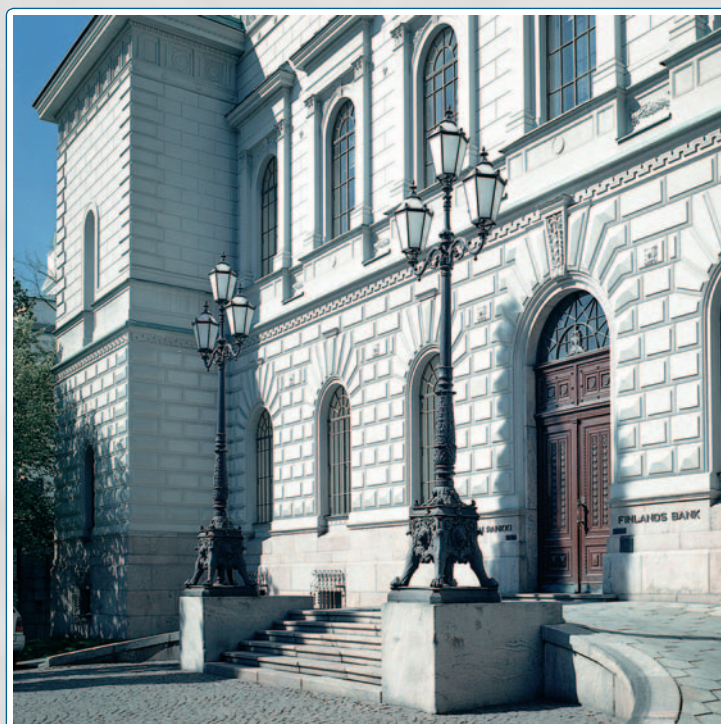


BANK OF FINLAND
BULLETIN

2 • 2004



Monetary policy and economic outlook
Financial stability in Finland
Finland's currency supply system



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Monetary policy and economic outlook

21.5.2004

The global recovery has continued through the early months of 2004. The short-term outlook for growth is bright, if still overshadowed by risks relating to structural problems and the financing of deficits in some of the major economies. Growth has been slower to pick up in the euro area than in the other major economies. Finland has continued to experience brisk demand in the household sector.

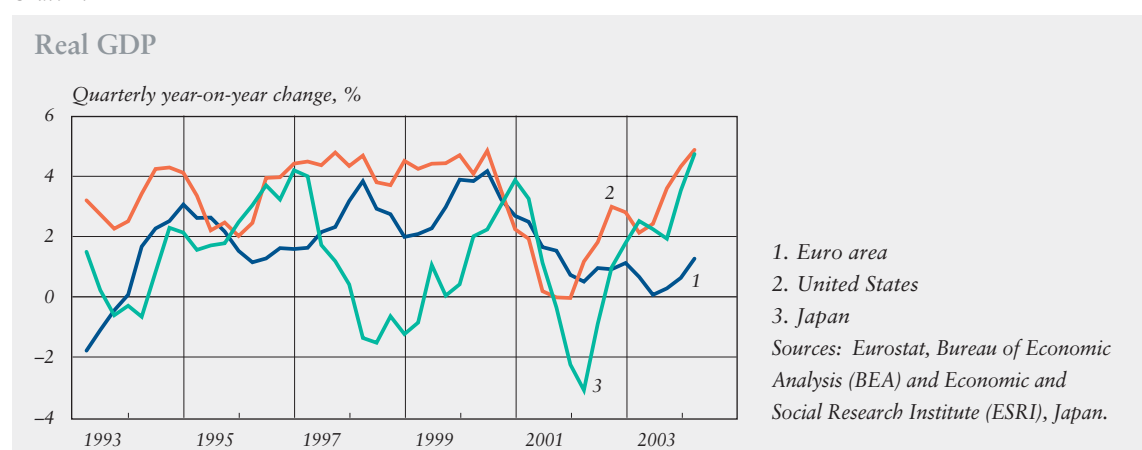
The world economy has continued to grow at a brisk pace in the early months of 2004. Growth has been particularly rapid in Asia, the United States, Russia and several of the new EU Member States. The euro area, in contrast, has been slower to recover (Chart 1). In many countries, economic policy has continued to make a considerable contribution to supporting growth.

In their new forecasts, international organisations such as the European Commission, the IMF and the OECD envisage continued brisk growth in the world economy throughout 2004, but with the pace of growth easing somewhat next year. A broadly similar view of the future was presented in the Bank of Finland's forecast published in March. The pace of growth in the United States is generally expected to ease next year as the stimulus from economic policy fades. In many countries of Asia, too, growth is expected to slow in line with an easing in the pace of exports and investment. In contrast, euro area growth is forecast to be stronger next year than in 2004.

Despite the favourable outlook for the world economy, significant risk factors still remain. No progress has been made towards correcting the large US federal and current account deficits. Many forecasts view a

The outlook for world growth is favourable.

Chart 1.



gradual tightening of US fiscal policy as an essential prerequisite for continued undisturbed growth in the world economy. In addition, the rapid growth in China is creating concern over possible overheating, while the recent rise in the price of crude oil could, if it continues, depress growth in oil importing countries.

Recent indicators of industrial and consumer confidence support this forecast picture of the short-term

economic trends (Charts 2 and 3).

Industrial confidence indicators have in general already risen above the long-term average, but consumers are more cautious. Consumer confidence is still depressed by concern over employment. In some countries, large general government deficits have also perhaps contributed to lowering consumers' growth expectations.

The situation in the euro area has been marked by a sluggish return

Chart 2.

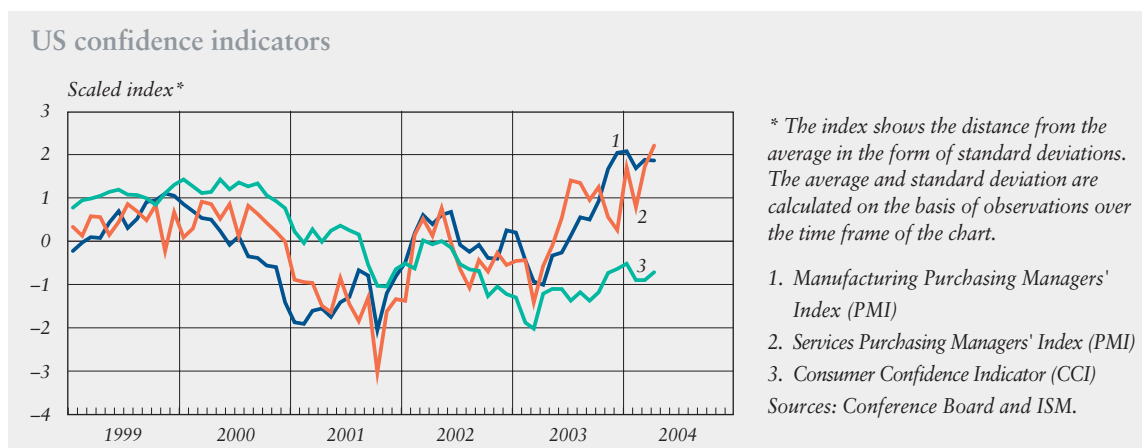
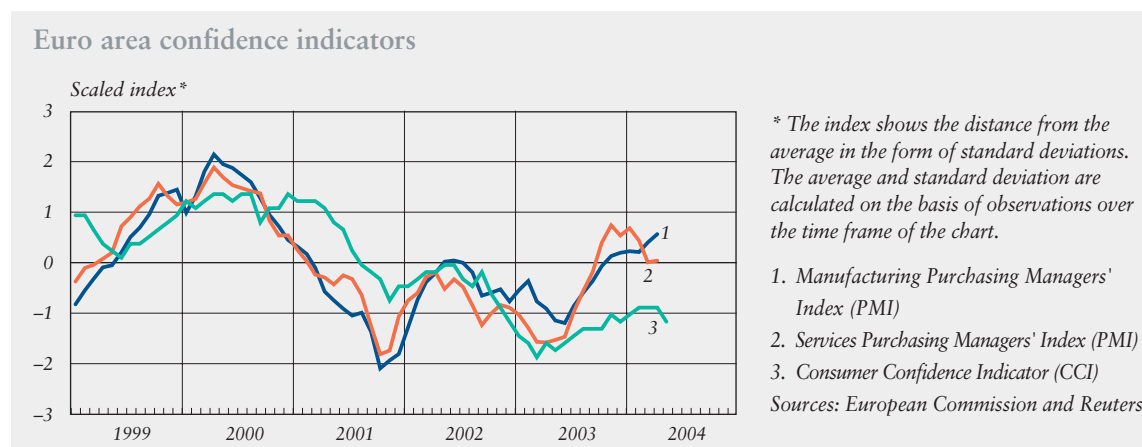


Chart 3.



to growth and deteriorating general government finances. Domestic demand has not recovered despite a supportive monetary policy and a relatively low level of household debt. The weak economic environment have also created unfavourable conditions for correcting the general government deficits. Six countries in the euro area (accounting altogether for approximately 80% of euro area GDP) are expected to be brought within the Excess Deficit Procedure of the Stability and Growth Pact in 2004. The credibility of fiscal policy coordination in the euro area is now under serious threat. It is essential that the countries suffering from excessive general government deficits honour their commitments and do their utmost to place their economies on a stable foundation.

The outlook for the Finnish economy remains brighter than for the euro area as a whole. Exports have admittedly been fairly lacklustre in the

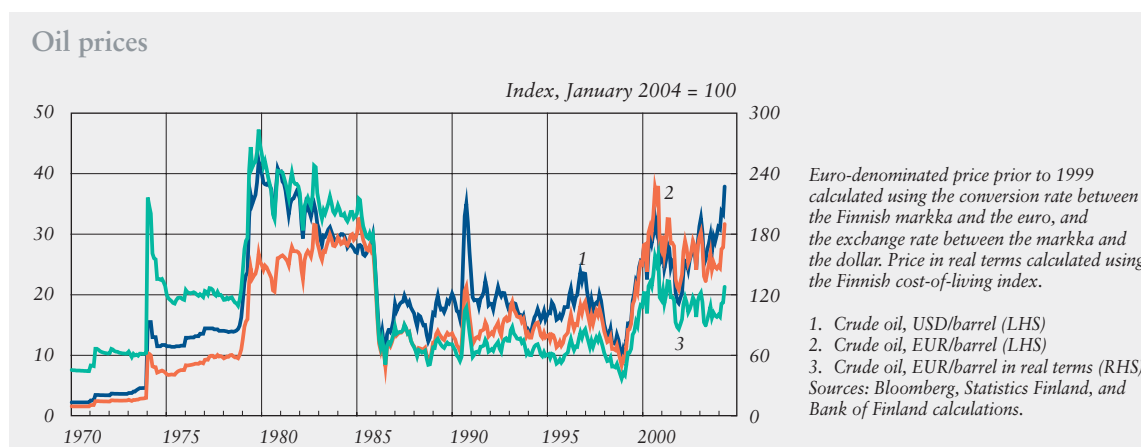
first part of the year compared with the brisk pace of growth in the world economy. Private consumption has nevertheless remained strong. As a whole, the outlook for the Finnish economy remains in line with the Bank of Finland's March forecast.

A sharp rise in the price of oil

Measured both in US dollars and in Finnish currency, the price of oil has already risen above the levels at the time of the first Gulf War in 1990–1991. In real terms, however, the price is still well below the levels during the oil crises of the 1970s and 1980s (Chart 4). As well as the increased demand caused by the recovery in the world economy, the price of oil has recently also been pushed up by the deteriorating situation in Iraq, among other things. The rising price of oil is undermining the terms of trade of the oil importing countries and, if it continues, could depress their GDP growth. There has

The higher price of oil is already being reflected in consumer prices.

Chart 4.



Tax cuts and a relaxed monetary policy have supported US growth in consumer demand.

also been a steep rise in other commodity prices, and particularly metal prices. This is due in part to increased demand from China.

Rising commodity prices, above all oil prices, have already begun to be reflected in consumer prices in industrial countries (Chart 5). The accelerating pace of inflation has, however, been subdued by the moderate rise in labour costs in many countries. Moreover, stiffening global competition has made it harder for companies to raise the prices of their final goods.

Strong private consumption in the United States

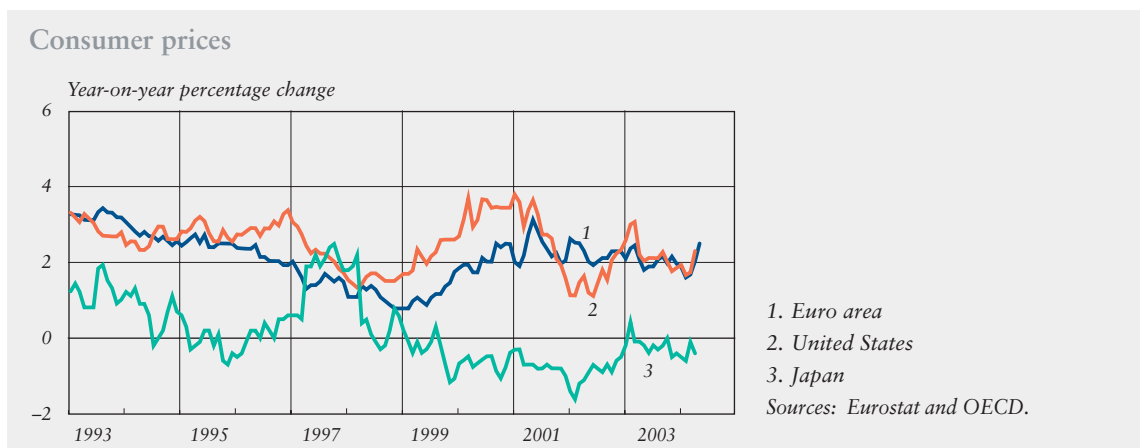
GDP growth in the United States continued at a brisk pace in the first quarter of 2004. Annualised growth was a good 4% up on the previous quarter. In 2003, US GDP growth was a little over 3%.

US GDP growth has in recent years depended to a significant degree

on private consumption. This is also true of the growth in the first quarter of 2004, although the economy also received a fiscal policy boost from increased defence expenditure. In contrast, the pace of growth in fixed investment was down slightly compared with the second half of 2003. Investment growth has continued to focus on the ICT sector, while traditional investment in machinery and equipment has been slow to recover.

Growth in the disposable income of US households and, by extension, consumer demand has been supported in recent years – including the first quarter of 2004 – by extraordinary factors such as large tax cuts and the remortgaging of housing loans facilitated by relaxed monetary policy (Chart 6). In contrast, aggregate household wages stagnated in the early years of the new millennium, only beginning a cautious rise in 2003 (Chart 7). Over the same

Chart 5.



period there has been vigorous growth in corporate profits as rapid growth in labour productivity has subdued the rise in unit labour costs. This creates a situation conducive to growth in corporate investment and employment.

US growth is expected to continue at a relatively brisk pace in the short term. Towards the end of the year, however, growth is expected

to ease gradually as the impact of tax cuts fades and the remortgaging of housing loans eases off.

The risks surrounding the sustainability of US growth have not disappeared. No progress has yet been made in remedying the country's large federal and current account deficits. The current account deficit remained at just under 5% of GDP in the first quarter of 2004, and the

Chart 6.

