different political groups and interest groups, eg the representatives of different ministries, negotiate over the use of public resources, they all seek to maximise their own appropriations, with none taking on board the concept of common budget financing.

Because the political process has this tendency to produce excessive growth in public expenditure, it is necessary to find means that can more efficiently hold expenditure within the limits set by the available resources. In practice, this is done either by delegating decision-making to the finance minister or by making a political agreement on expenditure caps. It has been observed that countries with two-party systems, where one party at a time is in government, have generally adopted delegation. In contrast, political agreements are used in countries where governments are formed by multiparty coalitions.[3] Of the EU countries, the expenditure rules applied by eg the Netherlands, Ireland, Belgium and Slovakia are based on a political agreement. In other countries, eg France, Germany and Italy, control of expenditure has been delegated to the finance minister. In Germany, fiscal policy is also monitored by an independent council of experts. The Swedish system incorporates aspects of both approaches.

Finland's spending limits are by their nature a political agreement. In the government programme, the governing parties agree in advance the overall spending framework for central government expenditure and the limits for each administrative branch for the entire electoral period of four years. The precise allocations are reviewed annually in the government discussion on spending limits, at which the government sets revised limits for central government expenditure to guide the various administrative branches in formulating their proposals for the next year's budget.

Negotiations with the ministries over spending limits and the government discussion on spending limits are conducted in the spring, which in recent years has meant in practice that the key budget decisions have also been decided at this time. Thus, the formal government budget session has receded in importance in the annual budget process. In principle, therefore, Finland's spending rules serve to reduce the above-mentioned risks of

[3] See European Commission (2005).

excessive expenditure growth deriving from the political process. The allocation of central government financial resources to the various ministries in the form of capped appropriations prevents the emergence of a deficit bias caused by the efforts of different administrative branches to maximise their own appropriations.

The spending rules in principle also make it easier for the budget process to be informed by the long-term economic outlook. In practice, longer-term economic pressures and prospects are reflected not only in determining the overall level of expenditure, but also via the multiannual operating and financial plans of the different administrative branches. These plans, which cover periods of four years, include general operational guidelines and focus points and the most important targets for the development of social effectiveness and operational performance. They also include calculations for the level of appropriations already decided upon in each administrative branch, the relevant ministry's proposal for future expenditures and estimates of expenditures excluded from the spending limits and of the revenues of the administrative branch.

Finland's spending rules are an efficient but non-transparent tool

The spending rules applied in Finland are one example of fiscal policy rules.[4] The literature proposes a variety of optimality conditions for the form of such rules. In setting expenditure caps, it is essential to base them on a sufficiently realistic estimate of future trends in the economy's financial resources. One potential problem is that the government's own estimate could be misleading for political reasons. If the aim is to achieve an objective estimate of future financial resources, the job can be entrusted to an outside party.

Other criteria of optimal spending rules that have been mentioned include unambiguousness and transparency. Outsiders should be able to monitor compliance with the limits. This highlights governments' accountability for their expenditure policy. One requirement of optimal spending rules is broadness of scope. They should ideally cover the entire public sector, making them harder to evade. It has also been suggested that cyclically dependent expenditure items should be separated from discretionary expenditure.

In practice, spending rules differ greatly from one country to another.[5] For example, in the EU, where most member states apply some sort of spending rule, there are differences in terms of whether the rule is defined numerically, qualitatively or a combination of the two. The extent to which spending rules cover the various sectors of general government finances also varies. In the majority of cases they are set so as to cover just central government finances, ie expenditure items under direct political control. Another distinction can be drawn between spending rules written into law

[4] See eg Kopits, G and Symansky, S (1998).

[5] European Commission (2006).

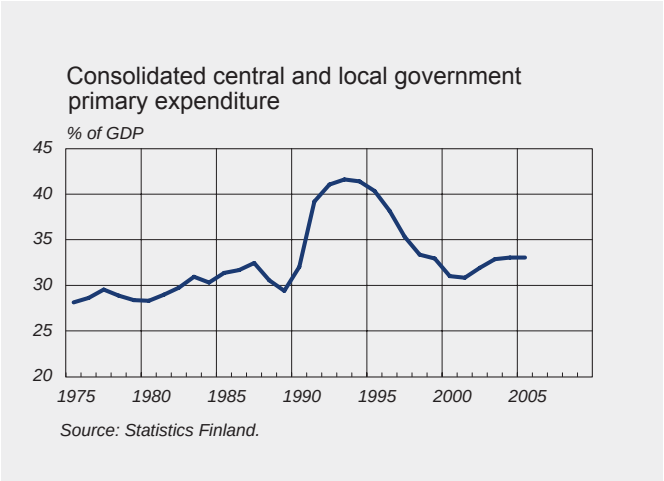
and those based on a political agreement. Moreover, rules may be based on the government's own forecast or on an assessment by an independent party. The different types of rule are linked with the specific practices in different countries, and there is considerable variation between countries in the role of spending rules in fiscal policy.

Finland's spending limits cover approximately three quarters of the appropriations for the annual expenditures included in the Budget. Finland's spending limit agreement is specifically designed to cover only those expenditure items that come under fiscal policy decision-making. This has been achieved by the exclusion of items that fluctuate automatically according to the economic cycle, such as expenditure on housing allowance and unemployment allowance and current transfers to the Social Insurance Institution. The effects of discretionary changes in these categories of expenditure are, however, included in the spending limits. The emphasis on the discretionary element reinforces accountability, but it also makes the system less transparent. In practice, it is very difficult for anyone outside the Ministry of Finance to assess whether spending has actually been held within the limits.

