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ECONOMIC OUTLOOK · 2009

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The cover picture depicts the national motif on the Cypriot 50 cent coin: A Cyrenian ship from the fourth century BC.

Preface

During the summer the global economy has shown some signs of stabilising. The decline in world trade and industrial output has come to an end. In the large economies of Asia (India and China), economic growth has remained brisk throughout the international recession. In the third quarter of the current year, output also began to grow in many developed economies.

The state of the financial markets has improved fundamentally since the spring. Risk premia have come down to the level they were a year ago, prior to the collapse of the investment bank Lehman Brothers. Corporate bond issues have increased substantially. Rising share prices also reflect positive expectations.

Government measures to stabilise the financial markets have proved a success. They have made it possible to prevent a serious collapse of the financial system that would have thrust the global economy into a maelstrom similar to the Great Depression of the 1930s. The measures taken have included recapitalisation of the banks and government guarantees for the acquisition of funding. Some countries have also had to take banks into temporary public ownership.

The lowering of policy interest rates and deployment of non-standard monetary policy measures were considered necessary to stabilise the financial markets and combat the threat of deflation. This now appears to have been successful.

The expansionary impact of fiscal policy has also been considerable. In many European countries, automatic fiscal policy stabilisers have cushioned the negative impacts on domestic demand and employment from the collapse in world trade. On the other hand, it is clear that in a small, open economy no fiscal policy can entirely compensate for the losses in output and employment caused by the collapse in exports.

Given the scale of the global economy, it has been an important feature that fiscal policy has been relaxed simultaneously in different parts of the world. The same applies to monetary policy. Fiscal and monetary policy have worked together to support economic recovery. This has been helped by close multi-lateral communication between authorities and a shared concern over where the global financial market crisis could in the worst case have led. This has also made it possible to ease the threat of protectionism.

The fact the economic situation is stabilised does not mean the economy will quickly return to the status quo before the crisis. The level of output in many developed economies is much lower than a year ago. A normal feature of economic cycles is that unemployment continues to rise even after output has begun to recover. For its part, higher unemployment subdues growth in consumption.

The process of unravelling the cycle of debt is still ongoing. In some countries, such as the United States, households are reducing their debt burden to a level more suited to their reduced income expectations. This will delay the recovery in consumption. Meanwhile, financial institutions' readiness to increase their lending is limited by the need to prepare for growing loan losses.

Non-standard monetary policy measures have been essential to prevent a downward spiral in the world economy. Such measures generally also have unwelcome side-effects. The

rapid improvement of the situation on the financial markets together with the current exceptionally low level of interest rates could slow down structural change in the banking sector and the reform of operating practices.

Growing public debt, which has been an essential counterweight in the process of reducing private sector indebtedness, is causing increasing concerns over the sustainability of the public finances. The expected tightening of taxation or cuts in expenditure are already causing an increase in household savings.

The Bank of Finland has further reduced its 2009 growth forecast for the Finnish economy. One of the main reasons for this is the weaker-than-expected performance of the economy in the first half of the year. The downward trend continued in the second quarter. Indicator data indicates the downward trend should come to an end during the third quarter. The recovery will, however, be slow, for a number of reasons. There is also the possibility of temporary setbacks, eg as a consequence of inventory changes.

As an industrial economy dependent on exports, the collapse in world trade has hit Finland particularly hard. The collapse itself, and particularly its timing, is related to the events of autumn 2008 on the financial markets.

The scale of the slump in Finnish exports was due in part to the fact that Finland's export industry specialises in the production of capital goods (and their components). Finnish exports suffered when the financial crisis caused the postponement of investment plans. For the same reason, the Finnish economy will recover later and more slowly than many others. Low capacity utilisation rates will subdue investment in many traditional Finnish export sectors. Finnish exports and industrial output will, however, begin to grow gradually, provided the global economy recovers as expected. The fundamentals are all in place: company balance sheets are healthy and, in terms of their technology, Finnish companies are among the best in the world. There is, however, no reason to simply assume that recovery in the world economy will automatically restore things to how they were before the recession. Even if investment activities take off in the rest of the world, it is by no means certain the structure of investment will be the same as before, or that the growth in demand will be met by Finnish output. Times of upheaval in the world economy have a tendency to accelerate structural change, and this will also require a readiness to make structural changes in Finland. This, in turn, will require investment in developing new products and seeking new markets.

In line with the typical cyclical pattern, the employment situation will continue to deteriorate even after exports and industrial output begin to strengthen as the global economy recovers. Construction investment will contract despite a considerable increase in government-supported interest-subsidised housing construction. The greater risk of unemployment will increase household caution, moderating any increase in private consumption. Compared with the recession of the 1990s, however, the present situation is better because people losing their jobs now have a higher level of education, which can be expected to make it easier for them to find alternative employment. The situation is nevertheless worrying for those young people with

no previous experience of work. Long-term youth unemployment grew in the 1990s, and it is important to ensure this does not happen again in the present recession.

According to the Bank of Finland forecast, Finnish GDP in 2011 will still be well below the level of 2008. It is possible there will be no return to the earlier trend in GDP. This would mean the income expectations of a couple of years ago will not be realised. It would also mean the public sector would be unable to meet all the expectations placed upon it.

As in other countries, the accumulation of debt by the public sector in Finland is justified. It has made it possible to soften the impact of the recession. Fortunately, the financial position of general government in Finland at the beginning of the recession was strong, at least relative to many other countries.

A sustained period of increasing indebtedness is, however, not possible. Before long it will be necessary to reach a level at which the debt ratio can be stabilised. The higher the debt ratio, the larger the primary surplus will need to be in the future. The primary surplus is the difference between public income and expenditure, excluding interest expenditure. Rising interest expenditure must then be financed by tax increases or by cutting other expenditure.

The recession has had no effect on demographic trends. Growing pension and care expenditure caused by an ageing population has already been anticipated for years. The means available for meeting this challenge have also been well known for some time, namely raising the employment rate in all age groups and improving productivity in the production of public services.

25 September 2009

Bank of Finland forecasts

This special issue of the Bank of Finland Bulletin presents the Bank's macroeconomic forecast, which is prepared in the Monetary Policy and Research Department at the Bank. The forecast report examines recent developments in the economy and the outlook for the present calendar year and the next two years ahead. The forecast itself describes the most probable trends in the economy, while a risk assessment included in the report discusses uncertainties relating to the outlook.

The forecast report focuses on the Finnish economy, while also presenting the Monetary Policy and Research Department's assessment of future trends in the international economy, on which the Finnish forecast is based. The forecast assumes that interest and exchange rates will develop in line with market expectations.

The forecast for the Finnish economy and the related risk assessment are prepared using a macroeconomic model developed at the Bank of Finland plus a large body of other data and assessments on the direction of the economy.[1]

The Bank of Finland publishes its macroeconomic forecast twice a year, in March and September, in a special issue of the Bank of Finland Bulletin. It also participates twice a year in preparation of the Eurosystem forecast for the euro area as a whole.[2] The European Central Bank also publishes summations of the Eurosystem forecasts in the June and December editions of the ECB Monthly Bulletin.

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[1] *The model is presented in 'Aino: the Bank of Finland's new dynamic general equilibrium model of the Finnish economy', an article by Juha Kilponen, Antti Ripatti and Jouko Vilmunen published in the Bank of Finland Bulletin 3/2004, and in 'Labour and product market competition in a small open economy – Simulation results using a DGE model of the Finnish economy', another article by Kilponen and Ripatti published as Bank of Finland Discussion Paper 5/2006.*

[2] *The Eurosystem comprises the European Central Bank plus the national central banks of countries in the euro area, including the Bank of Finland.*

Forecast at a glance

Finland's volume GDP grew 1.0% in 2008. Output began to decline in the second half of the year, a trend that continued in the first half of 2009. According to the Bank of Finland forecast, the deepest phase of the recession will be the second quarter of 2009. Thereafter, output will no longer decline, but growth will be sluggish until the second half of 2010 and will only pick up more clearly at the end of the forecast period. Annual GDP volume will contract 7.2% in 2009, remain unchanged in 2010 and grow 1.6% in 2011.

Finland's GDP will be lower in 2009 than it was in 2006. This means that in a short period of time the Finnish economy has lost the fruits of over 3 years of growth. According to the forecast, pre-crisis levels of GDP will not yet be restored by the end of 2011.

Finnish exports will begin to grow later than the export markets. The substantial increase in unemployment will undermine private consumption, which will be reflected during the forecast period in demand for both goods and consumer services. Consumption and private investment will not begin to grow seriously again until 2011.

The labour market recession will continue both this year and in 2010. Thereafter, the situation will begin to ease. Even so, the number of employed is expected to decline throughout the forecast period. The unemployment rate will rise to 11%. The external balance will deteriorate as the problems in goods exports eat into the balance of payments surplus. General government finances will move into deficit and the debt ratio will rise steeply.

Inflation will remain moderate throughout the forecast period. The harmonised index of consumer prices (HICP) is forecast to rise 1.7% in 2009. Both domestic and external inflationary pressures will remain weak, and HICP inflation will ease back to 1.3% in 2010. In 2011, it will gather pace slightly. Inflation as measured by the national consumer price index will be 0.3% in 2009, accelerating to 1.2% next year and reaching around 1.6% at the end of the forecast period in 2011.

Executive summary

Finland's GDP will be lower in 2009 than it was in 2006.[1] This means that in a short period of time the Finnish economy has lost the fruits of over 3 years of growth. Finland plunged into recession when world trade, and hence Finnish exports, contracted dramatically in late 2008 and early 2009. According to the Bank of Finland forecast, pre-crisis levels of GDP will not be achieved by the end of 2011, with volume GDP in 2011 still almost 6% below 2008.

Sluggish growth in 2010–2011 means that, apart from public consumption, all components of aggregate demand will be smaller in 2011 than before the recession. Despite making a recovery, export demand will still be exceptionally weak, which underlines the scale of the collapse in exports in 2009. Investment and private consumption, too, will not have returned to pre-recession levels by the end of the forecast period.

It now appears that the deepest phase of the recession will be the second quarter of 2009. Thereafter, volume GDP is not forecast to contract any further, but growth will be sluggish throughout 2010. Beyond this point, growth will begin to accelerate again. Exports will recover slowly in the wake of world trade and will gradually begin to pull the Finnish economy out of recession. Annual GDP volume will contract by 7.2% in 2009, remain unchanged in 2010 and grow 1.6% in 2011.

Finnish exports will begin to grow later than the export markets. World trade growth will already begin to pick up slightly towards the end of 2009, but a substantial recovery in exports will not get underway until the end of 2010. The pace of export growth will also lag behind growth in the export markets, due to Finland's export sector being structurally weighted towards capital goods, for which the pace of recovery in international demand will be slow. This will also have an effect on business sectors linked to exports, such as transport and business services. In addition, government measures in different countries to boost recovery will support domestic output more than imports.

Domestic demand will recover only after the recovery in exports. Uncertainty over the future trend of the economy and incomes, allied to a plentiful supply of unutilised capacity, will make both businesses and households less willing to invest. Both businesses and households will also increase their level of savings in order to reduce their indebtedness. As the real economy has gone ever deeper into recession, so the problems in managing debt have increased. The lower financing costs brought by the subsequent easing of the financial market crisis and lower interest rates will, however, support corporate and household investment.

The present low level of interest rates, and their rapid transmission into the costs of borrowing relative to elsewhere in the euro area, will also significantly ease the position of debtors in Finland. The key reference rates for bank lending have declined considerably since the end of 2008, and, although there has been some pressure for banks to raise their interest margins, there has

[1] This publication is based on statistical data available on 15 September 2009.

been a marked decline in the average rates on both new household and new corporate loans in Finland. In line with market expectations, short Euribor rates are expected to rise steadily in 2010 and 2011 but remain low relative to recent years.

The decline in goods exports means a considerable reduction in Finland's current account surplus, although the current account will nevertheless remain in surplus throughout the forecast period.

There will be a marked deterioration in employment both this year and next, with the situation expected to improve in 2011. The unemployment rate will move above the 10% mark during the forecast period. For cyclical reasons, labour productivity will decline particularly rapidly this year. Thereafter, productivity growth will pick up again, becoming clearly positive in 2010 and 2011.

The substantial increase in unemployment will undermine private consumption, which will be reflected during the forecast period in demand for both goods and services. Private consumption will contract strongly during the current year. It will begin to grow again in 2010, but even then the growth will be sluggish, with earnings rising only slowly and the continued weakening trend in employment. The household savings ratio will rise strongly this year and remain high throughout the forecast period.

The sharp downturn in the economy and the expansionary fiscal policy adopted in an attempt to ease it will significantly weaken the balance of public finances during the forecast period. Compared with 2008, the fiscal position of general government will decline by almost 10 percentage points relative to GDP, to stand at –5.3% of GDP in 2011. The social security funds (employment pension funds) will be the only public sector entities to remain in surplus in the immediate years ahead. In order to fund the deficits, central government will, over the next few years, take on debt at a rate unseen since the recession of the early 1990s. The debt-to-GDP ratio will rise by almost 23 percentage points, to a full 56%. Even so, Finland's public sector debt ratio in 2011 is expected to remain one of the lowest in the European Union.

World GDP is estimated to contract by just under 2% in 2009, whereafter it will recover slowly in 2010 and 2011. This means the strongest phase of decline in the global economy and world trade is now over. In the developed economies, however, growth will remain slow throughout the forecast period, with world growth dependent primarily on the greater growth potential in emerging economies.

World trade is forecast to decline in 2009 by around 13%. In 2010, world trade growth will be lacklustre and based primarily on strengthening demand in emerging economies. Towards the end of the forecast period, import demand in developed economies will also begin to pick up.

In Finland's export markets, demand will be weak in the immediate years ahead, with the outlook for exports remaining gloomy. In the prevailing situation of slow growth and excess capacity, global investment

Table 1.

Forecast summary

Supply and demand

	2008	2007	2008	2009[f]	2010[f]	2011[f]
	At current prices EUR billion	Volume, % change on previous year				
Gross domestic product	184.7	4.2	1.0	-7.2	0.0	1.6
Imports	79.6	6.5	7.0	-24.0	-1.9	3.1
Exports	86.8	8.1	7.3	-26.6	1.1	4.0
Private consumption	95.6	3.3	1.9	-2.7	-0.2	0.9
Public consumption	41.3	0.8	2.0	1.8	0.6	0.7
Private fixed investment	33.3	9.0	0.4	-15.1	-9.1	4.0
Public investment	4.8	6.8	-0.3	2.3	-1.7	-2.6

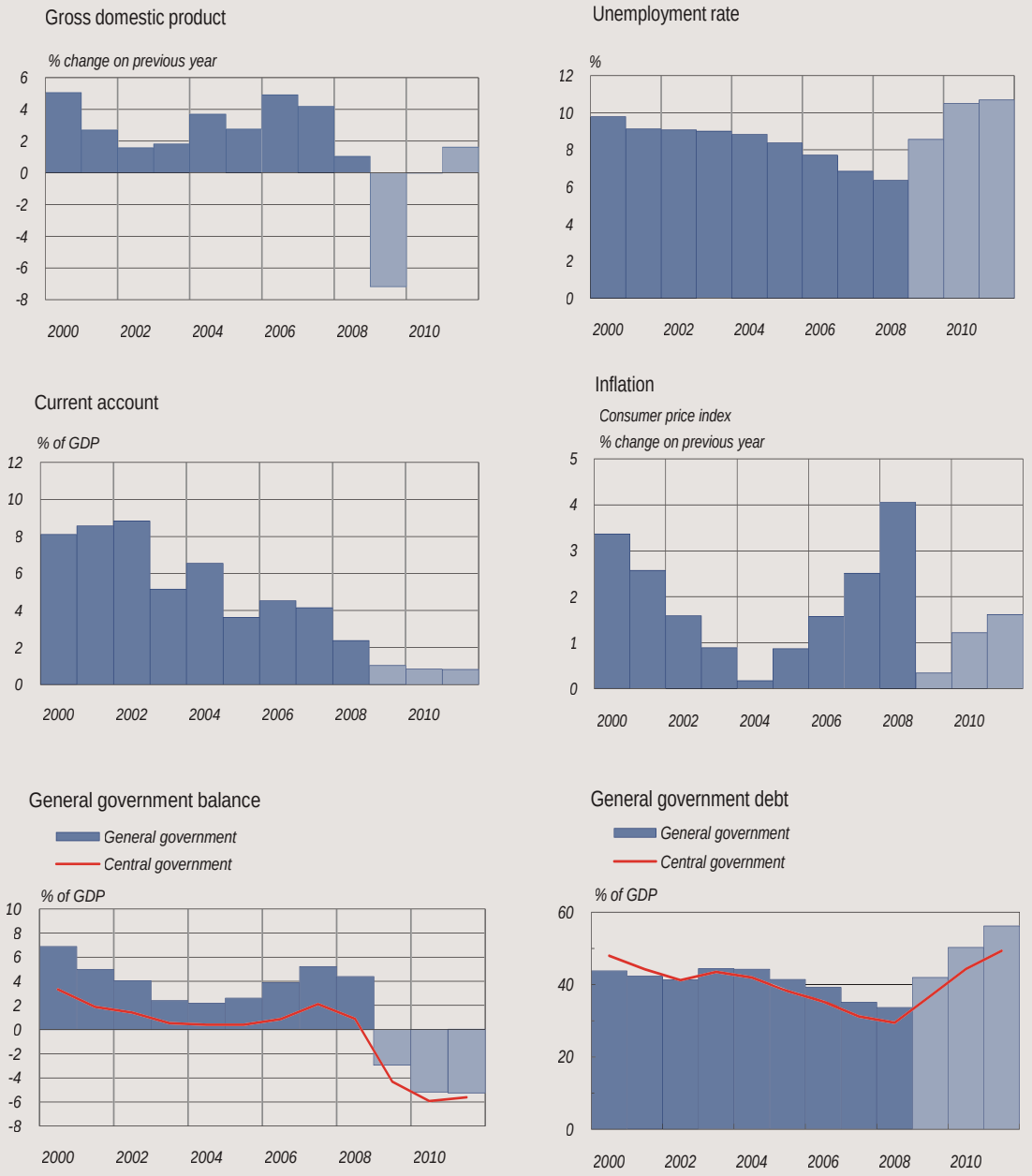
Key economic indicators

	2007	2008	2009[f]	2010[f]	2011[f]
% change on previous year					
Harmonised index of consumer prices	1.6	3.9	1.7	1.3	1.5
Consumer price index	2.5	4.1	0.3	1.2	1.6
Wage and salary earnings	3.3	5.6	4.4	2.7	1.9
Labour compensation per employee	3.4	5.6	3.6	2.2	1.4
Productivity per person employed	2.1	-0.4	-4.0	3.8	2.1
Unit labour costs	1.3	6.1	8.1	-1.7	-0.6
Number of employed	2.1	1.5	-3.3	-3.6	-0.4
Employment rate, 15–64-year-olds, %	69.9	70.6	68.2	65.9	66.0
Unemployment rate, %	6.9	6.4	8.6	10.5	10.7
Export prices of goods and services	0.7	-1.6	-6.1	-2.9	0.0
Terms of trade (goods and services)	-1.4	-3.3	1.3	-4.0	-1.0
% of GDP, National Accounts					
Tax ratio	42.9	43.0	42.4	42.0	42.4
General government net lending	5.2	4.4	-3.0	-5.2	-5.3
General government debt	35.1	33.6	41.9	50.2	56.1
Balance on goods and services	5.0	3.9	2.1	1.7	1.7
Current account balance	4.1	2.4	1.0	0.8	0.8

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

Chart 1.

Key economic indicators



Sources: Statistics Finland and Bank of Finland.

demand is estimated to remain weak. Labour costs will rise briskly in 2009 as a consequence of large negotiated pay increases. At the same time, employment and productivity will both decline. In 2010 and 2011, the rise in labour costs will be slower than this year, and productivity will improve. The pace of rise in real wages will slow markedly after 2009.

Oil and other commodity prices began to fall sharply in mid-2008 as the world economy declined. In 2009, however, commodity prices have rebounded strongly. This trend is expected to continue, if more moderately, in 2010 and 2011. With continued low inflation around the world, import price rises will be very moderate in the immediate years ahead.

The pace of rise in consumer prices began to slow in Finland in autumn 2008 with the decline in the price of energy. During the current year, the pace of inflation has continued to ease substantially. For 2009 as a whole, inflation is forecast to ease back to an average of 1.7%. In 2010 and 2011, too, the rise in consumer prices is expected to be subdued.

Although the most difficult phase of the economic crisis is now thought to be over, a sustainable return to growth in the world economy is still attended by both upside and downside risks. The most significant of these relate to the uncertainty surrounding the effectiveness of the expansionary economic policy measures that have been taken, and to the time it will take for any effects to be visible. Another key uncertainty relates to the ability of the banking sector to recover from its risky investments and the loan losses caused by the recession in the real economy. Consumer behaviour also has a key role to play: consumer caution and a larger-than-forecast growth in the savings ratio could delay the return to growth.

The outlook for the Finnish economy is closely linked to the future trend in the world economy. A recovery in world trade and export growth could pull Finland out of recession more quickly than forecast. If, at the same time, business and consumer confidence in a cyclical upturn were to strengthen, domestic demand could also recover more quickly. On the other hand, the narrow base and regional distribution of Finland's export industries could push the economy onto a weaker-than-forecast development trend. Purely domestic risks relate to the labour market and employment. A recovery in domestic demand could also be hampered by uncertainty surrounding the measures planned to resolve the aggravation of general government funding problems.

The alternative scenario included in the forecast examines Finland's potential to benefit from growth in the global economy and international trade once these begin to recover. If global recovery is no longer channelled as before into demand for the export industries situated in Finland and production capacity in Finland is therefore left unutilised, the recession would be prolonged. If, on the other hand, Finnish industry is able to adjust its output and increase its efficiency, export growth could, as before, accelerate more quickly than growth in the export markets.

Forecast assumptions

World GDP is projected to contract by almost 2% in 2009, with growth to recover thereafter slowly in 2010 and 2011. The worst phase of deterioration in the world economy and world trade is thus over. Even so, developed economies will be experiencing slow growth throughout the forecast period. World economic expansion rests on emerging economies' greater growth potential.

World trade is forecast to diminish by about 13% in 2009. In 2010, trade growth will remain modest and be based largely on stronger demand from emerging economies. Towards the end of the forecast period, import demand in developed economies will also gain momentum.

Demand in Finland's export markets will be weak over the next few years, with the outlook for exports remaining bleak (Table 2). In a context of slow economic growth and overcapacity, global investment demand is expected to remain subdued. In this situation, the structure of the Finnish export industry, with its focus on capital and related intermediate goods, is particularly unfavourable.

The assessments of international economic growth underpinning the domestic forecast are the Bank of Finland's own assessments and are discussed in greater detail in Box 5.

Commodity prices

Commodity prices turned sharply downward in response to the weakening of the world economy in autumn 2008. However, the prices of crude oil and other commodities have risen in recent months as a consequence of lower supply and increased demand from China. The forecast assumption is for the price of Brent crude to follow the trend in futures price quotations as at 15 September 2009. Accordingly, oil price rises should be moderate during the forecast period.

Increases in the prices of industrial raw materials, such as base metals, are anticipated to remain subdued in the forecast period. Price pressures will be held back by reactions from both supply and demand. The high level of metal prices, in particular, has already attracted more supply, and at the same time there have been signs of buyers shifting to cheaper materials and processes that save raw materials. A more detailed analysis of developments in commodity prices is presented in the chapter 'Costs and prices'.

Foreign trade prices

Developments in the export prices of countries of key importance for Finnish exports, ie Finland's competitors, will remain muted in the forecast period. Demand continues to expand very slowly, and several sectors have overcapacity, which

Table 2.
Forecast assumptions

	2007	2008	2009^f	2010^f	2011^f
Finland's export markets[1], % change	8.3	3.8	-14.9	1.0	4.9
Oil price, USD/barrel	72.7	97.6	60.2	72.9	76.3
Euro export prices of Finland's trading partners, % change	0.3	-0.1	-3.5	0.1	0.7
3-month Euribor, %	4.3	4.6	1.3	1.6	2.7
Yield on Finnish 10-year government bonds, %	4.3	4.3	3.9	4.2	4.5
Finland's nominal competitiveness indicator[2]	104.0	107.0	109.7	109.6	109.6
US dollar value of one euro	1.37	1.47	1.39	1.47	1.47

[1] *Growth in Finland's export markets equals growth in imports by countries to which Finland exports, on average, weighted by their respective shares of Finnish exports.*
[2] *Narrow plus euro area, 1999 Q1 = 100*
f = forecast
Sources: Statistics Finland, Bloomberg and Bank of Finland.

serves to keep prices in check. The export prices of competitor countries are expected to decline by 1% in 2009, with no further rises in view before 2011. The forecasts for price trends in the exports of Finland's competitors are the Bank of Finland's own estimates.

Interest rates and exchange rates

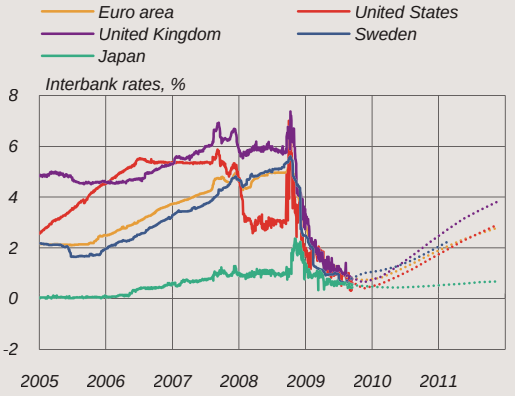
According to forecast assumptions based on interest rate futures quotations, short-term money market rates – including the 3-month Euribor – should remain low in 2009 (Chart 2). In 2010 and 2011, the short-term Euribor is assumed to rise steadily but remain at a low level compared with recent years.

Under an assumption based on currency forward quotations, the external value of the euro should not change markedly during the forecast period (Chart 3).

The interest and exchange rate assumptions in the forecast are derived from market expectations on 15 September 2009. The underlying assumption concerning interest rates and exchange rates is purely technical and does not anticipate the interest rate policy of the ECB Governing Council nor include an estimate of equilibrium exchange rates.