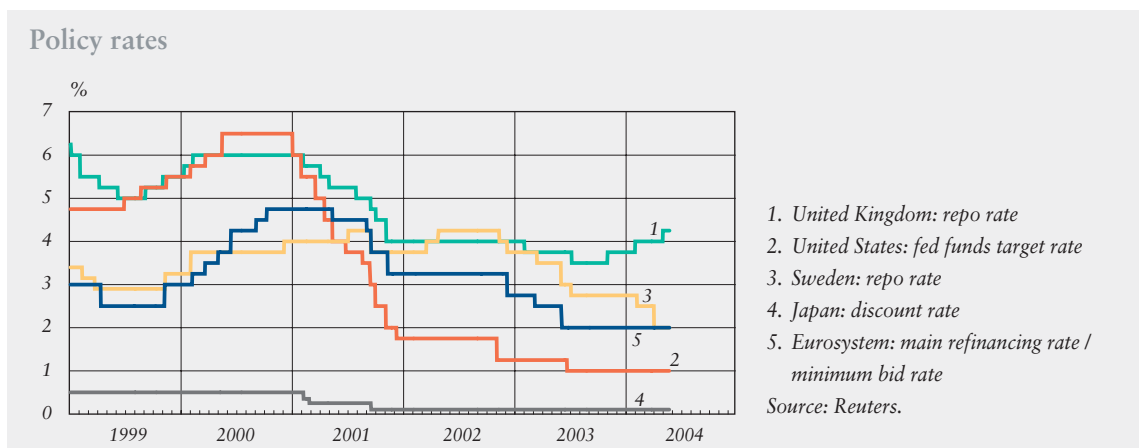
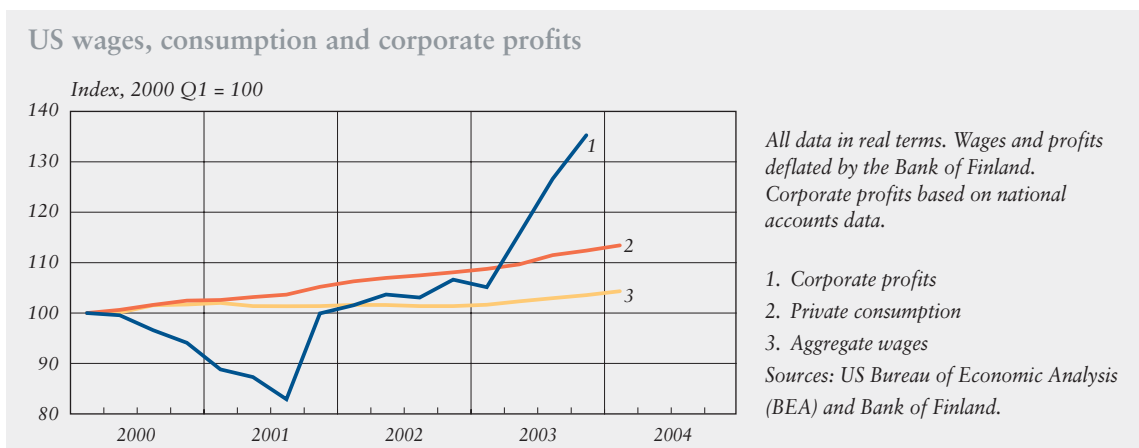


Chart 7.



federal deficit stood last year at a little under 4% of GDP. Most forecasts envisage only a slow reduction in the deficits. A reduction in the current account deficit will probably require a considerable deceleration in the pace of growth in household consumption and an increase in the savings rate in the immediate years ahead. Possible disturbances in financing the deficit could considerably weaken the dollar and raise

long-term interest rates in the United States.

Dollar and long-term interest rates both rising

The US dollar has stopped depreciating since the beginning of 2004, gaining approximately 4% by the end of May as measured by the trade-weighted exchange rate index (Chart 8). However, in the previous two years it had weakened by a total of

Chart 8.

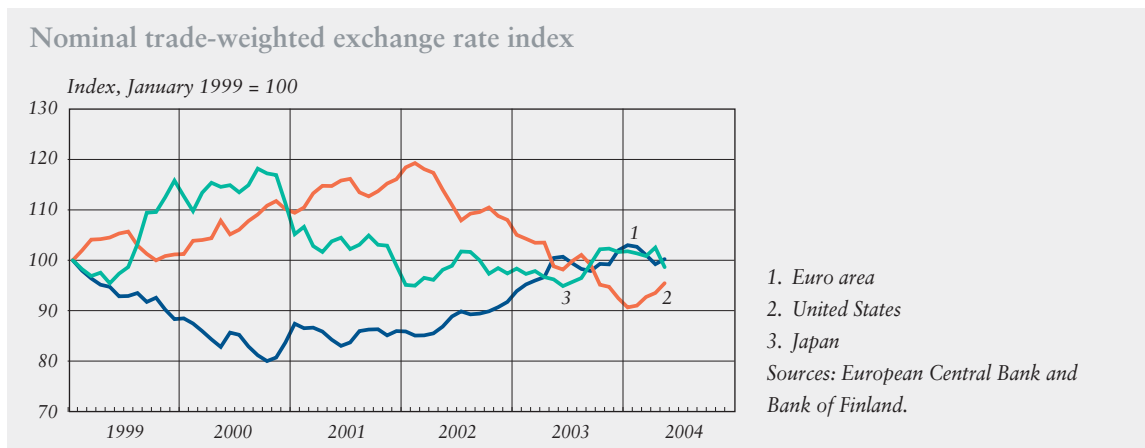
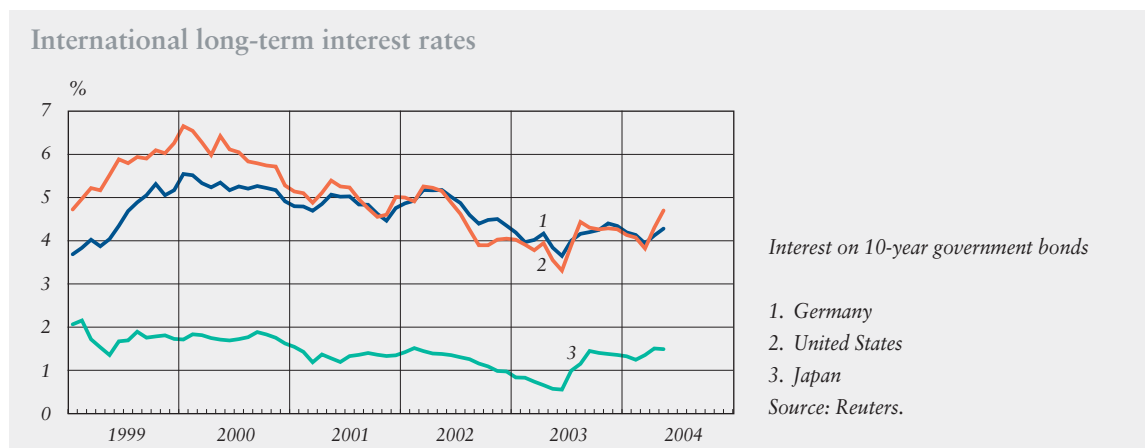


Chart 9.



approximately 20%. The recent gains by the dollar reflect the market's more optimistic expectations over US growth, and at the same time the expectation of a faster rise in the Fed's key interest rate than previous assessments. The appreciation of the dollar could weaken US export growth and thus further delay reduction of the current account deficit. In Europe, poor growth prospects for the euro area have in recent months slightly undermined the external value of the euro.

There has recently been a strong rise in long-term interest rates, particularly in the United States, where the rate on 10-year government bonds rose by around one percentage point between mid-March and the end of May (Chart 9). The rise in long-term US rates in turn reflects changing market expectations over interest rates and growth. The market anticipates a noticeable rise in the Fed's key rate during the course of 2004.

The rising trend in share prices that began early in 2003 would appear to have ended on many stock exchanges during the early months of 2004. In the United States, even better-than-expected earnings development in the corporate sector during the first quarter of the year has not raised share prices. The change in interest rate expectations has probably exerted an influence here. In addition, viewed historically, US share valuations are already relatively high.

Japan returns to growth

The pace of Japanese growth during the second half of 2003 surprised many forecasters. Over the year as a whole, GDP was up by 2½%. Brisk growth continued through the early part of 2004. This period of growth has been supported by exports to other countries in Asia, especially China. The higher profits of companies in the export sector have also contributed to a recovery in investment, and just recently there have also been signs of a gradual recovery in the Japanese employment. Optimism is spreading from the export industries to small and medium-sized enterprises and gradually also to the household sector. However, despite gradual progress with structural changes in the economy, there remain considerable risks relating to general government debt and nonperforming bank loans, among other factors.

International organisations also see signs of continued deflation in Japan.

During the first quarter of 2004 Chinese GDP growth continued at a very brisk pace, with an almost 10% increase on the previous year. The vigorous growth in the Chinese economy has caused general concern over the possibility of overheating. In order to dampen the extremely rapid pace of investment activity, the People's Bank of China has accordingly imposed limits on bank lending and raised the minimum reserve requirements on certain banks.

Japanese growth has been surprisingly rapid.

The euro area economy continues to recover, but at a slow pace.

Euro area domestic demand slow to recover

GDP growth in the euro area has been slower to recover than in many other economic regions. Advance data nevertheless indicates strengthening growth during the first quarter of 2004, with annualised growth up just under 2½% on the previous quarter. Indicators suggest growth has been supported above all by exports, which have benefited from the recovery in the world economy despite the earlier appreciation of the euro. There are also signs that private consumption has recovered slightly following a sluggish year in 2003. On the other hand, there is no real sign of faster growth in investment. The terrorist attack on Spain in March seems not to have had a major impact on the economy.

Euro area growth should continue to recover in the near term, but there is no foreseeable prospect of particularly rapid growth. The weak employment situation in recent years has depressed private consumption in many countries, and we cannot expect any rapid improvement in this area. On the other hand, the low level of interest rates should favour investment, while the recent depreciation of the euro and brisk world trade will help exports from the euro area.

Rising oil price increases inflation in the euro area

Consumer price inflation in the euro area (measured by the Harmonised

Index of Consumer Prices, or HICP) fell below 2% in the early months of 2004. The recent rise in the world market price for oil has, however, boosted inflation once again. Increases in administered prices and indirect taxes in the largest members of the euro area have also boosted inflation. On the other hand, the impact on food prices from the exceptionally dry summer in 2003 has gradually receded.

The high price of oil should sustain the relatively rapid pace of inflation in the euro area in the immediate months ahead. Over the longer term, however, the pace of inflation in the euro area is generally expected to remain moderate. Moderate wage rise pressures allied to the effects on import prices of the earlier appreciation of the euro will help to curb inflationary pressures.

Monetary policy in the euro area continues to support growth. The Governing Council of the ECB has held its key rate at 2% since June 2003 (Chart 6). The expectations of a rate cut that have from time to time emerged in the market have recently receded and market participants now expect a cautious rise in the ECB's key rate at the end of 2004 or beginning of 2005.

Growth of the broad monetary aggregate (M3) in the euro area has slowed during the early part of 2004, but is nevertheless still relatively strong, and there is plenty of liquidity in the economy. At the same time, the

pace of growth in lending to households has increased slightly. The high level of activity in the housing market in some euro area countries has been reflected in the demand for housing loans, while the growth in consumer loans could indicate a gradual recovery in private consumption.

Increased problems with public finances in the euro area

General government finances in euro area countries deteriorated last year for the third year in a row. The general government deficit-to-GDP ratio for the euro area as a whole grew from 2.3% in 2002 to 2.7% in 2003 (Table). The structural budget deficit has in recent years remained more or less unchanged. This means, on one hand, that the growth in nominal deficits has been due primarily to the weak economic cycle, which has among other things depressed growth in tax receipts. On the other hand, it also reflects the fact that the countries concerned have been unable to improve their underlying structural budgetary positions. The growth in budget deficits has ended the contraction in the euro area general government debt-to-GDP ratio that had continued since 1996.

Although GDP growth is now picking up in the euro area, the general government deficits of many countries in the area are forecast to deepen further this year. This is due in part to tax cuts. In practice, the swelling deficits will probably mean

that more countries will in future have to be brought within the sphere of the Stability and Growth Pact's Excessive Deficit Procedure. In addition to Portugal, France and Germany were brought within the scope of the procedure last year, as their deficits exceeded the reference value of 3% of GDP. Although their governments have assured the Council of Ministers they will endeavour to bring their deficits below 3% by 2005 at the latest, the Commission's spring 2004 economic forecasts suggest this will not necessarily happen.

Besides France and Germany, the general government deficits of the Netherlands, Italy, Greece and

Table.

Public sector financial balances, % of GDP					
	2001	2002	2003	2004 ^f	2005 ^f
<i>Belgium</i>	0.5	0.1	0.2	-0.5	-0.7
<i>Germany</i>	-2.8	-3.5	-3.9	-3.6	-2.8
<i>Greece</i>	-1.4	-1.4	-3.0	-3.2	-2.8
<i>Spain</i>	-0.4	0.0	0.3	0.4	0.6
<i>France</i>	-1.5	-3.2	-4.1	-3.7	-3.6
<i>Ireland</i>	1.1	-0.2	0.2	-0.8	-1.0
<i>Italy</i>	-2.6	-2.3	-2.4	-3.2	-4.0
<i>Luxembourg</i>	6.3	2.7	-0.1	-2.0	-2.3
<i>Netherlands</i>	0.0	-1.9	-3.2	-3.5	-3.3
<i>Austria</i>	0.2	-0.2	-1.1	-1.1	-1.9
<i>Portugal</i>	-4.4	-2.7	-2.8	-3.4	-3.8
<i>Finland</i>	5.2	4.3	2.3	2.0	2.1
<i>Euro area</i>	-1.6	-2.3	-2.7	-2.7	-2.6
<i>Denmark</i>	3.1	1.7	1.5	1.1	1.5
<i>Sweden</i>	2.8	0.0	0.7	0.2	0.7
<i>United Kingdom</i>	0.7	-1.6	-3.2	-2.8	-2.6
<i>EU 15</i>	-1.0	-2.0	-2.6	-2.6	-2.4

f = forecast

Source: European Commission, spring 2004 forecast.

Several euro area countries are suffering from excessive general government deficits.

Portugal are also forecast to exceed the 3% reference value this year. In terms of GDP these six countries account for around 80% of the euro area.

In April 2004, the European Commission recommended the issuing of an early warning to Italy due to the threat of its deficit exceeding the reference value. However, the Ecofin Council did not agree with the Commission's recommendation at this stage, deciding instead in May to give Italy until its July meeting to present a detailed programme of savings to reduce its deficit. At the same time, the Ecofin Council also decided to end the Excessive Deficit Procedure against Portugal, which had succeeded in bringing its deficit below the 3% reference value in 2003. The Commission nevertheless forecasts that Portugal's deficit will rise back above 3% if the country does not take additional steps to control it. Consideration is currently being given to whether the Netherlands and Greece should be brought within the sphere of the Excessive Deficit Procedure.

Thus, altogether half of the countries in the euro area are this year facing the prospect of being brought within the sphere of the Stability and Growth Pact's Excessive Deficit Procedure. The situation will become even more complex when the Commission also has to apply the procedure to the EU's new Member States. Their average general govern-

ment deficit-to-GDP ratio in 2003 was almost 6%. Only the Baltic States and Slovenia have budget deficits within the 3% reference value.

Weaker-than-forecast economic performance and the lack of effective action by governments to stabilise their finances particularly during the years of strong growth have severely strained the credibility of the Stability and Growth Pact. This has contributed to the weak prospects for economic recovery in the euro area. The disagreement between the Commission and the Council of Ministers in regard to interpretation and application of the pact has merely served to exacerbate the situation still further. For this reason it is extremely important that the countries suffering from excessive deficits honour their commitments and do their utmost to put their economies on a stable footing. One positive factor worth mentioning is that in 2003 many of the countries in the euro area carried out structural reforms in areas such as the labour market, health care and pension systems that are expected to reduce public expenditure and boost the long-term potential for growth in the euro area.

Finland's GDP growth gradually accelerating

Finland's GDP growth in the first quarter of 2004 was more or less as envisaged in the Bank of Finland's forecast published in March.

According to preliminary data, GDP was up approximately 2% on the previous year (Chart 10). However, the structure of growth would appear to differ slightly from expectations. Indicators suggest the situation in the electronics industry, in particular, was gloomier than expected in the early months of the year. In contrast, private consumption would appear to have grown more rapidly than forecast. The registration of new cars and

growth in retail trade both continued at a brisk pace in the first quarter.

There has been no improvement in the employment situation, with the employment rate still lower than it was a year ago. The number of employed has fallen in a number of sectors, including manufacturing and construction. In contrast, there has been a slight increase in employment

¹ See Bank of Finland Bulletin 1/2004, Box 6.

Chart 10.