The spending limits also do not include interest payments on central government debt or expenditure to compensate for the effects on other tax recipients of changes in the tax basis. Also not included are expenditure against income from the European Union, expenditure against income from pools profits and transfer of profits by the Finnish Slot Machine Association (RAY) and financial investment expenditure.

Contrary to the earlier spending ceiling framework, supplementary budgets have now also been included within the spending limits. With this in mind, the spending limits each year include an undistributed reserve to cover unforeseen expenditure. Income from sale of shares has been allocated to special expenditure, with part of it to be directed to infrastructure investments and to fund research and development. A supplementary agreement has been attached to the spending rules whereby the central government deficit as measured by National Accounts concepts cannot be allowed to exceed 2¾% of GDP even when the economy is sluggish.

Chart 1.



The problem with the spending limits is their narrow scope and failure to compress cost pressures

From the perspective of the manageability of public expenditure, the biggest

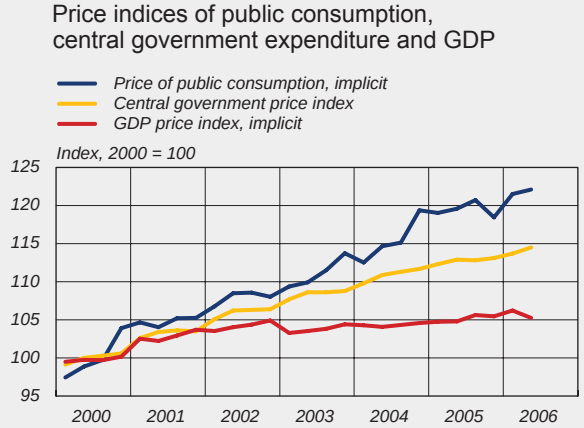
problem with Finland's spending rules is their scope. The wide-ranging autonomy of local government in Finland means that a considerable proportion of public expenditure lies outside the scope of centralised political decision-making. Hence the spending limits are not a particularly effective tool for regulating the economy's overall tax burden or the size of public (ie general government) finances.

If the size of public finances is measured on the basis of combined central and local government primary expenditure (ie their combined expenditure excluding interest payments and government transfers and grants to local authorities), even the successful central government expenditure policy of recent years has not meant a contraction in the size of public finances relative to the economy as a whole (Chart 1). Instead, it would seem that the GDP share of combined central and local government expenditure has in recent years continued the gradual upward trajectory that began in 2002.

The strict control on expenditure in the spending rules is in part merely apparent also because the spending limits are defined at constant prices. Rising wages and other costs involved in the production of public services tend to increase the expenditure burden relative to the development of the financial base even when there is no increase at all in expenditure measured at constant prices. This has been particularly true in Finland in recent years. It has been largely overlooked that the upward trend in central government expenditure prices has been considerably faster than average price rises across the economy as a whole. For example, in 2003–2005 the overall price index for central government rose by a full 6%, while the GDP price index rose by less than 1%. This explains why, despite the Government's tight spending policy, total central government expenditure coming under the spending limits has not declined relative to GDP. In fact, without the tight spending policy, the faster price rises in central government would have led to a significant increase in the relative size of central government. Moreover, in the absence of strict controls on volume expenditure growth, central government finances would no longer be structurally in balance.

The importance of relative prices to growth in the size of public finances is clearly visible if we compare the price trend in public consumption as a whole with the development of the GDP price component (Chart 2). The price of public consumption has risen much

Chart 2.



Sources: Statistics Finland and Bank of Finland.

faster than GDP prices. The growth in the ratio has been fed both by the considerable contribution of wages in the price of public consumption and by the weak productivity trend in general government. According to calculations by Statistics Finland[6], productivity in both central and local government has been steadily declining since the late 1990s. The trend in relative prices has, therefore, increased the public sector's share of the economy and at the same time contributed to the continued high average tax ratio.

Outlook for spending rules

Credible and binding spending rules are in principle an effective tool for keeping public expenditure under control. They can help to lengthen the planning span of fiscal policy and, by reducing politicians' room for manoeuvre in budget policy, they also reduce the risks of volatility in spending policy. This means a reduction in the efficiency losses caused by changes in tax policy. Setting spending limits on a rolling basis for several years ahead, as is done at present in Finland, would also make it possible to take systematic account of long-term objectives and immediately foreseeable structural changes. Although the limits do not bind the next government, the process nevertheless serves to enhance the sustainability of public finances, provided expenditure pressures have been properly assessed. Under current practices, however, the long-term spending limits are essentially just technical calculations. Accordingly, increasing costs from demographic ageing have not been reflected in short-term spending policy. In principle, the spending rules could provide an opportunity to assess the impacts of these factors.

Finland's spending rules have in different contexts – eg in relation to the EU's fiscal policy coordination procedure – been used as an example of well-functioning fiscal policy rules. They have brought stability to the Finnish economy, and hence a competitive edge relative to other countries. The key issue for fiscal policy is the credibility of the rules. When public expenditure growth is under control, this also reduces concern over sudden adjustments in fiscal policy, making it easier for economic agents to make long-term commitments. In particular, the stability of public finances is important to the direction of corporate investment.