Chart 2.

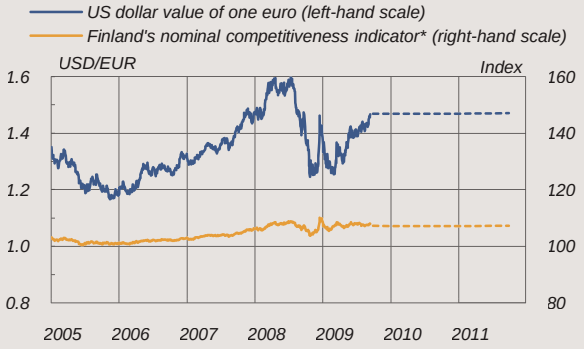
Short-term interest rates and interest rate expectations*



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

Chart 3.

Exchange rate assumptions



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

Financial markets

Since the beginning of March, developments on the financial markets have been positive in a number of ways. Fears of a total collapse of the international financial system have receded and the risk atmosphere improved. On the exchange markets, an increased willingness to take on risk has bolstered the euro relative to other anchor currencies. At the same time, the position of the US dollar as the traditional reserve currency has been questioned. On the interest markets, declining risk has been reflected in a narrowing of risk premia and eg the opening of the bond markets. On the stock markets, investors are once again more willing to take on risk, and share prices have risen at record speed. This has been matched by improved expectations for corporate earnings. The return of confidence in the international financial system has been particularly visible in the rapid climb of banking and financial sector shares from the depths experienced in March. Monetary policy has been strongly expansionary in all major economic regions. Despite this, growth in bank lending has remained sluggish. To some extent the change in the pace of lending growth is due to lower demand, but it is also partly a consequence of banks' tighter lending policies. The latter is a response particularly to the banks' own higher funding costs, uncertainty over the future course of the economy and the attendant negative risks. Banks are still prepared for increasing loan losses. Debtors are, however, benefiting from a substantial decline in key reference rates for bank lending from the levels prevailing at the end of last year. In many countries there are signs of an end to the downward trend in housing prices. In Finland, the downward pressure on prices has eased and the backlog of unsold houses has been cleared.

Interest rates

Since the beginning of 2009 the trend on the bond markets has been positive according to a number of yardsticks. Fears of the international financial system collapsing have evaporated and risk sentiment has clearly improved. Market funding channels have reopened, and the current year has seen record bond issues.

The more moderate pricing of risk is visible in a number of ways. Interest rate differentials between Euribor and Eurepo rates have narrowed. Also, risk premia on corporate bonds have come down close to the level of summer 2008 (Chart 5). The latter development has been supported by strong investor demand. Meanwhile, the credit risk on government bonds has receded from the extremely high levels of March.

Risk sentiment is nevertheless still sensitive to change. Growth in risk premia could be triggered by more problems in the financial sector, slower-than-expected economic growth, concern over excessive growth in government debt or negative shocks to growth in the emerging economies. Even as the economy begins to grow, it is unlikely the credit markets will return to risk premia as small in all markets as before the crisis.

Monetary policy has been strongly expansionary across all main economic

regions. In Europe the key policy rate was cut to 1%, in the United Kingdom to ½% and in the United States even closer to zero (Chart 4). Despite the improved outlook for growth, policy rates are still expected to remain relatively low in the future. The markets expect central banks to begin raising interest rates some time in 2010. These estimates are influenced by expectations that inflationary pressures will remain subdued and continued uncertainty over the future pace of economic growth.

This uncertainty over the strength of growth is sustained, among other factors, by the continued sluggish pace of growth in bank lending despite the expansionary policies of central banks. As well as sluggish demand, this is also partly due to banks being both unable and unwilling to grant new loans.

On the markets, short, 3-month interest rates have come down substantially but are expected to begin to rise moderately at the end of the present year. The yield curve has steepened since the beginning of the year in both the euro area and the United States. This means the interest-rate differential between long-term (10 years) and short-term (2 years) government bonds has grown. Short-term interest rates have remained low, while long-term rates have risen.

Market expectations for the future level of long-term rates are for them to climb further, although a significant rise is not expected until the end of 2010. Movements in long-term rates have traditionally been explained in terms of inflation expectations and economic growth, but now there are also other pressures involved. These relate primarily to non-standard monetary policy measures carried out in the United States and the federal government's need to issue bonds. Of these, it is the latter, the supply, that has led to the rise in interest rates.

Chart 4.

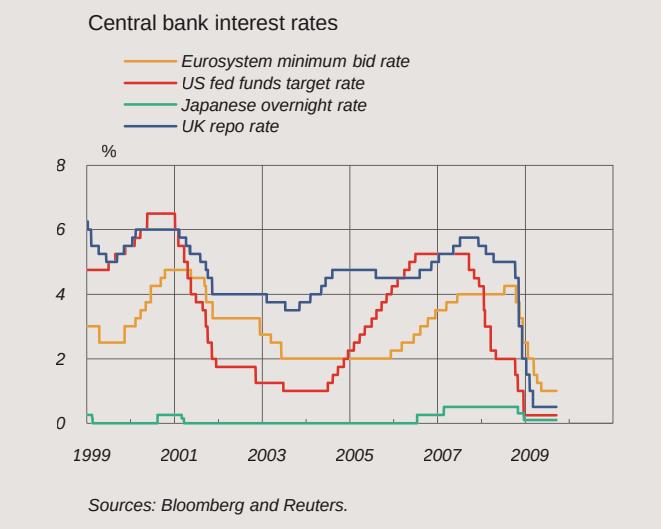
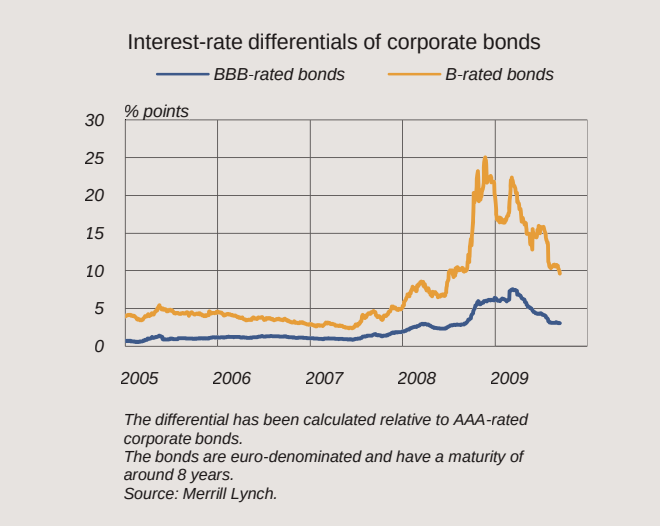


Chart 5.



Exchange rates

An increased propensity for risk in spring 2009 weakened the nominal value of the main safe haven currency,

the US dollar, both relative to a broad basket of major currencies and relative to the euro. The improved risk sentiment also bolstered the euro against other anchor currencies such as the Japanese yen. Real exchange rates have shown a similar trend (Chart 6).

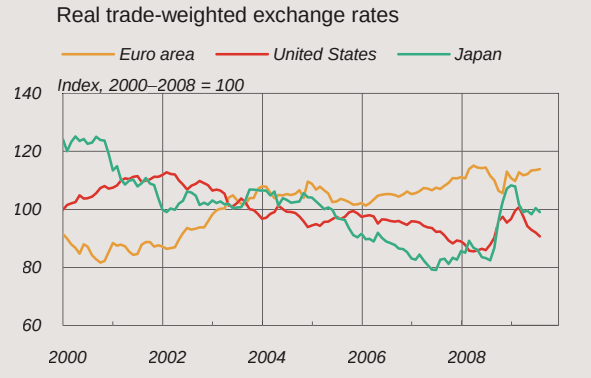
The more positive sentiment on the foreign exchange markets that began in early summer gave rise to criticism of the dollar as the traditional reserve currency. The intensification of this debate is also partly related to the increased weight of emerging economies on the financial markets. During spring and summer, a number of emerging economies, led by Russia and China, questioned the position of the dollar on a number of occasions. In the autumn, the UN trade and development body UNCTAD also raised this issue in its report. However, short-term expectations on the foreign exchange markets indicate no evidence of any pressures for a substantial depreciation of the nominal value of the dollar relative to other major currencies. In long-term perspective, however, the value and position of the dollar are threatened by the serious indebtedness of the US federal government.

The UK pound has been weakened by the gloomy outlook for the British economy, uncertainties surrounding the banking sector and the government's growing borrowing requirement.

The outlook for the Swedish krona has been overshadowed by weak growth expectations for the economy, Swedish banks' risks in the Baltic States and growing domestic credit risks. Despite occasional dips, the krona has since the spring sustained an upward course relative to the euro. Recent data on the real economy has been surprisingly positive, and the Swedish economy is now expected to begin growing again sooner than previously expected.

The trend in the Russian economy evened out during the second quarter of 2009, with GDP at almost the same level as in the first quarter. The Central Bank of the Russian Federation carried out a step-by-step devaluation of the rouble at the turn of the year 2008/2009, resulting in a substantial depreciation in the value of the currency. Since early in the current year, the central bank has not had to make any further significant interventions, apart from the recent interventions in October, and in recent months the rouble has been stronger than earlier in the year. The rouble's real trade-weighted exchange rate is already at almost the same level as a year ago. The fluctuations in the value of the currency

Chart 6.



Based on consumer prices. A rising curve indicates a real appreciation in the relevant currency. The most recent figures are based on nominal exchange rates. Source: IMF.

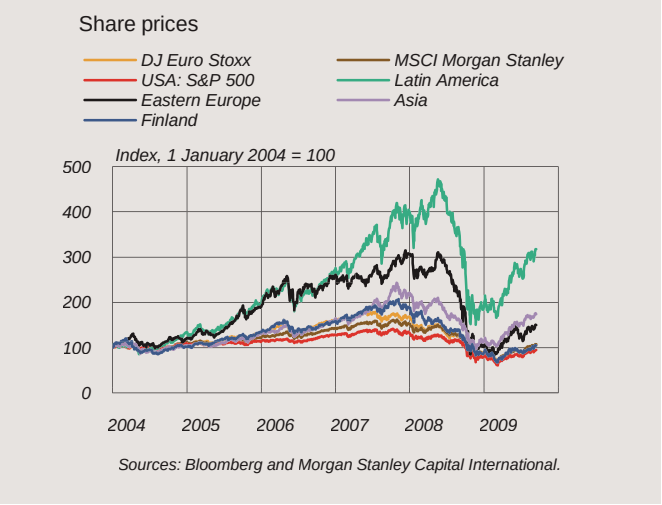
could become stronger in the future as the central bank seeks to move gradually away from a policy of guiding exchange rates, primarily to one of setting an inflation target.

The value of the Chinese yuan has been held steady against the dollar since July 2008, but its position relative to the euro and its real effective exchange rate (REER) have fluctuated strongly. Although the yuan has depreciated this year against the euro and its REER has also declined, on both measures it is still stronger than a year ago.

Stock markets

The steep decline on the stock markets came to an end in March 2009. Share prices began to rise with the first signs of improved earnings in the US banking sector (Chart 7). Public sector rescue measures led to a considerable reduction in financial markets' systemic risk, which has restored investors' willingness to accept risk. Poor yields from risk-free investments, stronger economic indicators in response to expansionary measures and better-than-expected corporate earnings have also helped boost share prices.

Chart 7.



Banking sector write-downs are still continuing in both the United States and Europe, but they are smaller than before. Earnings expectations have also improved, which has raised the value of shares across the whole sector.

Corporate earnings are still weaker than a year ago. They have nevertheless been better than analysts expected. This would appear to be largely a consequence of corporate savings measures. This interpretation is supported by the fact that earnings exceeded expectations despite weaker-than-expected sales in Europe in the second quarter of 2009.

Investors have been anticipating a cyclical upturn, a fact reflected in the rise in share prices for both industrial corporations and companies in the IT sector since March 2009. In the United States, the prices for IT and industrial shares in the S&P 500 index had by the beginning of September risen by more than 60% from the depths experienced in March. The shares of European industrial corporations in the S&P Europe 350 index have risen by over 50% in the same period, while financial sector shares have risen by more than 130%.

The restoration of risk propensity has been particularly evident on the stock markets of emerging economies, where the rise in share prices has been strongest. By the beginning of September, the stock markets of Brazil, China and Russia had all risen by more than 40% in euro terms since the start of the year. Over the same period, indices in the United States (S&P 500),

Europe (Stoxx 600) and Japan (Nikkei) had risen in euro terms by over 10%.

In Finland, too, share values have risen both since the depths of March and since the beginning of the year. By the beginning of September, the HEX index has risen slightly over 15% since the beginning of the year. Over the same period, of the sectoral indices, industrial goods and services and consumer goods and services both rose by over 50%, and finance by over 30%. Only information technology has suffered relative to the beginning of the year, which is the most significant difference relative to other stock exchanges.

Bank lending market

Banks substantially tightened their lending criteria towards the end of 2008 as the global financial crisis deepened. The crisis pushed up their own funding costs, caused bottlenecks in access to finance and created a general atmosphere of uncertainty over the direction of the economy.

Since the spring, the condition of the credit markets has fundamentally improved. The long-sustained period of tightening credit terms has begun to relax. As risk premia have narrowed, banks have found it easier to acquire funds. Nevertheless, the situation remains far from the normal position that prevailed a few years ago.

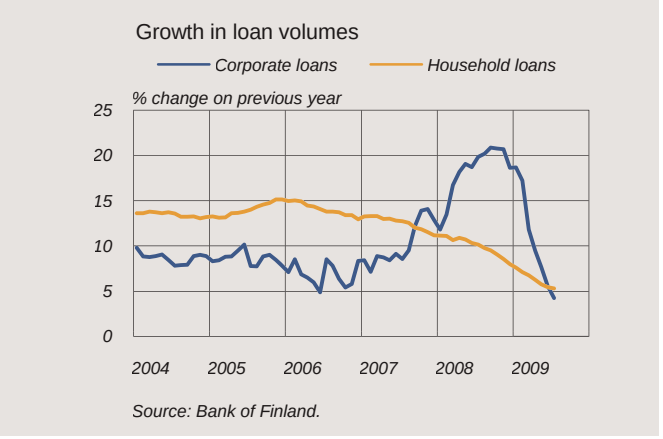
For non-financial corporations, the effects of banks' tighter lending policies have been eased by the opening of companies' own channels for market funding. The past half year has seen record issues of corporate bonds in Europe. This has been accompanied by a narrowing of corporate risk premia.

Small companies are, however, often unable to acquire funding directly from the financial markets. For them in particular, access to bank finance is vital, as small companies' operating capital is quickly eroded during a recession.

In Finland, the stock of corporate loans grew very rapidly in 2007–2008. As it became harder to get market funding, Finnish companies turned to the banks. As the effects of the international financial crisis reached Finland, annual growth in the corporate loan stock quickly slowed to the present level of under 5% (Chart 8). Since November 2008, the corporate loan stock has been declining.

Demand for corporate loans appears to have remained low both in Europe generally and in Finland. The biggest single factor subduing demand in the early part of the year has been a lack of investment projects. The sluggish demand for credit and the tightening of credit terms suggest the pace of recovery will be slow.

Chart 8.



Household indebtedness in Finland has increased at a fairly rapid pace over the past ten years. Relative to disposable income, the debt burden on households has risen to a level higher than in the late 1980s.

The rapid growth in the stock of housing loans began to ease as long ago as 2006, while the first half of 2009 saw considerably fewer new housing loan agreements in Finland than in previous years. This is also the case for consumer loans.

Low interest rates and their impact on the cost of credit are considerably easing the position of debtors (Chart 9). The main reference rates applied to loans have come down substantially since the end of 2008 and, although there has been some upward pressure on margins, the average rates on both new household and new corporate loans are significantly lower (Chart 10).

The decline in Euribor rates is reflected in a clear change in the reference rates of housing loans in Finland. As rates have come down, most new housing loans have become Euribor-linked and the banks' own prime rates have lost their position as the most popular reference rates.

Global economic growth is being dampened by the ongoing process of debt reduction. This can be seen on many different levels. In countries where the financial sector plunged rapidly into debt, the unwinding of this debt is reflected now as a contraction in lending. In areas where the household sector plunged rapidly into debt, the savings ratio has risen, demand for consumer credit has declined and the pace at which loans taken out earlier are being repaid has increased. The fall in interest rates has automatically accelerated this process, as loans with fixed monthly payments have seen the share taken by amortisation rise as interest rates have declined.

On the international credit markets, the reduction of the debt burden is reflected in a reduction in foreign lending by the previous drivers of economic growth.

Chart 9.

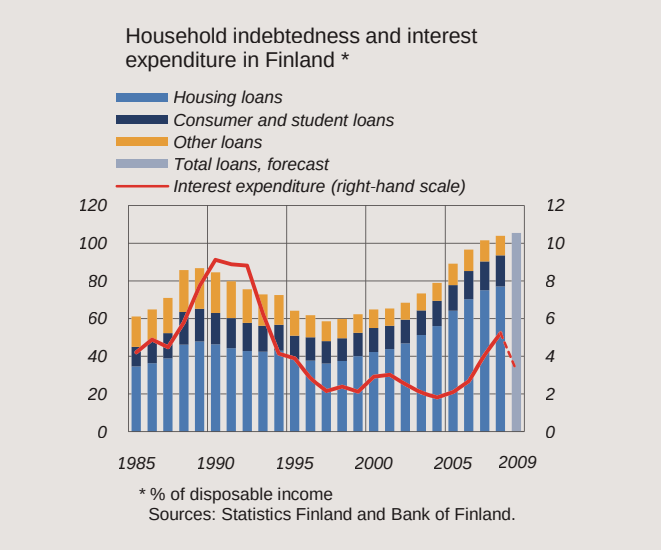
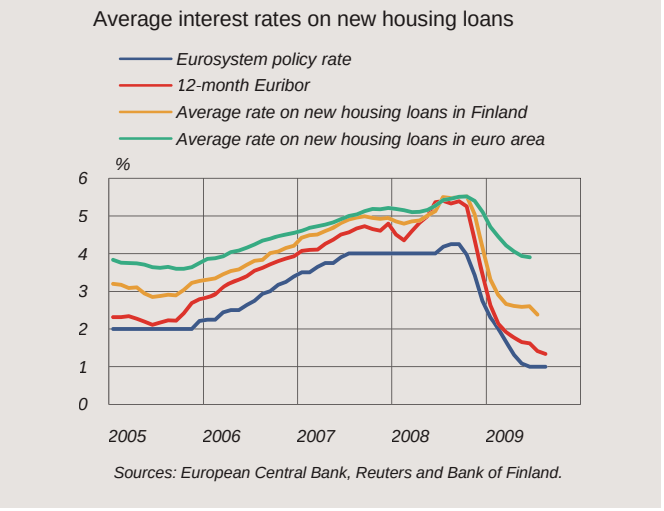


Chart 10.



All these factors weaken economic activity via the credit markets. Moreover, the positive trend of the past half year in China, which has injected confidence into the global economy, is partly debt-driven, as the amount of credit granted in the first half of the year exceeded the authorities' growth target for the whole year. The country's central bank has since pressurised the state-owned commercial banks to reduce their lending.

Housing market

The economic recession that began as a consequence of the financial crisis has been reflected in a general decline in the price of housing in Europe. This downward trend was still continuing in many places in the second quarter of 2009. There are, however, signs the decline is now bottoming out, particularly in the United States (Chart 11).

Although the Case-Shiller index of US house prices was approximately 15% down in the second quarter compared with a year earlier, there was an upturn in June, when it showed a rise of 1.4% on the previous month. US sales figures for existing homes have also been surprisingly positive.

In Finland, the prices of existing homes in the second quarter of 2009 were 2.8% lower than a year earlier. Compared with the previous quarter, prices were up 3.9%. Geographically, the upturn was broadly based. In contrast, prices of new homes continued to fall relative to both the previous quarter and a year earlier.

The slight recovery in the housing market in recent months is a response to demand. Investors have been particularly interested in small apartments as a consequence of the rapid rise in rents and especially the low level of interest rates. Across the country as a whole, rents were 4.6% higher in the second quarter than a year earlier. In the Helsinki metropolitan area, rents rose 6.3% over the same period. According to Statistics Finland's consumer confidence indicator, there was also a discernible increase in households' house-purchase intentions in the early part of the year (Chart 12).

Chart 11.

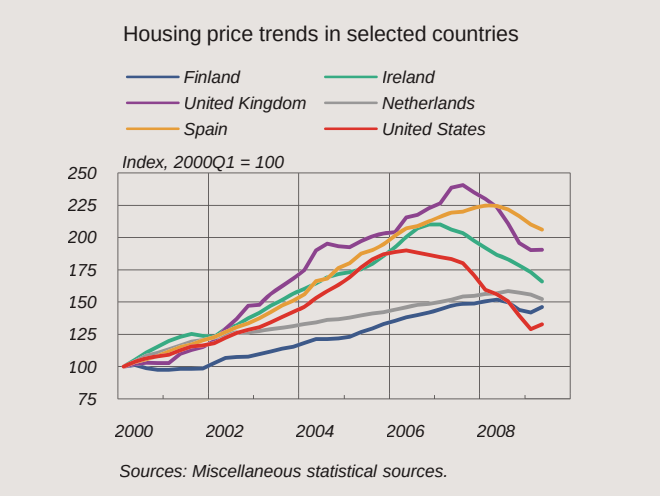


Chart 12.

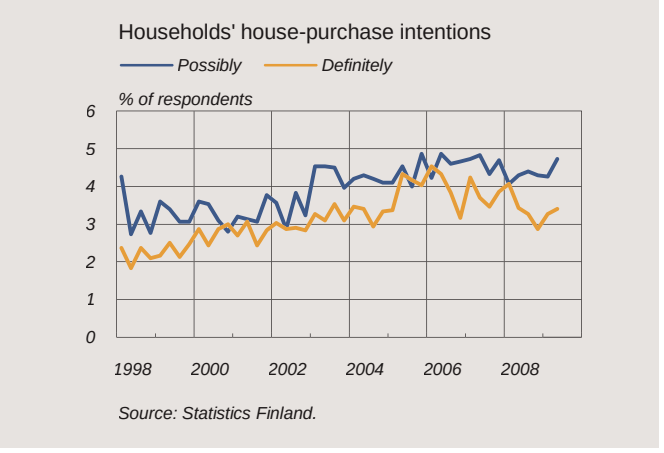
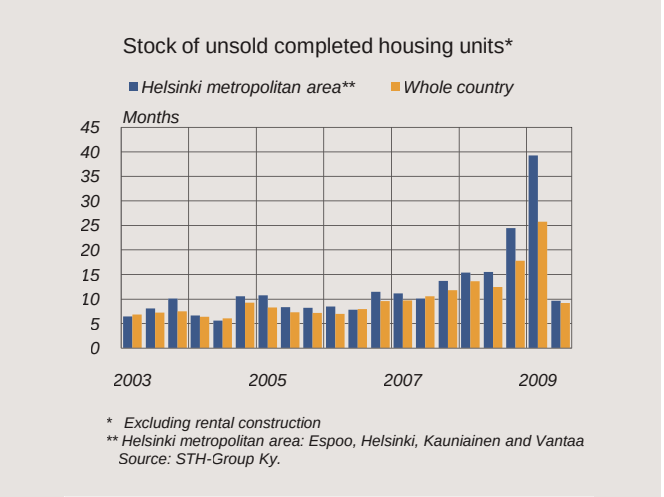


Chart 13.



This interest can be attributed primarily to the low level of interest rates and the recovery in share prices and consumer confidence from their previous depths. Low interest rates are providing an incentive to borrow despite banks widening their margins.

The early-year activity on the housing market was also reflected in the stock of unsold new housing units. As recently as April, across the country as a whole this was equal to approximately 26 months of sales, but by mid-June unsold stock had come down to around 9 months (Chart 13). According to preliminary data from Statistics Finland, the number of housing units sold in the first quarter of 2009 was over 26% down on the same period a year earlier, while new construction in the second quarter was 23% down on the second quarter a year earlier. Builders clearly want to sell their existing housing starts and see some stabilisation in the economy before embarking on new construction.

The short-term outlook for the housing market will be influenced above all by demand. With the deteriorating employment situation, first-time house buyers will remain cautious.

The over-supply of housing appears to have been cleared in the first half of the year. There has been a substantial decline in unsubsidised housing starts. The reduction in supply and low interest rates will ensure that nominal house prices do not decline despite the drop in demand.

Box 1.

Recent monetary policy in the euro area

The Governing Council of the European Central Bank (ECB) aims to keep the inflation rate in the euro area, as measured by the harmonised index of consumer prices (HICP), below, but close to, 2% over the medium term. The Governing Council monitors and analyses the economic outlook for the euro area and sets its key interest rates at a level that best supports price stability over the medium term.

The Governing Council lowered its policy rate in January, March, April and May to match its estimate of slower growth in the euro area economy and hence reduced inflationary pressures. Slower growth in the money supply and lending also indicated reduced inflationary pressures. Since May, the interest rate on the Eurosystem's main refinancing operations has stood at 1%. The Governing Council has lowered the policy rate seven times by a total of 3.25 percentage points since the sudden deepening of the financial market crisis in September 2008 (Chart 4).

In connection with the May decision, the Governing Council also narrowed the standing facilities corridor formed by the rates on the marginal lending facility and the deposit facility, bringing both the upper and lower limits 0.25 percentage points closer to the rate on the main refinancing operations. It also indicated the Eurosystem would begin to conduct liquidity-providing longer-term refinancing operations with a maturity of 12 months and purchase euro-denominated covered bonds issued in the euro area. Already since October 2008 the ECB has conducted the main refinancing operations of the Eurosystem as fixed-rate tenders at a rate set by the Governing Council and has approved banks' bids in full.

