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1 • 2010

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Contents

The cover picture depicts the national motif on the Cyprus 5 cent coin: the Cypriot moufflon.

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Monetary policy and economic outlook

10 June 2010

The world economy has performed better than expected in the early part of the year, although both in the euro area as a whole and in Finland growth has been subdued. The escalation of the Greek crisis into a sovereign debt crisis in a number of countries has increased the downside risks to growth, above all in the euro area, but also worldwide. Medium-term inflationary pressures remain moderate. The stabilisation package for the European economy assembled jointly by EU countries and the International Monetary Fund, based on loan and guarantee arrangements to a maximum of EUR 750 billion, will provide time for a controlled reduction in deficits. EU countries' decisions on consolidating the public finances, and their practical implementation are, however, solely the responsibility of the individual member states. The European Central Bank decided on measures to restore an appropriate monetary policy transmission mechanism. These measures will not, however, affect the stance of monetary policy.

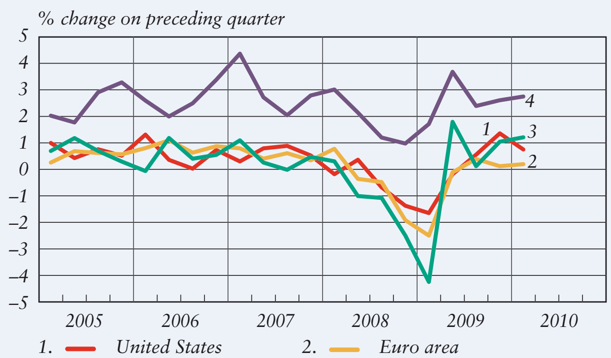
The world economy has performed better than expected in the early part of 2010 (Chart 1). The escalation of the Greek crisis into a sovereign debt crisis in a number of countries, and the spread of this crisis from government bond markets to become a broadly based disruption of the financial markets, has, however, cast a shadow over the outlook for the economy. Despite large-scale intervention by EU countries and the Eurosystem, the markets continue to be nervous and there is increased lack of confidence on the interbank market.

It is still too soon to assess how extensive and long-lasting the effects of the crisis will be, but if it were to continue for a prolonged period, it could seriously hamper the recovery currently under way. Besides the current heightened uncertainty, faster-than-expected consolidation of public finances in many countries could also contribute to slower short-term growth. The longer-term impact will, however, be different, as sustainable growth is not possible without healthy public finances. Moreover, the impact of the crisis at global level will be moderated by the signs of continued brisk growth in Asia plus the encouraging signals of a return to internally generated growth in the United States.

Inflation has continued to be moderate in most major economic

Chart 1.

GDP change



Sources: Bloomberg, CEIC and calculations by BOFIT.

regions. Although rising energy prices added to the spring inflation figures, base inflation excluding energy prices is running at around 1% in both the euro area and the United States. The crisis has furthered subdued inflationary pressures, and monetary policy has continued to be accommodative in most countries.

Recovery progressing at a different pace in different economic regions

The world economy has grown faster in the early part of 2010 than envisaged in the Bank of Finland forecast in March, but growth has been uneven. World trade has been driven by demand in emerging economies, particularly China (Chart 2). Output growth, too, has been strongest in Asia, while also continuing at a brisk pace in the United States. In contrast, the euro area economy has continued to be sluggish. To date, the only sign of the financial crisis in indicators on the real economy is in May's confidence indicators. It is, however, probable that indicator data for June–July will provide a more comprehensive picture of the impacts of the crisis on the real economy.

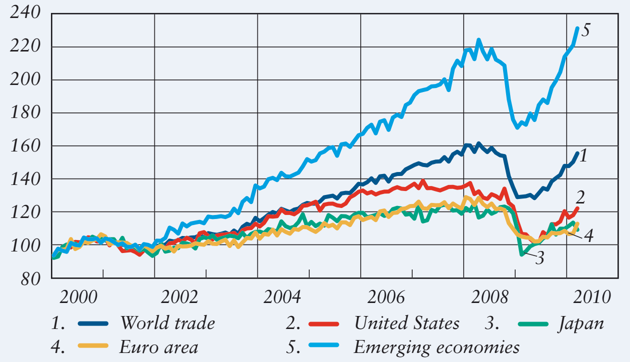
In the United States, exports have continued to bolster output, but private consumption has also been growing relatively briskly. Weak income development has caused a slight decline in the household savings ratio. Employment has not picked up alongside growth to the same degree as in previous upswings. Although the past few months have brought an increase of over 200,000 jobs per month, there remains a long way to go to recover the approximately 8.4 million jobs lost in the recession. The unemployment rate has remained stubbornly at close to 10%.

Both housing construction and the construction of commercial premises will remain subdued in the United States in the immediate future. House prices remain low, which is hampering recovery in new construction. The utilisation rate of existing commercial premises has, admittedly, risen, but it nevertheless remains too low for a recovery in commercial construction. Demand for new labour in industry is being eroded by rapid productivity growth, which means any improvement in employment will depend largely on the service sector. The low level of interest rates does, however, support

Chart 2.

Volume of world trade and import trends in selected countries

World trade volume index, 2000 = 100



Source: Netherlands Bureau for Economic Policy Analysis (CPB).

purchasing power, and private consumption can therefore be expected to continue to grow in the next few months, provided the financial crisis does not impact negatively on household expectations.

In Japan, too, economic growth early in the year has been faster than forecast. The export sector has benefited from the dynamics of the Asian economy, and eg capital goods deliveries have continued to recover. Service sector confidence has also improved. Retail growth has been fairly good, but this presumably still reflects the impact of government support measures. Despite the brisk pace of growth, deflation has been moderated almost solely by the rise in energy prices in the spring. Indicator data does, however, suggest that the declining wages spiral has come to an end at the same time as the reduction in unemployment.