An important challenge for the future in spending limits is how to achieve a better forecast of growth in the GDP share of expenditure caused by changes in relative prices. The projects currently under way to improve cost-efficiency in the public finances are important. In fact, the containment of cost pressures is essential if growing expenditure needs are to be met. Control of expenditure cannot, however, rely on this alone. It is clear that the costs of public service production will continue to rise in the future. The GDP share of central and local government expenditure could continue to grow even if expenditure policy measured at constant prices remains strict.

[6] Statistics Finland (2006) and Kinnunen (2005).

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Publications

A complete list of publications is available on the Bank of Finland's website (www.bof.fi).

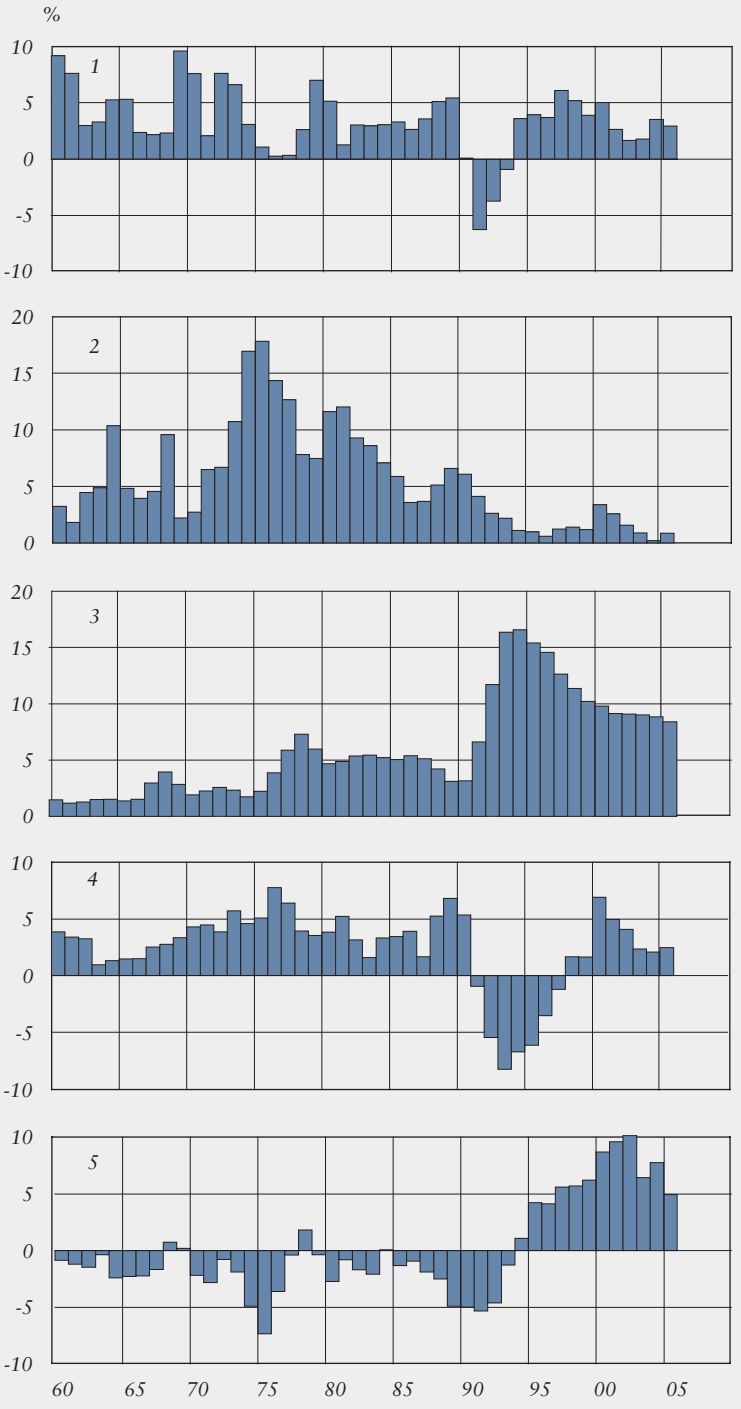
The Bank of Finland's publication operations are becoming largely electronic, in terms of both publication and distribution.

In future, research papers and other studies, such as discussion papers and the Bank's A and E series studies, will be published only online. An email alert system is due to be introduced, to alert listed readers to the release of new publications.

Back copies of older printed publications still in stock can be ordered from the Bank of Finland (www.bof.fi).

Charts

1. Finland: key economic indicators



GDP, volume change from previous year

Consumer prices, change from previous year

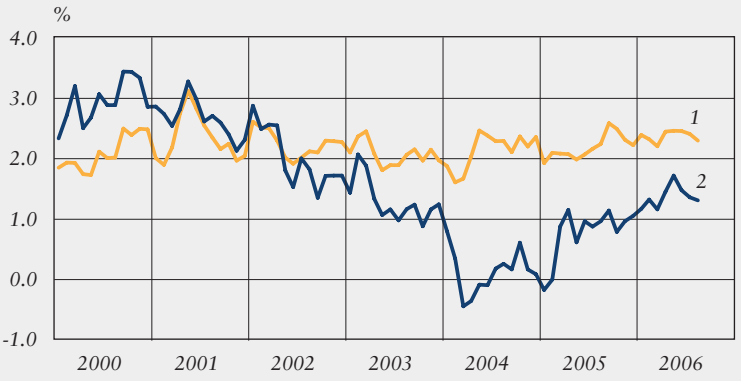
Unemployment rate

General government fiscal position, % of GDP

Current account, % of GDP

Sources: Statistics Finland and Bank of Finland.