Ever since the deepening of the financial market crisis, the Eurosystem has been implementing measures exceptional in terms of type, scope and timing. The purpose of these non-standard measures has been to foster a reduction in money-market interest rates, bolster lending by the banks, reflate the private sector debt securities markets and facilitate easier access to finance for banks and businesses. As a result of these measures, key money-market rates have come down and confidence in the financial markets and the banking system has increased. In particular, refinancing operations with a maturity of 12 months and the tender procedure applied to them, under which banks' bids are approved in full, have brought the overnight interbank rate down close to the overnight deposit rate on the ECB's standing facilities. The Governing Council has pointed out that these measures and the surplus liquidity they have generated will be dismantled once the macroeconomic situation improves, so that price stability in the euro area is not endangered as a consequence of the measures.

ECB and Eurosystem staff macroeconomic projections of the outlook for the euro area economy form an important part of the information drawn upon by the Governing Council in determining monetary policy for the euro area. The ECB publishes such projections four times a year in its Monthly Bulletin.

When the problems on the financial markets came to a head and the functioning of the markets became seriously compromised in early autumn 2008, this triggered a strong deterioration in the economy worldwide. As a succession of new and increasingly gloomy data on the euro area economy also began to accumulate, the ECB's published assessments of the economic outlook for the area were revised in the direction of a steeper contraction in the economy and slower inflation. During the summer there began to be signs that the worldwide recession was bottoming out and the pace of decline in euro area output was clearly decelerating. The ECB's projected economic outlook published in September

2009 is slightly more favourable than the projection published in June. The new projection foresees average annual growth in volume GDP of between –4.4% and –3.8% in 2009. Although GDP is expected to already begin to grow gradually again before the end of the current year, average annual growth in GDP for 2010 is still projected at just between –0.5% and 0.9%.

According to ECB staff projections, euro area inflation will accelerate during the course of the autumn, but will still average only between 0.2% and 0.6% over 2009 as a whole. The temporary period of negative annual inflation experienced in the summer and the forecast acceleration of inflation during the autumn are both due to the dramatic fluctuation in energy prices during the reference period one year earlier. In 2010, weak demand and the considerable amount of unutilised production resources will subdue price rises, and inflation is estimated to be between 0.8% and 1.6%.

The decision to leave the key policy rates unchanged in September reflects the Governing Council's assessment that price developments will remain subdued over the policy-relevant horizon and price stability will be maintained.

Notwithstanding the above, the Governing Council still observes considerable uncertainties regarding the future course of the economy. Output could begin to grow more quickly than anticipated if the measures taken by governments and central banks bolster growth more strongly than has been estimated and confidence in the future recovers more quickly than expected. On the other hand, rising commodity prices, increased protectionism, a slow unravelling of the problems on the financial markets and an uncontrolled correction of the imbalances in the global economy could, if they were to occur, undermine output and employment in the euro area more than forecast. In addition to the risks to growth and to commodity prices, the Governing Council also sees potential upside risks to the inflation outlook in the possibility that governments could be compelled to raise indirect taxes and administrative charges in order to cover their general government funding deficits.

Box 2.

Samu Kurri

Are global trade imbalances subsiding?

The period prior to the present global economic crisis was characterised by strong accumulation of current account surpluses and deficits in many major economies (Table 3). At global level, the most significant deficit country has been the United States, while China and the oil-producing countries have been the main economies running a surplus. Other significant countries running a surplus include Germany and Japan, while the United Kingdom has shown a deficit. In contrast, the current account for the euro area as a whole has been close to balance.

The main factor behind the US current account deficits is a low savings ratio. On one hand, the total savings rate has been increased by a savings surplus in the corporate sector, while on the other hand it has been decreased by public sector budget deficits and particularly by a low savings ratio in the household sector.

The low savings ratio in the US household sector has been due mainly to two factors: a rapid growth in household wealth and the use of this wealth as collateral for consumer borrowing. Among the countries with a current account surplus, China adopted an export-driven growth strategy that included slowing the revaluation of the yuan and financing the US deficit in order to secure its own export demand. The rapid growth of surpluses in oil-exporting countries was influenced by the limited ability in the short term of these countries to consume and invest export revenues suddenly inflated by the rise in the price of oil.

The fading of global economic growth sparked by the financial market crisis has reduced the problems of imbalance in the world economy. In particular, the savings ratio of the US household sector has increased significantly, while households' stock exchange and real estate wealth has declined.

The deepest plunge in the world economy, which occurred around the turn of the year, was characterised by a contraction in world trade that was even stronger than the drop in production. In addition to world trade volumes, prices have also fallen. As a consequence of price changes in different categories of goods, the terms of trade have become more favourable for oil-importing countries. In addition, growth stimulus packages have naturally boosted domestic demand more than import demand. For these reasons, current account surpluses and deficits had been reduced materially by the beginning of 2009.

At present, the imbalances in the world economy seem to have eased, at least temporarily. This is partly due to the strong contraction in US imports, which has had an impact on eg German (euro area), Japanese and Chinese exports. Furthermore, the decline in oil prices from the peak of summer 2008 has eroded to almost the same degree the nominal export revenues of oil-producing countries.

According to the Bank of Finland forecast for the global economy (see Box 5) growth in the developed economic regions

Table 3.

Current accounts in selected economies, % of GDP

	2006	*2007*	*2008*	*2009Q1**
United States	*-6.0*	*-5.2*	*-4.9*	*-2.9*
Euro area	*-0.1*	*0.2*	*-1.0*	*-1.2*
Japan	*3.9*	*4.9*	*3.2*	*1.4*
China	*9.5*	*11.0*	*10.0*	*6.3***
Middle East	*21.0*	*18.2*	*18.8*	

** Figures seasonally adjusted*
*** January–June 2009*
Sources: OECD, IMF and SAFE.

is expected to remain slow throughout the forecast period, whereas growth in the emerging economies will be stronger due to their greater growth potential. Due to the sluggish growth caused particularly by the problems in the US household sector, the imbalances will probably be less severe than in the pre-crisis period, although they will not disappear altogether.

A negative risk scenario would be a situation where recovery in the US economy succeeds in restoring the country's household sector to the same level of growth as before the crisis at the same time as rapid growth continues in the emerging economies of Asia. If this were to occur, the correction of imbalances could prove temporary. In the long term, however, there are no grounds to assume that the United States could continue to accumulate deficits indefinitely, and therefore its savings ratio must increase further or relative prices change.

One positive risk would be that domestic demand in emerging Asian economies would become more significant. In this case, the increase in net imports by these countries would help to balance the current accounts of countries with deficits further than envisaged in the Bank of Finland forecast's baseline scenario.

Box 3.

Mikko Spolander and Hannu Viertola

Finnish government borrowing

Finland's public finances have recently taken a sharp turn for the worse. Over the next few years, central government debt is set to grow at a pace unmatched since the recession of the early 1990s. The combined effect of stimulus measures, collapsing revenue and surging expenditure will push central government finances well into deficit already in 2009, with the deficit expected to grow further in the years ahead. The imbalance between revenue and expenditure must be financed with debt, and with debt itself growing faster than GDP, the debt ratio will also rise. At the end of 2011, the central government debt-to-GDP ratio is projected to stand at 49%.

Finland's central government raises external finance primarily by issuing fixed-rate bonds targeted at institutional investors. At present, the debt taken out is euro-denominated. If necessary, it also possible to borrow in other currencies; such loans are, however, converted into euro in order to eliminate exchange rate risk. Government borrowing is focused on longer-term financing, which, among other things, reduces refinancing risks and distributes the refinancing burden more evenly over future years.

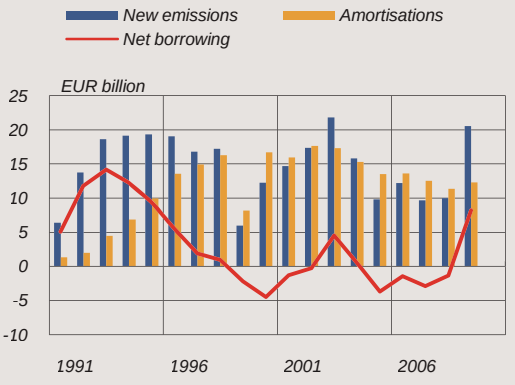
The major part of Finland's central government debt – roughly 85% in July 2009 – is in benchmark bonds. New issues of government benchmark bonds usually take place on an annual basis, with issues of 5-year bonds alternating with issues of 11-year bonds. Government benchmark bonds are serial bonds for which selected primary dealers (ie specific foreign and national financial institutions) are committed to supporting active secondary market trading. In the present decade, the typical volume of individual issues of government benchmark bonds has been EUR 4–7 billion. In addition to serial bonds, the Finnish government has also obtained other long-term debt financing, for example by issuing yield bonds and other bonds aimed at the public. In July 2009, these accounted for around 8% of total central government debt.

Central government raises short-term funding mainly for liquidity management purposes. Treasury bills are issued with maturities ranging from one day to one year, thus providing a flexible means of meeting short-term financing needs. At present, treasury bills account for approximately 7% of central government debt.

Although Finland's central government debt has been declining in recent years, the debt portfolio has been constantly restructured as a consequence of portfolio management and new issues and amortisations. New fund raising may also be required in future to refinance existing debt. With central government falling deeper into debt in 2009, there will be a marked increase in the number of new bond issues compared with previous years (Chart 14). Thus, in gross terms, fund raising depends on developments in net financing needs.

Chart 14.

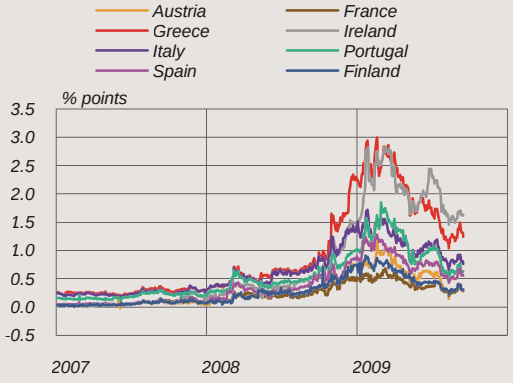
New emissions and amortisations



Source: State Treasury.

Chart 15.

Interest rate differentials between selected European countries and Germany



Source: Reuters.

So far, there has been sufficient demand for Finnish government bonds, as investors have confidence in the country's debt servicing capacity. Funding is therefore available to the Finnish government at almost the same rate as Germany and France, and at a much lower rate than to heavily indebted Greece or economically distressed Ireland (Chart 15).

A number of factors have sustained the high credit rating enjoyed by Finland. These include a long-term approach to fiscal policy and stable economic structures, a low debt-to-GDP ratio and the low level of government guarantee liabilities granted to the banking sector. The sound liquidity of benchmark bonds and a broad investor base have also contributed to demand for Finnish government bonds. In addition, growth in demand partly reflects a shift in investments away from insecure financial instruments, in response to the financial market crisis.

Finnish government bonds have traditionally been regarded as safe investment vehicles. However, government debt management takes place in the context of global, and at times rapidly fluctuating, money and capital markets, in which the debt servicing capacity of individual countries is reassessed by investors on a daily basis.

Supply

According to the Bank of Finland forecast, the second quarter of 2009 will prove to be the deepest phase of the recession. Thereafter, there will be no further contraction in volume GDP, but growth will remain sluggish until the end of 2010, not picking up more clearly until the end of the forecast period. Annual GDP volume will contract 7.2% in 2009, remain unchanged in 2010 and grow 1.6% in 2011. Finnish exports will begin to grow later than the export markets.

The unemployment situation will continue to deteriorate this year and next. The situation is expected to ease somewhat in 2011. The unemployment rate will break the 10% barrier during the forecast period. Labour productivity will decline rapidly for cyclical reasons, particularly this year. Thereafter, productivity growth will pick up again, becoming clearly positive in 2010 and 2011.

Output

GDP began to contract in the third quarter of 2008. The decline was particularly steep in the last quarter of 2008 and the first quarter of 2009. In April–June 2009, volume GDP was 10% below the second quarter of 2008. The decline in GDP has been even faster than in the early 1990s.

The economic downturn has been broadly based. In the second quarter of 2009, output in all main economic sectors was lower than a year earlier (Chart 16). The most substantial declines were experienced in industry, construction, trade, transport and forestry. There was also a contraction in business services.

Confidence indicators suggest the downward trend in the economy came to an end in early autumn. Industrial performance is, however, expected to remain poor, despite some improvement since the spring (Chart 17). There has been a decline in new orders in all the main industrial sectors. Industrial output will therefore remain weak at least through the second half of the current year. The largest decline in new

Chart 16.

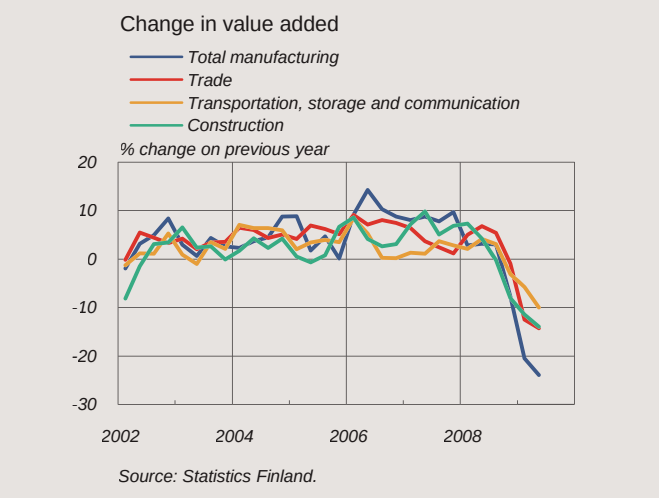


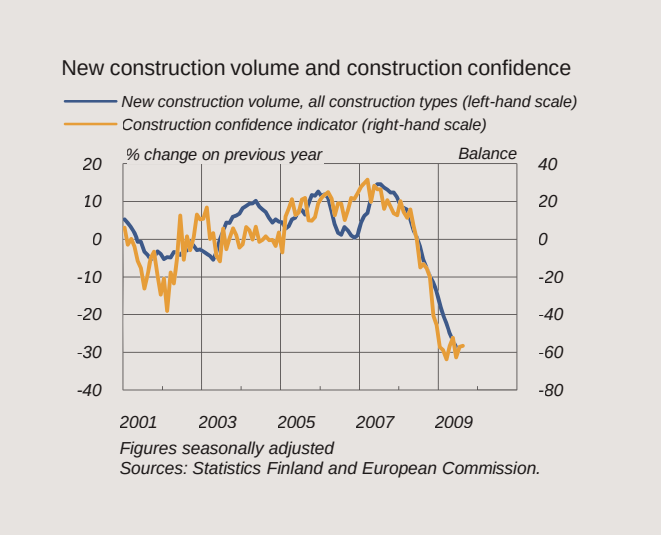
Chart 17.

orders has been in the technology industry. Despite the thin order books, a survey by the Confederation of Finnish Industries indicates a slight recovery in expectations for industrial output.

Declining demand and a rapid running down of inventories have led to a collapse in capacity utilisation rates in industry. In production of raw materials and capital goods a third of capacity is already lying idle. In electrical engineering and electronics, which are very important for the Finnish economy, there is also a considerable amount of unused capacity. The situation is a little better for producers of consumer goods, although services turnover has declined, reflecting both weak consumer demand and the considerable decline in industrial exports.

The cyclical situation in the construction industry began to deteriorate as long ago as mid-2007. New construction has declined strongly again in 2009 (Chart 18). Relative to 2008, construction of residential, industrial and commercial premises was down around one third in the second quarter. Only construction of public service facilities shows an increase.

Chart 18.



The short-term outlook for construction remains weak. The period January–June saw the granting of building permits for only 11,000 new homes. The outlook for construction of commercial premises also remains exceptionally subdued. There will therefore be little new construction in the second half of the year. There is also no immediate sign of a recovery, particularly in office construction. The impact of expansionary measures will be important, particularly in 2010.

According to the Bank of Finland forecast, the second quarter of 2009 will prove to be the deepest phase of the recession. Thereafter, there will be no further contraction in volume GDP, but growth will remain sluggish until the end of 2010, after which growth will begin to pick up. Annual GDP volume will contract 7.2% in 2009, remain unchanged in 2010 and grow 1.6% in 2011. Finnish exports will begin to grow later than the export markets. World trade growth will already begin to pick up slightly towards the end of 2009, but a substantial recovery in exports will not get underway until the end of 2010. The pace of export growth will also lag behind growth in the export markets, due to Finland's export sector being structurally weighted towards capital goods, for which the pace of recovery in international demand will be slow. This will also have an effect on business

sectors linked to exports, such as transport and business services. High unemployment will meanwhile undermine private consumption, and this will be reflected in demand for both goods and services during the forecast period. Consumption growth and private investment will not accelerate significantly until the beginning of 2011.

Finland's GDP will be lower in 2009 than it was in 2006. This means that in a short period of time the Finnish economy has lost the fruits of over 3 years of growth. According to the Bank of Finland forecast, pre-crisis levels of GDP will not yet be achieved by the end of 2011.

Employment and labour force

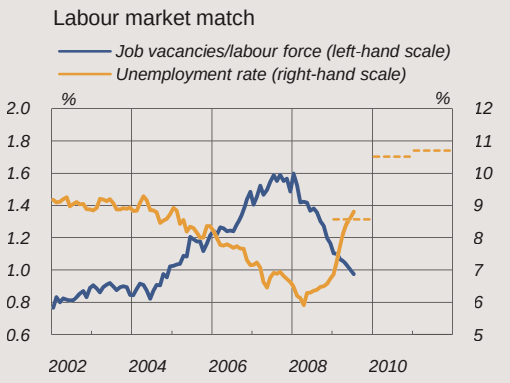
The effects of the recession are widely visible on the labour market. The first effect of the downturn was to reduce the number of vacant jobs. This began as early as the beginning of 2008, and by July 2009 the number had fallen almost by half. The reduction in jobs meant that less unemployed people were able to return to work. Then, at the beginning of 2009 the number of new periods of unemployment also began to grow quickly, as did the number of unemployed. In just a short period, the labour market went from labour shortages to over-supply (Chart 19).

The reduced demand for labour has also been reflected in a rapid increase in the number of people being laid off. The precise figures vary, depending on the source of the statistics. Statistics Finland's labour force survey puts the number laid off in the second quarter of 2009 at approximately 42,000, or 38,000 more than a year earlier. According to the Ministry of Employment and the Economy, the number laid off in the second quarter of 2009 who were not included in the figures for unemployed jobseekers totalled 31,000, or a good 25,000 more than a year earlier.

The decline in the number of employed has been broadly based but has predominantly affected the private sector and goods manufacturing. In services, and particularly welfare and health services, the employment situation has at least so far remained positive (for more details on the sectoral distribution of employment see Box 4).

Labour supply is declining as the baby-boom generation reaches retirement age. This does not, however, appear to have seriously checked the pace of redundancies. On the other

Chart 19.



Figures seasonally adjusted at the Bank of Finland
Sources: Statistics Finland, Ministry of Employment and the Economy and Bank of Finland.

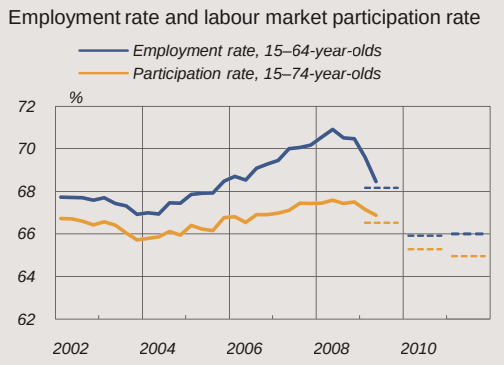
hand, the statistics do not, so far at least, indicate that the recession is causing any large-scale withdrawal from the labour force by older workers (see Box 4).

The employment outlook for the next few months is poor. According to the business tendency survey published by the Confederation of Finnish Industries in August 2009, both industrial and construction companies estimate they will continue to shed labour at a brisk pace. In services, too, the expectation is for a reduction in personnel, but at a more moderate pace than in other sectors.

According to the Bank of Finland forecast, the labour market will continue in recession in 2010. In 2011, the situation will begin to ease. The number of employed is, however, expected to decline throughout the forecast period, with the unemployment rate simultaneously rising to almost 11%.

The employment rate will decline during the forecast period to 66% (Chart 20). This is the lowest level since the aftermath of the 1990s recession. The decline in employment will not be fully mirrored in the unemployment figures, as a growing number of those close to retirement age will be leaving the labour market. In addition, as in the recession years of the 1990s, the difficult employment situation for the young will push younger people of working age out of the labour market. For these reasons, the forecast period will see a substantial decline in the labour market participation rate.

Chart 20.



Sources: Statistics Finland and Bank of Finland.

Chart 21.

Sources: Statistics Finland and Bank of Finland.

Productivity and capital

As is typical for this stage of the economic cycle, productivity has declined, but the decline has been unusually strong. In a situation in which the level of employment was tailored to a strong growth outlook and many sectors were experiencing labour shortages, the sudden drop in output has meant a dramatic decline in labour productivity. This began as early as summer 2008 (Chart 21). It then continued at a rapid pace in late 2008

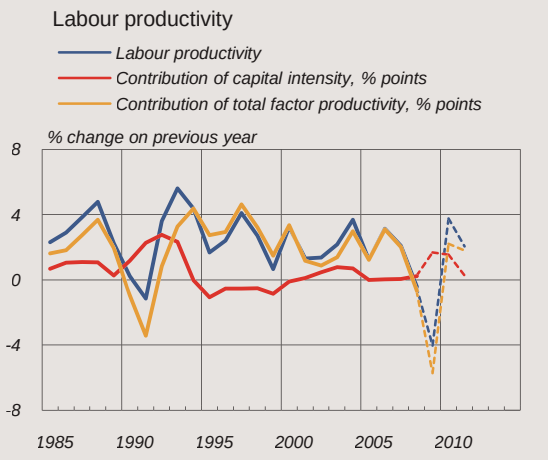
and the first half of 2009, despite the simultaneous rapid downturn in employment. Labour productivity per person employed declined in the second half of 2008 by an average of 2 percentage points, and in the first half of 2009 by 3½ percentage points. Productivity per hour worked has declined slightly less, as hours worked have declined more than the number of employed.

According to the Bank of Finland forecast, labour productivity will decline in 2009 by an average of 4%, but productivity growth will pick up clearly in 2010 and return to its average growth rate of around 2% in 2011.

The recent trend in labour productivity has been exceptional for Finland and strongly bound up with the rapid change in the economic cycle. The rapid decline in productivity does not, therefore, indicate the adoption in the economy of production technology or operating models incorporating weaker productivity.

Reduced output is reflected only gradually in employment. A growth accounting in which labour productivity growth is broken down into changes in capital intensity and total factor productivity indicates the decline in labour productivity has been caused above all by a change in total factor productivity (Chart 22). Thus, according to the forecast, the trend in the present recession is similar to the recession years of the 1990s, although during the present forecast period capital intensity will have only a marginally positive impact on labour productivity, whereas in 1992–1994 its contribution to productivity growth was considerable.

Chart 22.



Sources: Statistics Finland and calculations by the Bank of Finland.

Box 4.

Timo Hirvonen and Helvi Kinnunen

Bad news on the labour market

The recession has had a rapid and growing impact on the labour market in recent months. A great number of jobs have been lost, and part of the labour force has been laid off or is working a reduced working week. The latest data from July reveals that the number of employed has already fallen by 100,000, or 3.8%, from a year earlier. This, coupled with the falling number of hours worked per employee, has led to a strong contraction in labour input. According to Statistics Finland's labour force survey, the number of hours worked in January–July was down approximately 6% from a year earlier. Viewed by economic sector, there has been particularly bad news in industry and construction (Table 4). In January–July 2009 there were on average 8% less jobs in industry than a year earlier. The largest drop was seen in the technology industry, which has also experienced the fastest contraction in exports. The technology industry has accounted for about half of the reduction of jobs in the industry sector as a whole. Owing to the ongoing structural change in the forest industry, employment within the industry began to fall earlier than in other sectors. The downward trend has continued to gain some momentum in the current year, and restructuring in the industry gives rise to fears that even more jobs could be lost, regardless of the cyclical situation. Taken together, the wood, paper and graphic industries have lost over a third of their jobs in two years.

Employment in construction began to weaken as early as mid-2008, and in summer 2009 the situation has deteriorated further. It is evident there will be more bad news in the next few months, after already active sites have been completed, since there have recently been hardly any new construction starts. Employment expectations in the industry are weak and order books are at a very low level.

The difficulties in construction are also reflected in services, with exceptionally large cuts in construction-related planning jobs.[1] The downward trend in construction and industrial output is also partly responsible for a decrease in jobs in wholesaling. Employment in the retail sector has, in contrast, remained largely unchanged. In the production of public services, such as health and social services, employment has actually increased in 2009.

[1] *These jobs are included in the subsector 'Professional, scientific and technical activities'.*

Table 4.

Number of employed and hours worked

	*Employed**		*Hours worked***	
	2008	*% change 1–7/2009****	*2008*	*% change 1–7/2009****
All sectors	***2 534***	***-2.3***	***4 321***	***-6.1***
Total industry	*435*	*-8.3*	*704*	*-17.4*
Forest industry	*87*	*-19.1*	*136*	*-25.3*
Technology industry	*224*	*-5.9*	*366*	*-17.0*
Construction	*191*	*-5.1*	*395*	*-10.2*
Services	*1 764*	*-0.8*	*2 903*	*-3.4*
Trade	*331*	*-4.2*	*564*	*-7.6*
Health and social services	*371*	*3.1*	*576*	*2.0*
Other sectors	*144*	*2.9*	*319*	*1.7*

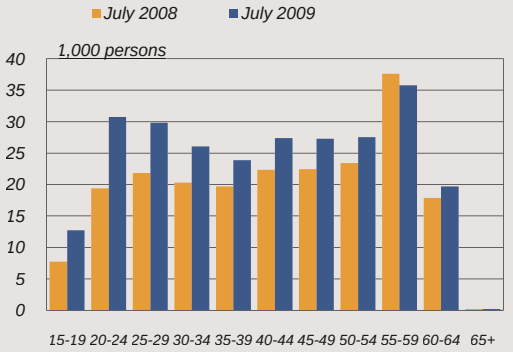
** 1,000 persons*
*** 1,000,000 hours*
****Change from 1–7/2008*
Source: Statistics Finland.