In China, the reflationary measures begun at the end of 2008 are still stimulating the economy in 2010. GDP in the first quarter was 11.9% up on a year earlier. There was brisk growth in both retail trade and investment. Investment growth is, however, expected to slow in future, as public investment projects will no longer be launched to the same degree as in 2009 and the growing threat of inflation will mean increasing pressures to tighten economic policy. In some cities, the real estate market is already showing signs of overheating, and attempts have been made to control this through administrative regulations. The Chinese authorities have made it harder to get a housing loan, eg by requiring larger down payments, and tax changes have been introduced to encourage house buyers to retain ownership for longer.

The trade surplus, which has caused friction in China's trade relations, was much smaller in January–April 2010 than in earlier years, and in March it was, exceptionally, in deficit. In addition to growing raw material imports, the trade surplus has also been reduced by increasing imports of machinery and equipment. However, some raw material imports have presumably gone into bolstering inventories. When inventory demand and investment growth ease off, China's trade surplus will begin to grow again.

The Russian economy recovered gradually during the second half of 2009. According to indicator data, GDP in January–April remained close to the level at the end of 2009. Consumption and investment have recovered slowly, but imports have continued to grow fairly briskly.

One factor behind the financial crisis of 2007 and 2008 was the accumulation of large current account surpluses in the world economy after the middle of the first decade of the new millennium. Asian countries, particularly China, oil producers and – of the industrial economies – Germany and Japan were unable to absorb the accumulated income in their domestic economies, with the

Japanese early-year growth has been faster than forecast.

Reflationary measures are still stimulating the Chinese economy this year.

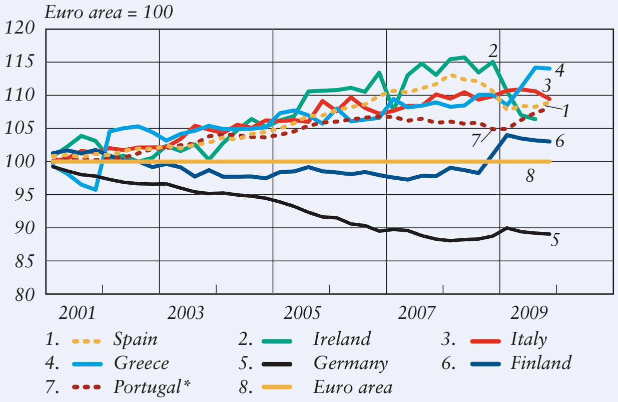
The Russian economy recovered gradually during the second half of 2009.

resources instead finding their way to countries able – and willing – to consume. The willingness of these countries to take on debt was, meanwhile, fed by low interest rates due to the level of savings. When it hit, the financial crisis led to rapid erosion of the large surpluses and deficits. The current account surpluses of oil-producing countries were eroded by a fall in export prices, while in other countries the surpluses were hit by a dramatic collapse in exports per se.

With the rise in oil prices, and to some extent also in response to growth in import demand, the current account surpluses and deficits have this year begun to grow again. However, it should be noted that, according to the IMF, the most significant surplus growth this year is in the oil-producing countries, with a corresponding slight increase in the deficit in eg the United States.

Chart 3.

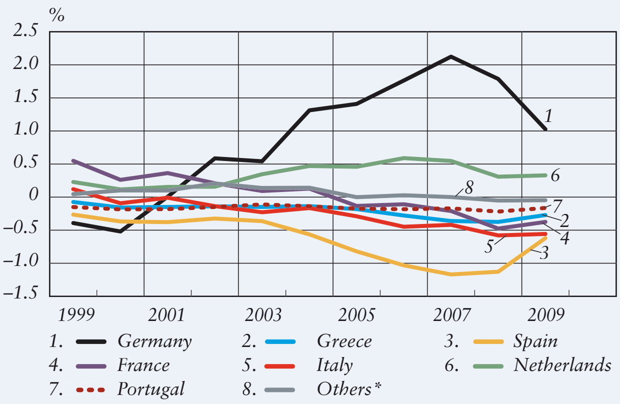
Unit labour costs in selected euro area countries



* Four-quarter moving average on non-seasonally adjusted data.
Source: Eurostat.

Chart 4.

Euro area countries' current account balances as a proportion of total euro area GDP



* Cypurs, Malta, Ireland, Austria, Slovenia, Slovakia and Finland
Source: Eurostat.

European recovery uneven

In the euro area, recovery has begun unevenly in different countries. On one hand, domestic demand is structured differently in the different countries. On the other hand, differences in competitiveness have meant that exports have recovered at a different pace. In many countries, the position of the public finances is very difficult. General government debt in the euro area has averaged over 60% of GDP throughout the past decade, and this figure was not significantly reduced even at the height of the boom in 2007–2008.

In many countries, such as Greece and Spain, unit labour costs have grown faster than the euro area average (Chart 3). In the years immediately preceding the crisis, large pay rises boosted purchasing power and imports while at the same time undermining export competitiveness.

This led to growth in the current account deficit. The current account for the euro area as a whole is this year almost in balance due to the large German surplus.

The IMF estimates that the Greek and Portuguese current account deficits amount to almost 10% of GDP (Chart 4). In Spain, the figure is 5%. At the same time, the general government deficits in all three countries are also estimated to be in the region of 10%. In practice, the large double deficits in these countries are a sign of a serious distortion in the structure of the economy that cannot be corrected by fiscal consolidation alone. Correcting the distortions will also require a reduction in the level of costs in the private sector, with wage rises in these countries remaining below the euro area average for many years ahead.