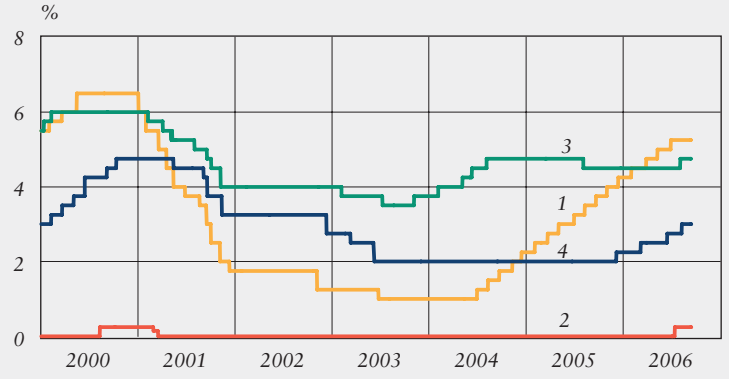
2. Price stability in the euro area and Finland



Harmonised index of consumer prices, 12-month change, %
1. *Euro area*
2. *Finland*

Sources: Eurostat and Statistics Finland.

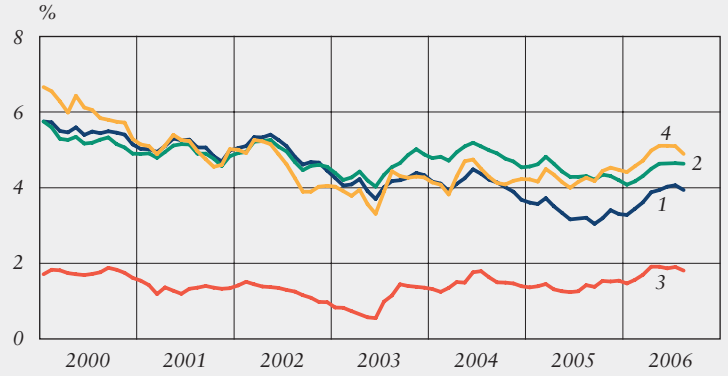
3. Official interest rates



1. *USA: fed funds target rate*
2. *Japan: overnight call rate*
3. *United Kingdom: repo rate*
4. *Eurosystem: main refinancing rate/minimum bid rate*

Source: Bloomberg.

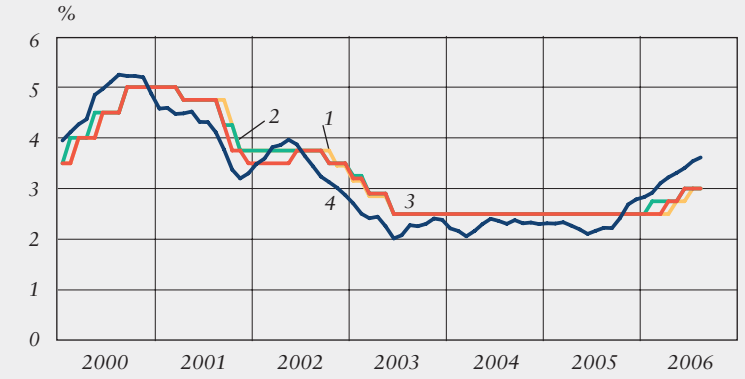
4. International long-term interest rates



Yields on ten-year government bonds
1. *Finland*
2. *United Kingdom*
3. *Japan*
4. *United States*

Source: Reuters.

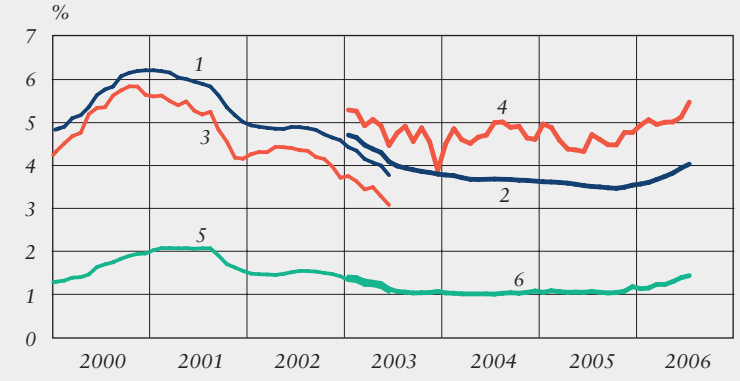
5. Bank reference rates in Finland and 12-month Euribor



1. *Nordea prime at the end of the month*
2. *Sampo prime at the end of the month*
3. *OKOBANK group prime at the end of the month*
4. *12-month Euribor*

Sources: Banks and ECB.