One piece of positive news on the employment front is that the labour force has clearly contracted less than expected. This is due to the fact that persons close to retirement age have not left the labour market to the same extent as in previous corresponding cyclical junctures. Unemployment among the oldest age groups has not increased, which means that in practice persons aged over 57 have not entered the unemployment pipeline or the unemployment pension pipeline to any great degree.[2] In the Ministry of Employment and the Economy's employment service statistics, persons in the unemployment pension pipeline are registered as unemployed jobseekers, whereas in Statistics Finland's labour force survey – the basis of labour force development estimations – they are usually not entered as unemployed at all.

The Ministry of Employment and the Economy's data on the age-group breakdown of unemployed jobseekers shows that, contrary to other age groups, unemployment has not increased in age groups 55–59 or 60–64 (Chart 23). Instead, the rise in unemployment has been concentrated on the lower end of the age scale.

Chart 23.

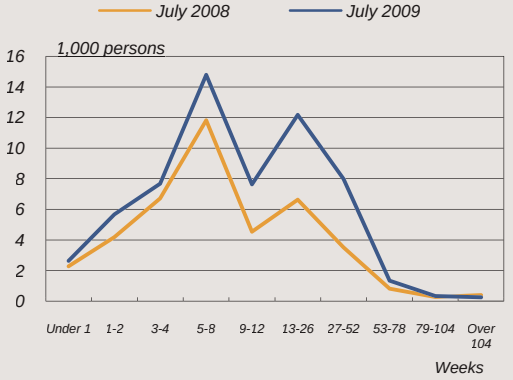
Unemployed jobseekers by age group



Source: Ministry of Employment and the Economy.

Chart 24.

Duration of unemployment: 20–29-year-olds



Source: Ministry of Employment and the Economy.

The sharp increase in unemployment among the young is the gloomiest piece of news from the recession. The increase has been particularly strong for those aged 20–29. According to the employment service statistics for July, almost a quarter of all unemployed jobseekers belonged to this age group, meaning that about 9% of the age group are unemployed jobseekers.

Considering the longer-term perspective for the labour market, another problem is that the duration of periods of unemployment for the young has lengthened. Compared with a year earlier, there has been a substantial change in the duration of unemployment periods (Chart 24). The longer young people are unemployed, the greater is their risk of exclusion and of a prolonged deterioration in the employment status of those entering the labour market now.

[2] *The unemployment pipeline applies to those born in the 1950s, who are entitled to receive an extra day's allowance on their unemployment allowance until such time as they qualify for the general retirement pension. Those born in the 1940s can receive national unemployment pension at the age of 60–61 before transferring later to the retirement pension.*

Demand

The Finnish economy plunged into recession as world trade and exports collapsed. Exports will recover cautiously on the back of world trade, starting to pull the Finnish economy gradually out of the cyclical trough. Recovery will, however, be slow, and the demand gap cannot be bridged during the forecast period. Levels of demand and output in 2011 will still remain notably lower than prior to the recession in 2008.

Finland's exports will recover more slowly than the export markets, as Finnish goods exports are focused on products for which global demand growth will be sluggish in the next few years. In addition, the expansionary measures undertaken in various countries support domestic output rather than imports. Uncertainty surrounding the future development of the economy and earnings, accompanied by abundant spare capacity, will subdue investment by non-financial corporations and households. Companies and households will also increase their savings in order to reduce accumulation of debt. Lower financing costs due to the easing of the financial crisis and a reduction in interest rates will, however, lend some support to corporate and household investment. Private consumption will contract strongly this year. It will regain momentum during 2010, but even then growth will be muted by sluggish earnings development and weaker employment. The household savings ratio will rise sharply this year and remain high throughout the forecast period.

The sharp downturn in the economy and expansionary fiscal policies aimed at mitigating its effects will significantly impair public finances during the forecast period. Compared with 2008, the general government financial balance will weaken by almost 10 percentage points and debt will expand by nearly 23 percentage points relative to GDP. The collapse in goods exports will considerably diminish the current account surplus. Even so, the current account will remain in surplus throughout the forecast period.

The economic downturn in 2008was sharp and broadly based. The collapse in foreign trade and industrial output reduced the positive contribution to growth from both net exports and domestic private-demand components. By contrast, the positive contribution made by public demand was slightly up on the previous year (Chart 25).

This year, the demand gap is deep and, even after resumption of growth, demand will recover very slowly in the forecast period.

Lower investment will be a major drag on economic growth both this year and next. The export crash has increased spare capacity in manufacturing, thereby reducing the sector's investment needs. Meanwhile, uncertainty about the future trend of the economy and earnings will depress households' residential investment.

The growth contribution of net exports will turn clearly negative this year, on account of the steep fall in the first quarter. The export outlook as a whole will be bleak throughout the forecast period. The slump in domestic demand will, however, curb imports next year to the extent that net exports will start to support economic growth and the downward path of the economy will bottom out.

The growth contribution of private consumption turned strongly negative this year, as heightened uncertainty caused households to increase their savings. Even if the decline in consumption comes to a halt in 2010, private consumption cannot be counted on as a driver of economic growth during the forecast period.

In 2011, all demand components will contribute to growth, which will, however, remain subdued overall. Public sector demand will be the only component to boost growth moderately throughout the forecast period.

The sluggishness of growth means that, except for public consumption, all demand components will remain lower in 2011 than prior to the recession (Chart 26). Despite picking up, export demand will persist at exceptionally weak levels, which underlines the scale of the export slump in 2009. Investment and private consumption, too, will be unable to reach their pre-recession levels before the end of the forecast period. In 2011, GDP will be almost 6% lower than the average for 2008.

Consumption

The deep economic recession is drastically cutting back household spending, and, regardless of public measures to support private consumption, this, too, will contract significantly during the forecast period.

The coming to a head of the financial market turmoil in autumn 2008 was a shock to consumers. Increased uncertainty reversed the upward trend in private consumption in the second half of the year. However, the strong performance in the first half meant consumption increased by 1.5% on average in 2008.

Uncertainty about the future direction of the economy and employment continued to deepen after the turn of the year. In spite of ongoing brisk earnings growth, tax cuts, lower inflation and falling interest rates, the

Chart 25.

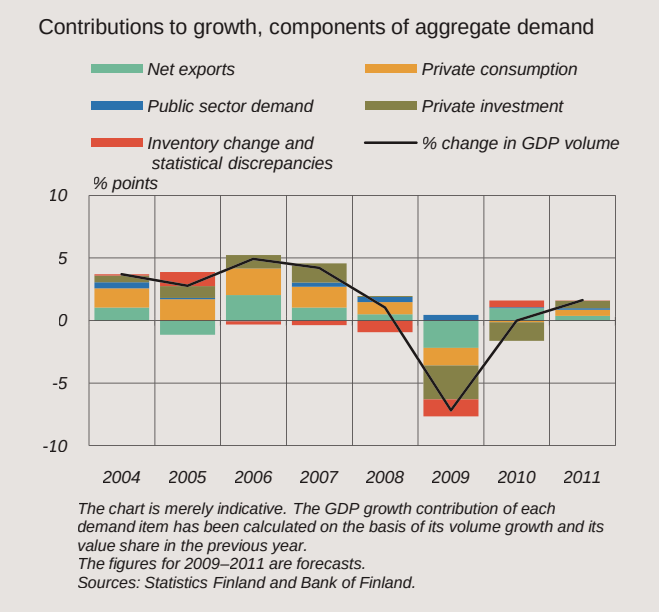
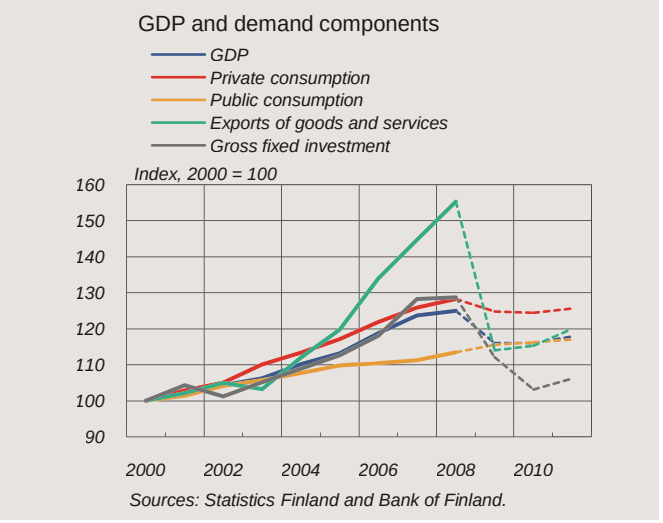


Chart 26.



bleak outlook caused households to increase their savings, and consumption continued to decline in the first half of 2009. Spending declined in all consumer goods categories, but households' dramatic pruning of purchases focused mainly on consumer durables, such as cars, domestic appliances and entertainment electronics.

Households will fall into two distinct groups this year in terms of their ability to consume. Those experiencing no unemployment will still enjoy appreciable growth in their disposable real incomes, and their ability to consume will remain good. On the other hand, rising unemployment will increase the number of those households whose spending will be severely hit. Even so, the threat of unemployment has not shaken household confidence in the future. The eruption of the financial market crisis and the downward spiral in the real economy tested household confidence at the end of last year, but upon recovery from their first shock households have kept calm with respect to their future prospects. According to Statistics Finland's consumer survey, consumers' confidence concerning their own finances and especially the national economy as a whole showed a pronounced improvement in spring 2009 (Chart 27).

Improved household confidence suggests an easing of restraints on spending. Moreover, cuts in value-added tax (VAT) on food will increase households' spending potential in the latter part of the year. Consumption is, however, projected to recover very slowly in the forecast period. Next year, the impact of tax decisions on households' disposable income will overall be fairly neutral. Household wage and salary earnings will increase only slowly, against a background of growing unemployment and a significant slackening in the growth in earnings per head. Earnings losses will be compensated for by an exceptionally rapid rise in unemployment and other social benefits. Pension income will also expand considerably.

Chart 27.

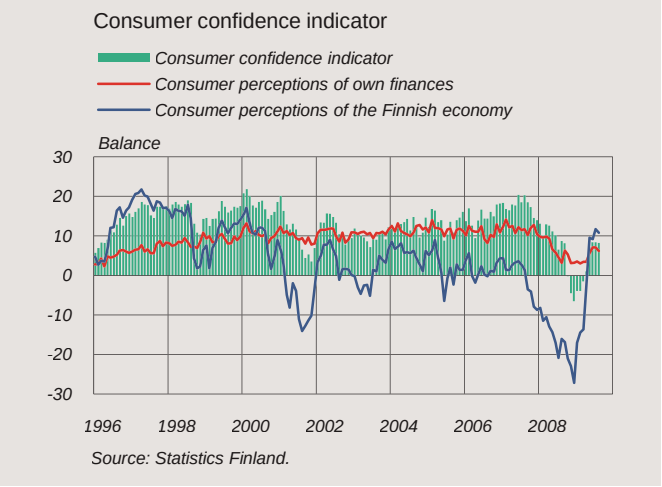
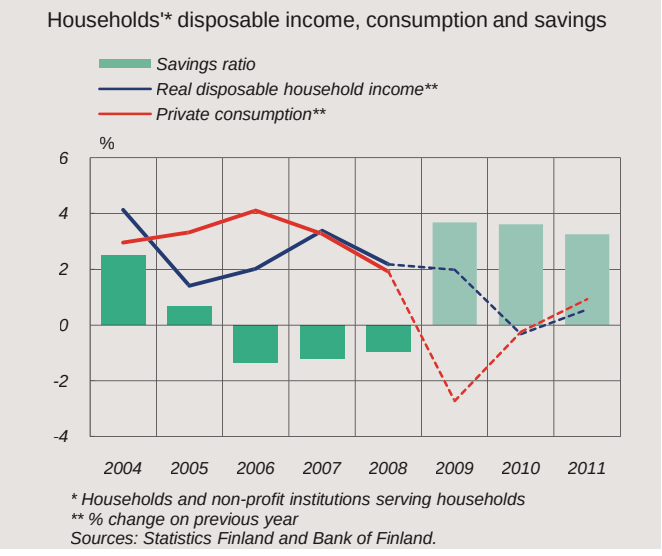


Chart 28.



Overall, households' real disposable income will decline. Consumption growth is not projected to start accelerating gradually until 2011, when the downward trend in employment is expected to come to a halt.

The household savings ratio (Chart 28) will rise considerably this year amid increased uncertainty over employment and earnings. The savings ratio will remain high throughout the forecast period, relative to recent years. As well as weaker economic prospects and increased uncertainty, the need to reduce the burden of debt is another factor driving household savings.

Households incurred debt rapidly in the early part of the decade, when loan maturities lengthened and interest rates were low. At the end of 2008, the household debt ratio reached an all-time high of 104% of annual disposable income, and the ratio of debt to disposable income is set to rise further still.

The very low level of interest rates will make it easier for households to service their debts. However, as the downward spiral in the real economy has deepened, debt servicing difficulties have increased.

General government

Owing to the sustained period of brisk economic growth, the general government financial balance in 2008 was still strong (Table 6). The general government surplus relative to GDP stood at 4.4% in 2008. The central government surplus and the surplus on the employment pension funds, in particular, continued to be large. At the end of 2008, central government debt amounted to EUR 54.4 billion, or 29.4% of GDP. With local government included, Finnish general government debt accounted for 33.6% of GDP. This debt ratio was one of the lowest in the EU.

As the economy took a sharp turn for the worse at the end of 2008, the public finances began to deteriorate rapidly. The central government financial balance has deteriorated, and the situation in respect of local government finances is also worsening. Of general government entities, only the social security funds (employment pension funds) will remain in surplus over the next few years. The general government financial balance is forecast to weaken relative to GDP from -3.0% in the current year to -5.3% in 2011.

In order to finance the deficits, central government will incur debt at a pace comparable to the recession years of the early 1990s. In 2009–2011, the general government debt ratio is projected to increase by almost 23 percentage points, to a full 56%. Even so, it is still expected to be one of the lowest in the EU in 2011.

Central government revenue collapsed in early 2009

The recession is leading to a sizeable gap in central government revenue as tax bases contract strongly. Central government monthly cash receipts for the first part of 2009 point to a collapse in tax revenue. Cumulative central government income tax receipts in August were 27% lower than a year earlier, mainly because of a decline in corporate and capital gains taxes. Revenue from VAT and car taxes is also

clearly diminishing: August data point to a reduction of 6% in 8-month cumulative VAT receipts, with a simultaneous decline of 41% in car tax revenue.

The Bank of Finland forecast foresees a considerable fall in general government revenue in 2009 (Table 5). Central government revenue is estimated to decline by a good 12%, corresponding to almost EUR 6 billion, or about 3.5% of GDP.

The marked weakening of corporate earnings and dividend payment capacity is expected to reduce corporate tax receipts by 40% in 2009, or about 1½% of GDP. Central government property income is, in turn, predicted to be half that registered in 2008.

As, on top of this, employment is continuing to deteriorate and the value of private consumption decline, direct taxes paid by households and excise and import duties will also diminish. These revenue losses will be offset to some extent by tax revenue from social benefits paid. The significant growth in benefits will particularly moderate the contraction in local government tax revenue.

Central government tax receipts will also be reduced by sizeable tax cuts. These will be mainly income taxes, concentrating on 2009 and accounting for about 1.5% of GDP in 2009–2010. Cuts in VAT on food, due in October 2009, will reduce accumulated tax receipts by an estimated 0.3% of GDP. The full impact of the food VAT cut on tax revenue will not be seen until 2010. VAT on restaurant services is also scheduled to be lowered in July 2010. To counterbalance these tax cuts, there will be a simultaneous widening of 1 percentage point in the VAT rate, accounting for some 0.4% of GDP. Environmental taxes will also rise in 2011 by an amount equivalent to 0.4% of GDP. Consequently, the tax ratio will rise by around ½% in 2011.

Local government tax receipts will decline to some extent as a result of the deteriorating employment situation and the consequent reduction in tax revenue from earned income. Local government revenue from corporate income tax will decline, despite a temporary increase of 10 percentage points in the apportionment to local government in 2009. In addition to this temporary increase, revenue losses incurred by local government as a result of the government's tax cut decisions are to be compensated by an increase in central government transfers to local

Table 5.

General government revenue

	2007	2008	2009[f]
EUR billion			
Taxes on production and imports	23.4	23.9	22.9
Direct taxes paid by households	24.1	25.4	24.1
Direct taxes paid by enterprises	7.4	7.0	4.2
Property income	7.8	9.1	6.8
Total	62.7	65.4	58.0
% change on previous year			
Taxes on production and imports	3.3	2.1	-4.1
Direct taxes paid by households	6.2	5.2	-4.9
Direct taxes paid by enterprises	22.9	-6.1	-40.0
Property income	21.0	17.4	-25.7
Total	8.5	4.2	-11.3
Impact of revenue sources on tax receipts, percentage points			
Taxes on production and imports	1.3	0.8	-1.5
Direct taxes paid by households	2.4	2.0	-1.9
Direct taxes paid by enterprises	2.4	-0.7	-4.3
Property income	2.3	2.2	-3.6
Total	8.5	4.2	-11.3

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

government. By contrast, local government property income is modest, and not even a strong reduction in this income source will impair local government finances to the same extent as it does central government or pension fund finances.

Owing to the considerable decline in the value of GDP, general government revenue relative to the value of GDP is estimated to decrease by only 1 percentage point in 2009, to 52.4%.

Public sector to grow in size

Government expenditure will continue to grow rapidly as a result of the increase in social security expenditure. Relative to GDP, general government expenditure will grow by almost 10 percentage points in the forecast period, to a good 58% by 2011.

The deteriorating employment situation will also add to local government and social security fund expenditure. The expenditure growth will be reflected in central government transfers to local government and to the social security funds. The abolition of employers' national pension insurance contributions will also mean increased transfers to the social security funds. Central government transfers to local government will increase by EUR 1.8 billion in the forecast period, while their share of total local government revenue will expand by almost 3 percentage points, to 31%. On the other hand, growth in general government consumption expenditure will slightly decelerate, as public sector earnings development is expected to slow and the abolition of employers' national pension insurance contributions will constrain growth in local government labour compensation. The labour force in central government is also assumed to contract slightly from the present level, while in local government it will remain almost unchanged.

Table 6.

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

	2005	2006	2007	2008	2009[f]	2010[f]	2011[f]
General government revenue	52.9	52.6	52.5	53.4	52.4	52.3	52.9
General government expenditure	50.3	48.7	47.3	49.0	55.3	57.5	58.2
General government primary expenditure	48.6	47.2	45.8	47.5	53.9	56.0	56.3
General government interest expenditure	1.7	1.5	1.5	1.5	1.4	1.5	1.9
General government net lending	**2.6**	**3.9**	**5.2**	**4.4**	**-3.0**	**-5.2**	**-5.3**
Central government	0.4	0.9	2.1	0.9	-4.3	-5.9	-5.6
Local government	-0.7	-0.3	-0.1	-0.2	-0.7	-0.8	-1.0
Social security funds	2.9	3.4	3.3	3.7	2.0	1.6	1.4
General government primary balance	4.3	5.4	6.7	5.9	-1.5	-3.7	-3.4
General government debt	**41.4**	**39.2**	**35.1**	**33.6**	**41.9**	**50.2**	**56.1**
Central government debt	38.2	35.3	31.2	29.4	36.8	44.3	49.3
Tax ratio	43.9	43.4	42.9	43.0	42.4	42.0	42.4

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

Central government investment expenditure in the next few years will be sustained by several road and other construction projects. By contrast, local government investment is projected to decline to some extent from current levels, although investment pressures on local government will be maintained by increased renovation needs, among other factors.

Halting growth in debt will be difficult

In principle, the growth in central government debt can be stopped by increasing taxes or cutting expenditure growth (Chart 29). However, as employment will remain much weaker than targeted, not even brisk economic growth will be able to provoke a change in the accumulation of debt. Even if central government finances could be balanced, it would take a long time for the debt ratio to return to its pre-recession level.

Chart 29.

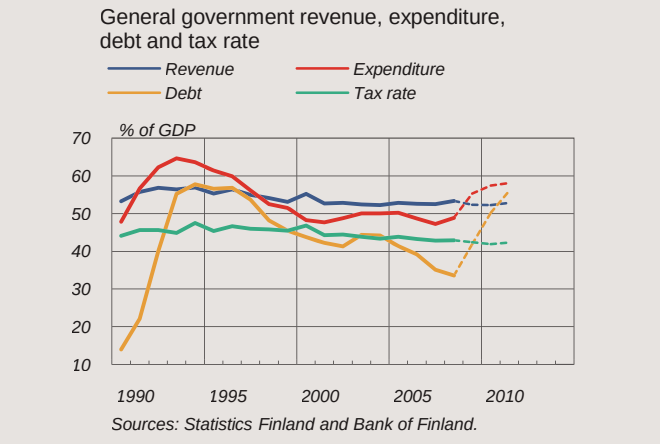
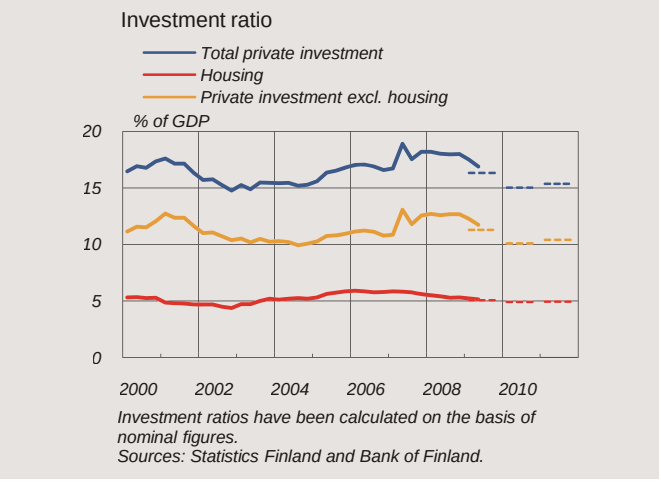


Chart 30.



Investment

During the present decade, Finland, with an investment ratio of less than a fifth, has ranked among the middle performers of the euro area (Chart 30). During the present economic crisis, investment has contracted strongly across different countries. Investment volume has declined by more than 15% in the euro area, and in Finland by more than a tenth in the last twelve months.

The decline in private investment has been particularly sharp in Finland, whereas public investment has grown by some 3% in the current year, buttressed by fiscal stimulus packages. However, public investment accounts for such a small fraction of total investment – perhaps just over a tenth – that public investment growth has nowhere near sufficed to compensate for the drop in private investment.

The contraction in investment has been broadly based. In the first half of 2009, construction investment dropped by more than 11% and investment in machinery and equipment by just under 9% from the same period a year earlier. As well as the subdued state of residential construction, construction investment was also curtailed by a steep fall in the construction of business

premises. A collapse in transport investment earlier in the year scaled back machinery and equipment investment. Besides a lack of demand, construction companies have also experienced difficulties in accessing financing as a barrier to investment.

Non-financial corporations' investment expectations have also weakened dramatically. According to the investment survey of the Confederation of Finnish Industries, investment plans in industry have been cut by about one third during 2008–2009. According to Statistics Finland, the volume index of new construction, a leading indicator for housing investment, almost halved from a year earlier in the first part of the current year. The cyclical monitoring group of the construction sector expects the construction slump to still continue next year.[1] In an environment of weak economic activity and excess capacity, construction of business premises will face a particularly sharp contraction.

The forecast expects a continued decline in investment in 2009 and 2010. Recovery will not begin until the end of the forecast period, in 2011. Both construction and corporate machinery and equipment investment will tail off because of weak demand. Sluggish foreign demand and the low capacity utilisation rate will put an effective brake on corporate investment, in particular. Public investment will be obstructed by the deterioration of local government finances.

Government action will significantly increase rental apartment production and renovation investment already in 2009. But this will not be enough to compensate for the drop in privately financed housing construction. Housing construction will not pick up until the end of the forecast period.

Export markets and export prices

The downward spiral of world trade in the early months of 2009 was dramatically reflected in the imports of countries important for Finnish exports. Unravelling of inventories and even annulment of investment occurred almost simultaneously across the board, except for some emerging economies. Imports in Finland's export markets contracted by about 20% quarter-on-quarter as early as the last quarter of 2008. The fall steepened further still in January–March, when the export markets, according to preliminary data, dropped by as much as 30% from the previous quarter.

The contraction in Finland's export markets, as in world trade, slowed in the spring and is predicted to have stopped in the current quarter. In July, various survey data already suggested that imports would start to rebound. Towards the end of the current year, the export markets should already begin to grow moderately, reflecting replenishment of stocks by buyers. Even so, for 2009 as a whole, the export markets are expected to shrink on average by close to 15%, and world trade by a good 13%. In 2008, Finland's export markets still expanded

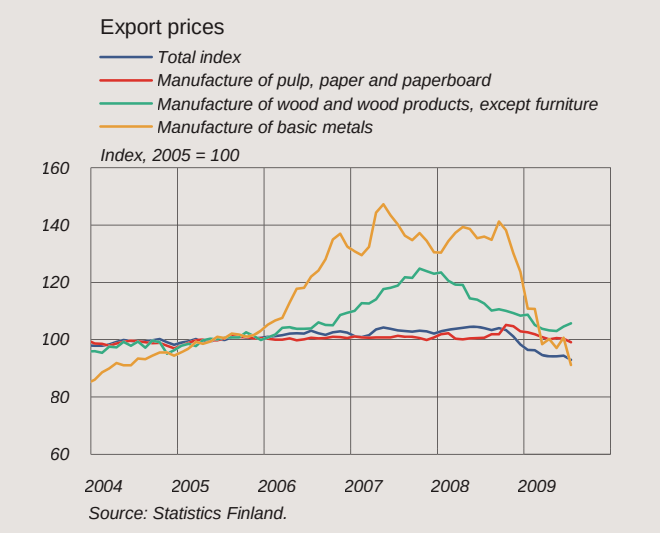
[1] Report by the cyclical monitoring group of the construction sector (19 August 2009), Rakentaminen 2009–2010 ('Construction in 2009–2010').

by 3.9% despite the crash at the end of the year (Chart 31).