There are also countries in the euro area that have come through the recession relatively unscathed. The current accounts of Germany, the Netherlands and Austria are in surplus, and their general government deficits are at a reasonable level considering the prevailing conditions. In the Netherlands and Austria, the unemployment rate is still only around 5% this year, while in Germany, too, the pace of increase in the unemployment rate has been well below the euro average.

In the United Kingdom, the recession was deeper and longer than in the euro area on average. Since the end of 2009, however, the British economy has shown signs of growth. Even so, the United Kingdom's extremely large budget deficit and rapid pace of debt accumulation increase the uncertainty surrounding the country, which presents the new government with a very challenging task. In Sweden, meanwhile, the economic recovery in spring 2010 has been very broadly based. Despite a dramatic contraction in GDP of 4.9% in 2009, Sweden's general government balance remained very strong, and the deficit was only 0.5% of GDP.

Estonia aims to join monetary union at the beginning of 2011

In May 2010, the ECB and European Commission published their most recent convergence reports on EU member states that are not yet participating in economic and monetary union. These reports assess developments in the countries' economies relative to the monetary union based on specific convergence criteria. The Commission considers Estonia fulfils the conditions of membership concerning stability of consumer prices, sustainability of general government finances, exchange rate stability and interest rates on long-term government debt. The ECB's assessment is similar, although it does express concern in relation to how sustainably based the country's price stability is. The final decision on Estonian accession to economic and monetary union will be taken by the EU finance ministers (Ecofin) on 13 July. Final decision will be preceded by an opportunity for the European Parliament to express its view and discussion by the European Council.

The global financial crisis enters a new phase

Confidence and liquidity have both been strengthening on the financial markets since autumn 2009. The recovery was actually faster than many forecasters had expected. Companies took advantage of increased investor confidence by issuing a record amount of bonds in January–March 2010. However, the sovereign debt crisis that began in Greece caused a progressive deterioration in the situation in the spring.

The problems with Greece's public finances have been known for several years. However, genuine concern over the situation only began to arise when the new government in Greece published in October 2009 a new, more gloomy estimate of the scale of the 2009 deficit. In the absence of a credible stabilisation programme, the markets began to become increasingly nervous , interest rates on Greek debt began to rise and the market price of shares in banks exposed to Greek risk began to decline. Even so, at this point it was still largely a local problem. The negative market sentiment gradually spread to other indebted countries, however, and their interest rate differentials relative to Germany also began to grow.

The increased negative sentiment pushed up interest rates, which further hampered Greece's ability to manage its general government debt. This, in turn, caused interest rates to rise to a level at which it was becoming impossible for Greece to borrow at all. The crisis had begun to feed itself.

To cut the negative spiral, the IMF and euro area countries agreed on 11 April 2010 a financial support package to provide Greece the

Table.

Greek stabilisation programme and economy

	2009	2010	2011	2012	2013	2014
Inflation	1.3	1.9	–0.4	1.4	0.7	0.9
GDP growth	–2.0	–4.0	–2.6	1.1	2.1	2.1
Deficit ratio, %	–13.6	–8.1	–7.6	–6.5	–4.9	–2.6
Debt ratio, %	115.1	133.3	145.1	148.6	149.1	144.3

Timing and targeting of stabilisation measures, % of GDP

	2009	2010	2011	2012	2013	2014
Overall	–	2.5	4.1	2.4	2.0	–
Revenue side	–	0.5	3.0	0.8	–0.3	–
Expenditure side	–	2.0	1.1	1.7	2.3	–

Sources: Eurostat and Greek Ministry of Finance and Economy.

opportunity of emergency funding in the event of market funding no longer being available. This arrangement calmed the markets only momentarily. Statistical data published on 22 April concerning Greece's larger-than-expected budget deficit and consequent downgrading of the country's credit rating led to panic on the markets. Greece was forced to request activation of the support package.

In the first weekend of May, the IMF and the EU agreed with Greece on a comprehensive EUR 110 billion package of financial and other support conditional on major cuts in the Greek budget deficit (Table).[1] The cumulative effect of the programme will be to strengthen the general government budgetary position 11 percentage points relative to GDP. Most of this will come from spending cuts. The reduction in the deficit will be slower, due to a decline in GDP.

Although the package guarantees funding for Greece until at least the end of 2011, and hence stabilises the position of the country for the time being, the disturbance to the financial markets also had an impact on other vulnerable countries in the euro area. At the same time as the downgrading of Greece's credit rating, the ratings of Portugal and Spain were also downgraded. Confidence in these countries' ability to acquire funding began to falter. The negative sentiment also spread to other market segments, such as the stock and commodity markets. Moreover, there began to be clear signs of tensions on the interbank market. Fear of a renewed financial crisis caused stock markets around the world to plunge.

In the second weekend of May, the EU as a whole came together to agree a much larger package of measures to restore confidence. The range of measures includes a funding package based on loan and guarantee arrangements, reinforcement of member states' budgets, IMF stabilisation programmes, increased coordination of economic policy and regulatory improvements. The financial portion of the package amounts to a maximum of EUR 750 billion, comprising both loans and guarantees. Of this total, EUR 60 billion is to come from the EU, EUR 440 billion from the euro area countries and 250 billion from the IMF. Finland's share of the contributions by euro area members is, as with the Greek package, determined by its relative capital contribution to the ECB.

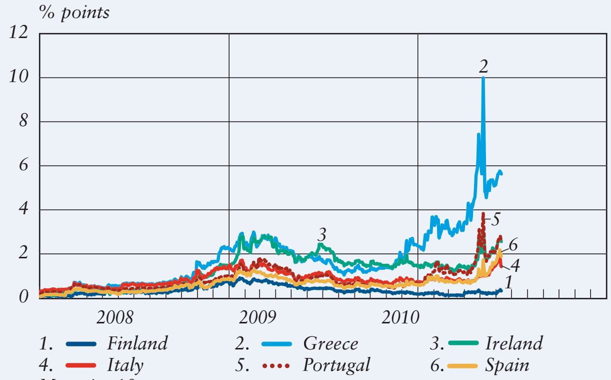
Separate measures by the ECB to restore an appropriate monetary policy transmission mechanism are dealt with below, on page 12.