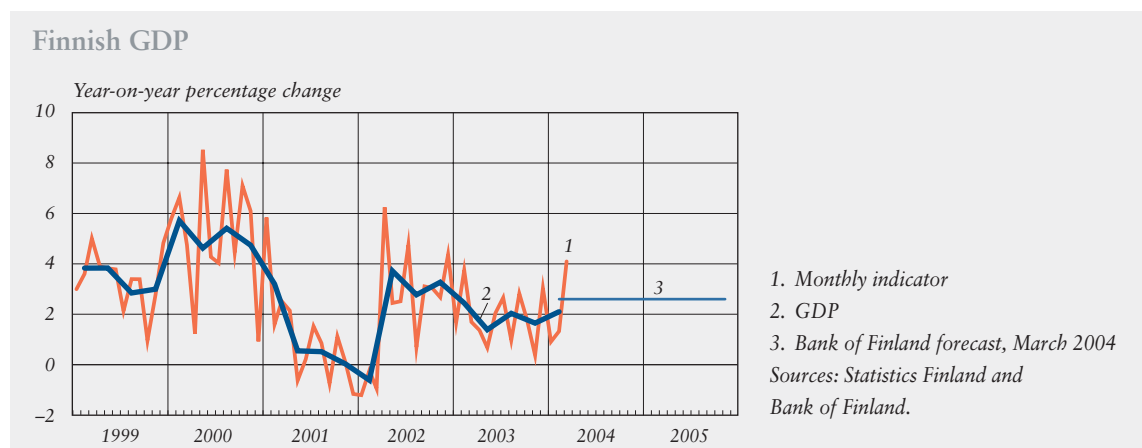
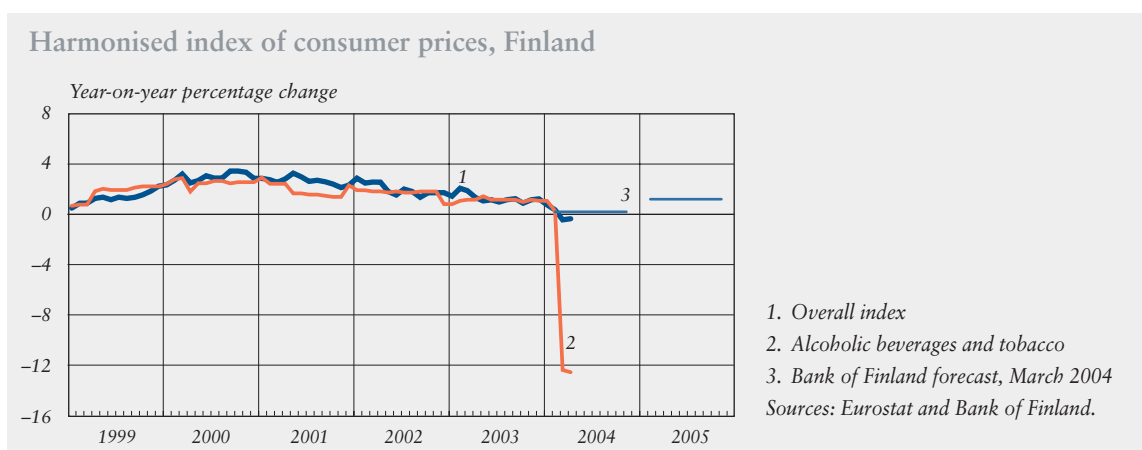


Chart 11.



in public services and some other service sectors.

The euro appreciation of recent years has hit Finnish exports harder than those of many other countries in the euro area¹, as a considerable proportion of Finnish exports are to destinations outside the euro area. This has, however, been partly compensated by the fact that growth in demand has been more rapid outside the euro area.

On the whole, the short-term outlook for the Finnish economy is in line with the Bank of Finland's March forecast. Growth is expected to rise gradually to a good 2½% as exports pick up and household consumption remains brisk.

Drop in consumer prices a temporary phenomenon

As expected, there has been a steep drop in the pace of Finnish consumer price inflation in the early months of 2004. As a result of the reduction in the excise duty on alcoholic beverages there was actually a fall in average consumer prices in March-April compared with the same period a year before. The drop in consumer prices is, however, expected to be short-term, with a return to a slightly positive pace of inflation towards the end of the year. Over the year as a whole, inflation could, however, be slightly slower than envisaged in the Bank of Finland forecast in March (Chart 11).

In addition to tax changes, inflation has also slowed partly as a result of stiffer competition. For example, there has been a fall in the price of telephone calls and air travel. On the other hand, the recent hike in oil prices has raised consumer fuel prices.

Key words: inflation, monetary policy, economic situation

Financial stability in Finland

21.5.2004

The rising trend on the international stock markets came to an end in the early months of 2004, reflecting continued uncertainty over the future direction of the global economy. The US federal and current account deficits remain a potential threat to the stability of the international financial system. The internationalisation of companies in the financial and insurance sector poses a number of challenges for supervisory authorities. Within the EU, the infrastructures of payment and settlement systems and post-trading systems related to securities transactions are still fragmented, which means the potential efficiency benefits of integrated systems have not been achieved. There continues to be stiff competition on the domestic housing loan market in Finland. The Finnish financial system is, however, fundamentally stable.

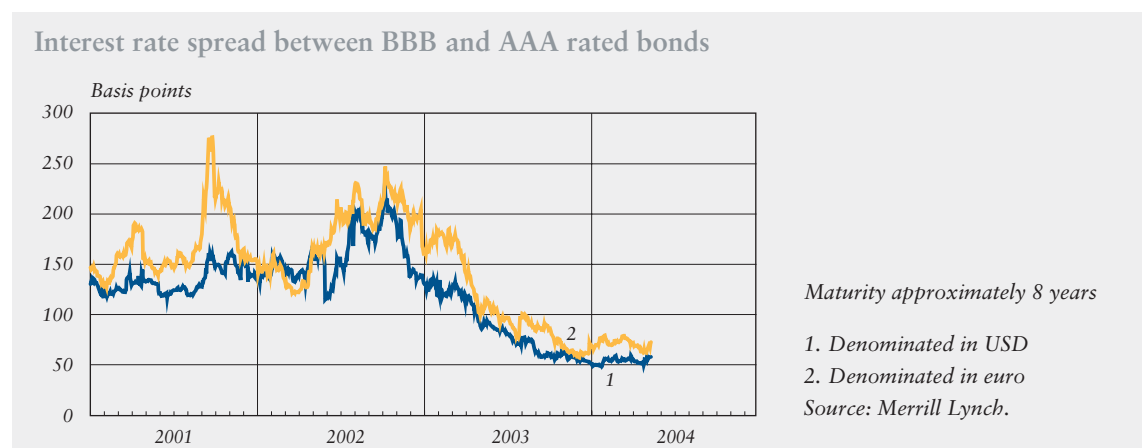
Global developments

Although the global economic recovery has continued, the financial markets are clearly uncertain as to what lies ahead. The rising trend in share prices that began in 2003 came to an end in the first part of 2004. This could be partly due to uncertainties over future developments in the international arena.

Interest rates on long-term loans in the main currency areas have fluctuated in the early months of 2004, although admittedly there has been a considerable rise in long-term rates in the spring, reflecting expectations of a tightening of US monetary policy.

The interest paid by less credit-worthy borrowers has in recent months been only slightly above that paid by borrowers with good credit ratings (Chart 1). In the current low yield environment investors have apparently sought more productive investments, even if these are also

Chart 1.



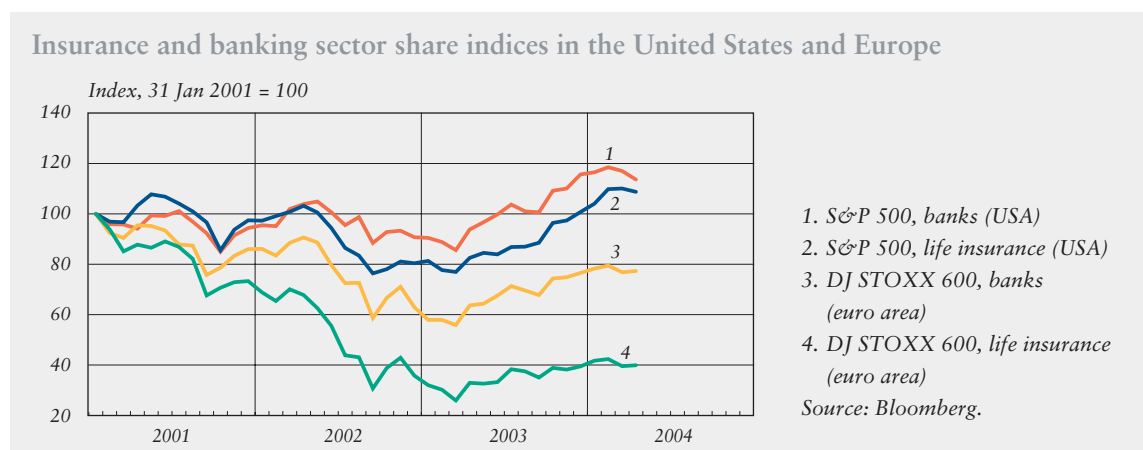
more risky. It would seem that many international banks have transferred their assets into investments with a higher level of risk, which over the longer term could pose a problem.

Despite the gradual improvement in the world economy, general government deficits have remained large. For example, the US federal deficit in 2003 was approximately 3½% of GDP, and according to several assessments the level of indebtedness is increasing at an accelerating rate. The overall deficit for the general government sector as a whole was even larger, at approximately 5% of GDP. As private sector savings have been insufficient to cover this deficit, there has been a need for foreign credit. This has in turn led to an unprecedentedly large current account deficit, at approximately 5% of GDP. For the stable development of global financial markets it is vital that this deficit eventually be reduced in a controlled manner to a sustainable level.

Many Asian central banks have invested heavily in US federal debt instruments in an attempt to prevent the appreciation of their own currencies. If they were to change policy, this could have a significant impact on markets globally. The dollar could continue to weaken against other currencies, and especially certain Asian currencies. The market price of dollar-denominated long-term loans would probably come down and interest rates on these loans rise considerably, an effect that could also be seen in other currency areas. There could also be a fall in the prices of other investment instruments, which would undermine both market liquidity and the solvency of many institutions.

The profitability of the banking sector around the world is now improving. This has already happened in both Europe and North America. Rising share prices have improved the position of the insurance sector, although the rise in banking and insurance shares would appear to be over (Chart 2). In

Chart 2.



Japan, too, public confidence in the banking system is improving.

In contrast, the state of the banking system in China seems worrying. The state-owned banks in particular still have high levels of nonperforming loans and weak capital adequacy, and the measures taken to solve these problems have so far proven inadequate. Overheating in the Chinese economy could also with time cause problems for the banking sector. A decision has been taken to partially privatise two state-owned banks.

Credit derivatives between financial institutions have become common in recent years on the international markets. These are agreements under which a creditor transfers his credit risk to the other party to the agreement. Normally such an agreement covers only part of the loss caused by an individual large debtor or a precisely defined group of debtors. These agreements probably reduce the overall credit risk in the banking sector, as they have been used to transfer risk from banks to, for example, insurance companies. On the other hand, such protection from credit risk could reduce the incentive for banks to analyse and carefully monitor the creditworthiness of their debtors.

Financial markets in the EU

In EU countries, too, the economic recovery has begun, but relative to the United States growth has been slow. General government deficits

have also been a problem in the EU, albeit the deficits here are smaller on average than in the United States. To date, this has only had a slight impact on the interest rates of euro-denominated bonds. The deficits have been financed by private sector savings in the EU countries, and both the EU and the euro area had a small current account surplus in 2003. The stock of government-issued securities in the euro area grew by approximately 4% from early 2003 to early 2004.

The terrorist attacks in Madrid and increasing uncertainty in the Middle East allied to the rise in the price of oil have caused a downturn in share prices.

There was a clear improvement in the profitability of banks in EU countries in 2003, and the first quarter of 2004 also looks bright, for the largest banks at least. The improvement was not caused by increased income so much as reduced costs. There was also a reduction in loan losses. Credit rating agencies appear to be taking a more positive view of the banking sector, as more ratings were raised at the end of 2003 and the beginning of 2004 than were lowered. Continuation of this favourable trend will depend above all on the overall performance of the economy as a whole.

The enlargement of the European Union by the accession of ten new Member States is unlikely to have any significant impact on the financial sectors of the old Member

The profitability of banks in the euro area has improved as a result of reduced costs and loan losses.

Box 1.

The housing loan market and financial stability

The nominal prices of housing have almost doubled in Finland since the mid-1990s. This is not merely a national phenomenon, as rapid price increases have also been witnessed in many other EU countries, the United States and Australia.

The low level of interest rates, narrower lending margins and longer loan periods have contributed to this development by reducing servicing costs for housing loans. The price increase has also added to the collateral value of housing, and a rise in the lending volume has therefore not been held back by lack of collateral. Thus, growth in the stock of housing loans has continued to be strong in Finland and household indebtedness has increased (Chart 3). The proportion of households' disposable income taken by interest payments has, however, fallen in response to the lower interest rates.

There is little difference in the development of the stock of housing loans between individual banks. In relative terms, growth has been stronger for certain small banking groups than for the bigger players.

The development of the housing loan market should also be viewed from the perspective of financial stability. Housing

loans pose a potential credit loss risk if interest rates were to rise, housing prices fall and unemployment begin to increase.

Although housing loans have not been a source of major loan losses in the past, it is hard to tell in which way the credit loss risk inherent in housing loans may have changed over the years. For example, Finnish legislation governing the debts of private individuals has been reformed since the banking crisis of the early 1990s. So far, little experience has been gained of the impact of this reform at various stages of the business cycle.

In terms of stability, narrow lending margins are currently the most questionable feature of the Finnish housing loan market. The interest rate differential of new housing loans vis-à-vis reference rates has recently been clearly lower than before. The rapid rate of increase in lending and the narrower lending margins speak of heavy competition for market share. Competition may reduce lending margins to the extent that they are not necessarily commensurate with the risks involved. Nor is such a development in line with the objectives of the capital adequacy reform applicable to banks (Basel II), according to which product pricing should

reflect the risks involved.

Competition for market share may also have an adverse effect on the average quality of the credit portfolio, in which case risks are easily assessed too low.

Not all households may have made adequate provision for the potential risks of housing loans posed by a robust interest rate hike or, for example, unemployment. Loan periods are currently often so long and loan amortisation so slow that even after several years the loan sum may not be much smaller than at the outset.

States. In many of the new members, subsidiaries of banks based in the old members already enjoy a considerable market share, which will probably prevent any problems with instability in the new members. The impact on payment systems and securities clearing and settlement systems will not be seen in practice until the first new members adopt the euro. An assessment carried out in 2002 indicated that the securities systems of

the new Member States correspond fairly well to the target level and should contribute to the overall stability of the financial system. In many of these countries, however, the securities markets are relatively insignificant compared with the average for the EU as a whole.

Domestic operating environment

In Finland, the economy has grown somewhat faster than the average for

Chart 3.

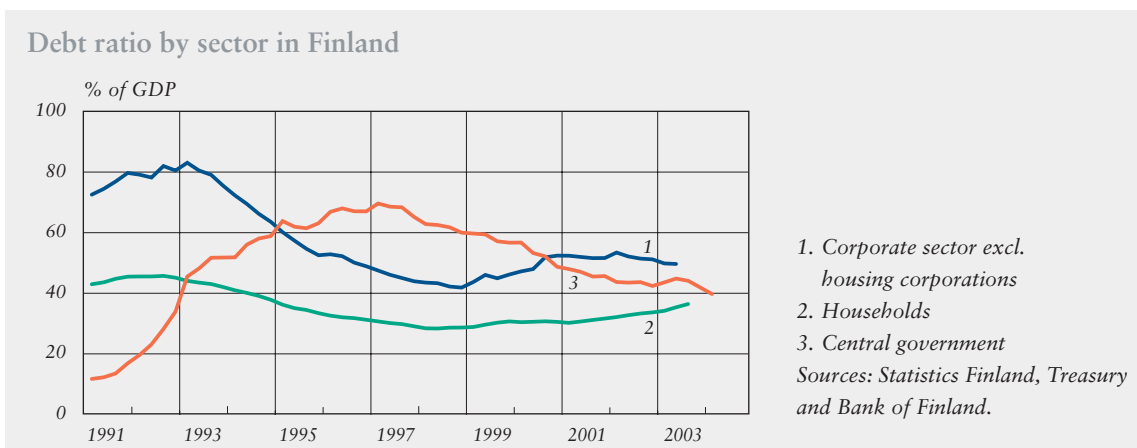
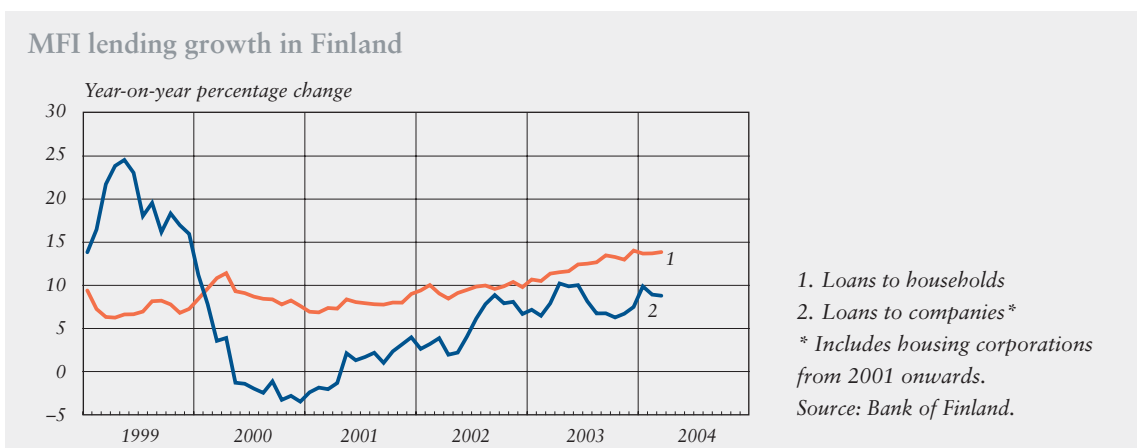


Chart 4.



the rest of the EU. Of the components of aggregate demand, private consumption in particular has grown. In contrast, corporate investment has remained low considering the overall economic situation, and this has subdued growth in demand for corporate credit. Household demand for housing loans has, in contrast, remained brisk (Box 1 and Charts 3 and 4).