Of those countries most important for Finnish exports, Sweden and the United States are projected to see particularly large reductions in imports, about 16% each this year. Russian imports, meanwhile, will record much stronger declines this year, in the face of the steep oil price fall as well as funding problems. Given the significance of Russia, Finland's export markets will this year shrink more vigorously than those of other euro area countries and world trade as a whole.

Chart 31.

Chart 32.



During the financial crisis, Finnish export prices followed a highly erratic pattern, partly deviating from corresponding trends elsewhere. Consistent with developments in other industrial countries, Finnish export prices began to fall rapidly at the onset of the crisis towards the end of last year. However, compared with Germany for example, Finnish export prices experienced substantially stronger declines, a reflection of the large share of raw materials in Finnish exports. Export prices were still decreasing in July, when they were as much as 10.6% lower than in July 2008 (Chart 32).

The export prices of metal manufacturers have come down particularly fast since 2008 and have been unable to recover in connection with the upward trend in copper prices that began in the spring. In July, prices had plummeted by as much as 33% year-on-year. The oil price crash last winter was partly reflected in the export prices of the chemical industry, which fell vigorously at the beginning of the year. By contrast, the oil price rise has not yet been mirrored in the sector's export prices, which in July were almost 20% lower than a year earlier.

Other sectors have witnessed more stable export price performance. The export prices of the paper industry have been hovering close to the levels seen in the first part of 2008. Paper and paperboard export prices have, however, persisted at the levels observed in 2005. Thus, the global commodity boom has not been reflected in the sector's markets. Paper consumption in Europe has fallen

dramatically this year, and it has been possible to maintain price levels only through sizeable cuts in output. Export prices in the mechanical forest industry have actually turned upwards in the summer months, after a downward trend that began in early 2008. The upturn in export prices for sawn timber is probably due to the replenishment of stocks by buyers following improved access to financing. Engineering export prices have also remained relatively stable.

In the forecast period, Finland's export markets are projected to resume growth very sluggishly. Economic policy measures around the world have favoured domestic production at the expense of imports. Accordingly, the propensity to import, ie imports relative to GDP, will remain very modest throughout the forecast period. Next year will see a recovery in the markets, as access to financing improves. Inventories will be replenished and investment projects launched amid a better outlook for demand. Finland's export markets will still shrink slightly on average in 2010, but will already expand fairly strongly in 2011, despite average growth continuing to lag well behind the levels familiar in the present decade. Even at the end of the forecast period, excess capacity will still exists in almost every country, which will keep investment demand and hence foreign trade relatively modest.

The rise in export prices will be very moderate in 2010 and 2011. Modest construction and other investment demand in Europe combined with the depreciation of competitor countries' exchange rates provide very little leeway for Finnish exporters. Even if the paper market were to recover slightly, demand would probably remain lower than before. Abundant capacity in competitor countries will also tend to push prices downwards. The forecast not only envisages an average fall of some 6% in export prices in the current year, but also a further decline of almost 3% in 2010. In 2011, export prices are estimated to remain on average at the level of 2010. The slow revival in world trade in the forecast period will thus also be reflected in modest export price performance.

Foreign trade

Prior to the ongoing crisis, the value of Finnish foreign trade rose to almost half of GDP in 2008, fuelled by strong world trade growth. The data for goods and services exports and imports in 2008 was revised upwards, mainly because of internal year-end balance sheet arrangements by large groups. This accounting measure does not affect the analysis of the economic situation.[2]

One of the features of the international economic crisis has been the dislocation of world trade and thereby a strong retrenchment in foreign trade across countries. The contraction in Finnish foreign trade has been substantial. In the second quarter of 2009, the volume of Finnish exports was estimated at being as much as 31%, and imports 28%, lower than a year earlier. Simultaneously, the contribution of exports to GDP decreased from an

[2] The forecast assumes that the upward revision to the levels of services imports and exports in 2008 will remain in force. Consequently, the statistical revision will not affect foreign trade growth rates in the forecast period 2009–2011.

average 47% in 2008 to 34% in 2009 (Chart 33).

Among the strengths of Finnish exports has been their fairly wide geographical dispersion. However, this has not been enough to protect Finland in a situation where economic activity has weakened strongly almost everywhere in the world. Reductions in Finnish exports to other euro area and EU countries and outside the EU have been almost equally large.

The product range of goods exports has been instrumental in exposing Finland to the effects of the ongoing crisis. Of Finnish exports, almost half are classified[3] as raw materials and intermediate goods (incl. communication and transport equipment) and about a third as capital goods (Table 7). During the current crisis, industrial production and investment have undergone a broadly based, strong contraction in many countries. The forest industry's structural problems have also deepened during the crisis. This has led to a drastic fall in demand for Finnish export goods (for a more extensive analysis, see Box 7).

Exports of capital goods from Finland were down by almost a third, and those of raw materials and intermediate goods by about a quarter, in the first half of the current year, compared with the average levels in 2008. Exports of consumer durables have fallen by even more, 56%, but their share of Finland's total exports is small. Imports, too, have witnessed the largest reductions in consumer durables and capital goods, as well as in raw materials and intermediate goods.

Foreign trade is expected to rebound only very slowly during the forecast period. The recovery will be slower than growth in the export markets. The crisis has led to under-utilisation of capacity throughout the world, curtailing demand for Finnish capital goods. Moreover, global economic growth is expected to remain modest, which will further impair world demand for raw materials and intermediate goods.

Difficulties caused by changes in demand for forest industry products will particularly hamper exports. The

Chart 33.

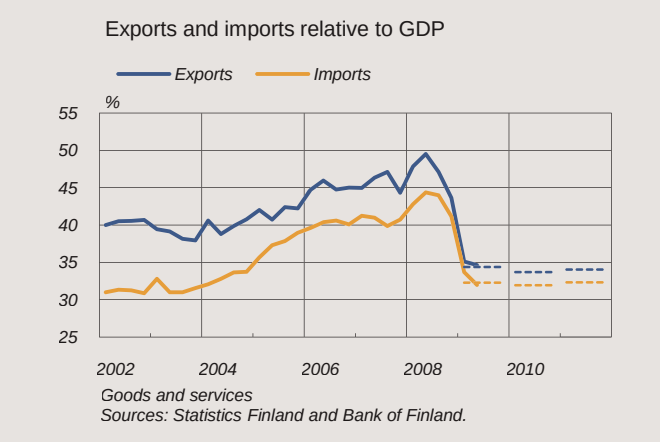


Table 7.

Breakdown of goods exports and imports by main use of goods in 2008

%

	Share in exports	*Share in imports*
Raw materials and intermediate goods	*43*	*35*
Energy products	*7*	*18*
Capital goods	*39*	*24*
Durable consumer goods	*5*	*10*
Non-durable consumer goods	*6*	*14*

Source: National Board of Customs.

[3] Based on CPA 2002 classification.

market for wood products in Europe will also be difficult in the years ahead, due partly to subdued construction activity and partly to growth in the exports of new competitors, such as Germany. Paper consumption has recorded an almost 20% fall in Europe in the first part of the current year. Paper demand is expected to recover slightly in the forecast period but due, for example, to the growing market share of electronic communication, paper exports will remain at much lower levels than before. The foreseeable changes in the demand for forest industry products are one reason why export growth will still lag behind growth in the export markets in 2011.

Engineering exports are projected to perform modestly in the forecast period due to abundant spare capacity in the world and muted investment demand globally. The sector's order books have also become much thinner this year as the flow of new orders has petered out. With global investment demand declining, services will gain in importance within the engineering industry. The export outlook for Finnish electronics is subdued, as mobile phones are increasingly manufactured abroad. This sector, too, will see an increased role for services.

The sizeable stimulus measures implemented in various countries are expected to strengthen domestic output rather than foreign trade. This will be reflected in demand for Finnish exports. The slow pace of growth in domestic demand means growth in Finnish imports is also predicted to remain sluggish.

Current account and level of debt

The Finnish current account surplus halved in 2008 (Chart 34). The decline was due to the erosion of the goods surplus by about a third. The weakening of the income and current transfers accounts also contributed to the decline. By contrast, the surplus for services remained unchanged. In 2008, exports and imports of services increased exceptionally strongly owing to transactions by international groups.

The decline in the goods surplus that began in the second half of 2008 has continued in 2009, the surplus being reduced by the collapse in the volume of goods exports. In the second half of 2009, the pace of the export slide should steady. Exports of goods and services will gradually recover during the forecast period, but the terms of trade will continue to deteriorate. The strengthening of income and current transfers accounts will improve the current account next year, but no longer in 2011. At the end of the forecast period, the current account will post a surplus of almost 1% relative to GDP.

Chart 34.

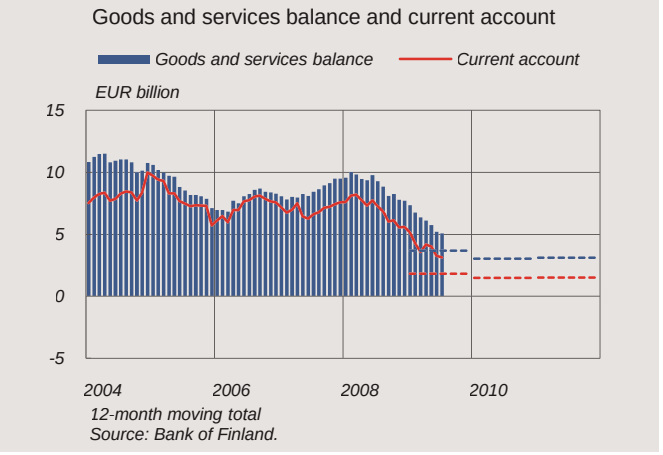
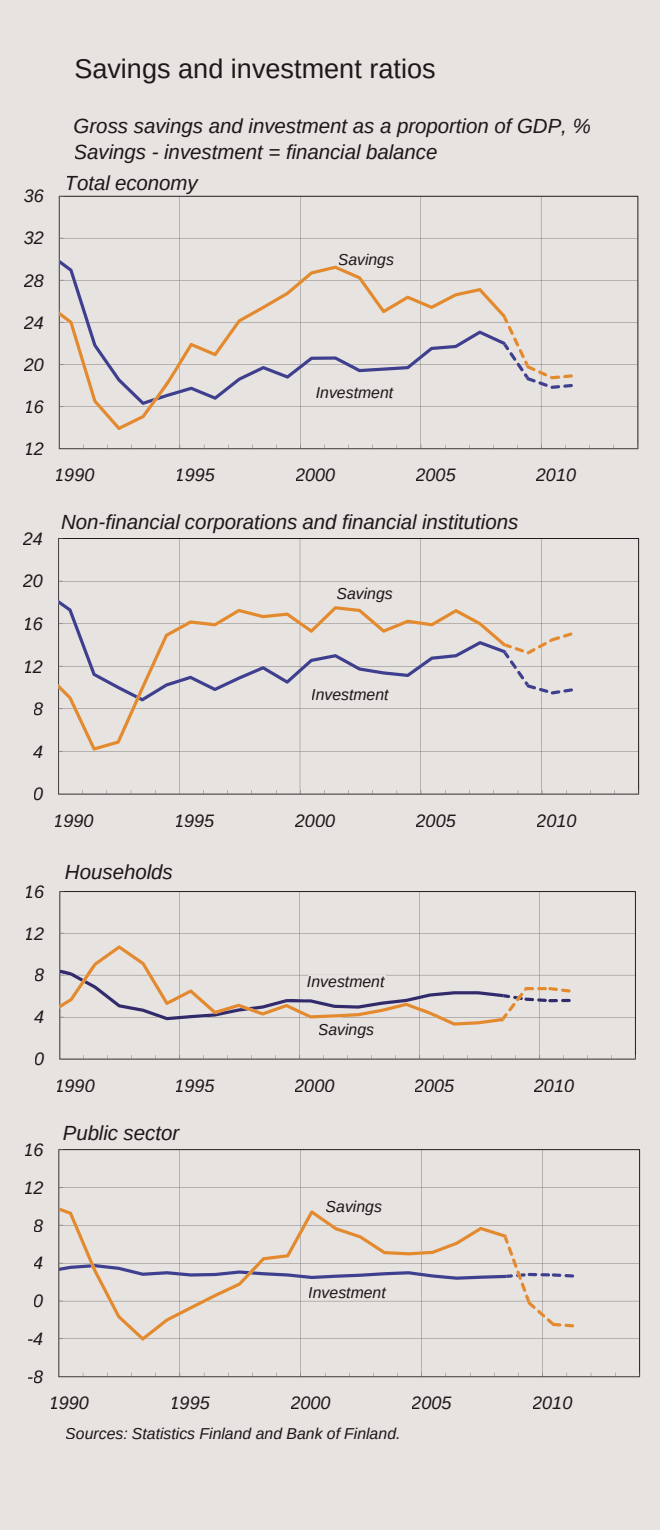


Chart 35.



Annual savings have exceeded annual investment in Finland since the 1990s recession, ie the economy's finances have been in considerable surplus. The downturn will substantially reduce the share of investment and particularly savings in GDP, causing the economy's financial surplus to contract in the forecast period.

There will also be significant changes in the financial balances of economic sectors in the forecast period (Chart 35). Brisk investment growth reduced non-financial corporations' financial surplus in the first half of the decade, leading to broadly balanced corporate finances in 2008. The forecast period will witness renewed growth in this financial surplus, as non-financial corporations seek to deleverage through savings and reduced investment.

Efforts to reduce indebtedness will also guide households' savings and investment decisions. The recession has increased households' concerns about the future development of the economy, employment and earnings. In the forecast period, households will step up their savings considerably and their long-sustained financial deficit will turn into a surplus.

The public finances will be hardest hit by the recession. The general government savings ratio will collapse, as revenues decline and expenditure growth accelerates. As, at the same time, the share of public investment in GDP will remain unchanged, the general government financial surplus will rapidly turn into a deep deficit and the general government debt to GDP ratio will grow considerably.

Box 5.

Risto Herrala

Global economy and foreign demand

Global economy picking up

The steep contraction in the global economy appears to have come to an end. Confidence in the financial sector is gradually being restored and commodity and share prices have begun to rise. Both companies and households are feeling more confident about the economy.

The upturn has been bolstered by strongly expansionary monetary and fiscal policy measures and non-standard support measures targeting the financial sector. Although determined policies have halted the collapse, there are as yet no clear signs of a recovery in output. Companies' production capacity is not fully utilised and unemployment is continuing to grow in many areas.

According to the Bank of Finland's September forecast, the global economy will begin to grow towards the end of 2009 and to some extent in early 2010. Growth is expected to be sluggish throughout the forecast period in the major economic regions: the United States, Japan and the European Union (Chart 36). Growth will be stronger in the emerging economies of Asia than in the developed economies due to their greater growth potential.

Broadly based recovery

Of the major economic regions, a slight recovery in growth is already forecast for the EU19 in the third quarter of 2009, partly driven by inventory changes, but also due to a range of stimulus programmes – including the so-called 'cash for clunkers' programmes. However, these impacts will remain temporary, and growth will dip into negative territory again in the last quarter before a slow recovery process gets properly underway.

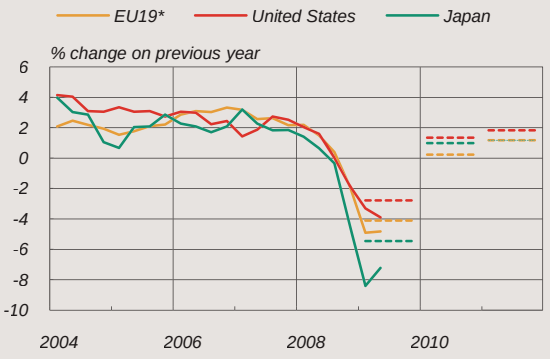
US growth is also expected to exhibit a bounce already in the third quarter, due to a temporary increase in private consumption, production and the related inventory cycle driven by stimulus packages, particularly the 'cash for clunkers' car scrapping package. However, this recovery will be temporary in nature, and more permanent growth is only expected to begin in 2010.

In Japan, the economy has already been showing signs of picking up for several months. Although the first quarter was particularly weak, the situation improved markedly in the second quarter. Growth is, however, expected to slow in the second half of the year. The reasons for this include the temporary nature of private consumption growth in the second quarter, which is believed to have been driven by stimulus measures. The remaining years in the forecast period should see positive but fairly subdued growth.

Among the emerging economies of Asia, China and India appear to have come through the crisis with little damage and to have succeeded in keeping their economic growth solidly in positive territory. In

Chart 36.

GDP growth in key economic areas



* Euro area, Sweden, Denmark and United Kingdom
Sources: Eurostat, Bureau of Economic Analysis, Economic and Social Research Institute and Bank of Finland.

contrast, many export-dependant small Asian countries have suffered badly from the contraction in world trade. Here, too, however, the worst phase of the crisis would now appear to be over, and GDP is expected to grow in 2010 throughout Asia.

The Russian economy has suffered more than expected from the international financial crisis and the drop in oil prices. Next year will see an upturn in both GDP and imports as consumption and investments recover on the back of higher oil prices.

Table 8.

Rates of growth in GDP and world trade

% change on previous year

GDP	*2008*	*2009f*	*2010f*	*2011f*
United States	*0.4*	*-2.8*	*1.3*	*1.8*
*EU19**	*0.6*	*-4.1*	*0.2*	*1.2*
Japan	*-0.7*	*-5.4*	*1.0*	*1.2*
World	*2.9*	*-1.8*	*2.2*	*3.3*
World trade	*3.1*	*-13.5*	*1.0*	*5.0*
Finland's export markets	*3.8*	*-14.9*	*1.0*	*4.9*

Growth in Finland's export markets equals growth in imports by countries to which Finland exports, on average, weighted by their respective shares of Finnish exports.

** Euro area, Sweden, Denmark and United Kingdom*
f = forecast
Source: Bank of Finland.

Slow growth ahead

Experiences from previous crises in the financial sector suggest the global economy will recover slowly. Slow recovery is also consistent with the interest rate assumption derived from financial market expectations. Accordingly, monetary policy will be tightened only slowly in the developed economies.

As a counterweight to expansionary economic policies, global economic growth will be dampened in the forecast period by companies restructuring their balance sheets, which will slow the pace of new investment. Growth in household demand will be dampened both by the increased risk of unemployment as a result of the weakening labour market and by the reduction in asset values. Although the most acute crisis in the financial sector is now over, banks' lending policies continue to be tight. Weakening central government finances will not allow a continued fiscal stimulus at the present level for an extended period.

Compared with the previous forecast published in spring 2009, the estimates for global economic growth in 2009 have been revised slightly downwards, primarily reflecting the weaker-than-expected growth in the first half of the year. The growth forecasts for 2010 and 2011 have been revised moderately upwards compared with the previous forecast (Table 8). This reflects the passing of the financial sector crisis and the recovery in household and business confidence.

Box 6.

Pentti Forsman and Seija Parviainen

How does the present recession compare with the 1990s?

Finland's GDP has contracted exceptionally rapidly since the end of 2008. Moreover, a surprising fact is that while labour and capacity shortages were still acting as a constraint on output growth in late spring 2008, only a few months later industrial production began to decline. The recession of the 1990s also saw an unexpectedly rapid fall in production (Chart 37). At present, the number of unemployed has been growing since the end of last year at almost the same pace as in 1990. However, despite their similarities, these two crises that have buffeted the Finnish economy also display distinguishing features, particularly as regards background factors.

The most important background factors to the current downturn are the international financial market crisis and the collapse of world trade. Finnish exports have fallen sharply. In the 1990s recession, by contrast, export volumes shrank relatively modestly despite an almost complete halt in the Soviet trade. In addition, declining construction will reduce total output this year, but this phenomenon is largely explained by excessive construction of business premises in 2006–2008. This has some points in common with the events of the late 1980s, but at that time it was housing construction that overheated.

External circumstances also diverge in a number of ways when comparing these two crises. Firstly, the high level of interest rates and the devalued currency cut domestic purchasing power in the 1990s so drastically that private consumption did not reach the level of 1989 until at the end of the 1990s (Chart 38). But the weak currency boosted exports, which began to grow rapidly as early as 1992. The present situation is almost diametrically opposed: the purchasing power of wages and salaries is stable and interest rates are low, whereas exports are facing difficulties.

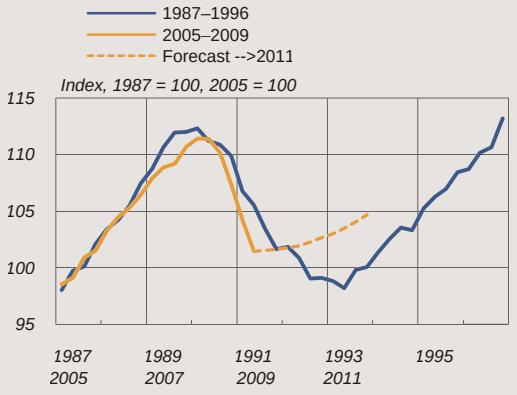
Finnish exports have become diversified since the 1980s, measured in terms of the range of both goods and countries. Largely as a consequence of the 1990s recession, manufacturing has represented an exceptionally high share of GDP because of Finland's deepening specialisation. By contrast, exports in the 1980s were hamstrung by weak price competitiveness, which led to chronic current account deficits. Globalisation has helped drive up Finland's earnings level faster than in other euro area countries.

Export growth for the next few years looks set to remain very slow, with no return in sight to the levels seen in 2007–2008. Weak export performance will also impair income formation in the home market through the erosion of service structures underpinning exports.

Prior to the emergence of the 1990s recession, there was talk about overheated private

Chart 37.

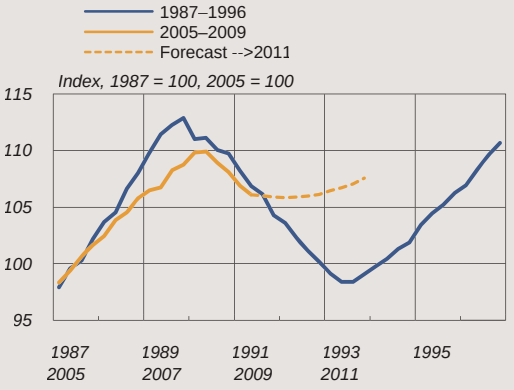
Development of GDP in the 1990s recession and now



Sources: Bank of Finland and Statistics Finland.

Chart 38.

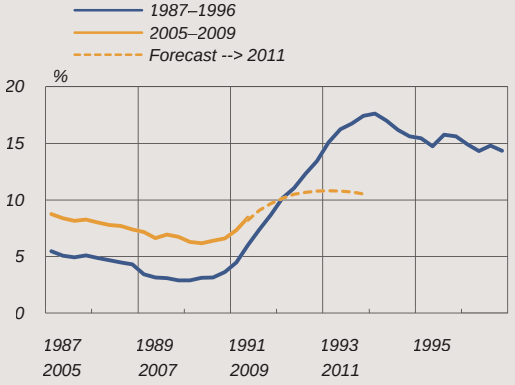
Development of private consumption in the 1990s recession and now



Sources: Bank of Finland and Statistics Finland.

Chart 39.

Unemployment rate in the 1990s and now



Sources: Bank of Finland and Statistics Finland.

consumption and a spending spree. As access to credit had been significantly eased at the end of the 1980s following the deregulation of capital markets, there was an unprecedented surge in household indebtedness. Although the household debt ratio has risen still higher in recent years, already being well above 100%, debt-servicing costs have not formed as heavy a strain on households as in the early 1990s. Interest rates have been exceptionally low during the present crisis, as compared with the early 1990s, when they soared as high as 15%. Partly on account of this difference, housing prices have not plummeted during the current crisis as dramatically as they did in the early 1990s.

Inflation, too, has been very low throughout the present crisis – unlike in the early 1990s – which has helped bolster consumer purchasing power.

The number of unemployed has increased since the onset of the present recession as briskly as in the first months of the 1990s recession (Chart 39). Thus, the response of unemployment to GDP contraction has been broadly similar during both periods. The unemployment rate is projected to reach a much lower peak this time than in the 1990s, when at its worst it reached more than 18% in 1994. This is another factor that will buttress the home market in the next few years.

According to the Bank of Finland forecast, GDP decline in the current recession will remain well below the levels observed in the 1990s. Businesses and households now find it easier and cheaper to access finance than in the previous crisis. On the other hand, export growth will remain very subdued, thereby posing a genuine threat to real income growth in the next decade. The general government deficit will increase this year and next, initially at the same pace as in the early 1990s, but it is not likely to dip quite as far as the trough of the previous recession in 2011.

Box 7.

Markus Haavio

Why did Finland's exports collapse?

In autumn 2008, the financial market crisis deepened and its impact spread to the real economy. International trade collapsed. In the last quarter of 2008 and the first quarter of 2009, world trade shrank (in cumulative terms) by nearly 20 % from the pre-crisis level. Exports from industrial countries also fell by approximately one fifth. Finnish exports subsided by more than a quarter.

Part of the collapse in exports is undoubtedly due to the drop in production caused by the crisis, which in turn weakened the purchasing power of economic agents. However, if we look at GDP developments during the course of the crisis, it is evident that this was only a partial cause. At the end of 2008 and in the first quarter of 2009, world GDP growth decelerated by some 3%, that of Finland's key export markets by just under 5% and Finland's GDP also by just under 5%.

Because a large proportion of the goods in international trade are industrial products sensitive to cyclical fluctuations it is natural that imports and exports exhibit greater cyclical fluctuations than GDP growth. However, in the global recessions preceding the current crisis (in 1981, 1991 and 2001), the world GDP share of international trade fell by only a couple of per cent. Now the shrinkage in trade has been significantly larger.

Two types of explanations have been proposed for the collapse in world trade. The first focuses on international delivery chains. International division of labour has become more pronounced in recent years and decades in that during a single production process a product (or some parts of it) may be transported several times from one country to another. Each time a product crosses an international border a trade transaction is registered. If the delivery chain is long, the trade flows registered may be many times higher than the increase in GDP resulting from the production process.[1] Correspondingly, if the production chain is broken, the contraction in international trade may much greater than the decline in GDP.