Although the measures decided did not remove concerns over the sustainability of public finances in

[1] Of the total loan package of EUR 110 billion, EUR 30 billion will come from the IMF and EUR 80 billion from euro area countries, according to their relative capital contributions to the ECB.

Chart 5.

Interest rate differentials on selected countries' government bonds relative to Germany



Maturity 10 years
Source: Bloomberg.

euro area countries, they did calm sentiment on the financial markets and improve potential access to market funding for countries currently the focus of negative sentiment (Chart 5). How sustainable the protection afforded by these measures turns out to be will depend on the ability of the countries experiencing difficulties to put together a credible programme for consolidating their public finances. Many countries, including Spain and Portugal, have already announced measures in this direction.

EU and IMF support package to secure financial market stability

Decisions of the extraordinary meeting of the Ecofin Council of EU finance ministers held on 9/10 May 2010:

- The Council adopted a regulation establishing a European financial stabilisation mechanism to provide financial support for EU member states in difficulties caused by exceptional circumstances.
- Use of the mechanism will be based on strict conditions in the context of joint EU/IMF support.
- The stabilisation mechanism will be worth up to EUR 750 billion and be based on loans and guarantees.
- The EU will contribute direct loans of up to EUR 60 billion.
- Euro area member states committed themselves to providing loan guarantees of up to EUR 440 billion through a Special Purpose Vehicle.
- The IMF will participate in funding arrangements and is expected to provide at least half as much as the total contribution by EU countries.
- The EU will urgently start working on the necessary reforms to ensure fiscal sustainability in the euro area.
- The Ecofin Council underlined the need to make rapid progress on financial market regulation and supervision.

The effects of the sovereign debt crisis are most clearly visible on the stock markets. The expected volatility in share prices gained strength in the first week of May, becoming very striking (Chart 6). There was a broadly based decline in share prices around the world. On the stock markets, investors remain nervous, and the risk premia on corporate loans have risen. There is also increased negative sentiment on the interbank markets, particularly the dollar markets.

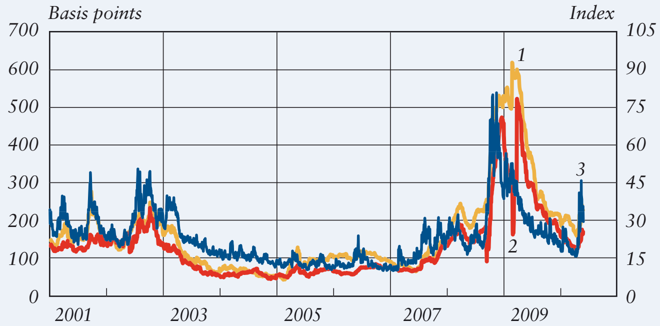
As a result of the crisis, the euro has lost ground against both the dollar and the yen (Chart 7). Even before the crisis, the trade-weighted value[2] of the euro had already been declining since the end of 2009, primarily due to the sluggishness of recovery in the euro area. Viewed historically, however, the euro is still relatively strong. The dollar has benefited from increased economic activity and the safe haven effect brought by the crisis. China's currency, too, has strengthened on average, due to its linkage to the dollar. In addition, the index value of the Japanese yen has strengthened somewhat in recent weeks.

Inflation remains moderate

Despite the recovery in demand, inflation has continued to be moderate in most of the main

Chart 6.

Stock market volatility and interest rate differentials on corporate loans

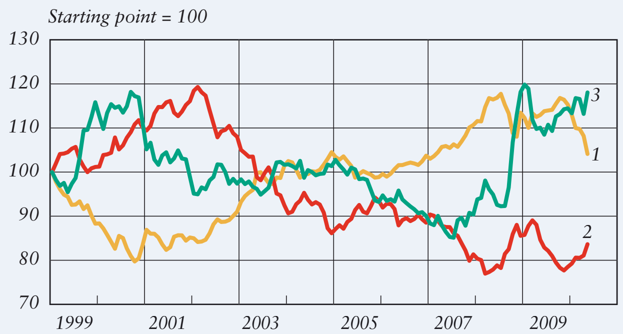


1. Differential* on euro-denominated loans (left-hand scale)
2. Differential* on dollar-denominated loans (left-hand scale)
3. Expected volatility (VIX index) (right-hand scale)
* Interest rate differential = interest on BBB-rated corporate loans minus interest on AAA-rated corporate loans.

Sources: Bloomberg and Merrill Lynch.

Chart 7.

Nominal weighted exchange rate, daily (TCW index)



1. Euro area 2. United States 3. Japan

Sources: European Central Bank and Bank of Finland.

2 Measured according to the narrow index.

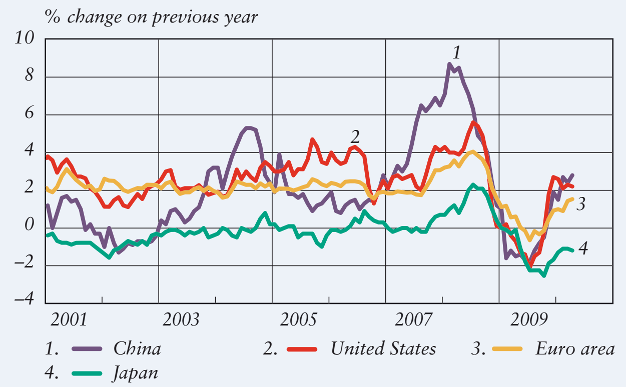
economic regions (Chart 8). In Japan, the trend in prices in the early months of 2010 has continued to be deflationary. In the United States, the pace of rise in consumer prices has admittedly climbed slightly above 2%, but if energy and food prices are excluded, the pace of rise is only in the region of 1%. In euro area countries, inflation according to the harmonised index of consumer prices (HICP inflation) has in recent months accelerated to around 1½%. Base inflation (HICP inflation excluding energy and unprocessed foods) has remained in the region of 1%, as in the United States. For China, too, inflation is essentially still a problem for the future, with consumer prices in April only around 3% higher than a year earlier. The pace of price rises in China is, however, expected to accelerate further.