The poor performance of the HEX all-share index since the early part of the year is due primarily to the drop in Nokia's share price, but can also be attributed in part to the exceptionally large dividends paid out this spring.

Euro appreciation has caused more competitiveness problems for Finnish companies than for companies in the other euro area countries, as a larger proportion of Finnish exports go outside the euro area. At least so far, this has not had any significant impact on corporate loan losses. Given the reasonable debt levels in the Finnish corporate sector, the present situation is unlikely to cause problems for the banks unless there is a considerable increase in interest rates.

It is difficult to anticipate all the impacts of the proposed reform of corporate and capital income tax. As proposed, the reform would make the present clear system more complicated. It could encourage companies to take on extra debt, which over the long term could increase the incidence of corporate loan losses (Box 2).

Present situation and risks of the Finnish banking and insurance sector

Despite banks' difficulties in maintaining the level of their net income from financial operations (the difference between interest paid and interest received) during the present period of low interest rates, profitability in the sector has remained good as a consequence of a reduction in costs and growth in other income.

Nordea Group's operating profit in the first quarter of 2004 was EUR 584 million, well above the EUR 380 million for the same period the previous year. Income was up, costs down and loan losses smaller. There was an increase in fee income in particular, but net income from financing operations was also slightly higher. Return on equity was 18.2%, and capital adequacy 9.1%.

OP Bank Group's operating profit was also up on the first quarter of last year, from EUR 115 million to EUR 136 million. Net income from financial operations declined by EUR 14 million, but fee income increased by approximately the same amount. The life insurers OP-Henkivakuutus also recorded an improved financial result. Return on equity was 10.8%. Capital adequacy for the Group as a whole was 15.2%.

Compared with the first quarter of last year, Sampo Group more than tripled its operating profit to EUR 252 million. This was largely due to EUR 104 million in sales profits from deal-

Stability effects of the reform of corporate and capital income taxation

A reform of corporate and capital income taxation is currently under way in Finland. The major amendment will be the reintroduction of double dividend taxation. Under the current regime, private individuals are not usually charged a tax on dividends from Finnish limited liability companies. As matters stand, profits distributed as dividends will become subject to tax as of 2005, first in the context of corporate results and thereafter shareholders' dividend income, subject, however, to certain major conditions. Under these conditions, only 70% of the dividends will be subject to tax, while dividends payable by unlisted companies will in most cases be tax exempt up to the amount of EUR 90,000.

Listed companies have paid higher dividends than normal in 2004, with early distribution of dividends being used to avoid double taxation.

The reform of corporate taxation may have substantial long-term consequences for financial markets considering that the reform will affect the relative merits of alternative forms of financing. No dividends can be paid out unless the company first makes a profit on which a tax can be charged. When the profit is distributed as

dividends, shareholders pay tax on the income. If investors were to have provided loan financing to the company instead, the interest rates would be deductible for the company and would only be taxed once as interest income for the investors. In other words, double taxation encourages debt financing even in cases where share issues would otherwise be a more rational choice.

Double dividend taxation was abolished in Finland at the beginning of the 1990s. The indebtedness of Finnish companies used to be very high in the past, but after the reform the share of liabilities in companies' balance sheets declined rapidly in the course of a few years. Conversely, the return to double taxation may increase the relative importance of loans for the financing of investments. This is likely to have the strongest bearing on companies which might be able to obtain equity financing from Finnish private individuals more easily than from other sources. Stronger credit demand would generate new business prospects for credit institutions. Finnish-owned companies, which are mostly affected by the reform, are generally too small to obtain debt financing through bond issues.

The new regime may boost demand for bank loans in another way, too. Under the new regime, dividends payable by listed companies are subject to stricter taxation than dividends from unlisted companies, which are likely to become eligible for substantial tax relief. There may thus be tax disincentives to stock exchange listing. Unlisted companies often have difficulties raising share capital from external investors. If companies decide against listing because of the tax regime, the importance of loans as a source of financing may increase.

The risks present in such a development are not to be underestimated. If the tax system encourages companies to incur debt, their ability to ride out an economic slowdown is weakened, with banks facing higher credit loss risks. Compared with the present situation, corporate indebtedness was high at the beginning of the economic recession of the early 1990s, which further contributed to the number of bankruptcies and the volume of loan losses witnessed during the banking crisis. Weak corporate solidity may partly be related to the tax system, which encouraged companies to finance investment through debt rather than share issues.

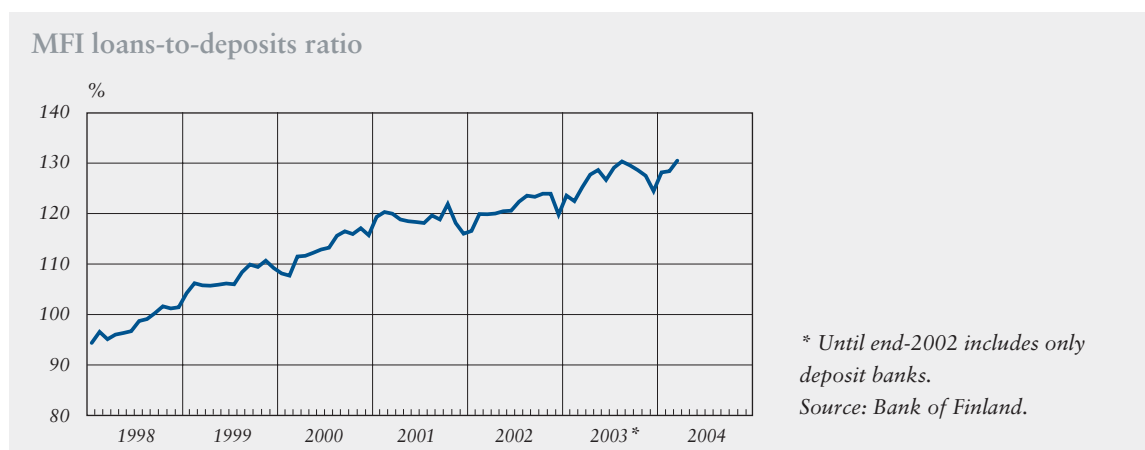
ings in the shares of the Swedish insurers Skandia. Return on equity for the Group as a whole was 19.1%. Operating profit from credit and investment activities was down on the previous year due to the exceptionally large dividend paid by Sampo Life Insurance Company in 2003. Fee income was up and costs down, but net income from financial operations was also down. Capital adequacy for the Group as a whole was 15.1%.

The present low interest rates have affected banks operating in Finland in a number of ways. They have kept the margin between banks' borrowing and lending narrow, as interest on borrowing has responded less than interest on lending to the fall in market rates (Chart 5). The recent decline in net income from financial operations can probably be attributed mainly to interest rates. On the other hand, the low interest rates

Chart 5.



Chart 6.



have stimulated demand for credit, particularly in the household sector, which has to some degree compensated for the impact of narrowing interest rate margins on net income from financial operations. Moreover, the low level of interest rates has reduced the risk of loan losses. A strong rise in interest rates would probably increase this risk.

Loans granted by monetary financial institutions have continued to grow faster than deposits. This increases banks' dependence on market-based financing and highlights the importance of managing liquidity (Chart 6).

In respect to loan losses, the situation in the Finnish banking system is still very good. Nevertheless, the rapid

increase in the stock of lending in recent years could with time increase the risk of loan losses. For the most part, however, the collateral policy operated by Finnish banks has been sound. The growth in the stock of lending has been largely an increase in the stock of housing loans, which have not traditionally been a significant source of loan losses (Box 1). From the point of view of capital adequacy, the distribution of dividends by some banks has perhaps been excessive, but the capital adequacy of the banking sector as a whole remains good. Admittedly, there are considerable differences between banking groups in this respect.

According to assessments by the Bank of Finland, the credit institution sector is well placed to cope with an

Table.

Key data on selected deposit bank groups

EUR m	Net interest income			Other income			Total expenses			Loan losses		Operating profit		
	1-3/ 2004	1-3/ 2003	Change, %	1-3/ 2004	1-3/ 2003	Change, %	1-3/ 2004	1-3/ 2003	Change, %	1-3/ 2004	1-3/ 2003	1-3/ 2004	1-3/ 2003	Change, %
Nordea Group	846	835	1.3	693	601	15.3	913	958	-4.7	42	98	584	380	53.7
Sampo Group ¹												252	75	
Banking and investment services	97	106	-8.5	52	73	-28.8	100	104	-3.8	-7	2	57	73	-21.9
OP Bank Group	194	208	-6.7	130	97	34.0	189	192	-1.6	-1	-1	136	115	18.3
OKO Bank Consolidated ²	41	40	2.5	24	74	-67.6	35	38	-7.9	-1	0	30	76	-60.5
Savings Banks (excl. Aktia)	27	30	-9.0	14	9	65.9	27	25	8.0	0	0	14	14	5.1
Aktia Savings Bank plc (Group)	18	19	-5.4	13	9	43.2	20	20	0.0	0	1	10	7	49.2
Local cooperative banks	18	20	-8.6	6	4	56.4	17	17	4.8	0	0	7	7	-6.8
Bank of Åland plc (Group)	7	7	0.0	5	4	50.0	8	8	2.6	0	0	5	4	42.9
eQ Online Group	1	0	54.3	6	3	96.2	4	4	12.7	0	0	2	0	
Total	1,208	1,225	-1.4	919	799	15.1	1,279	1,327	-3.7	34	99	815	599	36.2
Total excl. Nordea	362	390	-7.2	226	198	14.3	366	369	-0.9	-8	1	231	219	5.7

Sources: Interim group reports April–May 2004.

Other income includes share of consolidated profit or loss calculated according to the equity method.

Fee income has been calculated as net.

Loan losses are negative if the amount returned on old losses exceeds the amount of newly registered losses.

¹ The Sampo Group's operating profit January–March 2004 includes EUR 104 million in sales profits on the sale of shares in Försäkringsaktiebolag Skandia.

² Operating profit for OKO Bank Consolidated during the comparison period includes EUR 50 million in extraordinary sales profits.

Nordea's transformation into a European company will bring new challenges for the central banks and banking supervisors.

extended recession, despite the fact that a recession lasting a couple of years would seriously undermine bank earnings. Most of this deterioration would come from an increase in loan losses, but this would not trigger a capital adequacy crisis of any sort.

The profitability of their insurance activities has become more important to the banks since the formation of financial conglomerates providing both financial and insurance services. At the end of 2003 the capital position of even the weakest life, employment pension and non-life insurance companies was clearly better than the minimum capital adequacy required by law. In Finland, as elsewhere, the capital adequacy of insurance companies is strongly dependent on the development of share prices. No significant changes in the capital position of insurance companies are to be expected in the near future.

Restructuring has continued in the Nordic financial and insurance sector. Nordea Group has further simplified its legal structure with the aim of establishing a European company to handle the Group's banking business. The company will continue to be registered in Sweden. The statute allowing the establishment of a European company will come into force 8 October 2004, but the transformation of Nordea into a European company will be a complex process and will probably not be completed until sometime in early

2006. Nordea's group structure was simplified in March 2004 with the merger of Nordea Bank Sverige (publ) into the Group's holding company, Nordea Bank.

The European Company Statute has been several years in the making. In preparing the statute, no particular attention has been paid to the sector to which a potential European company can belong. The statute has not been drafted primarily with the financial sector in mind, but it looks as if Nordea will be the first major European company, at least in the Nordic context. The opportunity to form a European company will over the longer term represent considerable progress towards integration, although its immediate significance is perhaps slight. The transformation of a bank into a European company is, however, a complex process, and its implications should be assessed from a number of angles at once. The change has indeed stimulated debate on how the existing rules governing supervision and regulation can be applied to a European company, and particularly to a banking-sector company with a large share of the market in several countries. The transformation of Nordea into a European company has given cause to consider the applicability of internationally approved deposit insurance regulations and regulations governing the respective roles of authorities in home and host countries, among other factors. Another key issue is the level of

preparedness for crisis or emergency situations that should be expected of a foreign company's branch operating in Finland. The issue of preparedness already became topical when Nordea announced its intention to establish a joint enterprise in Sweden with IBM and concentrate its IT output in the new company.

In summer 2003 the Nordic central banks signed a Memorandum of Understanding (MoU) on cooperation in the management of financial crises. This will be invoked in cases where a serious problem threatens a bank based in one or other of the Nordic countries and with branches elsewhere in the Nordic region. As the MoU covers cooperation between central banks, the key issue is securing the liquidity of the banking system. The central banks are currently considering what sort of new challenges the transformation of Nordea into a European company will present. The supervisory authorities in the Nordic countries have a joint agreement on the supervision of Nordea and have also begun to investigate the challenges Nordea's becoming a European company will pose for cooperation between supervisors. The Memorandum of Understanding between the central banks clearly highlights the need for constant close cooperation between central banks and banking supervisors, but particularly in crisis situations. The need for cooperation is further underlined by the transforma-

tion of Nordea into a European company.

In May 2004 Sampo acquired from the Swedish company Skandia and its subsidiary Skandia Liv and the Norwegian company Storebrand their holdings in the stock of the Swedish-registered If Holding. If Holding owns a Finnish and a Swedish insurance company as well as a number of other assets. Sampo now owns 89.94% of If, which has thus become a subsidiary of Sampo. The If Group commands a considerable share of the market in Finland, Sweden and Norway. The acquisition has thus made the Sampo Group much more insurance-oriented and international than it was before. The employment pension company Varma's stake in If remains at 10.06%.

In March, the Finnish state sold 8% of Sampo's shares to Varma. The state now holds just over 32% of Sampo's shares and voting rights.

Financial system infrastructure

Finland's domestic payment and settlement systems have operated reliably and thus promoted financial stability. In fact, the operational reliability of the Bank of Finland's TARGET component has even exceeded that of the whole TARGET system on average in 2003 and in the first quarter of 2004. The new clearing and settlement system introduced by the Finnish Central Securities Depository in November 2003 has in

The merger of the Finnish and Swedish central securities depositories aims for greater efficiency and competitiveness, but the challenges are apparent.

turn reduced significantly the risks involved in processing equities trades. The new system permits greater flexibility in the processing of transactions and has a high operational capacity.

The infrastructures of payment and settlement systems and post-trading systems related to securities transactions are still fragmented at the level of Europe as a whole. An important step forward was taken in the north European securities markets in April 2004, when OMHEX and the Swedish Central Securities Depository (VPC) signed a Letter of Intent concerning the creation of a new Nordic Central Securities Depository (NCSD). OMHEX has marketplace operations in Helsinki, Stockholm and the Baltic States and is currently the owner of the Finnish Central Securities Depository (APK). The Letter of Intent states that the new Finnish-Swedish CSD is to be based on the technological solutions designed by OMHEX. VPC will acquire and hold the entire share capital of APK. Following the transaction, the current Swedish principal owners of VPC, ie FöreningsSparbanken, Nordea, Skandinaviska Enskilda Banken and Svenska Handelsbanken, as well as OMHEX, through its HEX Integrated Markets unit, will each own approximately 19.8% of the new NCSD. Additional Finnish market participants will be invited by the principal owners of NCSD to subscribe for new shares

representing up to a 10% ownership in the new depository.

The intended merger of OMHEX and VPC will accelerate the integration of post-trading activities related to securities transactions in northern Europe. This is a prerequisite for the achievement of efficiency gains and increased competitiveness. It is important that the principal owners of infrastructure have finally reached an understanding on strategies in a way that benefits most of the parties concerned. So far, only the two CSDs, in Finland and in Sweden, have agreed on implementing common technology solutions. For this reason, the post-trading infrastructure for securities transactions in northern Europe is likely to continue to suffer from fragmentation and the technical barriers to cross-border activities will remain in place at least in the short run. The absence of the OMHEX-owned Baltic CSDs from the scope of the new NCSD may give a misleading picture of the area's long-term objectives and even harm the integration of the Baltic States into the euro area. Moreover, the lack of central counterparty clearing in northern Europe is a problem from the perspective of effectiveness and competitiveness. In a central counterparty clearing system, the central counterparty interposes itself as a new transacting party for both the buyer and the seller and takes responsibility on behalf of the original transacting parties for the payment of the

purchase price to the seller and the delivery of the object of the trade to the buyer.