The second explanation is based on the key role of the financial system in international trade. When a company exports its products abroad, it often gets paid only afterwards. Because the cost of labour, raw materials and other production inputs is typically payable during the production process, companies frequently need short-term funding. Moreover, banks also occupy an important role in international payment transfers. Exporting companies do not necessarily know their trading partners well and thus cannot be fully certain of their solvency. Both importing and exporting companies typically have an established relationship with a bank operating in their own country. If the exporter's bank has confidence in the bank used by the importer, the latter can act as a guarantor for the payment.

Serious disruptions affected the financial system and payment transactions in international trade in late 2008 and early 2009. As banks found it increasingly difficult to raise funds, the price of short-term funding necessary for companies engaged in foreign trade went up, and access to funding became more restricted.[2] At the same time, corporate confidence in the solvency of foreign trading partners weakened during the crisis, thus increasing the need for bank guarantees. Because interbank confidence collapsed,

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[1] *It is worth noting that trade statistics use the gross prices of goods, whereas GDP measurements are carried out by adding the sum totals of value added. If, for example, mobile phone components are imported from Estonia to Finland at a value of EUR 60 and the finished mobile phone is exported from Finland to Germany for EUR 80, Finnish GDP grows to the extent of the value added, ie EUR 20, while Finnish exports grow by EUR 80.*

[2] *Of the banks that responded to an IMF survey in spring 2009, 90% reported they had raised interest rates on their trade credits. In addition, 70% of the banks indicated they had also tightened other conditions attached to the granting of trade credits.*

banks could not carry out their usual role as intermediaries of international payment transactions.

Finland's exports contracted in late 2008 and early 2009 even more than world trade. Finnish exports were also below average if compared with other developed economies. One possible reason for this could be that countries important for Finnish exports were exceptionally severely affected by the financial market turbulence. As previously mentioned, GDP in Finnish export markets fell more than world GDP. The problem with this explanation is that imports in Finnish export markets contracted broadly to the same extent as world trade or even less. In other words, Finnish exports subsided more than total imports in the export markets, with Finland thus losing share in its export markets (Chart 40).

More light can be shed on these questions if we look at Finnish goods exports by country and product group. Although the current financial crisis is global in nature, its impact on Finland's trading partners has varied. In the last quarter of 2008 and first quarter of 2009, there was considerable contraction in the Swedish and German economies, while the Baltic states were close to freefall. At the same time, GDP growth in France dipped only slightly, while in Norway and Poland growth was around zero, but no contraction was observed. Chinese growth continued to be positive. Exchange rates were also volatile in the autumn and winter. The Swedish krona depreciated against the euro, while the US dollar grew stronger.

The regional composition of Finnish goods exports changed somewhat during the crisis (Chart 41). China's share of the value of exports increased, while Russia's decreased. However, all in all, the changes in the regional composition of exports were fairly small considering the stark contraction of exports overall and the country-specific differences discussed

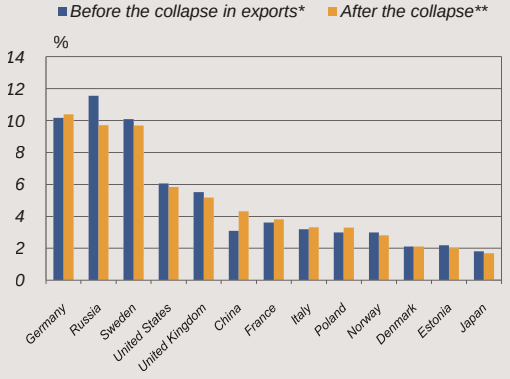
Chart 40.

Finland's exports, export markets and world trade

Sources: Statistics Finland, CPB and Bank of Finland.

Chart 41.

Regional composition of Finnish goods exports



** November 2007 to October 2008*
*** November 2008 to May 2009*
Source: National Board of Customs.

above. In late 2008 and early 2009, the value of Finnish exports fell by at least a fifth in nearly all market areas, with China being the only significant exception.

Arguments have been put forward above to demonstrate that the regional composition of exports does not explain why Finnish export performance has been below average during the crisis. An alternative explanation can be found in the product structure of exports. The majority of Finnish exports consists of capital goods, demand for which dropped as investment subsided. Moreover, of the products exported from Finland paper, sawn goods and metals are intermediate goods and input products. Intermediate products were hard to sell during the crisis, as client companies struggling with financial problems sought to reduce their inventories.

This explanation based on product structure is also supported by trade statistics. In all key product groups for Finnish exports, ie 'machinery and transport equipment' and 'manufactured goods classified chiefly by material', the value of imports in Finnish export markets fell more than in all product groups on average (Chart 42).[3] These two product categories account for approximately 70 % of the value of Finnish goods exports. The group 'machinery and transport equipment' includes machinery and engineering industry products as well as electronics industry products, while the group 'manufactured goods classified chiefly by material' includes paper and cardboard.

Trade statistics also show that Finland may have lost some market share within these product groups. In the category 'manufactured goods classified chiefly by material', the value of Finnish exports shrank more than the value of imports in the export markets in the last quarter of 2008 and the first quarter of 2009. In contrast, in the category 'machinery and transport equipment', Finland's market share remained broadly unchanged.

Chart 42.

Contraction of Finnish export markets and exports across different product groups

Change from the period 11/2007–3/2008 to the period 11/2008–3/2009.
Included in the chart are Finland's trading partners Sweden, Germany, United Kingdom, France, Italy, Spain, Netherlands, United States, Denmark, Norway, Poland and Japan.
Sources: National Board of Customs and OECD.

[3] *The product group observations cover OECD countries, meaning eg Russia and China are not included.*

Costs and prices

Labour costs will rise briskly in 2009 due to high negotiated pay rises. This will be accompanied by declining employment and productivity. In 2010 and 2011, labour costs will grow more slowly than in 2009, and productivity will improve. The rise in real wages will slow significantly after 2009.

The price of oil and other commodities began to decline steeply in the middle of 2008 as the global economy deteriorated rapidly. In 2009, however, prices have risen substantially. Commodity prices will continue to rise at a more subdued pace in 2010 and 2011. With the slow pace of inflation in the rest of the world, the rise in import prices will remain very subdued over the next few years.

The pace of rise in consumer price inflation began to ease in autumn 2008 as a result of the fall in energy prices. This year, inflation has continued to slow down substantially. Inflation is forecast to ease back to an average of 1.7% in 2009 and to also remain moderate in 2010 and 2011.

Labour costs

Aggregate wage and salary earnings rose exceptionally rapidly in 2008, at an average rate of 5.6%. In January–June 2009, the rise slowed to 4.4%. Recent developments in wages and salary earnings are largely due to collective bargaining agreements between employer and employee organisations. In 2008, the largest increases came in the third quarter, and around 1% of the rise in wage and salary earnings continued to be attributable to factors other than negotiated pay rises. In 2009, negotiated wages have risen by nearly 4%, and the contribution of other factors has decreased by half (Chart 43).

Chart 43.

Due to accelerating inflation, real wages rose only marginally in 2008. The substantial increase in wage and salary earnings and decline in productivity substantially weakened Finland's price competitiveness in 2008. Unit labour costs rose by as much as 6.1%.

Earnings development in 2009 will be determined primarily on the basis of collective bargaining agreements signed between employer and employee organisations in the previous round. The round of negotiations on the new collective agreements began in autumn 2009. Thus far, only the technology industry and some other industries have reached agreement. Aggregate earnings

are estimated to rise an average 4.4% in 2009. The rise in earnings will slow to 2.7% in 2010 and further, to approximately 2.0%, in 2011. The gap between negotiated wages and aggregate earnings is estimated to remain virtually unchanged from the first half of the year throughout the forecast period.

The trend in average wages more clearly reflects the recession's impact on wage development than does the index of wage and salary earnings, as overtime and other cyclical factors are not shown in the index, which measures compensation for a standard labour input (Chart 44). The average wage per employee will still rise 3.6% in 2009, but the pace of rise will ease to slightly over 2% in 2010 and further, to approximately 1.5%, in 2011.

Unit labour costs will rise at an exceptionally brisk pace in 2009, when labour productivity will decline, partly for cyclical reasons. The decline in productivity is also partly due to the fact that some companies have sought to avoid shedding labour. Employment reacts with a time lag to declines in productivity growth. Productivity is estimated to begin to improve after 2009. In 2010 and 2011, unit labour costs will remain virtually unchanged from 2009.

Commodity prices

Commodity prices fell sharply in autumn 2008 due to declining demand. The trend in prices turned in early 2009, since when prices have been rising at a surprisingly rapid pace. This is partly because of increased demand due to the replenishing of inventories and partly on account of supply constraints on various commodities.

The world market price of oil was on a downward trend until December 2008 as the deterioration in the global economy caused a substantial contraction in demand (Chart 45).

Chart 44.

Chart 45.

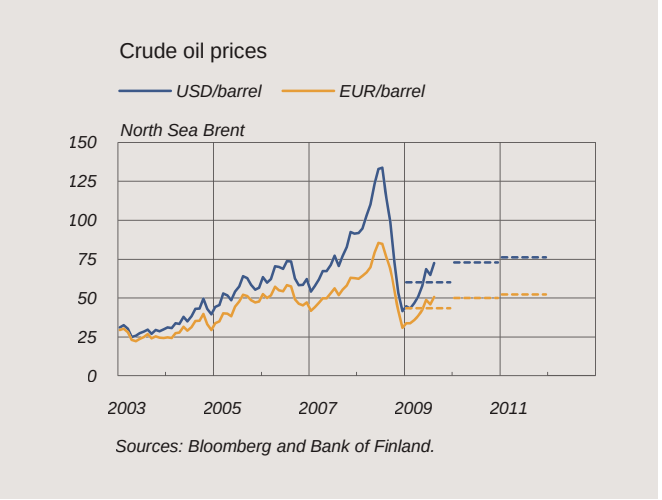


Chart 46.

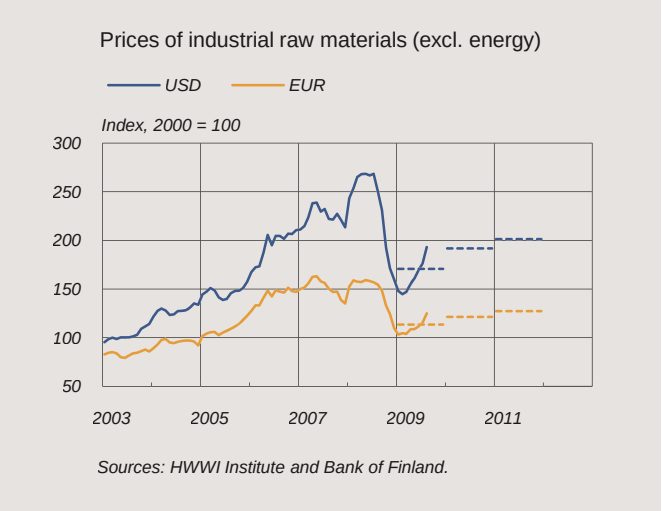
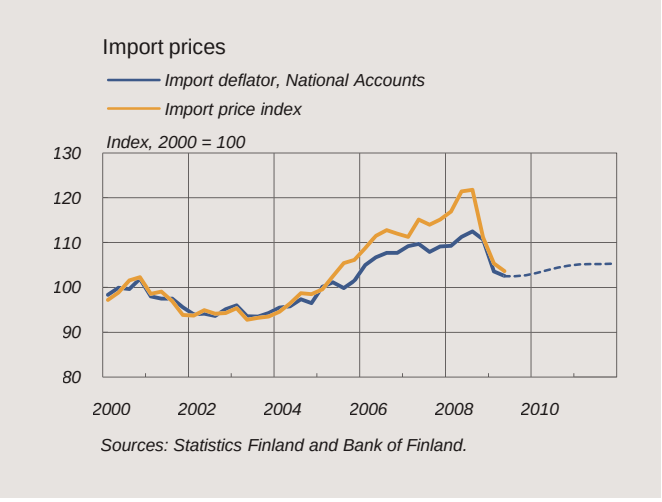


Chart 47.



OPEC's measures to cut production began to bear fruit in spring 2009, while the decline in demand was dampened by the replenishment of oil inventories. As supply contracted at a more rapid pace than demand, the price of oil began to rise. Demand will be supported going forward by the growing consumption of oil in emerging economies. Non-OPEC countries' ability to increase supply in the short term is very limited. Oil futures prices are expected to reach around USD 80 a barrel in the forecast period.

The prices of industrial raw materials (excluding energy and foodstuffs) have also risen swiftly in 2009 (Chart 46). The prices of base metals, such as copper, have risen at a rapid pace, as the improved outlook for demand has encouraged companies to replenish their inventories. China has been particularly active in replenishing its commodities inventories. The ending of inventory adjustments may bring the rise in commodity prices to a halt and initiate a downturn. Meanwhile, current prices will enable an increase in supply if the availability of financing does not hamper investments in new production capacity. The trend in industrial raw materials prices is expected to be slightly rising in the forecast period.

The decline in the price of food commodities at the end of 2008 was more subdued than in the prices of other commodities, hence the more moderate rise in prices in early 2009. Due to the outlook for crops, however, price developments differ considerably between the various food commodities. For example, the price of sugar has risen sharply, while the price of cereals has declined. Prices of other agricultural and forest-based commodities have risen in 2009. The price of pulp has also begun to rise, supported by cuts in production.

Import prices and domestic producer prices

Import prices rose an average of 3.5% in 2008, according to the import price

index, although at the end of the summer they began to decline steeply (Chart 47). Although the downward trend in prices has moderated slightly in 2009, import prices in July were over 15% lower than a year earlier.

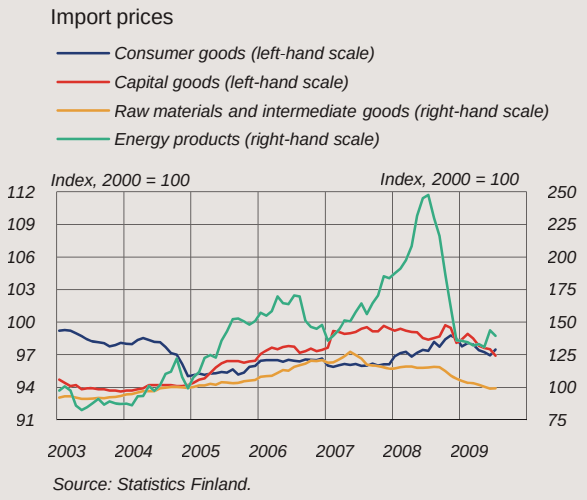
The recent trend in the import price index mainly reflects the large fluctuations in energy prices (Chart 48). The rapid decline in international demand also contributed to the fall in import prices. Import prices of energy products rose dramatically in the first half of 2008, but in August they began a steep decline, triggered by the fall in crude oil prices. Import prices of energy products continued to decline steadily until spring 2009, but in recent months they have been rising again due to higher crude oil prices. In July 2009, prices for energy products were nevertheless over 40% lower than a year earlier.

Raw material and intermediate goods prices remained virtually unchanged until August 2008, when they began to decline steadily. In contrast, consumer goods prices rose moderately in 2008, but in 2009 they have been sliding moderately. Import prices of capital goods have also declined gradually since autumn 2008.

In contrast to the import price index, the national accounts import deflator fell only slightly in the last quarter of 2008 (Chart 47). This is because, in addition to goods prices, the import deflator also includes services, the prices of which rose much more than goods prices in 2008, at an average of 6%. According to national accounts figures, the average rise in goods import prices in 2008 was only 0.5%. The import deflator in January–June 2009 was on average 6.5% lower than a year earlier.

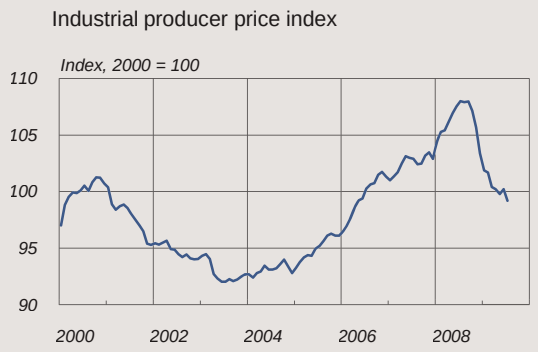
Global economic recovery is forecast to trigger a moderate rise in import prices towards the end of 2009. Energy import prices are expected to follow oil prices and rise gradually, while the prices of raw materials and intermediate goods will also begin to rise gradually. Sluggish demand will, however, mean that import prices for consumer and capital goods will rise only moderately. Import prices as measured in the national accounts are forecast to decline by over 7% this year, while in 2010 and 2011 they are expected to rise by about 1%.

Chart 48.



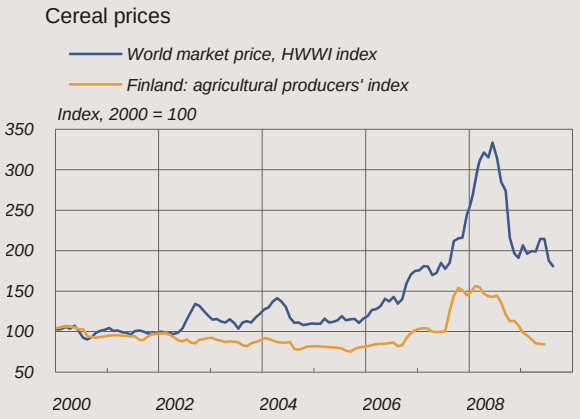
Source: Statistics Finland.

Chart 49.



Source: Statistics Finland.

Chart 50.



The cereal varieties included in the indices differ slightly.
Sources: HWWI Institute and Statistics Finland.

The brisk rise in industrial producer prices came to a halt in autumn 2008, when prices began to fall sharply due to the downward trend in world market prices for commodities (Chart 49). The marked decline in producer prices continued after the turn of the year. World market prices for food commodities, eg cereals, also continued to rise until the middle of 2008, followed by a sharp decline throughout the rest of the year (Chart 50). The trend in prices has been more moderate in 2009 than the previous year. In Finland, agricultural producer prices began to fall in August 2008, the rapid decline in food commodities prices and a sharp downturn in energy and fertiliser costs taking them down in the second half of the year.

Private sector production prices are expected to rise this year at a slower pace than in 2008, as measured by the national accounts deflator for value added in private sector production. The pace of rise will slow despite declining productivity and higher labour costs, as raw material prices will remain historically low. The pace of rise will not pick up until 2011, when raw material prices will begin to climb.

Consumer prices

Consumer price inflation accelerated considerably until autumn 2008 due to the rise in fuel and food prices. The pace began to ease off in October 2008 as the global recession pushed down the prices of oil and other commodities at a rapid pace. In January–August 2009, inflation as measured by the harmonised index of consumer prices (HICP inflation) averaged 1.9%. The national consumer price index (CPI) rose at a slower pace due to the downward trend in interest rates and falling house prices: in the first half of 2009, CPI inflation rose at only 0.5% on average.

HICP inflation in Finland has been among the highest in the euro area (Chart 51). This is mainly due to service prices: services inflation has been maintained by the rapid rise in labour costs, among other factors (see Box 8). In the first half of 2009, service prices have risen at an annual rate of around 4%. The trend in food prices has also differed from that in the euro area. In Finland, food prices (excl. alcohol and tobacco) were in January–August 2009 on average 4.8% higher than a year earlier. In the euro area, the prices rose by only 0.7% on average. Food prices will fall in October 2009 as the cut in value-added tax on food takes effect. This will also moderate the accelerating impact of food prices on overall inflation.

The trend in fuel prices has dampened inflation in 2009 due to the exceptionally high level of prices in the reference period in 2008 (Chart 52). The base effect was, however, smaller than expected due to the rise in the world market price of oil in early 2009. Prices for industrial products have also declined slightly, as in 2008. Prices for consumer durables, such as used cars and entertainment electronics, have continued to fall slightly, whereas prices for non-durable industrial products were 1.4% higher in the first half of 2009 than in the same period in 2008.

The fall in house prices and considerable cuts in interest rates on housing loans and consumer credit dampened CPI inflation in late 2008, and in summer 2009 it turned negative. National CPI inflation is forecast to average 0.3% in 2009.

Inflation is expected to remain sluggish

It is estimated that HICP inflation will remain moderate over the forecast period. This is partly due to unused resources in the economy. This year,

Chart 51.

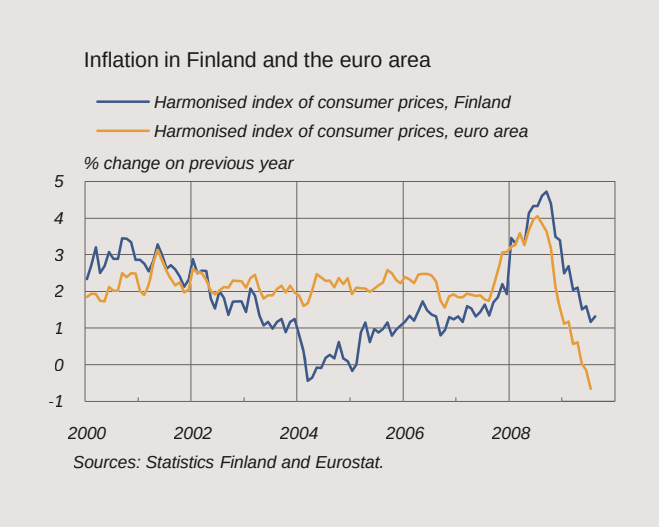


Chart 52.

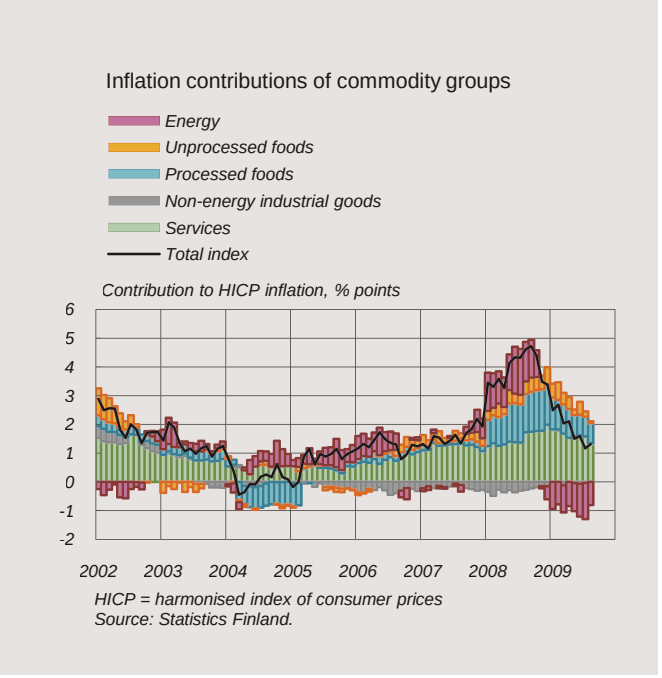
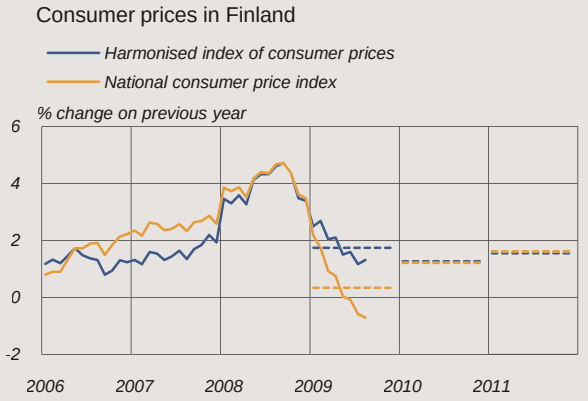


Chart 53.



Sources: Statistics Finland and Bank of Finland.

HICP inflation will ease to 1.7% (Chart 53). Labour costs are expected to rise in 2010–2011 at a significantly slower pace than in the two previous years. World market prices for commodities and import prices are also expected to rise at a relatively slow pace. HICP inflation is expected to ease to around 1.3% in 2010. The 1 percentage point increase in value-added tax in July 2010 will boost inflation by 0.2 percentage points. In 2011, HICP inflation is forecast to accelerate to 1.5%.

Inflation as measured by the national consumer price index will accelerate to 1.2% in 2010. In 2011, higher interest rates will push CPI inflation up to 1.6%.

Box 8.

Maritta Paloviita and Jarkko Kivistö

Service prices

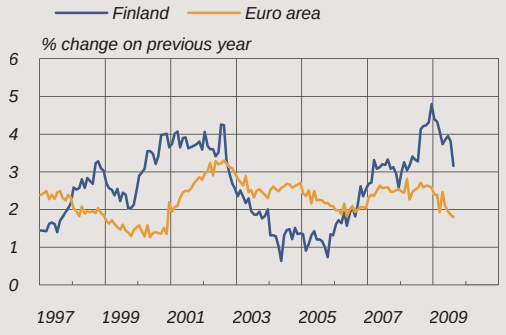
The harmonised index of consumer prices (HICP) describes price developments in goods and services purchased by households in Finland. The basket underlying the index consists of services, industrial goods and foods, with services accounting for over 40% of the total index, energy and other industrial goods 35% and foods (incl. alcohol and tobacco) slightly under a quarter. Due to the considerable weight of services in the HICP, service prices have a material impact on overall inflation. Services inflation has in recent years been persistently positive, fluctuating between 1 and 4% (Chart 54). Since 2007, services inflation in Finland has been higher than average for the euro area. In 2008, the figure for Finland was 3.7%, against an average of 2.6% for the euro area as a whole. In the first half of 2009, the difference in the rates of services inflation has actually grown further: despite the recession, service prices in Finland increased by an average of 4%, against 2.2% in the euro area. In addition to food prices, this explains why overall Finnish inflation has been among the highest in the euro area.