The barrel price of oil rose well above USD 80 in spring 2010, compared with USD 40 a barrel in winter 2008–2009, and this has had an impact on consumer prices worldwide (Chart 9). The euro-denominated price rose even more. In January–February 2010, the annual change in the energy category as a whole was 3–4%. Prices of other products, such as unprocessed foods, were, however, lower around the turn of the year than a year earlier. A very slow rise in goods prices (excl. energy) has also helped to subdue inflation in the euro area. The price of oil did, however, react very strongly to the crisis, although the appreciation of the dollar moderated the decline in prices in the euro area.

Looking ahead over the next few months, inflation in euro area countries will continue to be dampened by underutilisation of capital allied to the moderate trend in unit labour costs in many countries. Wage rises will be moderated by continued high levels of unemployment. In previous years, wage

Chart 8.

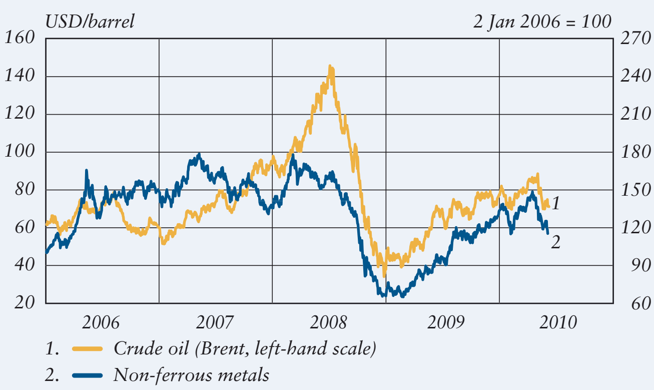
Consumer prices



Source: Statistical authorities in the featured countries.

Chart 9.

Commodity prices



All data measured in dollars
Sources: Bloomberg and HWWI.

inflation, and hence unit labour costs, developed very differently in different countries within the euro area. Currently available figures suggest that wages will now rise moderately and relatively uniformly as a legacy of the recession. Admittedly, inherited differences in competitiveness within the euro area remain very durable.

Monetary policy has been supportive of growth

Almost all industrial economies have kept policy interest rates at the very low levels of the recession, despite the acceleration in the pace of growth (Chart 10). Central banks have been able to keep monetary policy supportive of demand, given only minor inflationary pressures and a still deep output gap in the wake of the financial crisis. The sovereign debt crisis has subdued market expectations of a rise in interest rates. In the United States and Japan, policy rates remain close to zero, despite very brisk economic growth since last autumn. In the United Kingdom and Sweden, too, central bank policy rates have been kept unchanged.

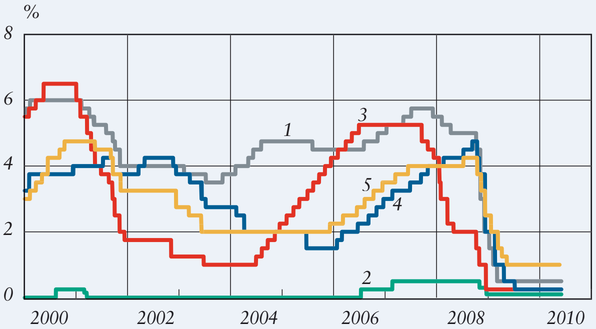
Some countries have, however, already tightened their monetary policies. In economies producing oil and other commodities – such as Canada, Australia, Norway and Brazil – the central banks have had to raise interest rates to contain inflationary pressures caused by improvement in the terms of trade. The full force of the financial crisis did not reach all the countries of Asia, eg India, where monetary policy has also been tightened.

In China, reflationary measures brought an abundance of liquidity into the economy, which has led to increased inflationary pressures. China's central bank has long been warning of the threatening trend in prices and, among other measures, has already tightened its reserve requirements several times. The real reference rate on 12-month loans has already come down to marginally above 2%, while the real reference rate on deposits is now negative.

The ECB has held its key policy rate at 1% since May 2009. The abundance of liquidity has ensured that the shortest market rates are lower still. Interest rates on both household and corporate loans have continued on a downward trend

Chart 10.

Central bank interest rates



1. United Kingdom: repo rate
2. Japan: overnight rate
3. United States: fed funds target rate
4. Sweden: repo rate
5. Eurosystem: main refinancing operations' fixed rate / minimum bid rate

Sources: Bloomberg and Reuters.

The ECB decided in May on measures to ensure the transmission of monetary policy to the markets.

throughout 2010. During the spring, restoration of the operating capacity of the financial markets increased competition between banks and led to a narrowing of lending margins. Admittedly, within the euro area there substantial differences in the interest rates applied on both household and corporate loans. These are due partly to differences in loan terms, and partly to the different margins charged by banks.