From the perspective of Finland's national securities market, the proposed ownership structure for CSDs does not provide much opportunity for participating in the development of an integrated market. The central problem concerning the channelling of the potential benefits of establishing a Nordic CSD to final investors and issuers may be the fact that ownership of the new NCSD will remain largely in the hands of the big banks. These naturally have their own incentives to promote their competitive positions, in particular. This has been evident in the way in which the Swedish Central Securities Depository and Euroclear Bank, whose ownership structures are similar to the future NCSD, have developed their international operational relations without attempting to comply with the standards given by the European Central Securities Depositories Association (ECSDA).

When planning joint systems, it is important to pay special attention to the achievement of sufficiently secure solutions. This holds true especially in relation to securing the functioning of the Finnish market in contingency situations. There has been progress in cooperation projects between banks for the creation of a Single Euro Payment Area (SEPA). However, one outstanding challenge is whether a common understanding

can be reached on central issues such as the terms and conditions under which banks would be willing to transfer domestic payments to be processed in a pan-European ACH (PEACH). Centralisation must not be allowed to lead to a deterioration in service quality. Remote access to systems may increase operational vulnerability and the risks inherent in technical development if system governance, oversight and supervision do not function effectively. Solutions based on a fully decentralised settlement of payments are a possible alternative to the centralisation of payment systems. For example, the Finnish decentralised payment systems designed for processing domestic payments can still be considered highly reliable and efficient, and will most likely remain the best solutions, at least for the moment. Finnish market operators also participate in cooperative bodies seeking to create a harmonised European post-trading infrastructure for securities transactions. Quite important progress has also been achieved in the national central banks' project to develop a new reliable and cost-effective TARGET system which responds to market needs more closely than the present system.

The north European market area, with its own special needs and several currencies, differs from the pan-European market area. This can have an adverse effect on integration. The special features of the north

Progress has been achieved in cooperation projects between banks towards the creation of a Single Euro Payment Area.

Corporate restructuring across countries and industries highlights the importance of cooperation between supervisory authorities at both national and international level.

European markets are often not taken sufficiently into consideration in policy-making within the EU.

There has been considerable progress in the harmonisation of securities and derivatives trading systems in the Nordic countries, with derivatives trading and clearing systems due to move outside Finland entirely. By the end of September 2004, Helsinki, Tallinn and Riga will in turn introduce the share trading system already in use in the Nordic countries. OMHEX signalled its intent to own and operate a system covering all the Baltic States by acquiring a substantial stake in Lithuania's National Stock Exchange and Central Securities Depository.

International competition between derivatives marketplaces in pursuit of efficiency gains has increased considerably. The world's largest derivatives exchange, Eurex, which is operated by European marketplaces, expanded its derivatives activities successfully to the US market in February. Interest in the Chinese market has also increased in Europe. Both the London Stock Exchange and OMHEX have signed important agreements in China.

Challenges in financial system oversight, supervision and regulation

Corporate restructuring across countries and industries highlights the importance of cooperation between

banking and insurance supervisors at both national and international level. EU directives also provide for the supervision of international financial and insurance groups, except for the securities system infrastructure. The coordinating supervisor of a group is determined by the relative importance of its various activities and the domicile of the parent company. This issue is important for Finland, since a large proportion of financial operations in Finland is conducted by groups whose supervision requires international cooperation. Restructuring of groups may complicate supervision by preventing the availability of comparable figures for supervised entities and by hindering assessment of the adequacy of backup measures for supervised entities in Finland. Due to the internationalisation of finance, the scope of international cooperation between supervisors and the harmonisation of supervision methods will likely have to be increased in the next few years. This is an integral part of many EU initiatives being discussed at the moment.

In 2000, the Ecofin Council consisting of economic and finance ministers of the EU countries established a committee for the development of securities markets, chaired by Alexandre Lamfalussy. The committee drafted a recommendation on the development of the regulation and supervision of financial markets. The resulting Lamfalussy process, based on the recommendation, and

with committees on supervision and regulation, is now applied to other sectors of the financial markets as well. Two new supervisory committees belonging to the Lamfalussy process, namely the Committee of European Banking Supervisors (CEBS) and the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS), held their first meetings in early 2004. These committees consist of representatives of national authorities and EU institutions. They provide advice to the European Commission, promote the consistent application of directives and the harmonisation of regulation practices in Member States, and also function as an information exchange forum for supervisors.

In late 2003, frauds were discovered in the accounts of the Italian food manufacturer Parmalat and the company's financial state was shown to be much worse than had been claimed. Subsequently, the company filed for debt restructuring. Numerous banks and other creditors around the world suffered credit losses because of Parmalat. The reverberations on the supply of financing for companies appear as such to have been relatively limited. However, the Commission has taken steps to avoid the recurrence of similar cases in the future. In March 2004, the Commission proposed a new auditing directive aimed at clarifying the tasks of auditors, increasing their independence and improving the effectiveness of public supervision.

In accordance with an EU regulation, the international accounting standards (IAS) will be obligatory for listed companies in 2005. In addition, by national decisions, other companies can be obligated or granted the right to apply IAS provisions in their financial statements. The regulation also applies to the financial statements of listed companies in the financial sector. Under the IAS financial statement, a larger share of assets than previously is valued at fair market price. This is likely to increase the cyclicity of banks' reported profitability.

In various parts of the world, including all EU countries, capital adequacy requirements have been established based on recommendations by the international Basel Committee on Banking Supervision. These recommendations are now being reformed. The main objective of this Basel II reform is to adjust the requirements of banks' own funds to their risks more specifically than previously. After years of preparation, the reform is finally reaching completion. The Basel Committee has reported that the accord will be published during summer 2004. Most of the recommendations will enter into force at the end of 2006, but some of the advanced approaches included in the reform will not be taken into use until 2007. The European Commission is currently drafting a legislative proposal based on the recommendation of the Basel Committee. The proposal will

The capital adequacy requirements recommended by the international Basel Committee on Banking Supervision are being updated.

presumably be given to the Council of Ministers and the European Parliament as soon as possible. The reforms are envisaged to be implemented in the national legislation of Member States so that they would be in force as of 2006.

Regulation of the required solvency margins for insurance companies is also being reformed. The Solvency I framework required by the relevant directives has recently been implemented in the Finnish legislation on insurance companies, although there are long transitional periods. The reform will increase the solvency requirements for insurance companies. This framework is envisaged to be replaced by the Solvency II framework, which is already being prepared in the EU. Implementation of this reform is likely to take many years.

A proposal for a new legal framework for payments in the EU, which was published in December 2003 and is currently being processed by the Commission, aims to promote the protection of users of payment services and to create a single payment area by harmonising legislation. The Commission proposal includes a provision that the right to provide payment services would be limited to certain types of agent. Diversification into this field would not be allowed by non-regulated entities. While the new legislation aims to provide a level playing field, regulation concerning the various types of

institution providing payment services will have different forms. In fact, the lack of harmonised regulation currently presents barriers to integration in this field.

Similarly, the European Commission published another communication in April on securities clearing and settlement. This includes both an action plan on the basis of numerous initiatives aimed to promote integration and a proposal for a framework directive. Their objective is to promote competition, efficiency and the stability of the financial system and to ensure investor protection by virtue of uniform legislation. The proposed directive includes provisions on free access for clearing and settlement providers to all EU markets, the creation of a uniform regulative framework for operations included in the settlement and clearing process and arrangements concerning the governance of systems. The Commission is expected to appoint a group of experts to facilitate the creation of uniform EU legislation on the ownership of securities. In addition, the establishment of another expert group for monitoring and dismantling more general barriers to integration was proposed.

The Commission has published assessments by four expert groups on the progress in financial markets integration, barriers thereto and further measures. In addition, the Commission has published its own indicator-based assessment on the

progress of integration. These assessments are part of monitoring the EU action plan on financial services and are subject to consultation until September 2004. Thereafter, the Commission will begin to prepare a further programme based on the action plan.

The Bank of Finland has begun cooperation on the oversight of the cross-border post-trading infrastructure for securities transactions with the central banks of Estonia and Latvia. To achieve comprehensive, efficient and flexible cooperation in oversight is, however, a challenging process. Authorities in the various countries have already had to pay attention to the capability of those providing infrastructure services based on a centralised solution to operate in crisis situations. Meanwhile, it is also crucial that risks related to the activities of systems operators can be covered by adequate safety measures, such as funds or insurance reserved to such purposes.

The Bank of Finland considers it important that the structural change of systems does not create problems for the monetary policy operations of the Eurosystem and that the competence and capability of relevant authorities to oversee and supervise systems remains at a high level in practical terms. At the same time, euro liquidity management should continue to function without difficulty for Finnish market participants. Authorities have noted that market

participants have a need to ensure the high quality of outsourced operations by means of continuous internal control. The risks and technical capacity of operations should be clear to the users of the systems.

Key words: financial system, stability, banking sector, securities market, payment systems, clearing and settlement systems

Finland's currency supply system

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At the beginning of 2004, Finland's currency supply system was overhauled with the aim of creating a more efficient system with less overlap, a clearer division of labour and lower overall costs. Central bank opening hours for the reception of cash were extended and regional cash depots were established in selected areas on a trial basis. As a result, the Bank of Finland will now concentrate more clearly on wholesale activities in its currency supply and reduce the provision of individualised services for banks and other private customers. In recent decades, Finnish banks have taken similar steps to outsource their currency supply operations to private specialists.

Despite the increasing electrification of payment systems, cash still retains a strong position in everyday payments by Finnish consumers. It is estimated that over half of all purchases of daily consumer goods are still made in cash, and small payments in particular are paid primarily in cash. Cash has occupied a strong position as a means of payment for centuries, and there are good reasons for its continued popularity. Among the most important of these is the universality of cash as a means of payment independent of technical aids and systems.

In the euro area, the use of cash as the most widespread form of payment has become even more popular since the introduction of the single currency. In most cases cash is also the fastest form of payment and unlike electronic methods does not require confirmation of payment. Continuous development work has also made it possible to retain adequate security in cash payments, and in Finland, for example, it is extremely rare for counterfeit notes to reach the consumer.¹

Cash also has properties that are normally lacking in electronic means of payment. One of these is anonymity. The use of cash as a payment medium also makes it easier to keep a control on expenditure than with electronic money, and therefore cash is preferred when people find it difficult to keep within a predetermined budget.

The banking system is charged with ensuring the general security of payment systems. The aim is to foster the overall efficiency of payment systems, with no individual method of payment unjustifiably favoured over another. Of key importance to the consumer is the availability of alternative payment methods and

¹ The infrequency with which counterfeit banknotes come to light in Finland can be illustrated by the fact that even on a purely random basis only one banknote in every 100,000 is counterfeit. As these counterfeit notes are almost always caught at store checkouts, in the cash centres or by central bank sorting machines, the consumer only comes into contact with them primarily in the form of change for a retail purchase, and the odds against this are very high indeed.

competition between methods, although nowadays a bank account is admittedly essential to ensuring flexibility in payments. The ongoing technical changes in the operating environment of currency supply also means a constant process of change in the position of cash as a means of payment.

This article takes a look at the main features of the Finnish system of currency supply since the reform at the beginning of 2004. We also consider the currency supply regulations imposed by the Eurosystem and future guidelines that will most likely influence the future of the cash cycle in Finland as well.

The position of cash in payments transmission

One basic question of currency supply that has not so far received a satisfactory answer is the extent to which consumers should be guaranteed ready access to cash free of charge. The handling, sorting and transporting of cash are naturally not without costs to the various parties involved. To date, banks have not charged customers separately for cash withdrawals provided they have used ATMs belonging to their own bank group. They have instead recouped their costs by charging for service packages.

Because of their monopoly on issuing banknotes, central banks also have responsibilities in respect of the availability of this basic means of payment. The position of cash as

legal tender makes it incumbent upon the central banks to ensure its usability. The volume of counterfeit banknotes cannot be allowed to reach a level where it undermines the use of cash as a means of payment. The security of cash can best be ensured by the Eurosystem designing its own banknotes and protecting them with adequate security features.

Central banks' currency supply operations can vary considerably depending on factors such as the coverage of their networks of regional offices, whether they are solely responsible for sorting banknotes returned from circulation, who delivers banknotes to bank branches, etc. For several years, banks have already been transferring their customer service in cash withdrawals from branches to ATMs, and in recent years they have also sought to encourage the use of cards in retail purchases. Invoice payments, on the other hand, they have sought to channel into direct credit transfers, direct invoicing and, most recently, Internet-based payments. Cuts in the network of bank branches and ATMs have increased the interest of retail traders in offering their customers opportunities for cash withdrawals at store checkouts. In Finland at present approximately 3,500 stores provide such a service. Indeed, a considerable proportion of money deliveries today take place between cash centres and retail stores, and checkout withdrawals thus reduce both the return of bank-

The Eurosystem enjoys a monopoly on the issue of banknotes, but is also responsible for ensuring the security of cash as a means of payment.

notes from retail stores to cash centres and the need to replenish ATMs.

The costs incurred in handling cash have led the banks to seek to reduce the volume of cash in circulation and to use their service prices to promote methods of payment that cost them less to provide. The pace of growth in electronic payments, and card payments in particular, has certainly accelerated in recent years (Chart 1). The banks have promoted

card payments by, for instance, cutting their branch networks, increasing their charges for over-the-counter cash payment of invoices in their branches and cutting the number of ATMs. Consumers nevertheless continue to get the majority of their banknotes from ATMs, and the weakened access to cash has for the most part simply led to the withdrawal of larger sums on average. The total sum of cash withdrawals

Chart 1.

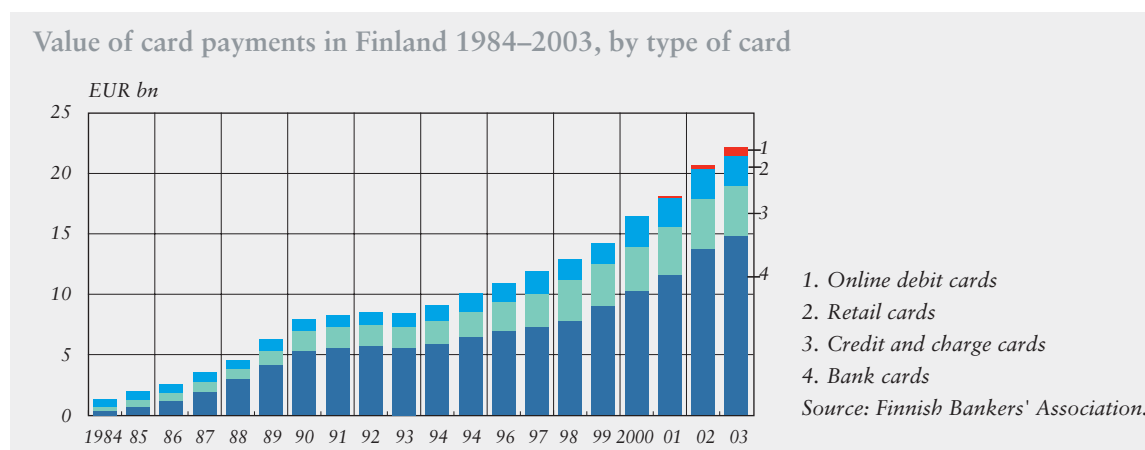
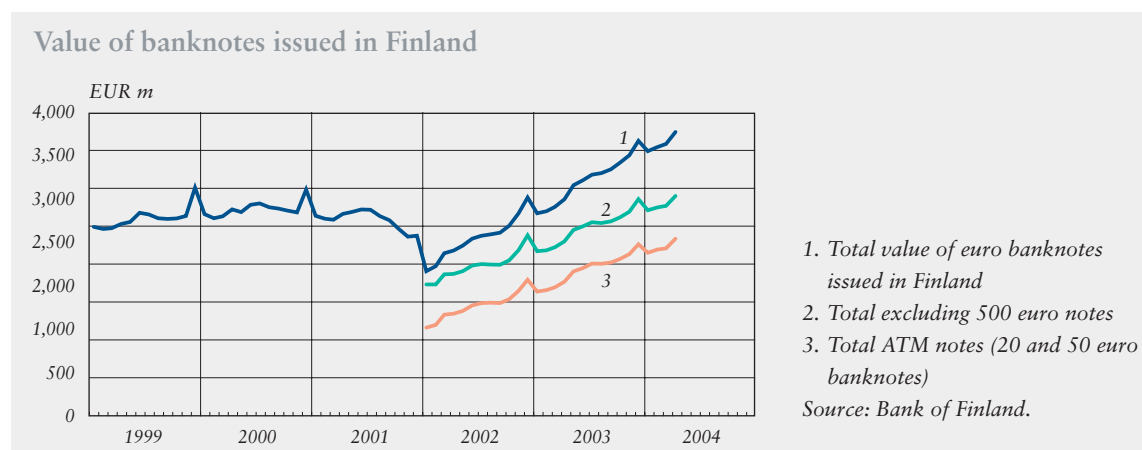


Chart 2.



from ATMs has not declined despite the rapid increase in card payments, and the persistence of consumer demand for cash is also indicated to some extent by the fact that the value of banknotes issued in Finland has continued to grow by an annual rate of more than a fifth (Chart 2). It would appear there is still a need for cash, and the opportunities for using cash in the euro area (for example, on tourist trips) have clearly improved.