6. Average lending and deposit rates

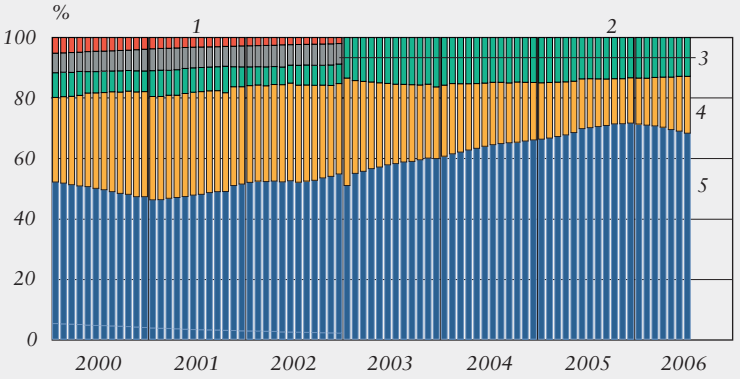


1. *Banks' stock of loans*
2. *MFIs' stock of loans*
3. *Banks' new loans*
4. *MFIs' new loans*
5. *Banks' stock of deposits*
6. *MFIs' stock of deposits*

Source: Bank of Finland.

Data collection changed as of 1 January 2003. Under the new system MFIs include both deposit banks and other credit institutions.

7. Stock of bank lending by interest rate linkage

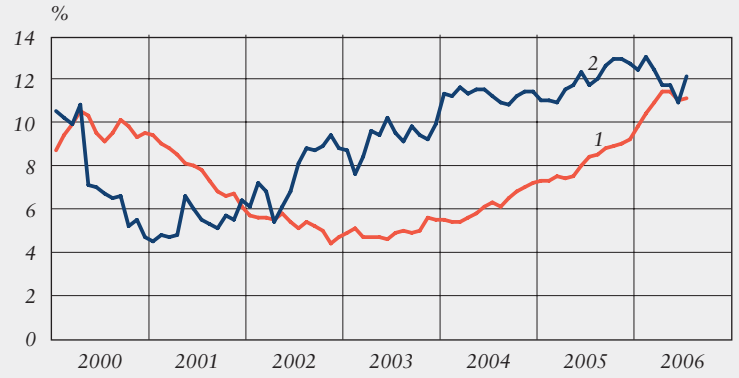


1. *Linked to base rate*
2. *Linked to other rates (as of 2003 includes loans linked to base rate and fixed-rate loans)*
3. *Fixed-rate*
4. *Linked to reference rates of individual banks (prime rates, etc)*
5. *Linked to Euribor*

Source: Bank of Finland.

Data collection changed as of 1 January 2003.

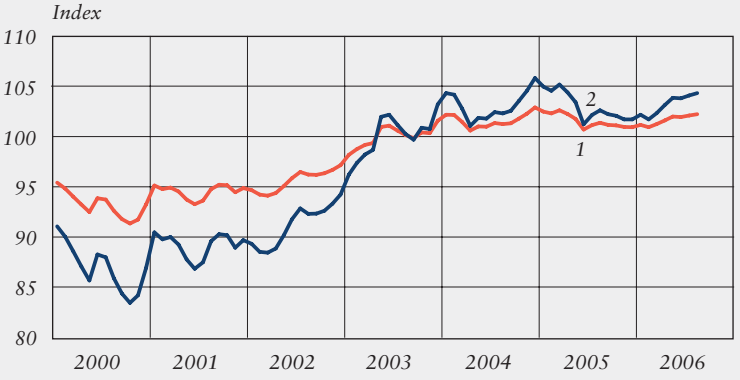
8. MFI loans to private sector



12-month change, %
1. *Loans by euro area MFIs to euro area residents*
2. *Loans by Finnish MFIs to euro area residents*

Sources: European Central Bank and Bank of Finland.

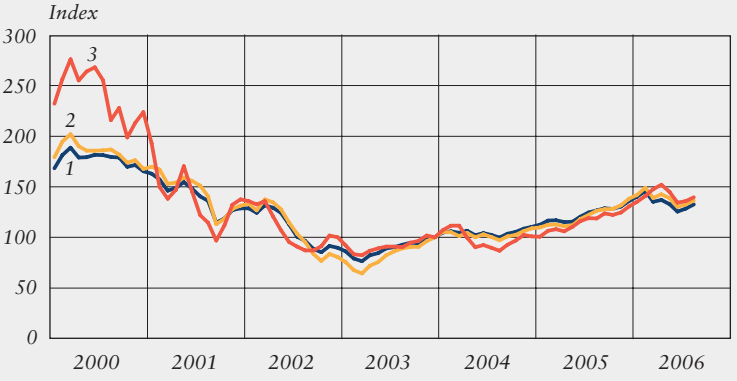
9. Competitiveness indicators for Finland



1999 Q1 = 100
Based on trade-weighted exchange rates.
An upward movement of the index represents a weakening in Finnish competitiveness.
1. *Narrow competitiveness indicator including euro area countries*
2. *Narrow competitiveness indicator*

Source: Bank of Finland.