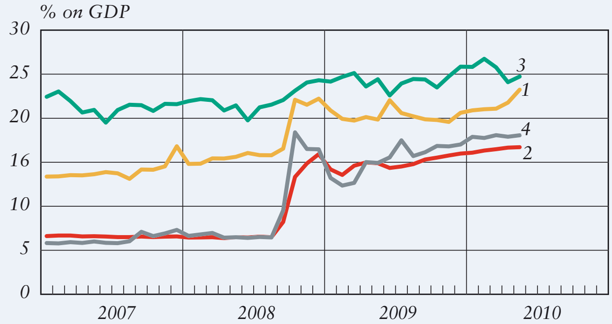
With the outbreak of the financial crisis in autumn 2008, central banks in the United States and Europe were forced to take non-standard measures to ensure liquidity in the financial system. This caused a swelling in central bank balance sheets. In the United States, in particular, this reached exceptional levels (Chart 11).

Following the recovery of the interbank market, the central banks had to begin dismantling their non-standard measures and restore their balance sheets to a normal level.

Chart 11.

Central bank balance sheets

% on GDP



1. Eurosystem 2. Fed
3. Bank of Japan 4. Bank of England

Sources: ECB, Fed, Bank of Japan, Bank of England and Eurostat.

The ECB began to exit from its non-standard measures in December 2009, when it organised the final 12-month refinancing operation for its counterparties. In the United States, the Fed, too, gave up most of its non-standard measures in February–March 2010. The sovereign debt crisis has, however, made it necessary to reintroduce non-standard measures.

On 10 May 2010, the Governing Council of the ECB decided on measures to address severe tensions in financial markets stimulated by the problems in Greece. The Eurosystem will use its Securities Markets Programme (SMP) to conduct interventions in both the public and private debt securities markets. The excess liquidity caused by these interventions will be sterilised through liquidity-absorbing 1-week operations. At the same time, the Eurosystem will address the nascent turbulence on the interbank markets by providing banks with funding through fixed-interest operations of over 3-months' duration (fixed-rate tenders with full allocation)[3], plus a single 6-month operation with full allocation on 12 May. There are also plans to reintroduce currency swap operations with the central banks of the United States, the United Kingdom, Canada and Switzerland in order to boost liquidity on the dollar markets.

[3] At its meeting on 10 June, the Governing Council also decided to organise 3-month fixed-rate operations with full allocation in July, August and September.

There are at present no threats to price stability in the euro area, which gives the ECB room for manoeuvre to restore market confidence and support growth. The non-standard measures adopted do not conflict with the objective of price stability and are temporary in nature.

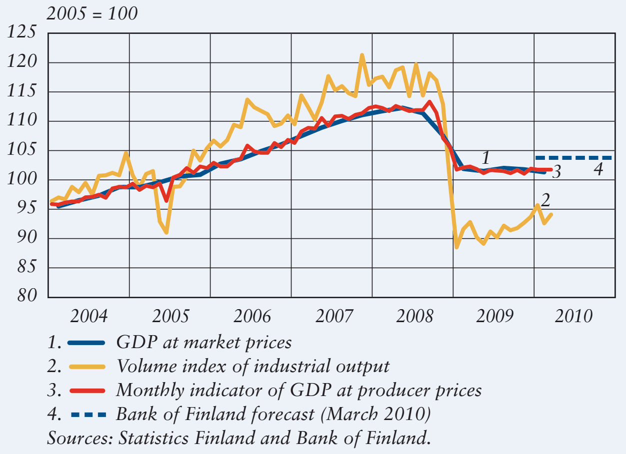
Finnish economy more sluggish than euro area as a whole

The Finnish economy has been slow to come out of recession (Chart 12). This is in line with the Bank of Finland's March forecast, according to which Finnish exports were expected to lag behind the export markets due to an unfavourable production structure (Chart 13). Private consumption growth was also forecast to be weak on account of continued high unemployment, and a significant recovery in investment was not expected until 2011–2012.

Early-year statistics for Finland reveal the recovery is slower than the euro area average. GDP declined 0.4% in the first quarter, and goods exports declined by over 9% from the final quarter of 2009. The weak export figures are partly due to the completion of an exceptionally large shipbuilding contract at the end of last year (Chart 13) and the dock strike in March. There have been major changes in the relative shares of different industries within goods exports in recent years, with the role of electrical engineering and electronics declining significantly from the heights of 2005; foreign sales of high-tech products have been particularly badly hit. The present outlook for exports is, however, cautiously positive, with both new industrial orders and confidence showing signs of improvement. In addition, preliminary data on April shows an increase in goods exports,

Chart 12.

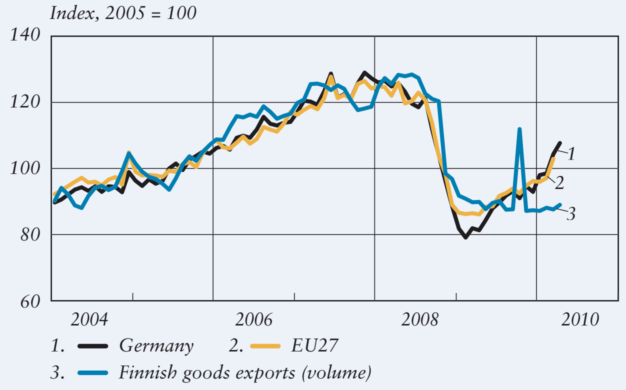
Finnish GDP and industrial output



Sources: Statistics Finland and Bank of Finland.

Chart 13.

New industrial orders in Germany and EU27 countries plus trend in Finnish goods exports



Source: Eurostat.

In Finland, the investment outlook remains weak.

There has been a substantial rise in house prices.

although this is partly because of the disturbance to exports in March caused by the dock strike.

Industrial output in the first quarter of 2010 was 1.2% down on the preceding quarter, but 1.9% up on a year earlier. Viewed by sector, the fastest annual growth was in the paper and wood products industry. The proportion of unutilised industrial capacity has decreased and there was an increase in new orders in the first quarter, although the absolute figures remain low. The investment outlook remains weak. Private investment will be bolstered primarily by housing construction, as investment in machinery and equipment remains very low. Private consumption was down relative to the previous quarter, but up from a year earlier. The quarter-on-quarter contraction was partly due to weaker demand for consumer durables.