Slightly less than half of all consumer spending on services goes on rents, restaurant and cafeteria services and telecommunications services. A rapid rise in rents and a considerable increase in the price of cafeteria and restaurant services has pushed up overall inflation in 2009 by a total of 0.6 percentage points on average. Rent rises have in recent years been fuelled by rising housing prices, while the supply of rented housing has been unable to keep pace with increased demand. Moreover, the general rise in costs has led to an increase in indexed rents. Meanwhile, robust growth in food, alcohol and tobacco prices in 2008 contributed to overall inflation in two ways. It had a direct impact on the food component of the consumer price index, but it also had an indirect impact via restaurant and cafeteria prices. The rise in restaurant and cafeteria prices was also due in part to an increase in wages and rental costs. Labour costs also had a significant impact on several other service prices. In the service sector as a whole, labour costs in Finland grew by 5.5% in 2008, against an average of just 3.1% for the euro area.

Prices for telecommunications services declined in 2002–2006, due to stiff competition between telecom operators. As a result of subsequent changes in competitive conditions, the price of phone calls began to rise. This trend continued into the first half of 2008. The decline in telecom service prices has continued over the past twelve months at an average annual rate of 5%, which has dampened HICP inflation by approximately 0.1 percentage points. In the euro area, the downward trend in telecom prices has been somewhat slower.

Chart 54.

Service price development in Finland and the euro area



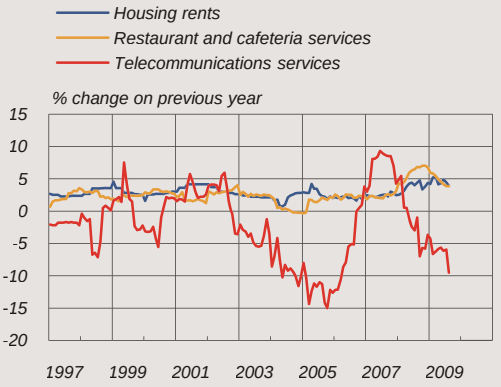
Source: Eurostat.

Public sector measures have also added to services inflation in Finland over the past twelve months. In August 2008, social protection and healthcare fees were raised substantially and tied to the national pension index. These fee increases added 0.4 percentage points on average to the overall inflation figures for the year to July 2009.

In the second half of 2009, services inflation is expected to ease. In August, the impact of the rise in social protection and healthcare fees a year earlier will no longer be included in the annual inflation figures. The upward trend in rents should moderate gradually as supply and demand in the rented housing sector becomes more balanced and general inflation eases. The future of telecom prices is uncertain. If competitive conditions remain tight and demand for services is dampened by the recession, the downward trend may continue. Services inflation overall, however, continues to be driven by rising labour costs. Price pressures in restaurant and cafeteria services will also be fed by the rise in alcohol taxation planned for October 2009.

Chart 55.

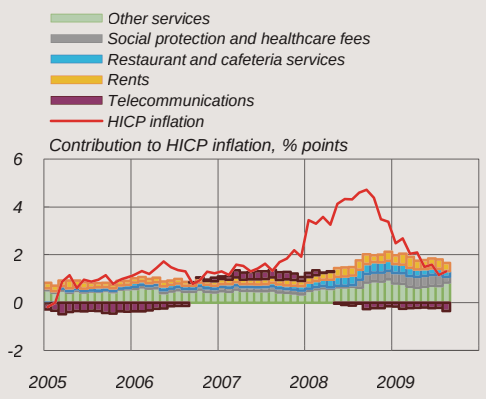
Developments in the most important service price components



Source: Statistics Finland.

Chart 56.

Inflation contribution of services



HICP = harmonised index of consumer prices
Source: Statistics Finland.

Risk assessment

Although the worst phase of the economic crisis is now believed to be over, a return to sustained growth in the global economy is attended by both upside and downside risks. The most significant of these relate to uncertainties over the effectiveness of expansionary economic policy measures and the timescale within which any effects may be felt. Another key uncertainty relates to the banking sector's ability to recover from risky investments and the loan losses caused by the downturn in the real economy. Consumer behaviour, too, will be of prime importance: caution and a greater-than-forecast rise in the savings ratio would delay the return to growth.

The outlook for the Finnish economy is closely bound up with future developments in the global economy. Recovery in world trade and export growth could cause a faster-than-forecast upturn in the Finnish economy. If this were to be accompanied by strengthening corporate and household confidence in the upturn, domestic demand could also recover more quickly. On the other hand, the narrow base and export market distribution of Finland's export industry could lead to weaker-than-forecast developments in the economy. Purely domestic risks relate to the labour market and employment. Recovery in domestic demand could also be hampered by uncertainty over the measures to be taken to resolve the increasingly serious problems in the public finances.

An alternative scenario attached to the forecast analyses Finland's readiness to take advantage of growth in the global economy and international trade as these recover. If the global recovery does not translate into demand for Finnish exports to the same extent as before, leading to underutilisation of production capacity in Finland, this would prolong the recession. If, on the other hand, Finnish industry is able to adjust its output and raise its level of efficiency, export growth could once again accelerate to outstrip growth in the export markets.

International economy

The deepest downturn in the global economy is generally assessed to be over, and a gradual recovery in economic growth is forecast for 2010 and 2011. Confidence in the turnaround has been strengthened particularly by the financial sector's recovery from the deepest phase of its crisis of confidence allied to non-financial corporations' and consumers' clearly more positive expectations of future economic trends in many countries. The forecast for growth is attended by both upside and downside risks. The upside risks are predominantly short-term and possibly easier to manage, whereas the downside risks, if realised, could have more far-reaching negative consequences.

In many major economies, like the United States and China, expansionary measures by the authorities have been considerable. Policy interest rates in the major economic regions are close to zero and central banks have increased the liquidity in the banking system in unprecedented fashion. Such a coordination of monetary and fiscal policy has not been experienced before. It is

possible the economic policy impacts could turn out to be stronger than forecast, whereupon recovery from the recession could be faster than forecast, at least in the short term.

There are upside risks in respect of consumer behaviour, too: if confidence in the more positive outlook for the economy were to strengthen further and private consumption begin to grow more quickly than expected, the present extremely low capacity utilisation rates in industry and other sectors would facilitate brisk growth in output. In this way, the early phase of the global economic recovery could be stronger than forecast.

In addition to these upside risks, the forecast is also attended by a number of noteworthy downside risks. Previous experience tells us that recovery in the real economy is slower when the onset of recession has involved a serious financial market crisis. On this basis alone we can assume the global economic recovery will not be fast.

Consumer behaviour will be of central importance. Although output has begun to rise, the number of unemployed will continue to grow for a while yet, as companies will initially be able to meet increased demand by raising their capacity utilisation rates. The danger is that the foreseeable growth in unemployment and, as a consequence, banks' loan losses could undermine the reawakening of confidence among economic agents. This could delay private consumption and investment decisions that are vital to economic recovery. At its worst, such a decline in confidence could set the real economy and the financial markets off again on a mutually reinforcing downward spiral.

The state of the financial sector could also lead to weaker-than-forecast economic developments. If bank balance sheets were to be weaker than assumed and the capital adequacy of financial institutions were to come into question, risk premia on the financial markets could begin to grow again and bank lending that is vital for economic recovery could become restricted all over again.

The uncertainty surrounding the effects of recent monetary and fiscal policy also contains a risk of weaker-than-forecast economic developments. If caution on behalf of both banks and borrowers means the current low money market interest rates do not, after all, lead to a sustainable recovery in lending, and the impact of already implemented fiscal policy measures turns out to be too short-lived, the onset of autonomic growth in the global economy could be delayed. Large public sector budget deficits and growing debt burdens could make it difficult to implement new expansionary fiscal policy measures. Moreover, rapid growth in public debt could feed long-term inflation expectations, which would in turn restrict room for manoeuvre in monetary policy.

If global recovery ends up being primarily dependent on growth in domestic demand in the United States, the US current account deficit will probably begin to grow again. This could undermine the dollar and at the same time further increase pressures on the competitiveness of countries in the euro area.

Other risks to growth continue to include the threat of increased protectionism and a larger-than-forecast rise in commodity prices, particularly in response to strong growth in China, India and other emerging economies of Asia. A rapid rise in commodity prices could also mean that the potential pace of global economic growth could remain permanently slower than we have been used to expect.

Domestic economy

The Finnish economy has declined both faster and more than expected. Thus, of the alternative development trends described in the Bank of Finland's March 2009 forecast[1], it is the less favourable alternative that has in part been realised. Volume GDP has already declined to a level envisaged in the bleakest alternative for 2010. In other respects, however, the picture is not so gloomy. For example, the unfavourable alternative scenario sketched out in the spring for exports and employment has not materialised, nor does it appear to be the most likely trend for the remainder of the forecast period. In addition, GDP growth is set to accelerate faster in 2011 than in the bleakest alternative.

With the deepest phase of the recession coming early in the forecast period, the possibility of developments in the forecast period being more positive than forecast is greater than before. Even so, there still remain risks of a gloomier outcome.

A faster-than-forecast recovery in exports on the back of a quick recovery on the financial markets and in international trade could also help the Finnish economy as a whole to pull out of recession more quickly than expected. Finnish industry has a lot of free capacity, which means output could respond quickly to an increase in export demand. The present exceptionally low level of inventories, in particular, provides scope for a quick resurgence in output.

Faster economic recovery would be seen in better-than-forecast developments in employment, private consumption and investment. The difficulties in general government finances would then also be less serious than forecast. Together with a relaxed fiscal and monetary policy, increased confidence in an economic upswing could also foster brisk growth on the domestic market. The construction sector, for example, is currently exceptionally sluggish, which means it holds the potential for brisk growth.

The improvement in the global economy assumed in the forecast is much weaker than in a normal cyclical upturn, and Finnish growth will take off even more slowly. If the global recovery does not progress as expected, Finland's position will be particularly difficult.

Even if the global economy does recover as forecast, one downside risk to the forecast for the Finnish economy that will remain is the narrow focus of the export sector. The specialisation of Finnish exports on capital goods and specific export markets will make it harder to benefit fully from a recovery in world trade. It is possible that

[1] Bank Finland Bulletin: Economic outlook 1/2009.

growth in Finland's main export markets will be weighted to a greater degree than forecast towards consumer demand. In such an event, the forecast recovery in international trade would benefit Finnish exports less than expected. A more prolonged economic crisis could also mean increased pressures around the world for protectionist measures to protect domestic output. This would cause long-term problems for Finnish exports.

In longer-term perspective, the growth prospects for the economy are threatened by labour force displacement, erosion of the capital base due to a lack of investment and uncertainty over the measures to be taken to resolve the increasingly serious problems in the public finances.

Domestic downside risks to the forecast concern the labour market. The employment situation could turn out to be weaker than is discernible at present. Particularly in labour-intensive service sectors and the construction industry, unemployment could increase more quickly than expected and could also continue for longer than forecast. In local government, too, municipal authorities could find it harder than currently assumed to recruit new personnel to replace those retiring in a situation where they face pressures to cut expenditure growth. Moreover, if the employment situation deteriorates and open unemployment increases more than forecast, households could increase their savings beyond the level estimated in the forecast.

The risks to the forecast trend in prices point more in the direction of lower inflation in the short term (see Box 9). In the longer term there is also the possibility of a faster-than-forecast rise in prices. If exporters are able to take full advantage of growth in the export markets and the Finnish economy recovers more quickly than forecast, the open sector of the economy could face pressures for higher-than-expected wage increases. If wage-formation mechanisms in the economy remain unchanged, such increases would quickly spread to the closed sector of the economy and on into prices. Moreover, pressures to tighten indirect taxation and raise administrative charges in order to reduce net government borrowing will already grow during the forecast period.

The risks to the forecast for general government finances have materialised in terms of both revenue and expenditure. The financial base has narrowed rapidly, while expenditure has grown. There are several risks surrounding future expenditure, including the calibrating of fiscal policy once the present expansionary measures have run their course. The forecast assumes the use of public funds to expand the economy will come to an end some time in 2010 and that in 2011 fiscal policy will already be clearly contractionary. If fiscal policy tightening were to be postponed until after the forecast period, this would further deepen the central government deficit. Meanwhile, in respect of local government finance, there is a more general risk that municipal expenditure may still have been calibrated in terms of a stronger growth in the financial base than is currently foreseeable.

Reducing public debt and building up the pension funds have long been

important tools in preparing for the future challenges to public finances posed by an ageing population. Growing deficits have undermined this strategy. Uncertainty over how the hole that has now opened up in the future financing of pensions and public welfare services can be filled could make both households and businesses more cautious than before. As uncertainty grows regarding taxation, the volume and quality of welfare services, the level of pensions or the age of retirement, households and businesses will become less willing to enter into long-term commitments. This could contribute to a reduction in investment and an increase in savings, whereupon income formation would be weaker than forecast.

The experience of the early 1990s demonstrates that the restructuring of the economy that occurs during a deep recession can push people out of the labour market for a long time. The displacement in this way of young people just entering the labour market would have a particularly negative impact on the prospects for long-term economic growth. If, in addition, the investment rate were to remain low for a prolonged period, this would also slow productivity growth. Low employment and a halt to productivity growth would then push the economy back into recession.

Alternative scenario: restructuring of the export sector

The strong growth in Finnish goods exports in recent years was a consequence of international demand for capital goods and Finnish companies' ability to exploit the global opportunities on the capital goods market. At the same time, the most important export industries have been those with above average labour productivity. The impact of the financial crisis on the real economy began to be apparent at the end of 2008, and there was a substantial dip in exports. Exports of Finnish goods and services in the first half of 2009 were almost 30% down on the first half of 2008.

This alternative scenario examines Finland's readiness to cope as the global economy and international trade come out of recession. An initial assumption in the scenario is that the global economic recovery will no longer translate into demand for Finland's export industry in the same manner as before. Accordingly, Finnish export growth will be much weaker than growth in the export markets, despite the assumed recovery in world trade in 2010 and 2011. The export industry undergoes structural change in which companies specialising in exports and the production of capital goods reduce their output in Finland. As a result, their production capacity located in Finland is initially under-utilised, whereupon the capital utilisation rate begins to decline. Although exports begin to recover in 2011, this does not stimulate a substantial recovery in output. Even after recovery, the existing export industries in Finland and the present sectoral structure of exports will be unable to reproduce the success story of the mid-1990s.

A decline in the capital utilisation rate means that the same capital input yields less output than before. One example of such a situation is when

some of the physical capital stock is not being fully exploited. Such a situation can arise when, for example, the electronics industry transfers its subcontracting outside Finland, or when production plants are closed in the forest industries. When exploitation of the capital stock declines, it also means slower growth in labour productivity, as this is partly dependent on the capital stock.

A decline in the rate of technological development is examined using Aino, a macroeconomic dynamic general equilibrium model developed at the Bank of Finland. Aino describes systematically the behaviour of economic agents at the level of the macro economy.[2] The short-term responses of the economy are strongly influenced by price and nominal pay rigidities and the costs of capital stock adjustment, which are all included in the model. A decline in the rate of exploitation of the capital stock and a related decline in the rate of development of labour-saving technology are expected to come as a surprise to economic agents whenever they occur. After a decline, the rate of exploitation of the capital stock returns gradually towards average, while the rate of development of labour-saving technology also accelerates towards its average pace.

As a result of the above developments, the economic recession is prolonged and GDP continues to decline in 2010 and 2011 at least (Table 9). The decline in the rate of development of labour-saving technology and in the rate of exploitation of the capital stock undermine labour productivity growth, the pace of which slows by 1 percentage point. The response from wages and prices is delayed due to rigidities, with the result that labour demand declines and the number of employed contracts by 80,000 relative to the forecast. Companies' marginal costs grow and increase the pressures on producers to raise prices. Due to price rigidities, domestic inflation gradually accelerates. The rise in domestic prices leads to a deterioration in the price competitiveness of Finnish exports, which accelerates the pace of restructuring in the export sector. Even if exports return to a growth curve in 2011, the pace of growth is still slower than growth in the export markets. Finnish output of capital goods for export is lower than

[2] For more on Aino and its features see Kilponen, J – Ripatti, A – Vilmunen, J (2004) 'Aino: the Bank of Finland's new dynamic general equilibrium model of the Finnish economy', Bank of Finland Bulletin 3/2004, and Kilponen, J – Ripatti, A (2006) 'Labour and product market competition in a small open economy – Simulation results using a DGE model of the Finnish economy', Bank of Finland Discussion Paper 5/2006.

Table 9.

Alternative scenario: restructuring of the export sector
Deviations from forecast

	2009	*2010*	*2011*
Annual deviation, % points			
GDP	*-0.4*	*-2.3*	*-2.8*
Imports	*-0.3*	*-2.4*	*-2.7*
Exports	*-0.4*	*-2.8*	*-3.4*
Private consumption	*-0.5*	*-2.4*	*-2.8*
Private sector investment	*-0.4*	*-3.4*	*-4.3*
Price of private consumption	*0.0*	*0.2*	*0.3*
Export prices	*0.0*	*0.1*	*0.3*
Index of wage and salary earnings	*0.0*	*0.0*	*0.0*
Deviation, level			
Number of employed, 1,000 persons	*-4.9*	*-39.8*	*-83.8*
Unemployment rate, % points	*0.1*	*0.8*	*1.7*

Source: Bank of Finland calculations.

before, because companies move some of their production abroad.

Slower GDP growth has clear negative implications for domestic demand. Private consumption growth is notably slower than forecast. Contributory factors include households' lower level of earned income and a declining asset position. Growth in earned income is hampered by both the declining employment situation and slower growth in real wages due to faster inflation. There is slower growth in corporate profits, as price rigidities prevent companies passing on the full effect of rising costs to their prices.

There is no change in the required return on capital. The capital stock does, however, have to be reduced through lower investment in order to adjust to slower output growth. For this reason, the restructuring of output is initially expressed as a strong contraction in investment. In the recovery phase after the forecast period, investment correspondingly grows most quickly. The scenario does not speculate as to which fields of business will attract investment in the future.

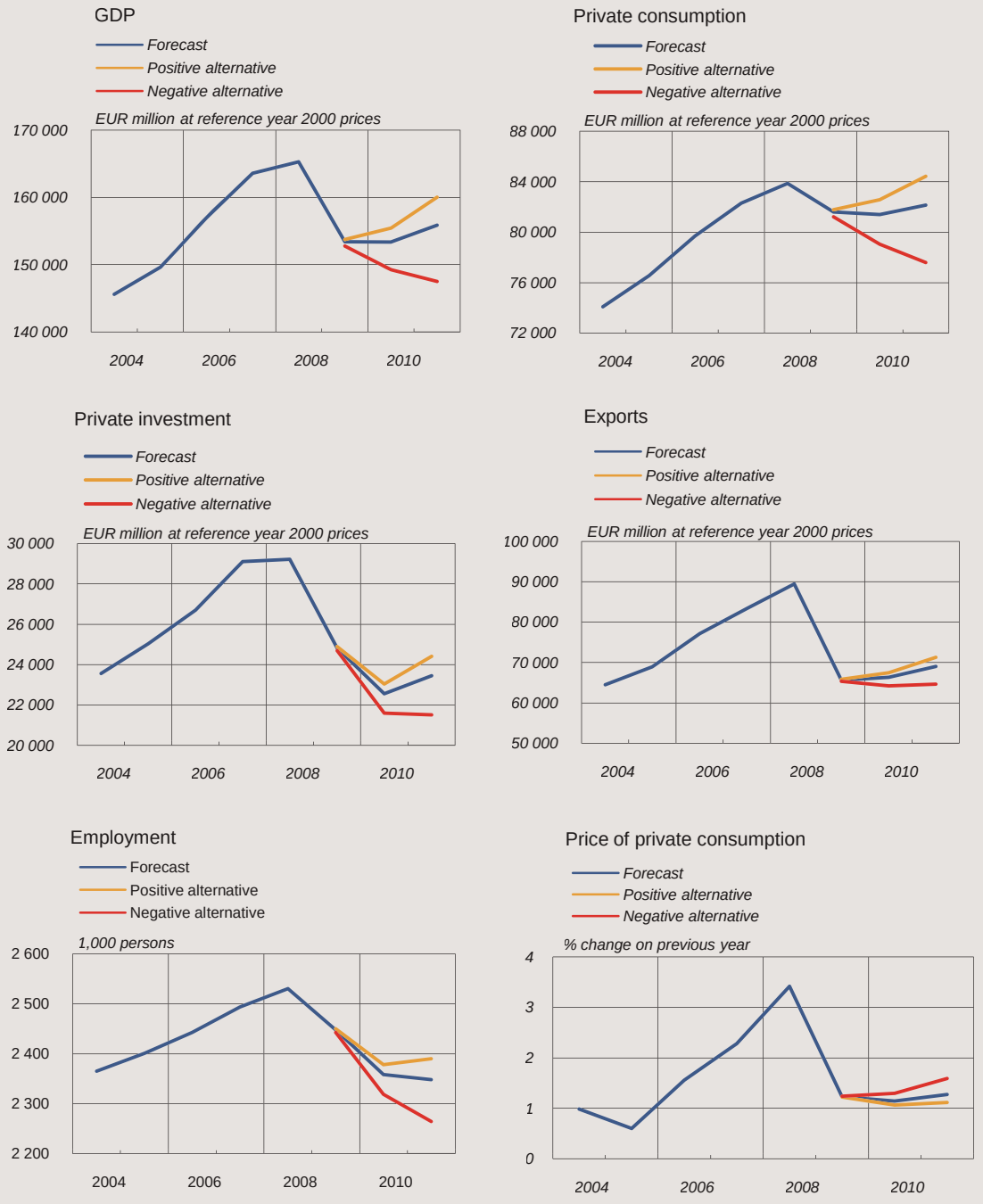
The impacts are moderated by the assumption that the process of restructuring in the export sector is temporary and the economy returns over the medium term to its pre-recession growth trend. The response of consumption and investment is subdued by a slight decline in real interest rates relative to the baseline forecast, as nominal interest rates are not assumed to differ from the baseline.

The chain of events depicted in this scenario can also be examined from a positive angle. If Finnish industry is able to adjust its output and raise its efficiency very quickly, export growth could already accelerate this year to overtake the pace of market growth around the world. This would be fostered by a fall in companies' marginal costs and improved price competitiveness following from improvements in labour productivity. The speed of response would be furthered by the ready availability of existing capacity, as the capacity utilisation rate is still very low.

A faster-than-forecast recovery in the financial sector would make it easier for Finnish companies to access funding and facilitate the launch of new investments. A recovery in Finnish exports would be quickly reflected in a brisk improvement in the employment situation and growth in consumption.

The above scenario represents an attempt to sketch out possible development trends. The positive and negative alternatives are differently dimensioned in terms of their deviation from the baseline forecast (Chart 57). The negative alternative is larger than the positive, although they are considered to be equally likely. The construction of new capacity or more efficient exploitation of existing capital are slower and more difficult to achieve than simply closing existing production plants.

Chart 57.



Sources: Statistics Finland and Bank of Finland.

Box 9.

Jarkko Kivistö and Maritta Paloviita

Short-term inflation risks

Inflation in 2009 has been more rapid than expected in the first months of the year. Despite the gloomy economic situation, the rise in eg food and service prices has been surprisingly rapid in recent months. The short-term trend in inflation is surrounded by higher-than-normal uncertainty. Risks to the inflation forecast are slightly on the downside.

The short-term uncertainty surrounding the forecast for inflation according to the harmonised index of consumer prices (HICP inflation) is illustrated in Chart 58. In respect of the national consumer price index (CPI), in addition to the risks indicated in the chart there are also risks regarding future trends in house prices and housing loan interest rates, as these are included in the CPI but not in the HICP. The short-term forecast fan is slightly asymmetrical because slower-than-forecast inflation is considered a little more probable than faster-than-forecast inflation. The breadth of the inflation fan illustrates the larger-than-normal uncertainty surrounding the inflation forecast.

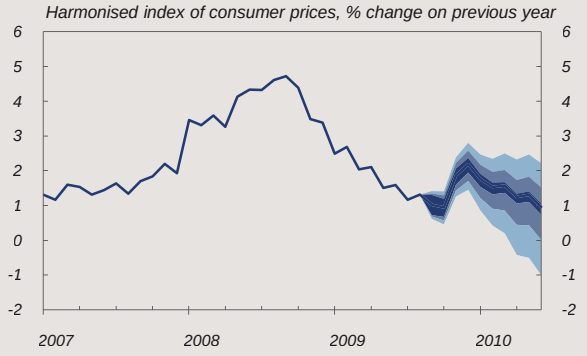
The increase in service prices is expected to slow in the forecast period. Higher unemployment and uncertainty about the development of household finances may, however, dampen consumer demand in the next few months to an extent that will slow the increase in service prices more than expected. Even though higher labour costs will maintain price pressures in eg restaurant and cafeteria services, the pace of rent rises may slow more quickly than expected. The development of non-energy industrial goods prices is also surrounded by some uncertainty. For example, higher prices for used cars could boost the pace of industrial producer price rises more than forecast, whereas end-of-year discounts could provide a considerable surprise on the downside.

The trend in food prices is also surrounded by higher-than-normal uncertainty. The impact on consumer prices of the cut in value-added tax on food could diverge from the forecast. In addition, world market prices for food commodities could rise faster than forecast, and the rise could pass through the food production chain to consumer prices more quickly and more strongly than before.

The trend in the world market price of oil could also diverge from the forecast. Moreover, fluctuations in both supply and demand on the world market as well as changes in the domestic consumption of energy will be reflected in consumer prices, while the impact on domestic prices of unexpected changes in oil and other commodity prices could be either dampened or amplified by changes in the external value of the euro.

Chart 58.

Short-term inflation forecast



The fan chart illustrates the degree of uncertainty in the short-term inflation forecast. Inflation is estimated to be within the darkest area with 50% probability. 75% probability is depicted by the darkest area plus the two medium-dark areas either side of it, and 90% probability by the entire coloured area.
Sources: Statistics Finland and Bank of Finland.

Box 10.

Markus Haavio, Jarmo Kontulainen and Mika Kortelainen

The economic and financial crises and forecasting[1]

The financial market crisis that originated on the US housing market in summer 2007 deepened further in autumn 2008, while the effects of the crisis became more widespread. When the US investment bank Lehman Brothers went bankrupt in September 2008 and a major player in the credit risk insurance market, the giant insurance company American International Group, was teetering on the verge of bankruptcy, panic spread through the financial markets. Market participants lost confidence in each other, rendering parts of the markets inoperable.