In 2003 the total sum of bankcard withdrawals was EUR 17.4 bn, representing no change since 2000. In contrast, the average value of ATM withdrawals has been growing alongside a slight reduction in the number of withdrawals.² The value of euro cash issued by the Bank of Finland in 2003 averaged EUR 3.4 bn. Given that the return frequency for euro banknotes is known to have averaged six times during the course of the year, we can estimate the total value of cash payments made in Finland in 2003 to have been at least EUR 25 bn.³

The estimates presented on the use of cash can be compared with the total sum of card payments registered by the banks. The total sum of

payments by cards issued by the banks in 2003 increased to EUR 22.3 bn, of which bankcard payments accounted for EUR 14.8 bn. These figures suggest cash and consumers' card payments are fairly equal as methods of payment. It should, however, be borne in mind that cards are used more for larger payments, as in the purchase of consumer durables. Cash has retained its popularity for smaller payments.

Although, as Finland's central bank and part of the Eurosystem, the Bank of Finland has a monopoly on the issuing of cash in Finland, in practice it is unable and does not even attempt to influence how the general public uses the cash it issues. It has also not attempted to favour the use of cash at the expense of other methods of payment or to inhibit the growing importance of electronic means of payment. The Bank of Finland's policy has been to take an open approach to its currency supply. This also makes things easier and more efficient for the other parties involved, because when the objectives are clear for all the parties they can all have a similar conception of future developments.

Larger sums are nowadays being withdrawn from ATMs, but less frequently.

Key features of the currency supply system in Finland

In its currency supply, the Bank of Finland has sought to concentrate more clearly on wholesale activities and reduce the provision of individualised service for banks and other

² The average ATM withdrawal in 2003 was EUR 75.4, which is almost exactly the mean between the two most commonly used preselected withdrawals: EUR 60 and EUR 90.

³ The return frequency for banknotes is calculated according to the average number of times per year a banknote returns to the central bank to be counted and checked for authenticity and fitness. The calculation also takes account of the fact that a considerable proportion of the cash used in retail trading is returned directly to the stores or ATMs after processing by a cash centre.

Cash centres run by cash-in-transit companies take care of the practical aspects of cash transport, sorting and distribution of banknotes.

private customers. As of the beginning of 2004 private customers will be served only in the central bank's head office in Helsinki for the purpose of redeeming markkaa.⁴ In corresponding fashion, banks in Finland have in recent decades taken steps to outsource their currency supply operations. Money deliveries and cash sorting have been transferred to outside specialists, and other aspects of currency supply, including ATMs, to the Automatia companies, Automatia Pankkiautomaatit Ltd and Automatia Rahakortit Ltd. The three largest deposit bank groups (Nordea, Sampo and the OP Bank Group) have all outsourced their currency supply to Automatia. The savings banks and local cooperative banks as well as other banks can use Automatia's network of 'Otto.' ATMs, and, correspondingly, customers of the banks that own Automatia can draw cash from other banks' ATMs.

The Bank of Finland distributes new banknotes and used notes that are still in good condition via its network of regional offices, from where the cash-in-transit (CIT) companies order usable notes and return poorer-quality and unfit notes for sorting and checking in the central bank. From the cash centres, cash is further distributed to the bank branches and ATMs and on to the

general public. Used cash finds its way back via the CIT companies or bank branches to the cash centres and the central bank.

The Bank of Finland's primary counterparty in currency supply is the above-mentioned Automatia Pankkiautomaatit Ltd owned by Finland's three largest deposit banks, which has a non-overdraft settlement account with the central bank for this purpose. Orders for euro banknotes and coins by bank branches and other customers and returns thereof have been brought together into Automatia's euro order and distribution system, the agreement on which was already concluded before the first euro were issued. During the course of 2003 the customer base for currency supply changed in that, in addition to Automatia, the cash centres took on a new cash customer in the form of Rekla Oy, which takes care of currency supply for the S Group retail chain through its own cash centres in the Helsinki area, Kuopio and Oulu. Rekla handles its currency supply connection with the Bank of Finland via Sampo Bank.

Actual cash transports are handled by Automatia and the banks with the assistance of two CIT companies: the security transport specialists Falck Cash Services Ltd and Securitas Arvokuljetus Ltd. In practice, cash transportation, sorting and distribution for the banks and other cash customers are handled by the CIT companies' own cash centres,

⁴ Markka cash can be returned via the banks until the end of 2004 at least. The Bank of Finland will redeem markka notes and coins until the end of February 2012.

of which there are currently 22 in different localities all over Finland. Automatia orders the cash it requires from the nearest regional office of the Bank of Finland, of which there are five in different parts of the country: in Vantaa, Turku, Tampere, Oulu and Kuopio. Almost half of the central bank's cash transports are concentrated in the Vantaa branch office in the Helsinki area. The cash centres run by the CIT companies are responsible for ensuring balance at regional level between supply and the demand for cash by bank branches and other customers, including retail chains. Only one CIT company operates in each cash centre, and it is generally only in the largest towns that both CIT companies have centres.

In the cash centres, the banknotes are counted and also partly sorted and checked for authenticity and fitness, then either recirculated or returned to the central bank for replacement. Tattered, worn, torn or discoloured notes, or those otherwise unsuitable for recirculation are returned to the central bank, as only there can they be exchanged for new notes. Counterfeit or suspected counterfeit notes are forwarded to the police for investigation. The National Bureau of Investigation enters details on counterfeit banknotes in the euro area's central database on counterfeit money located in Frankfurt.

Currency supply system reformed at the beginning of 2004

Early in 2003 the Bank of Finland began to investigate whether there was a need to reform the system of currency supply. Although no major problems were identified in the system as it then was, there was still a wish to define more precisely the roles of the various participants, clarify the division of labour, reduce any overlap, and in this way save on the overall costs. With this end in mind, the entire system was overhauled by reorganising the opening hours of the central bank, altering the preliminary handling of banknotes and establishing regional cash depots in selected areas on a trial basis.

In terms of content, the establishment of the above-mentioned regional cash depots in selected areas was the most important feature of the new currency supply model introduced on a trial basis at the beginning of 2004. This represents an attempt to improve the efficiency of the system in outlying areas affected by long or otherwise difficult routes for transporting cash. In order to avoid interest expenses, the banks have generally sought to return as much as possible of the cash they hold to the central bank rather than retain it at their own expense. As the central bank pays interest on the banknotes held in the cash depots, there is no longer any need to return the notes to the central bank's regional offices in order to avoid interest expenses. The Bank of

The efficiency of regional currency supply was improved by the establishment of cash depots in six towns around Finland.

The volume of banknote production and the distribution of production by denomination and country are agreed jointly within the Eurosystem.

Finland has set local ceilings on the amount of cash that can be held in the cash depots in each area. In addition, a maximum limit of EUR 25 million has been placed on the cash in the system as a whole. The new procedure involves savings in transport costs and is a more secure alternative to the transportation of cash back and forth across the country.

There are at present regional cash depots located inside the CIT companies' existing cash centres in six towns in different parts of the country. The regions covered by these depots are northern Finland, Ostrobothnia, Kymenlaakso, southeast Finland and central Finland. The cash depots are open to receive banknotes until midnight, which means that cash returns can be delivered later than before in the areas covered by the depots.

At the Bank of Finland's regional office in Vantaa the reception of cash has been extended until 10 pm. At the other four regional offices cash reception has been extended until 6 pm in place of the previous 3 pm, which has also increased the efficiency of cash collection at regional level. Moreover, the customer-specific tallying of bundles of banknotes was ended in the central bank's regional offices at the beginning of 2004. The Bank of Finland now accepts notes primarily in bundles of 500.

Eurosystem regulations and guidelines on currency supply

Within the Eurosystem, the European Central Bank holds a monopoly on the issue of euro banknotes, and this is handled on its behalf by the national central banks of the euro area. The Eurosystem agrees annually on how many notes need to be printed and on the distribution of production by denomination and country. Also agreed are the size of banknote stocks, cash transports between national central banks within the Eurosystem and numerous other issues relating to the handling of the single currency. The move from national systems of currency supply to a centrally directed system within monetary union has involved the coordination of currency supply between countries in the euro area. Many euro area countries have already begun to reduce their local networks of regional offices and harmonise the currency supply services offered by their central banks.

In the period of national currencies prior to monetary union there was a great deal of variation across the present euro area countries in the production, deterioration and extent of use of cash. For example, the amount of cash in circulation relative to GDP is still almost five times as much in Spain as in Finland. There has also been a great deal of variation between countries in respect of the density and number of regional

offices operated by the central banks: in Ireland, for example, the central bank only has one office, while in Italy there are almost a hundred. Thus, the practices involved in running such large systems of currency supply, requiring action by both the central banks and the private banking sector, cannot be harmonised overnight.

One reason for the importance attached to the harmonisation of currency supply has been the fact that the euro area is concentrated primarily in the densely populated areas of continental Europe. Issues of competition have thus been prominent, as CIT companies can use the regional offices that are economically cheapest to use irrespective of the country they happen to be situated in. This is why the Eurosystem has harmonised such things as the central banks' basic currency supply services that are provided free of charge, the sizes of banknote packages, the minimum opening hours for central bank offices, practices relating to charging and crediting for the ordering and return of cash, minimum authenticity and fitness criteria for the central banks' machine-sorting systems, the authenticity and fitness detection level of cash-recycling machines and security standards for cross-border cash transportations.

Some national characteristics of currency supply will undoubtedly remain in place within the euro area

for many years still. The proportion of common practices is, however, growing. The central banks are clearly seeking to develop a wholesaling role. In addition, the electronic of payment systems has forced the banks to reconsider their own key functions and their role in the development of payment systems. Increased use of ATMs has been one of the reasons why the banks have had to reassess the size of their branch networks and the precise role of their branches. The outsourcing of currency supply services has increased CIT companies' operative and logistical role in currency supply. The importance of the retail sector and retail chains in particular has also increased, as a growing proportion of cash is used in stores selling daily consumer goods.

In their joint statements, European banks have stressed the importance of the competitive framework. At the same time they have also pointed out that the trend of central banks towards concentrating on wholesale activities is passing the costs of currency supply on to third parties, primarily the banks. Admittedly, the banks themselves have admitted that the final costs will actually be borne up by the end customer. However, the costs involved in cash supply are not necessarily clear to the uninitiated layman.

The Banknote Committee of the European Central Bank plays a key preparatory role in the harmonisation

In its currency supply, the Bank of Finland is concentrating ever more clearly on wholesale activities.

of currency supply in the euro area and the formulation of common guidelines, procedures and rules. During the past year the Committee has drafted guidelines on internal cash transportation within the euro area, international cash depots for euro banknotes, models for the harmonisation of currency supply, counterfeit prevention, machine-sorting of banknotes by professional cash handlers in specialised cash centres and the future of banknote procurement.

Key words: currency supply, cash, means of payment

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Discussion Papers

ISSN 0785-3572 (print)

ISSN 1456-6184 (online)

Unintended convergence – how Finnish unemployment reached the European level

Erkki Koskela – Roope Uusitalo

6/2004

ISBN 952-462-124-X, print

ISBN 952-462-125-8, online

Key words: economic crisis, labour market institutions, unemployment

Finnish unemployment rose in the early 1990s from 3% to 18% in just four years. It has since fallen back to the average European level, being 9.0% in January 2003. In this paper, we describe the shocks leading to this unforeseen increase in unemployment. We then discuss and research the role of labour market institutions in the adjustment process that has brought unemployment back to a 'normal' level. We argue that these institutions cannot be blamed for the increase in unemployment, but that more flexible institutions could have led to a more rapid fall in unemployment once the Finnish economy began to recover.

Monopoly rights can reduce income big time

Berthold Herrendorf – Arilton Teixeira

7/2004

ISBN 952-462-126-6, print

ISBN 952-462-127-4, online

Key words: cross-country income differences, cross-country productivity differences, monopoly rights, relative price of capital, capital accumulation

We ask which part of the observed cross-country differences in the level of per capita income can be accounted for by monopoly rights in the labour market. We answer this question in a calibrated

growth model with two final goods sectors, the novel feature being that monopoly rights in the capital-producing sector shield insiders from competition by outsiders and permit coalitions of insiders to choose inefficient technologies or working practices. We find that monopoly rights can lead to quantitatively much larger reductions in the level of per capita income than previously demonstrated. This comes about because they do not only reduce TFP in the capital-producing sector but also increase the relative price of capital. This reduces the capital-labour ratio in the whole economy. The implied predictions about the price of capital goods relative to consumption goods and the investment share in output are quantitatively consistent with the cross-country facts.

Further evidence on the link between finance and growth: An international analysis of community banking and economic performance

Allen N. Berger – Iftekhar Hasan – Leora F. Klapper

8/2004

ISBN 952-462-128-2, print

ISBN 952-462-129-0, online

Key words: banks, community banking, SMEs, financial development, economic growth, international

We seek to contribute to both the finance-growth literature and the community banking literature by testing the effects of the relative health of community banks on economic growth and investigating potential transmission mechanisms for these effects using data from 1993–2000 on 49 nations. Data from both developed and developing nations suggest that larger market shares and higher efficiency rankings for small, private, domestically owned banks are associated with better economic performance, and that the marginal benefits of larger shares are greater when the banks are more efficient. Only mixed support is found for hypothesized transmission mechanisms through improved financing for SMEs or

greater overall bank credit flows. The data from developing nations is also consistent with favourable economic effects from foreign-owned banks, but unfavourable effects from state-owned banks.

Asymmetries in the euro area economy

David G. Mayes – Matti Virén

9/2004

ISBN 952-462-130-4, print

ISBN 952-462-131-2, online

Key words: monetary policy, asymmetry

Using quarterly data for the period since 1987 this paper explores, in the context of a small model of the EU economy, the degree to which monetary policy has been asymmetric. It shows in particular that monetary policy has been much more responsive to threats that inflation would lie outside the price stability target than to equally sized shocks within the target zone. Similarly, monetary policy has responded to threats of large positive and negative output gaps but has remained largely unresponsive to smaller divergences. It thus appears that the ECB and its predecessors have been avoiding 'fine-tuning' but have been aggressive in responding to substantial threats to macroeconomic stability. The action seems to have been stronger with respect to inflationary pressure than to deflation, but this may offset any bias in fiscal policy. The asymmetric response of policy in part reflects considerable non-linearities and asymmetries in the behaviour of the euro area economies. High unemployment has a relatively limited effect in pulling inflation down, while low unemployment can be much more effective in driving it up. Economic downturns are both more rapid and sustained in driving unemployment up than recoveries are in bringing it down. There is considerable variety in these relationships and IS curves across countries, sectors and regions. Monetary policy reacts in the light of this.

BOFIT Discussion Papers

ISSN 1456-4564 (print)

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Assessing equilibrium exchange rates in CEE acceding countries: Can we have DEER with BEER without FEER? A critical survey of the literature

Balázs Égert

1/2004

ISBN 951-686-884-3, print

ISBN 951-686-885-1, online

The ambition of this paper is to provide a thorough overview of equilibrium exchange rates in the acceding countries of Central and Eastern Europe. Therefore, theoretical models of equilibrium exchange rates are reviewed first and presented in a structured way. Subsequently, the existing body of the empirical literature aimed at investigating real exchange rate determination and possible misalignments is analyzed in a systematic manner. Finally, an attempt is made to sum up where we stand at the moment and what the major shortcomings of the approaches currently used in the literature are.