Demand stimulated by low interest rates has supported the housing market, with a substantial rise in house prices. The stock of new unsold housing has contracted, and is now very small. Construction activity other than housing is, however, lacklustre. Construction of business premises is expected to be particularly modest in 2010, as there is still overcapacity in this market segment, particularly in the Helsinki area.

The spring forecast anticipated the labour market recession continuing throughout 2010, with the unemployment rate still around 9%. During the course of spring the labour market trend appears to have stabilised, and the seasonally adjusted figures actually indicate a slight drop in the unemployment rate. In April it stood at 8.7%.

HICP inflation in Finland has remained around ½% in the early months of 2010. Inflation has been driven both by rising fuel prices and by a marked increase in the price of services. In contrast, the targeted cut in value-added tax implemented last October has lowered food prices and thereby moderated overall inflation.

The decline in food prices will continue to have a moderating effect on consumer price rises until the autumn, but a general 1 percentage point rise in value-added tax in July will have an opposing effect. Although the trend in service prices will continue to drive inflation in the future, price pressures will remain fairly moderate in the immediate months ahead.

Finland's general government deficit will grow further in the current year, with a consequently rapid increase in government debt. According to the Funds Statement for Central Government Finances, tax revenues for the early part of 2010 would appear to be slightly lower than for the same period in 2009. According to the Bank of Finland forecast, general government debt will rise to approximately 52% of GDP in 2010. Besides funding the deficits, the debt will also be swollen by the loan granted to Greece.

Keywords: inflation, monetary policy, economic outlook

Financial stability in Finland

7 June 2010

The emerging sovereign debt crisis in a number of countries threatened to create a new financial crisis. Intervention by the EU, ECB and IMF successfully contained the crisis.

Confidence in the functioning of the global financial system has not entirely recovered, despite financial institutions strengthening their capital adequacy and liquidity buffers and thereby improving their capacity to withstand a crisis.

A renewed deepening of the debt crisis would, together with its knock-on effects, pose a serious threat in the present situation, in which the financial system has not yet fully recovered from the previous crisis and there is less room than normal for manoeuvre in public finances. The financial system in Finland, too, is not immune to the effects of international turbulence.

Finnish banks have strengthened their capital adequacy and hence their ability to lend. Even so, a serious liquidity crisis would strain the Finnish financial system's capacity to channel sufficient funding to Finnish businesses.

Payment systems and securities settlement systems have performed reliably. The transition to the Single Euro Payments Area is progressing rapidly, so businesses should be prompt in making the necessary changes. When introducing the use of foreign systems, it is essential to ensure national operators can influence the process and receive sufficient information.

International operating environment

The global economic crisis has entered its third phase. In the first phase, the crisis of confidence that spread through the financial markets paralysed the interbank loan and deposit markets, caused a general rise in the price of finance and provided a reminder of the importance of an efficient banking system. The second phase saw a collapse in world trade and a deep recession in the real economy. In the third phase, the crisis brought to a head the problems in the public finances as suspicions grew over the debt-servicing capacity of the most indebted members of the euro area.

The deteriorating public finances in a number of countries could hamper both financial and non-financial corporations' access to funding through a variety of channels.[1] Increased supply of government debt instruments will depress the prices of both government and corporate instruments, thereby pushing up funding costs. Excessive budget deficits could add to inflation expectations, thereby causing a rise in interest rates. Moreover, a decline in the credit rating of an individual country's government debt instruments will often also have an

[1] See ECB (June 2010) Financial Stability Review, Box 9.

effect on the price of debt financing for the corporate sector in that country.

A decline in the price of government debt instruments will also mean a lower market value for these instruments on banks' balance sheets. European banks' investments in government paper have grown over the past two years, with banks bolstering their capital adequacy and liquidity by shedding high-risk assets and replacing them with what they have considered to be safe investments. By purchasing government debt instruments, banks have also been preparing for the changes in liquidity regulations currently under preparation.[2] Although, during the crisis, MFIs in the euro area have increased their investments in euro area government debt instruments, their ownership share of all general government debt instruments of euro area countries currently in circulation is much smaller than the average for the past decade (Chart 1).

The current levels of public debt mean there will in future be less capacity available for supporting the financial system.

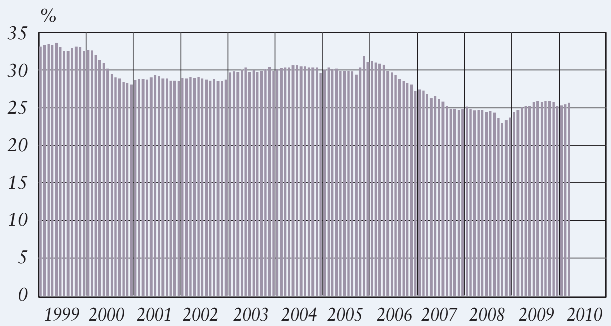
In order to ease the market tension and support the transmission mechanism of monetary policy in the euro area, the authorities have embarked upon a number of non-standard measures (see Box). However, the current levels of public debt mean there will in future be less capacity available for supporting the financial system.

The most dangerous direct consequence of a further deterioration in the sovereign debt crisis would be a repeat of the disruption experienced during the liquidity crisis of autumn 2008, which could paralyse the interbank loan market and push up market interest rates. The drying up of interbank funding would, in turn, reduce bank lending to households and businesses. Doubts over the creditworthiness of governments would not cause a rise in interest rates on government bonds alone, but also on debt instruments issued by companies from the most heavily indebted countries.