Finnish GDP growth was only around 1% in 2008, compared with the two previous years when it had been close to 5%. The deepening of the crisis – in particular the collapse of international trade – came largely as a surprise. In March and September 2008, the Bank of Finland projected Finnish GDP growth in 2008 of 2.7% and 2.3%, respectively. Although growth rates were revised downwards in the months following the Lehman Brothers bankruptcy, in forecasts released towards the end of the year, growth was still projected to hit 2% annually.

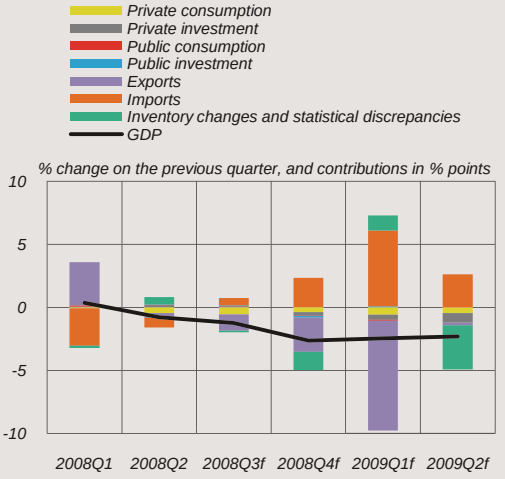
In December 2008, the Bank of Finland exceptionally released an adjusted forecast due to the rapid deterioration of the economy. The adjusted forecast, which was prepared as part of Eurosystem staff macroeconomic projections, was produced mainly in November, when national accounts data for the second quarter of 2008 were available. The forecast horizon commenced in the third quarter, when both exports and consumption began to decline. The forecast error for the third quarter was still only moderate and much smaller than the subsequent statistical adjustment for the first quarter. By contrast, the forecast errors relating to foreign trade for the last quarter of 2008 and the first quarter of 2009 were of exceptional magnitude. The negative growth contributions of consumption and investment were also larger than predicted (Chart 59).

The figures projected for 2009 changed even more dramatically. While projections before the Lehman Brothers bankruptcy assumed that the growth rate of the Finnish economy would stabilise at around 2% in 2009, the forecasts produced in winter 2009 reflected a clearly negative growth trend. (Chart 60).

Needless to say, the problems of the financial sector did not come as a surprise to financial forecasters, given the unrest on the financial markets since late summer 2007. US housing prices had begun to

Chart 59.

Adjustments to the Bank of Finland's GDP forecast



Changes between the national accounts data available in September 2009 and the December 2008 forecast.
f = December 2008 forecast
Source: Bank of Finland.

[1] *See also Markus Haavio, Jarmo Kontulainen and Mika Kortelainen, The Finnish Economic Journal, Volume 105, 3/2009.*

decline in 2006, while, at the same time, payment defaults on the US housing loan market had begun to grow. By summer 2007, it had become apparent that US mortgage-backed debt securities carried a much higher risk than had been estimated. Problems in one market segment were reflected in a more general change in the attitude towards risk, which had previously been exceptionally under-priced. In August 2007, risk premia increased on all markets. Banks' problems surfaced when the interest differentials between collateralised and uncollateralised credit on the interbank market widened and demand for liquidity surged. The higher risk premia were reflected in the forecasts and are one reason for the downward revision of forecasts since autumn 2007.

There were, however, many uncertainties surrounding analysis of the economic effects of the financial market disruption. First of all, estimates of the scale of the problems have changed considerably over time. In autumn 2007, it was projected that the crisis would cause financial institutions write-downs in the range of a few hundred billion dollars. In spring 2008, the IMF projected that loan losses and losses on impairments would amount to a little under USD 1,000 billion, while in autumn 2008 this figure was raised to USD 1,500 billion. The calculations undertaken by the IMF in autumn 2009 now foresee write-downs of USD 2,800 billion for commercial banks and USD 3,400 billion for the financial sector as a whole.

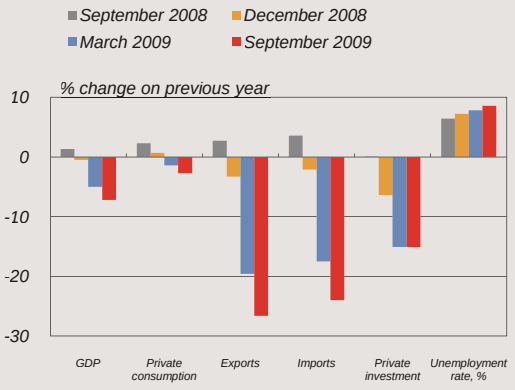
At the time the forecasts discussed above were produced, it was still unclear how legacy securities would be divided between banks, other financial institutions, various funds and other investor groups. In the early days of the financial crisis, the general belief was that banks would securitise housing loans and sell these securities to a large number of investors. However, it became apparent later that a substantial amount of legacy securities had ended up on banks' balance sheets – either directly, or indirectly through the shadow bank system. Hence, the prime objective of securitisation may not have been diversification of the risks related to housing loans, but rather evasion of capital adequacy regulations. The high level of legacy securities on banks' balance sheets made the banking system vulnerable.

The geographical distribution of financial market risk was also unclear. In the early days of the crisis, the banking system of key euro area countries, such as Germany, seemed to be in fairly good shape. In light of later information, however, this belief has proved at least partly unfounded.

In these unusual times, an individual event can have a considerable impact on the thinking of both market participants and financial analysts. In March 2008, the commercial bank JP Morgan Chase took control of the troubled investment bank Bear Stearns, with the assistance of the US Federal Government. After the Bear Stearns incident, the general sentiment was that no systemically important financial institution would be

Chart 60.

Bank of Finland's forecasts for 2009



Source: Bank of Finland.

allowed to go bankrupt. Despite the general awareness of the difficulties of Lehman Brothers and American International Group, the spring 2008 experience led financial analysts and economic forecasters to believe the problems of individual financial institutions would not cause the entire financial system to collapse.

When the effects of the financial crisis began to feed through into the Finnish economy in autumn 2008, international trade was the key channel of contagion. The difficulties and uncertainties surrounding trade projections were at least two-fold. Firstly, the effects of the financial crisis were reflected in transaction flows only after a relatively long time lag. As many months went by without anything very dramatic happening, it was thought possible that growth in trade could be sustained despite the financial market disruption. Even in retrospect, it is difficult to pinpoint any clear indicators that would explain the decline in international trade subsequently witnessed.

At the time, it also looked as if the key market area for Finnish exports, namely Europe, would escape the worst consequences of the crisis. In the first half of 2008, most EU economies posted stronger-than-expected GDP growth. In economic analyses, the common interpretation was that the problems of the US economy had been partly brought on by the country itself, as it had long been living beyond its means. By contrast, the euro area current account posted a slight surplus. For example in the largest euro area country, Germany, the savings ratio for households was high and corporate balance sheets sound.

The second difficulty for projections was the fact that when the financial crisis finally hit international trade the impact came through exceptional channels, such as the effect on international payment transfers and the short-term financing needs of export companies. In normal times, international trade analyses may fairly safely ignore technical details like international payment transfers and trade credits. In autumn 2008 and spring 2009, serious disruptions nevertheless occurred in the financial system vital to international trade. These issues are examined more closely in Box 7.

Interestingly enough, forecast errors for imports are of the same order as for exports. The Bank of Finland forecast over-estimated import growth for 2009. With the contraction in international trade, the imports-to-GDP ratio and the propensity to import declined worldwide. In Finland, too, the financial market disruption provoked a stronger-than-expected shift in the focus of demand towards home-produced goods and services. Furthermore, national stimulus measures, in Finland as well as elsewhere, were mainly geared towards domestic production, displacing imports.

Changes from the previous forecast

The picture provided by the current Bank of Finland forecast for the performance of the Finnish economy is bleaker for the current year but slightly more favourable for 2010–2011 than in the Bank's forecast released in March 2009. These changes are due in part to unexpectedly weak actual developments in the Finnish economy in the first half of the year and in part to more positive prospects for the world economy in the forecast period. Overall, however, the output contraction during the forecast period is projected to be larger than estimated in the spring.

In the first part of the year, demand fell much more rapidly than anticipated in the spring. The collapse in world trade that began at the end of 2008 came as a surprise in terms of its severity. Finland's export markets will shrink this year twice as much as estimated in the spring, and Finnish exports will drop by more than a quarter instead of almost a fifth. While imports will also decrease more than previously foreseen, the downward impact from net exports on value-added growth is in the present forecast greater than in the previous projection. In the first half of the year, the decline in private consumption was also stronger than anticipated, in an environment with a high degree of uncertainty and increased savings.

In the course of the summer and early autumn, there were increasing signs that the downward spiral of the world economy and Finland's export markets would be giving way to a cautious, albeit stronger upturn than predicted in the spring. This is projected to boost exports slightly earlier and more firmly than assumed in the previous forecast. On the back of the more favourable export outlook, the investment slump should be less severe and shorter than predicted in the spring. By contrast, there is no immediate sign of a turnaround in private consumption.

As well as the growth prospects for the world economy, the rest of the economic environment that provides the setting for the forecast for the Finnish economy has also changed in many respects since the spring. The financial markets have calmed down more rapidly than assumed, risk premia and interest rates on lending have fallen more than anticipated and financing costs for non-financial corporations and households are lower than in the previous forecast. However, the problems relating to the availability of finance have

Table 10.

Current and March 2009 forecast

	2008	*2009*	*2010*	*2011*
GDP, % change	*1.0*	*-7.2*	*0.0*	*1.6*
March 2009	*0.9*	*-5.0*	*-1.1*	*1.5*
Inflation (HICP), %	*3.9*	*1.7*	*1.3*	*1.5*
March 2009	*3.9*	*1.2*	*1.1*	*1.3*
Finland's export markets, % change	*3.8*	*-14.9*	*1.0*	*4.9*
March 2009	*5.0*	*-7.1*	*0.5*	*4.2*
Current account, % of GDP	*2.4*	*1.0*	*0.8*	*0.8*
March 2009	*2.5*	*1.2*	*1.0*	*0.2*
General government net lending, % of GDP	*4.4*	*-3.0*	*-5.2*	*-5.3*
March 2009	*4.1*	*-1.0*	*-3.0*	*-3.7*

not in all respects eased in a corresponding way. Public-sector measures to prop up demand will provide a strong boost to growth in Finland, as elsewhere, during this and next year. Fiscal policy tightening in Finland towards the end of the forecast period will nevertheless be more stringent than assumed in the spring.

In the first half of the year, commodity prices rose faster than predicted in the previous forecast and are expected to continue rising moderately throughout the forecast period. The price of oil will remain a good quarter higher than projected in the spring. On the other hand, the value of the euro against the US dollar is expected to remain significantly stronger than in the previous forecast.

As the overall outlook for Finnish GDP is weaker than assumed earlier, a number of economic equilibrium variables will undergo stronger deterioration than foreseen in the previous forecast. Employment in the forecast period will be impaired by as much as foreseen in the previous forecast, but open unemployment will grow considerably more than suggested earlier. At the same time, earnings growth will slow more quickly.

Consumer prices in the early part of this year rose more rapidly than anticipated in the spring. Towards the end of the forecast period, inflation is also projected to be higher than foreseen in the spring, because of a more substantial tightening of indirect taxation than previously expected. Overall, however, price pressures are now estimated to be lower than assumed in the spring and consumer prices should edge up in the forecast period at broadly the same pace as envisaged in the previous forecast.

As exports are projected to recover slightly faster than domestic demand, the current account surplus at the end of the forecast period will be somewhat larger than previously expected. The growth in non-financial corporations' financial surplus will be larger, but correspondingly the general government financial deficit will deepen more rapidly. At the end of the forecast period, the general government debt-to-GDP ratio will be notably higher than predicted in March.

Articles and boxes from previous publications

Articles

Ten years of common monetary policy. Jarmo Kontulainen. Bank of Finland Bulletin 1/2009.

Euro cash is as popular as ever. Antti Heinonen. Bank of Finland Bulletin 1/2009.

Finanssikriisi koettelee euroalueen talouden vakautta [The financial crisis is testing the stability of the euro area economy; in Finnish only]. Heidi Schauman. Euro & talous 2/2009.

The euro era has internationalised the Finnish economy – the recession is weakening its external stability. Jorma Hilpinen. Bank of Finland Bulletin 1/2009.

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Maataloushyödykkeiden maailmanmarkkinahinnat ja euroalueen inflaatio [World market prices of agricultural commodities and euro area inflation; in Finnish only]. Risto Herrala. Euro & talous 1/2008.

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Household wealth in Finland. *Risto Herrala.* Bank of Finland Bulletin 3/2007.

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Katsaus Yhdysvaltain rahapolitiikkaan [Review on monetary policy in the United States; in Finnish only]. Antti Suvanto and Mika Pösö. Euro & talous 4/2006.

Why does consumers' perceived inflation differ so much from actual inflation? Samu Kurri. Bank of Finland Bulletin 3/2006.

Spending rules bring stability to fiscal policy in Finland. Helvi Kinnunen. Bank of Finland Bulletin 3/2006.

Household indebtedness. *Risto Herrala.* Bank of Finland Bulletin 1/2006.

Changing paper markets and prices. Lauri Hetemäki. Bank of Finland Bulletin 1/2006.

ICT's contribution to labour productivity. Pentti Forsman and Jukka Jalava. Bank of Finland Bulletin 1/2006.

Will growth in Russia continue? *Pekka Sutela.* Bank of Finland Bulletin 4/2005.

General equilibrium effects of population ageing. Juha Kilponen and Helvi Kinnunen. Bank of Finland Bulletin 3/2005.

Consumer price changes. *Samu Kurri.*
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Bank of Finland Bulletin 2/2005.

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Increasing competition on the product and labour markets. Juha Kilponen and Antti Ripatti.
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Public services productivity, the labour market and public finances in Finland. Helvi Kinnunen.
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Will rapid growth in China continue?
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Pentti Forsman. Bank of Finland Bulletin 3/2000.

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Mikko Spolander. Bank of Finland Bulletin 1/2000.

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- Alternative scenario: a deepening prices and wages spiral. Bank of Finland Bulletin, Economic outlook 2/2008, p. 69–72.
- Alternative scenario: the impact on Finland of a stronger-than-forecast deterioration in the international economy. Bank of Finland Bulletin, Economic outlook 1/2008, p. 63–65.
- Alternative scenario: Impact of Russian export duties on roundwood. Bank of Finland Bulletin 3/2007, p. 73–77.
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Forecast tables

1. Balance of supply and demand, at reference year 2000 prices

% change on previous year

	2007	2008	2009^f	2010^f	2011^f
GDP at market prices	4.2	1.0	-7.2	0.0	1.6
Imports of goods and services	6.5	7.0	-24.0	-1.9	3.1
Exports of goods and services	8.1	7.3	-26.6	1.1	4.0
Private consumption	3.3	1.9	-2.7	-0.2	0.9
Public consumption	0.8	2.0	1.8	0.6	0.7
Private fixed investment	9.0	0.4	-15.1	-9.1	4.0
Public fixed investment	6.8	-0.3	2.3	-1.7	-2.6

2. Contributions to growth*

	2007	2008	2009^f	2010^f	2011^f
GDP, % change	4.2	1.0	-7.2	0.0	1.6
Net exports	1.0	0.6	-2.2	1.0	0.4
Domestic demand excl. inventory change	3.5	1.2	-3.7	-1.5	1.2
of which Consumption	1.8	1.1	-1.0	0.0	0.7
Investment	1.7	0.1	-2.7	-1.5	0.5
Inventory change + statistical discrepancy	-0.4	-0.9	-1.3	0.5	0.0

** Bank of Finland calculations. Annual growth rates using the previous year's GDP shares at current prices as weights.*

3. Balance of supply and demand, price deflators

Index, 2000 = 100, and % change on previous year

	2007	2008	2009^f	2010^f	2011^f
GDP at market prices	109.8	111.8	113.3	113.6	115.1
	3.2	1.8	1.4	0.2	1.3
Imports of goods and services	109.0	111.0	102.9	104.1	105.1
	2.1	1.8	-7.3	1.1	1.0
Exports of goods and services	98.5	97.0	91.1	88.5	88.5
	0.7	-1.6	-6.1	-2.9	0.0
Private consumption	110.2	113.9	115.3	116.7	118.1
	2.3	3.4	1.2	1.1	1.3
Public consumption	128.4	135.2	140.2	144.4	148.8
	4.3	5.3	3.7	3.0	3.0
Private fixed investment	110.1	114.0	114.4	116.1	117.4
	4.4	3.6	0.3	1.5	1.1
Public fixed investment	118.6	125.6	124.8	125.2	126.5
	5.4	5.9	-0.6	0.3	1.0
Terms of trade (goods and services)	90.4	87.4	88.5	85.0	84.2
	-1.4	-3.3	1.3	-4.0	-1.0

4. Balance of supply and demand, at current prices

EUR million and % change on previous year

	2007	2008	2009f	2010f	2011f
GDP at market prices	179,659	184,728	173,825	174,200	179,395
	7.6	2.8	-5.9	0.2	3.0
Imports of goods and services	73,056	79,582	56,086	55,643	57,966
	8.7	8.9	-29.5	-0.8	4.2
Total supply	252,715	264,310	229,911	229,843	237,360
	7.9	4.6	-13.0	0.0	3.3
Exports of goods and services	82,127	86,761	59,760	58,670	61,056
	8.8	5.6	-31.1	-1.8	4.1
Consumption	129,123	136,847	137,713	140,105	143,906
	5.5	6.0	0.6	1.7	2.7
Private	90,685	95,574	94,117	94,958	97,056
	5.6	5.4	-1.5	0.9	2.2
Public	38,438	41,273	43,596	45,147	46,851
	5.1	7.4	5.6	3.6	3.8
Fixed investment	36,566	38,098	33,246	30,978	32,245
	13.6	4.2	-12.7	-6.8	4.1
Private	32,047	33,327	28,398	26,195	27,538
	13.8	4.0	-14.8	-7.8	5.1
Public	4,519	4,771	4,848	4,783	4,708
	12.6	5.6	1.6	-1.3	-1.6
Inventory change + statistical discrepancy	4,899	2,604	-808	90	153
% of previous year's total demand	0.3	-0.9	-1.3	0.4	0.0
Total demand	252,715	264,310	229,911	229,843	237,360
	7.9	4.6	-13.0	0.0	3.3
Total domestic demand	170,588	177,549	170,151	171,173	176,305
	7.5	4.1	-4.2	0.6	3.0

5. Balance of supply and demand

% of GDP at current prices

	2007	2008	2009f	2010f	2011f
GDP at market prices	100.0	100.0	100.0	100.0	100.0
Imports of goods and services	40.7	43.1	32.3	31.9	32.3
Exports of goods and services	45.7	47.0	34.4	33.7	34.0
Consumption	71.9	74.1	79.2	80.4	80.2
Private	50.5	51.7	54.1	54.5	54.1
Public	21.4	22.3	25.1	25.9	26.1
Fixed investment	20.4	20.6	19.1	17.8	18.0
Private	17.8	18.0	16.3	15.0	15.4
Public	2.5	2.6	2.8	2.7	2.6
Inventory change + statistical discrepancy	2.7	1.4	-0.5	0.1	0.1
Total demand	140.7	143.1	132.3	131.9	132.3
Total domestic demand	95.0	96.1	97.9	98.3	98.3

6. Prices

Index, 2000 = 100, and % change on previous year

	2007	2008	2009f	2010f	2011f
Consumer price index, 2005=100	104.1	108.3	108.7	110.0	111.8
	2.5	4.1	0.3	1.2	1.6
Harmonised index of consumer prices, 2005=100	102.9	106.9	108.8	110.2	111.9
	1.6	3.9	1.7	1.3	1.5
Private consumption deflator	110.2	113.9	115.3	116.7	118.1
	2.3	3.4	1.2	1.1	1.3
Private investment deflator	110.1	114.0	114.4	116.1	117.4
	4.4	3.6	0.3	1.5	1.1
Exports of goods and services deflator	98.5	97.0	91.1	88.5	88.5
	0.7	-1.6	-6.1	-2.9	0.0
Imports of goods and services deflator	109.0	111.0	102.9	104.1	105.1
	2.1	1.8	-7.3	1.1	1.0
Value-added deflators					
Value-added, gross at basic prices	111.0	113.2	115.4	116.5	118.2
	3.5	2.0	1.9	1.0	1.4
Private sector	106.0	107.6	108.7	109.1	110.1
	2.9	1.5	1.1	0.3	1.0
Public sector	137.7	145.8	153.9	159.5	165.0
	5.5	5.9	5.5	3.7	3.4

7. Wages and productivity

% change on previous year

	2007	2008	2009f	2010f	2011f
Whole economy					
Index of wage and salary earnings	3.3	5.6	4.4	2.7	1.9
Compensation per employee	3.4	5.6	3.6	2.2	1.4
Unit labour costs	1.3	6.1	8.1	-1.7	-0.6
Labour productivity per employed person	2.1	-0.4	-4.0	3.8	2.1

8. Labour market

1000 persons and % change on previous year

	2007	2008	2009f	2010f	2011f
Labour force survey (15–74-year-olds)					
Employed persons	2,493	2,530	2,447	2,358	2,348
	2.1	1.5	-3.3	-3.6	-0.4
Unemployed persons	183	172	229	277	281
	-10.1	-6.3	33.4	20.8	1.5
Labour force	2,677	2,702	2,677	2,635	2,629
	1.1	0.9	-0.9	-1.6	-0.2
Working-age population (15–64-year-olds)	3,517	3,536	3,544	3,535	3,515
	0.3	0.5	0.2	-0.2	-0.5
Labour force participation rate, %	67.2	67.5	66.5	65.3	65.0
Unemployment rate, %	6.9	6.4	8.6	10.5	10.7
Employment rate (15–64-year-olds), %	69.9	70.6	68.2	65.9	66.0

9. General government revenue, expenditure, balance and debt

% of GDP

	2007	2008	2009f	2010f	2011f
General government revenue	52.5	53.4	52.4	52.3	52.9
General government expenditure	47.3	49.0	55.3	57.5	58.2
General government primary expenditure	45.8	47.5	53.9	56.0	56.3
General government interest expenditure	1.5	1.5	1.4	1.5	1.9
General government net lending	5.2	4.4	-3.0	-5.2	-5.3
Central government	2.1	0.9	-4.3	-5.9	-5.6
Local government	-0.1	-0.2	-0.7	-0.8	-1.0
Social security funds	3.3	3.7	2.0	1.6	1.4
General government primary balance	6.7	5.9	-1.5	-3.7	-3.4
General government debt	35.1	33.6	41.9	50.2	56.1
Central government debt	31.2	29.4	36.8	44.3	49.3
Tax ratio	42.9	43.0	42.4	42.0	42.4

10. Balance of payments

EUR million

	2007	2008	2009f	2010f	2011f
Exports of goods and services	82,127	86,761	59,760	58,670	61,056
Imports of goods and services	73,056	79,582	56,086	55,643	57,966
Goods and services account (SNA)	9,071	7,179	3,674	3,027	3,090
% of GDP	5.0	3.9	2.1	1.7	1.7
Investment income and other items, net (+ statistical discrepancy)	-231	-1,230	-439	-218	-215
Current transfers, net	-1386	-1566	-1437	-1350	-1389
Current account, net	7,455	4,383	1,798	1,459	1,487
Net lending, % of GDP					
Private sector	-1.1	-2.0	4.0	6.0	6.1
Public sector	5.2	4.4	-3.0	-5.2	-5.3
Current account, % of GDP	4.1	2.4	1.0	0.8	0.8

11. Interest rates

%

	2007	2008	2009f	2010f	2011f
3-month Euribor[1]	4.3	4.6	1.3	1.6	2.7
Average interest rate on new loans	5.9	6.3	3.5	3.9	4.8
Average rate of interest on deposits	2.2	2.9	1.0	0.7	1.1
Bank lending rate, average	4.9	5.4	3.0	2.7	3.6
Yield on Finnish 10-year government bonds[1]	4.3	4.3	3.9	4.2	4.5

[1] *Technical assumption derived from market expectations*

12. International environment

Bank of Finland forecast

	2007	2008	2009[f]	2010[f]	2011[f]
GDP, % change on previous year					
Whole world	4.9	2.9	-1.8	2.2	3.3
USA	2.1	0.4	-2.8	1.3	1.8
EU19[1]	2.7	0.6	-4.1	0.2	1.2
Japan	2.3	-0.7	-5.4	1.0	1.2
Imports, % change on previous year					
Whole world	5.8	3.1	-13.5	1.0	5.0
USA	2.0	-3.2	-16.4	1.6	3.8
EU19[1]	4.3	1.0	-13.2	-0.5	3.9
Japan	1.5	0.9	-17.7	-1.4	3.3
Index, 2000 = 100, and % change on previous year					
Import volume in Finnish export markets	158.3	164.4	139.9	141.3	148.2
	8.3	3.8	-14.9	1.0	4.9
Export prices (excl. oil) of Finland's trading partners, national currencies	109.8	114.6	113.4	113.4	114.2
	2.5	4.3	-1.0	0.0	0.8
Export prices (excl. oil) of Finland's trading partners, in euro	96.3	96.2	92.8	92.9	93.5
	0.3	-0.1	-3.5	0.1	0.7
Industrial raw materials (excl. energy), HWWA index, in US dollars	224.6	236.7	170.9	191.8	201.2
	15.3	5.4	-27.8	12.2	4.9
Oil price, USD per barrel	72.7	97.6	60.2	72.9	76.3
	11.2	34.3	-38.3	21.0	4.7
Finland's nominal competitiveness indicator[2, 3]	104.0	107.0	109.7	109.6	109.6
	2.1	2.8	2.5	-0.1	0.1
US dollar value of one euro[2]	1.37	1.47	1.39	1.47	1.47
	9.1	7.3	-5.5	5.7	0.1

[1] Euro area plus Sweden, Denmark and United Kingdom
[2] Technical assumption derived from market expectations
[3] Narrow plus euro area, 1999 Q1 = 100

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10 September 2009

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