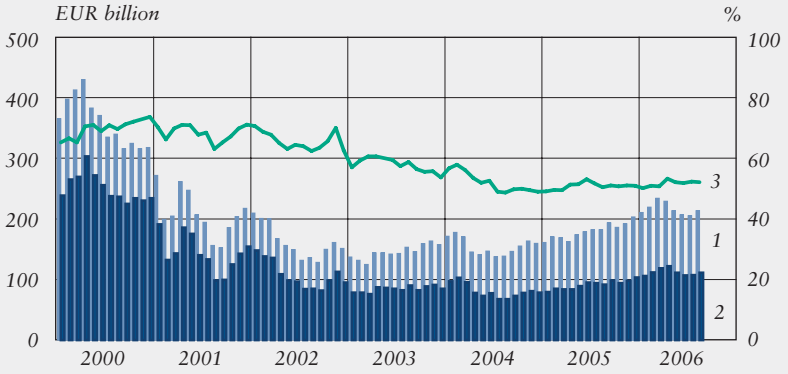
10. Selected stock price indices in the euro area



31 December 2003 = 100
1. *Total euro area: Dow Jones Euro Stoxx index*
2. *Germany: DAX index*
3. *Finland: OMX Helsinki All-Share Index*

Sources: Bloomberg and Helsinki Stock Exchange.

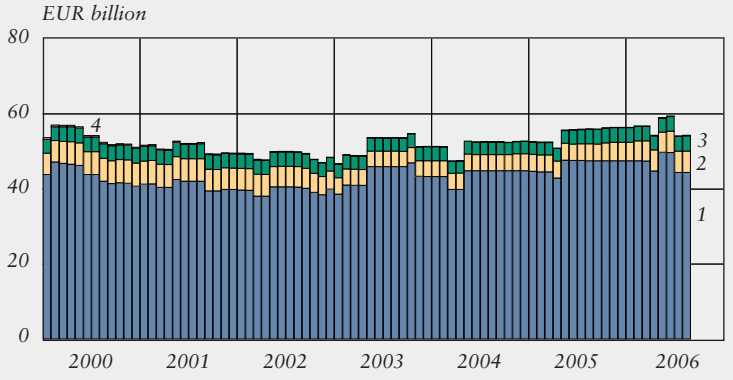
11. Listed shares in Finland: total market capitalisation and non-residents' holdings



1. *Market capitalisation of all listed shares (left-hand scale)*
2. *Market capitalisation of non-residents' holdings (left-hand scale)*
3. *Market capitalisation of non-residents' holdings as a percentage of total market capitalisation (right-hand scale)*

Sources: Helsinki Stock Exchange and Finnish Central Securities Depository (APK).

12. Bonds issued in Finland

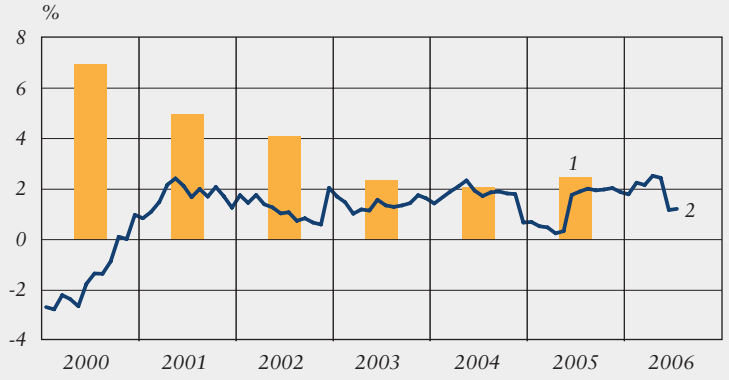


End-month stock

1. *Central government*
2. *Financial institutions*
3. *Companies*
4. *Other*

Source: Statistics Finland.

13. Public sector balances in Finland

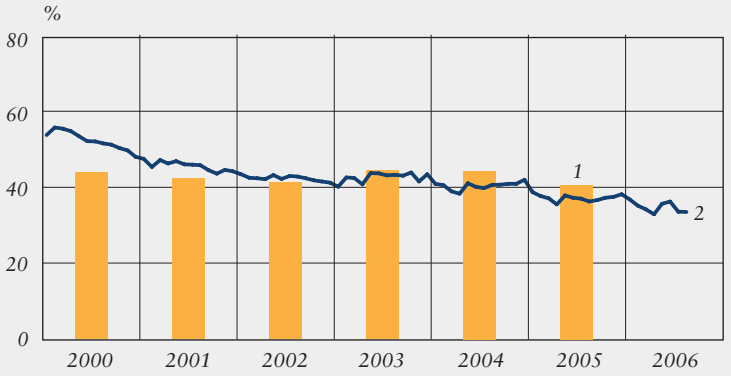


% of GDP

1. *General government fiscal position*
2. *Central government revenue surplus, 12-month moving total*

Sources: State Treasury, Statistics Finland and Bank of Finland.

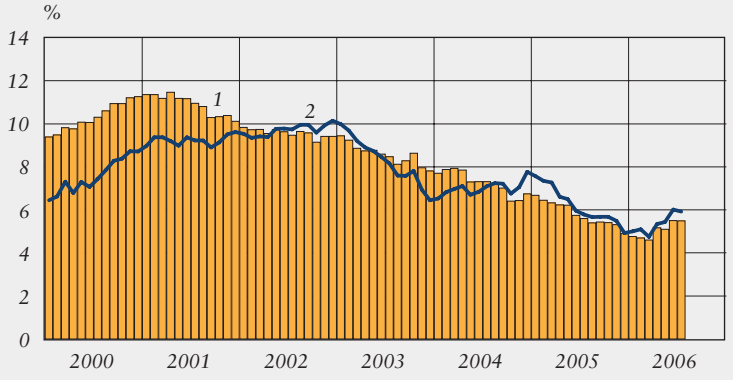
14. Public debt in Finland



% of GDP
1. *General government debt*
2. *Central government debt, 12-month moving total*

Sources: State Treasury, Statistics Finland and Bank of Finland.