Distortion costs and effects of price liberalisation in Russian energy markets: A CGE analysis

Leena Kerkelä

2/2004

ISBN 951-686-886-X, print

ISBN 951-686-887-8, online

Key words: CGE modelling, energy market liberalisation, Russia

Russia's economy is energy intense and wasteful of resources. This situation has arisen in part due to the country's ample energy supplies and regulated privileges for domestic consumers. Recently enacted and proposed reforms intended to

increase the efficiency of the energy sector by raising domestic energy prices also have implications for the export levels of Russian energy commodities. In this study, we estimate the costs of the subsidised energy system in an allocative sense and then analyse recent moves of the Duma to boost gas and electricity prices to bring them into line with market-based pricing. Our analysis uses a multi-region general equilibrium model (GTAP) modified to express the global dimensions of the subsidisation policy and suggested reforms. Preliminary results show that current subsidies extract over 6% of GDP and limit the potential benefits of Russia's comparative advantage in energy commodities. Increases of 6% in electricity and 10% in the price of regulated gas improve efficiency by reducing distorting subsidies and distinctly shifting output from domestic markets to exports.

Price variability and the speed of adjustment to the law of one price: Evidence from Slovakia

Julius Horvath – Stanislav Vidovic

3/2004

ISBN 951-686-888-6, print

ISBN 951-686-889-4, online

This paper uses a large panel data set of monthly frequency final goods and service prices in thirty-eight Slovak districts over a five-year period to study price variability and the working of the law of one price. We concentrate on three issues. First, using simple statistical tools, we investigate the range of price differences across Slovak districts. Second, we measure relative price variability across cities and across products. The variability of relative prices in the same district appears to be higher than the variability of prices of the same goods across different districts. We identify the factors likely to be responsible for this fact. Third, using benchmarks we investigate the speed of convergence to the absolute law of one price. While we find evidence for absolute convergence, the speed is lower than that found in US cities. The speed of convergence to the relative law of one price is considerably higher.

Endogenous time preference, investment and development traps

Pertti Haaparanta – Mikko Puhakka

4/2004

ISBN 951-686-890-8, print

ISBN 951-686-891-6, online

Key words: development trap, overlapping generations

We introduce endogenous time preference via investment in patience (farsightedness) in an overlapping generations growth model to study development traps. There is no investment in patience if the economy is very poor, while if it is wealthy enough there is always such investment. We explore the conditions for the existence of the development trap, and study in detail a robust example of an economy with traps. It does not exist if the economy's total factor productivity is large enough. Our results illustrate the complementarity between physical investment and investment in farsightedness. Our model may also explain why economic growth is affected by initial conditions. In addition we show that increased international capital mobility does not necessarily help economies to escape from development traps.

Observations on disinflation in transition economies

Paul Wachtel – Iikka Korhonen

5/2004

ISBN 951-686-892-4, print

ISBN 951-686-893-2, online

The transition economies were remarkably successful in curbing the inflation that took place after the initial transition and shocks and, more recently, most of the countries have brought inflation down to the levels found in major developed countries. In this paper we review the experiences and show how fiscal discipline, monetary policy and exchange rate policy contributed to the outcome. In addition, we note that the influence

of EU accession on institutions and policy may have played an important role. The paper also surveys the literature on the quality of the inflation data, the extent to which necessary relative price adjustments have occurred and the size of the Balassa-Samuelson effect. Case studies of disinflation in four countries are presented: Poland, Romania, Estonia and Russia.

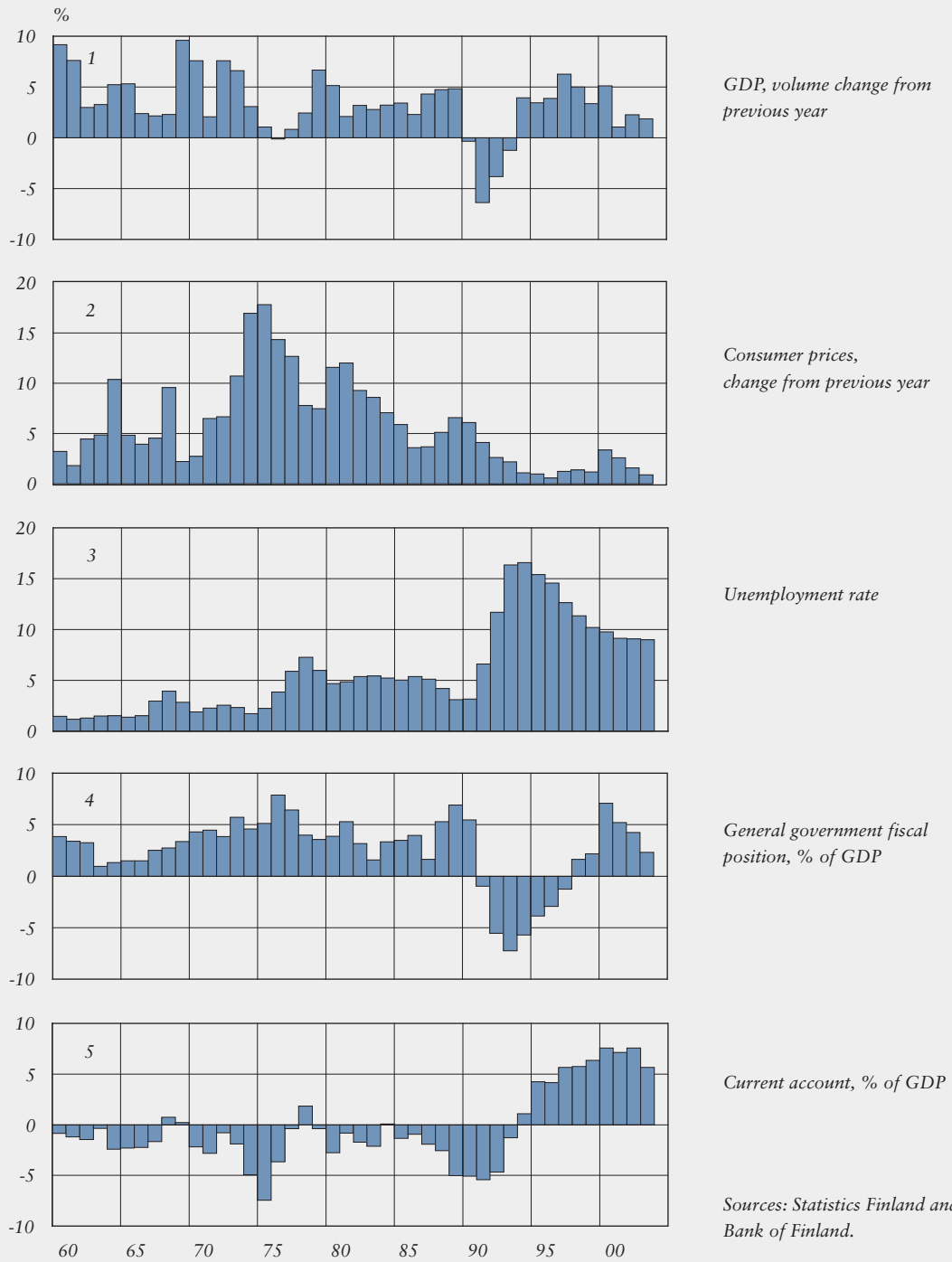
NOTE: The authors appreciate the research assistance of Lisa Lixin Xu, Elif Sisli and Diana Kniazeva. Comments from the conference discussants, J. David Lopez-Salido and Werner Her-

mann, helped us sharpen the discussion and avoid errors. Finally, discussions with Oleh Havrylyshyn, Georges de Menil and Jukka Pirttilä provided some important insights, which we are grateful to be able to use. Of course, all remaining errors are solely our own responsibility.

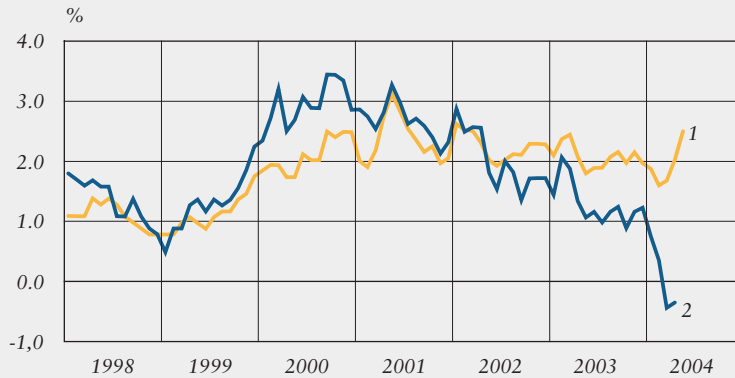
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1. Finland: key economic indicators



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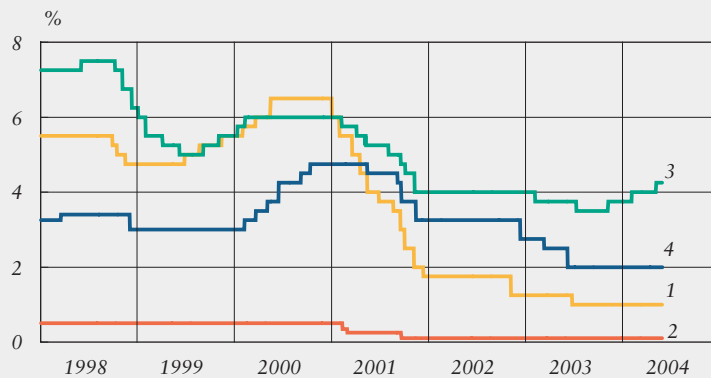


Harmonised index of consumer prices, 12-month change, %

1. Euro area
2. Finland

Sources: Eurostat and Statistics Finland.

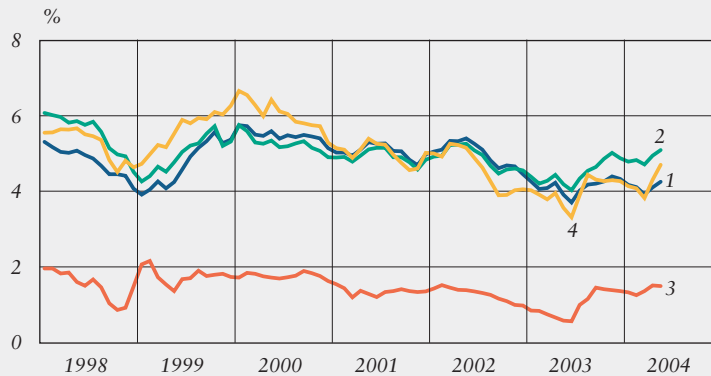
3. Official interest rates



1. USA: fed funds target rate
2. Japan: discount rate
3. United Kingdom: repo rate
4. Eurosystem: main refinancing rate/minimum bid rate (Bank of Finland tender rate)

Source: Bloomberg.

4. International long-term interest rates

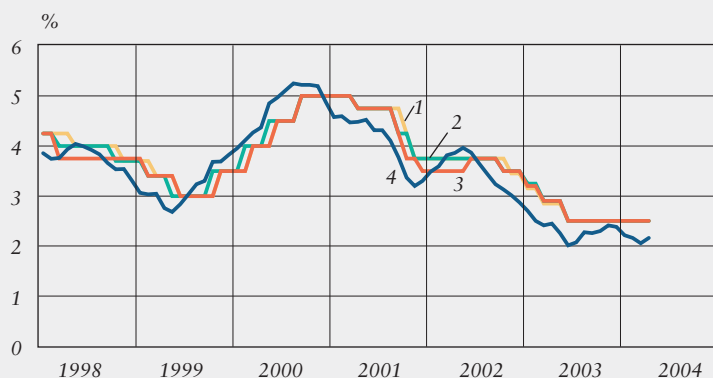


Yields on ten-year government bonds

1. Finland
2. United Kingdom
3. Japan
4. United States

Source: Reuters.

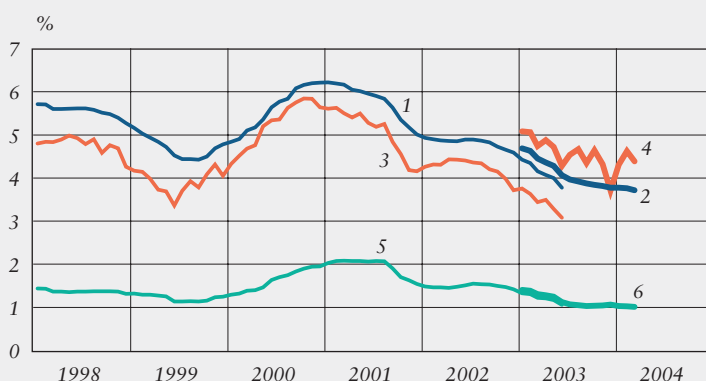
5. Bank reference rates in Finland and 12-month Euribor



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 (Helibor until end-1998)

Sources: Banks and ECB.

6. Average lending and deposit rates

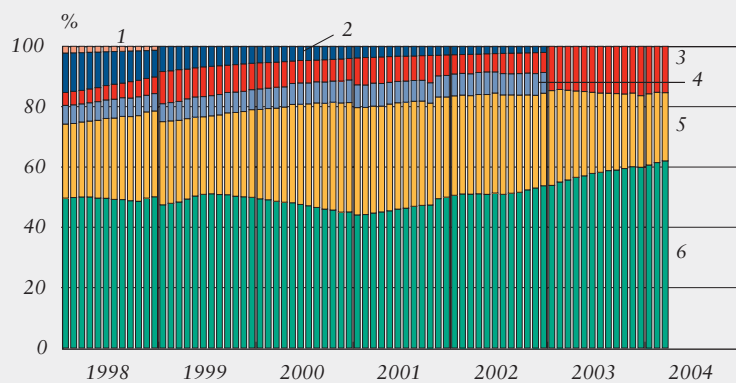


1. Banks' stock of loans
2. MFIs' stock of loans
3. Banks' new loans
4. MFIs' new loans
5. Banks' stock of deposits
6. MFIs' stock of deposits

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

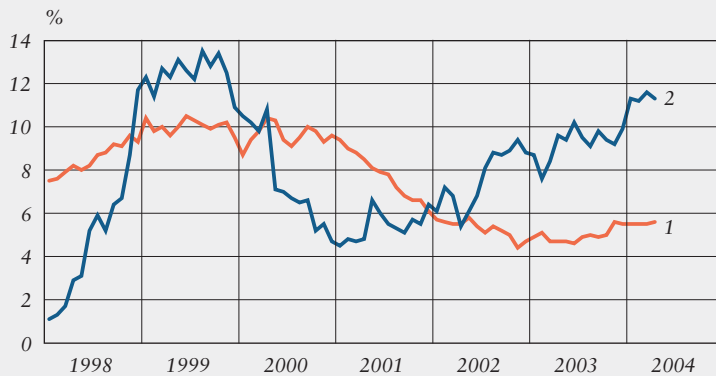


1. Linked to 3 and 5-year reference rates
2. Linked to base rate
3. Linked to other rates (as of 2003 includes loans linked to base rate and fixed-rate loans)
4. Fixed-rate
5. Linked to reference rates of individual banks (prime rates, etc)
6. Linked to Euribor (Helibor until end-1998)

Source: Bank of Finland.

Data collection changed as of 1 January 2003.

8. MFI loans to private sector

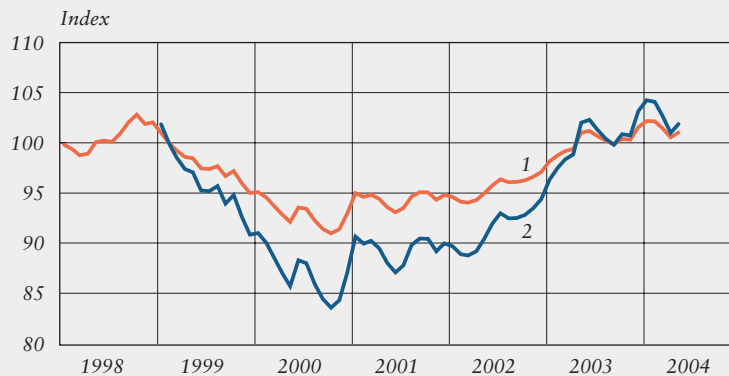


12-month change, %

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

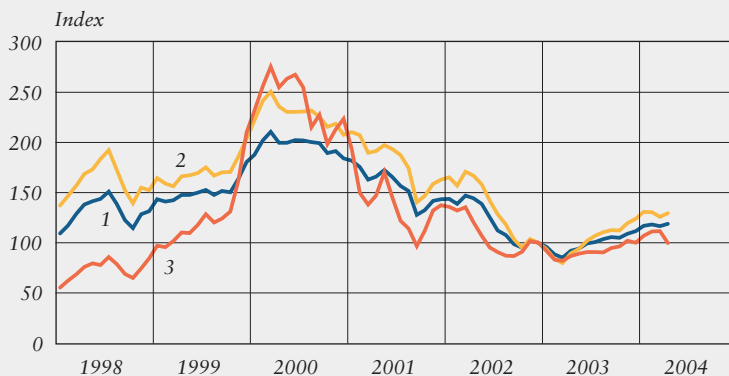
Based on trade-weighted exchange rates.