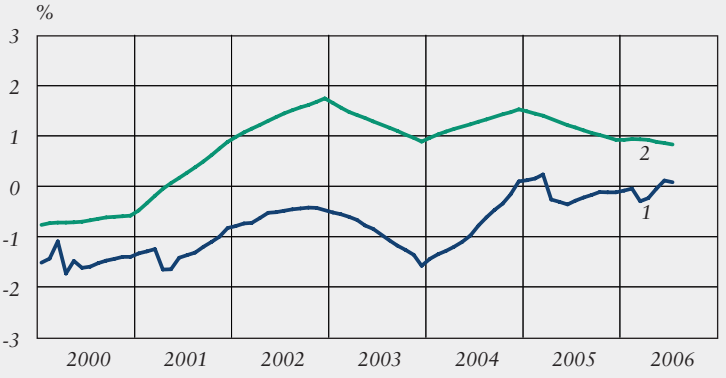
15. Finland: goods account and current account



12-month moving totals, % of GDP
1. *Goods account, fob*
2. *Current account*

Source: Bank of Finland.

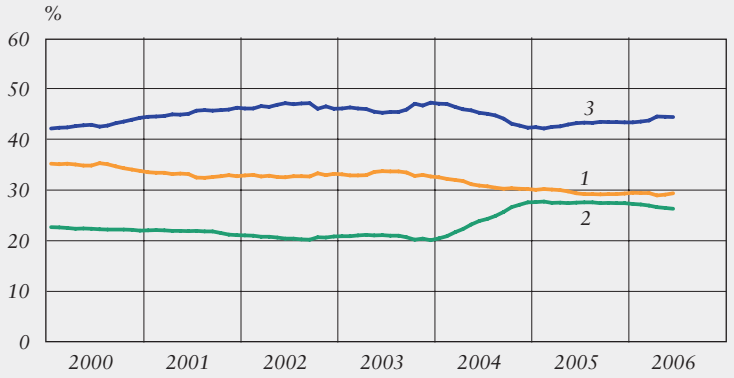
16. Finland: services account and income account



12-month moving totals, % of GDP
1. *Services account (trade in goods, fob)*
2. *Income account*

Source: Bank of Finland.

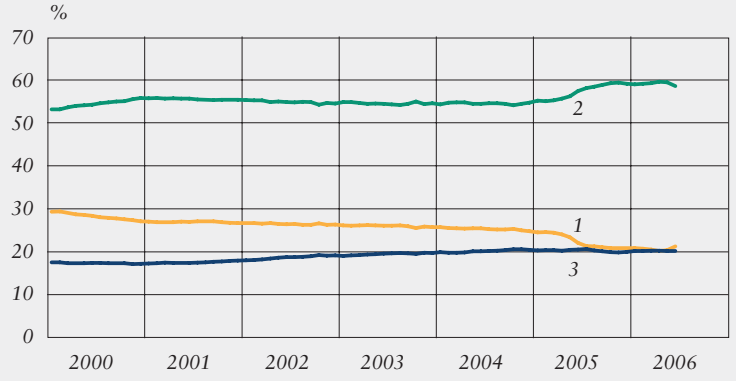
17. Regional distribution of Finnish exports



12-month moving totals, percentage of total exports
1. *Euro area*
2. *Other EU member states*
3. *Rest of world*

Sources: National Board of Customs and Statistics Finland.

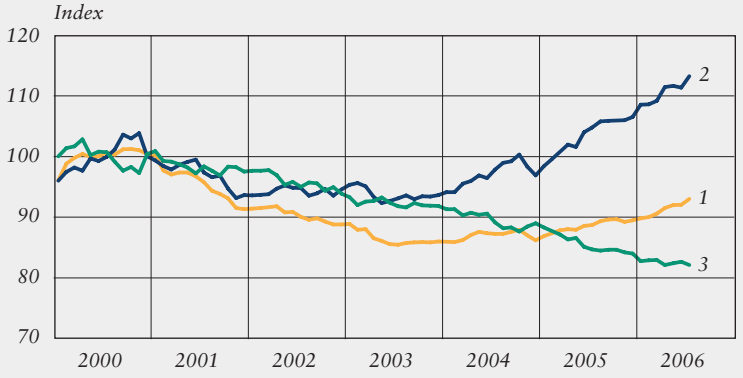
18. Finnish exports by industry



12-month moving totals, percentage of total exports
1. *Forest industries*
2. *Metal and engineering industries (incl. electronics)*
3. *Other industry*

Source: National Board of Customs.

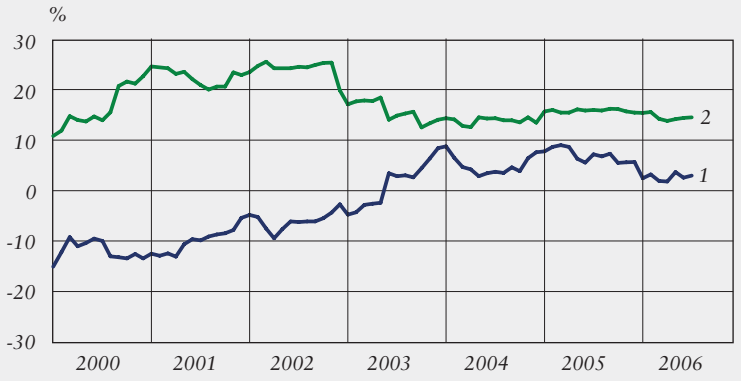
19. Finland's foreign trade: export prices, import prices and terms of trade



2000 = 100
1. *Export prices*
2. *Import prices*
3. *Terms of trade*

Source: Statistics Finland.

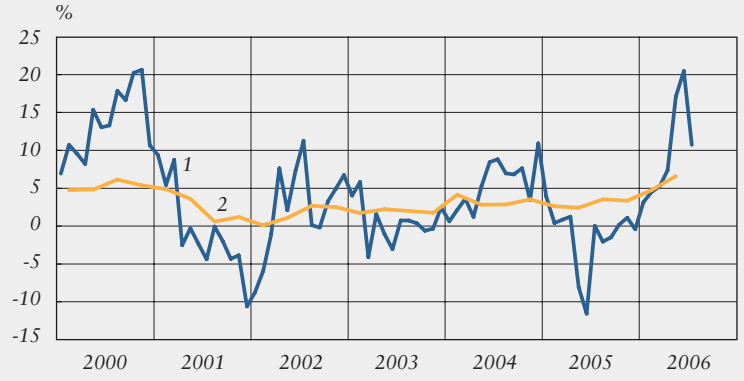
20. Finland's net international investment position



% of GDP
1. *Net international investment position excluding equity items*
2. *Net outward direct investment*

Sources: Bank of Finland and Statistics Finland.

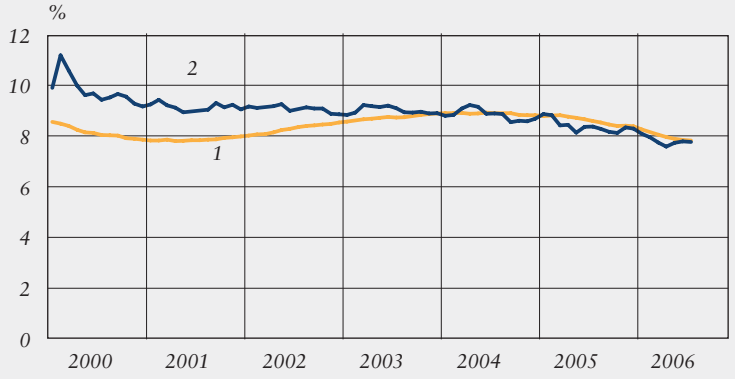
21. Finland: GDP and industrial production



Percentage change from previous year
1. *Industrial production*
2. *Gross domestic product*

Source: Statistics Finland.

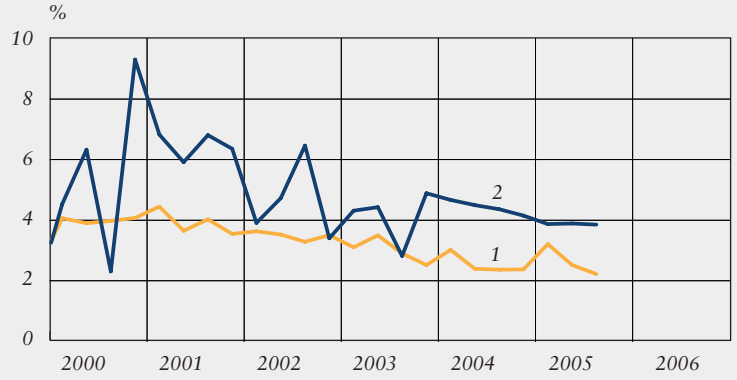
22. Unemployment rate in the euro area and Finland



1. *Euro area*
2. *Finland*

Sources: Eurostat, Statistics Finland and Bank of Finland.
Data seasonally adjusted.

23. Hourly labour costs in the euro area and Finland

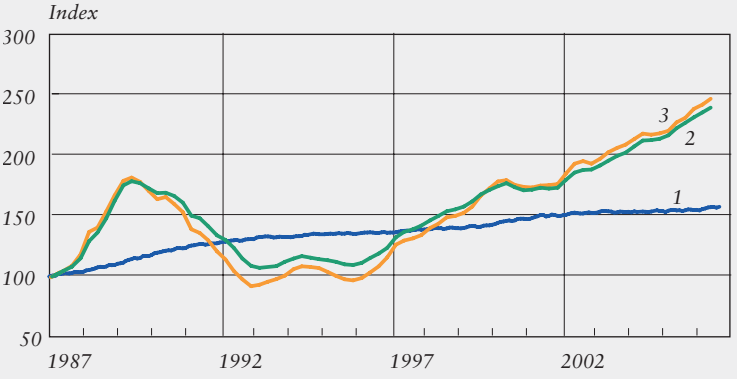


Whole economy excl. agriculture, public administration, education, health and unclassified services.

Percentage change from previous year
1. *Euro area*
2. *Finland*

Sources: Eurostat and Statistics Finland.

24. Selected asset prices in Finland



1987 Q1 = 100
1. *Consumer prices*
2. *Housing prices*
3. *Two-room apartments (secondary market; debt-free price per m²)*

Source: Statistics Finland.

Organisation of the Bank of Finland

17 May 2006

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