An upward movement of the index represents a weakening in Finnish competitiveness.

1. Narrow competitiveness indicator including euro area countries
2. Narrow competitiveness indicator excluding euro area countries

Source: Bank of Finland.

10. Selected stock price indices in the euro area

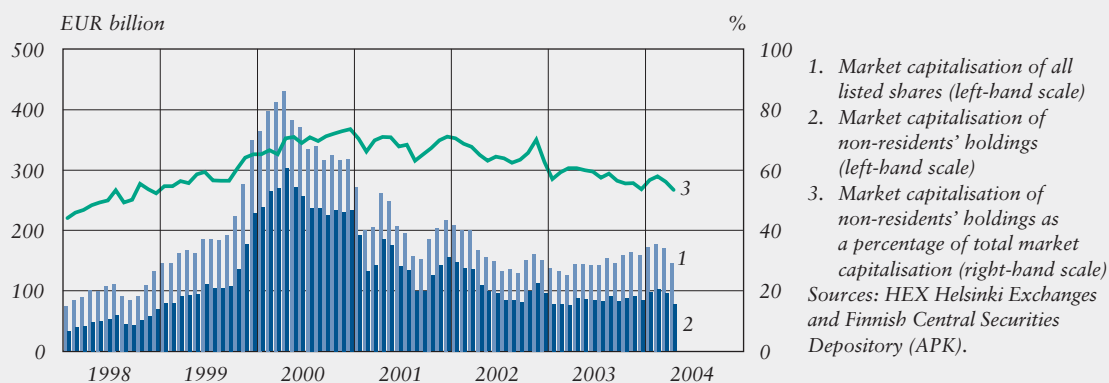


31 December 2002 = 100

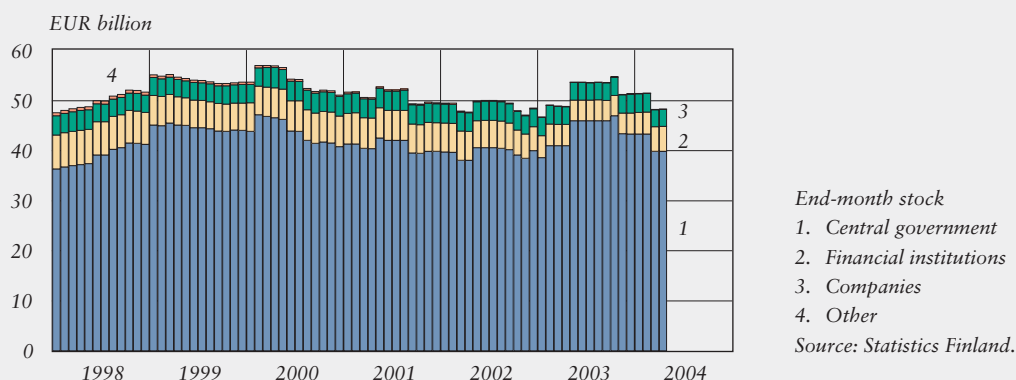
1. Total euro area: Dow Jones Euro Stoxx index
2. Germany: DAX index
3. Finland: HEX all-share index

Sources: Bloomberg and HEX Helsinki Exchanges.

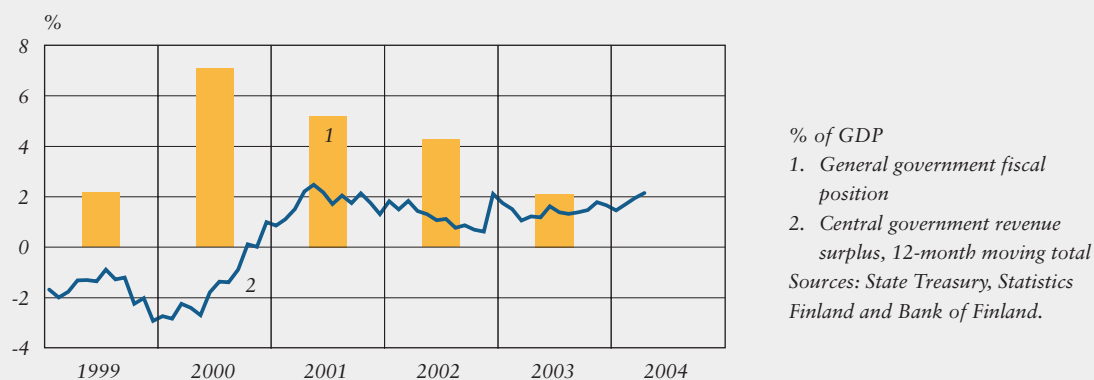
11. Listed shares in Finland: total market capitalisation and non-residents' holdings



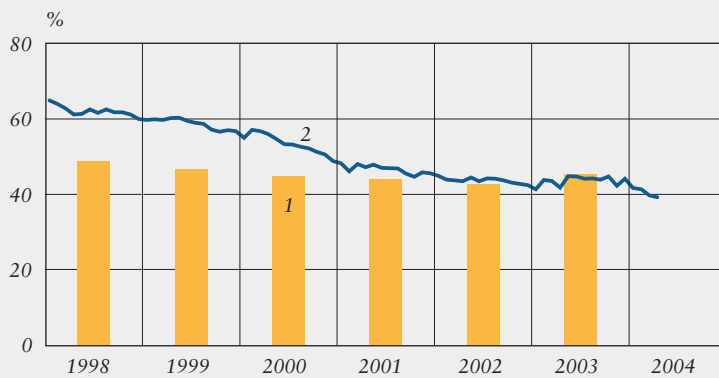
12. Bonds issued in Finland



13. Public sector balances in Finland



14. Public debt in Finland

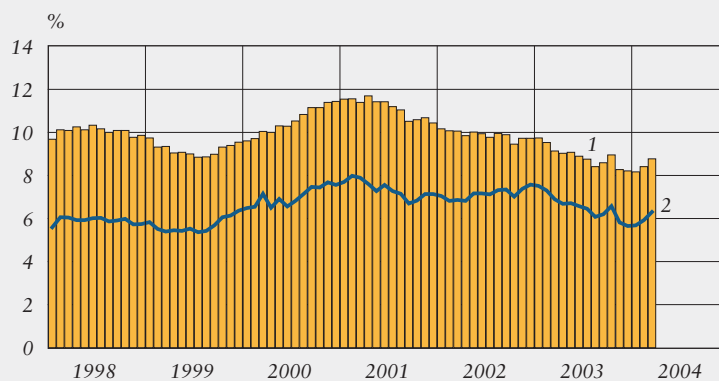


% of GDP

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

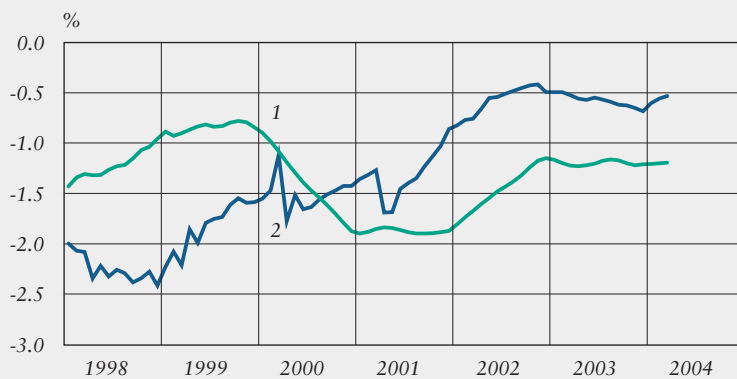


12-month moving totals, % of GDP

1. Goods account, fob
2. Current account

Source: Bank of Finland.

16. Finland: services account and income account

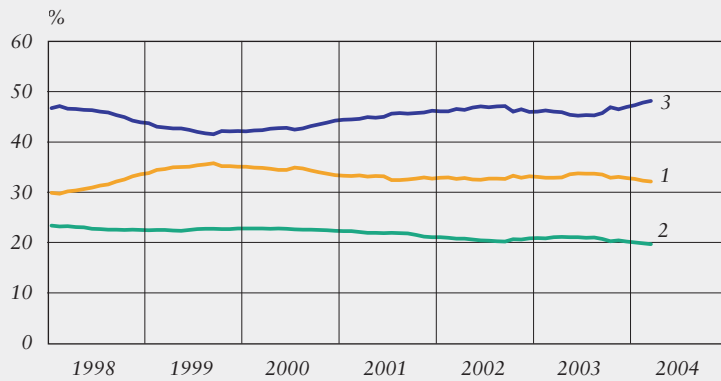


12-month moving totals, % of GDP

1. Services account (trade in goods, fob)
2. Income account

Source: Bank of Finland.

17. Regional distribution of Finnish exports

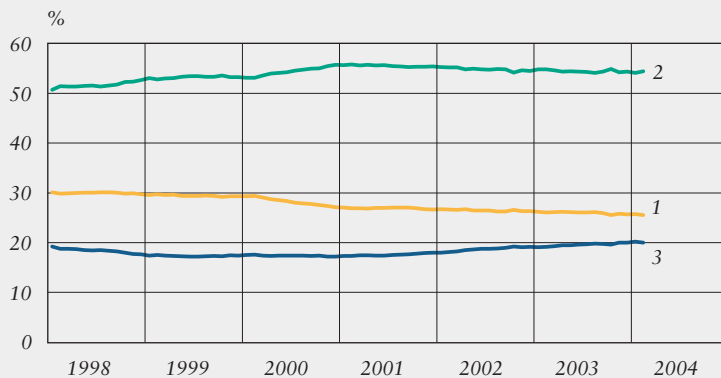


12-month moving totals,
percentage of total exports

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

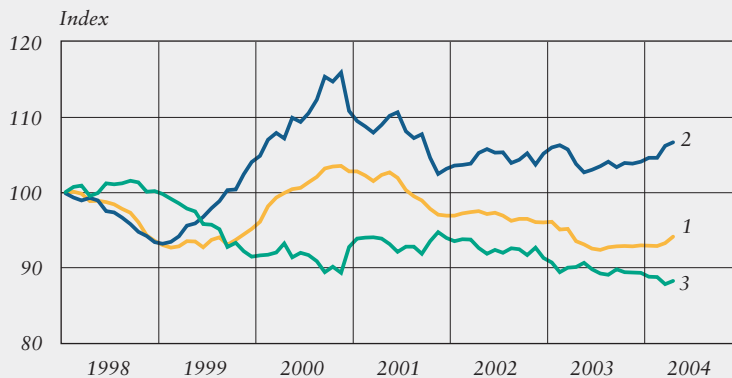


12-month moving totals,
percentage of total exports

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

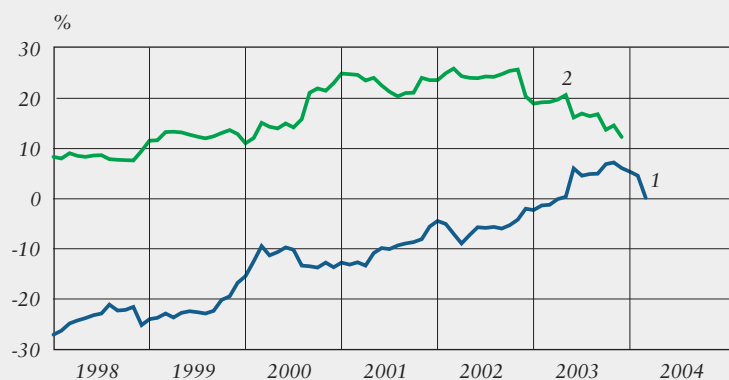


1995 = 100

1. Export prices
2. Import prices
3. Terms of trade

Source: Statistics Finland.

20. Finland's net international investment position



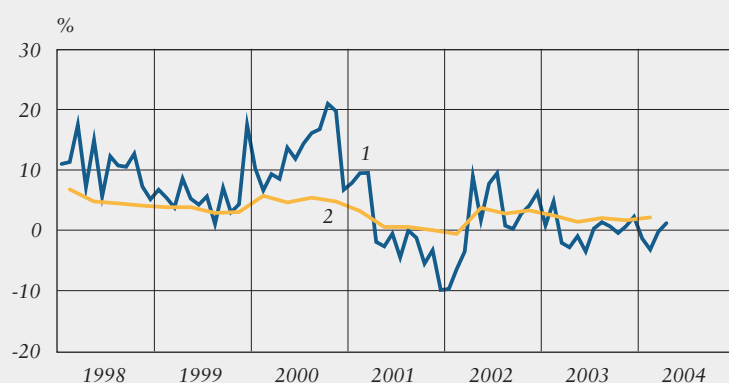
% of GDP

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



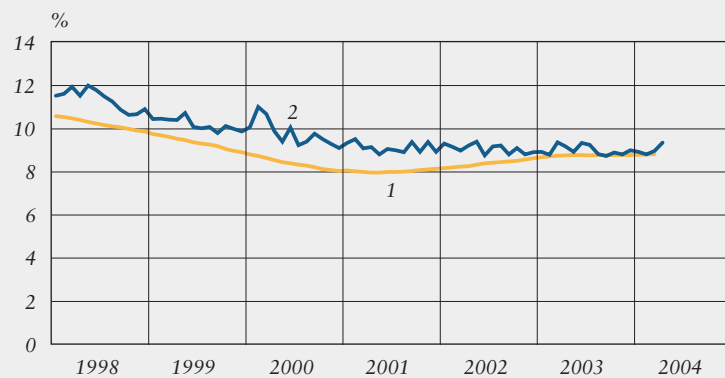
Percentage change from previous year

1. Industrial production

2. Gross domestic product

Source: Statistics Finland.

22. Unemployment rate in the euro area and Finland



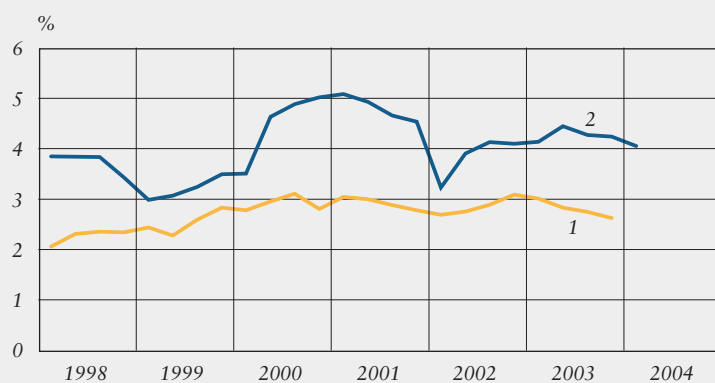
1. Euro area

2. Finland

Sources: Eurostat, Statistics Finland and Bank of Finland.

Data seasonally adjusted.

23. Industrial earnings in the euro area and Finland

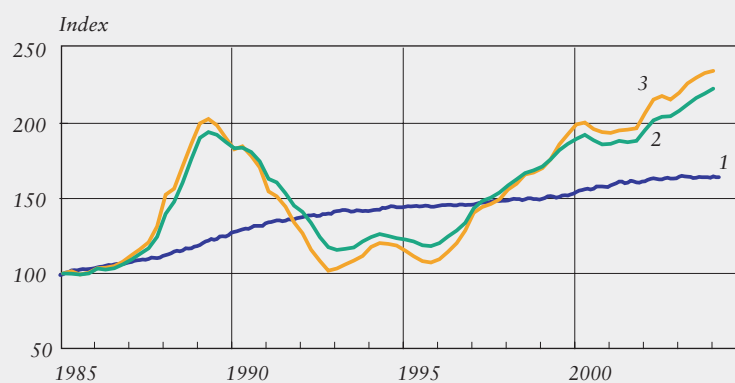


Percentage change from previous year

1. Euro area
2. Finland

Sources: Eurostat and Statistics Finland.

24. Selected asset prices in Finland



January 1990 = 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

1 June 2004

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¹⁾ As of 12 July 2004.

²⁾ Acting Governor until 11 July 2004.

³⁾ Adviser to the Board

Regional Offices: Kuopio, Oulu, Tampere and Turku. The Financial Supervision Authority functions as an independent body in connection with the Bank of Finland, with Kaarlo Jännäri as Director General.

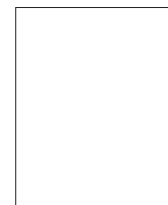
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