The spread of negative sentiment would make it both harder and more expensive for the Finnish government and Finnish banks to access funding. An international credit slump would quickly cause difficulties for Finnish exporters. The consequences of such a crisis could be more serious than the deep recession of 2009, as the European economy is only just recovering and the recent reflationary

Chart 1.

Euro area MFIs' share of euro area general government debt securities



Source: European Central Bank.

[2] See Basel Committee on Banking Supervision (December 2009) Consultative Document: International framework for liquidity risk measurement, standards and monitoring, www.bis.org.

measures mean there is now little room for manoeuvre in public finances.

One positive development is that financial institutions are now less dependent than before on direct public support measures. Banks have also managed to raise their level of capital adequacy, reinforcing their capital base through both income financing and share issues. They have also reduced their dependency on wholesale funding, with growth in the relative importance of more stable sources of funding: retail deposits and equity funding. In contrast, the markets for securitised financial instruments have not returned to normal, and this is hampering the funding of banks that depend upon them. A large amount of bonds issued by European banks will reach maturity in the next few years. The weakest banks, in particular, could find it hard to renew these loans on reasonable terms.

The profitability of large international and Nordic banks improved during the first quarter of the current year (Chart 2), although low interest rates on credit, slow growth in lending to the public and tight competition in deposit interest rates constrained net interest income. Higher earnings from trading in financial instruments was a particularly significant factor in the improved performance. This was due to the exceptional market situation early in the year.

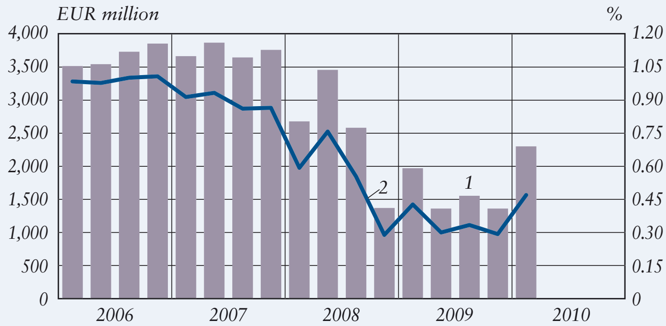
International banks have cleared their balance sheets of most of the toxic assets (complex securitised instruments whose value suddenly collapsed) that caused them enormous losses during the early phase of the financial crisis. In April 2010, the IMF reduced its overall estimate of the cumulative loan and impairment losses sustained by banks in the industrial economies during the financial crisis to USD 2,300 billion, from the earlier highest estimate of USD 2,800 billion.[3] The loan and impairment losses of European banks are forecast to still be fairly substantial in 2010, at least, but the banks would appear capable of absorbing them. Among other sources, losses can be expected on

The loan and impairment losses of European banks are forecast to still be fairly substantial in 2010, at least.

[3] IMF (April 2010) Global Financial Stability Report.

Chart 2.

Aggregate earnings of major Nordic financial conglomerates*



1. Quarterly pre-tax earnings (left-hand scale)
2. Pre-tax earnings, % (annualised) of balance sheet at end of quarter (right-hand scale)

* OP-Pohjola Group, SEB, Handelsbanken, Nordea, Swedbank, DnB NOR, Danske Bank and Jyske Bank
The currencies have been converted to euro according to the average annual exchange rates.
Sources: Conglomerates' interim and consolidated financial statements and Bank of Finland.

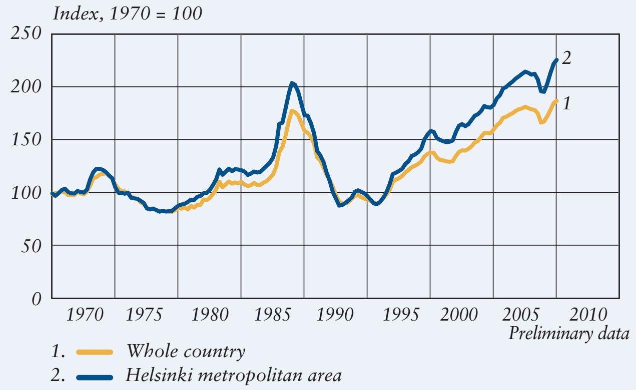
lending related to commercial real estate.[4]

In the post-crisis operating environment, the aim of many banks is to strengthen their core banking operations by increasing the role of retail deposits and lending. Moderate collateral valuations and loan-to-value ratios are increasingly important in lending. The return of lending practices to a more healthy foundation is a welcome development.

[4] See ECB (June 2010) Financial Stability Review.

Chart 3.

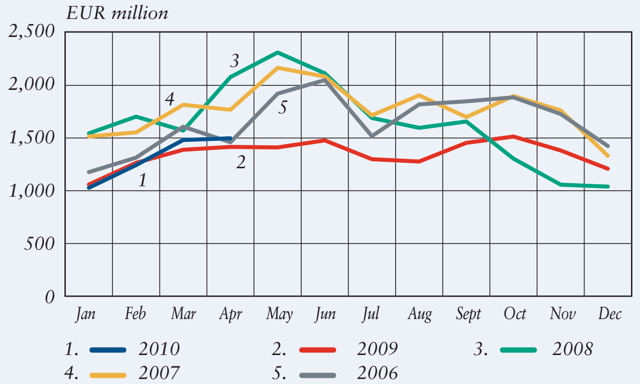
Real price index* for old houing units in apartment blocks in Finland



* *The general development in consumer prices has been removed from the change in the price of dwellings.*
Source: Statistics Finland.

Chart 4.

Monthly trend in Finnish households' new housing loans



Source: Bank of Finland.

Domestic operating environment and banking sector

The recent rapid rise in house prices (Chart 3) contains certain risks. According to preliminary data, the prices of old apartments and row houses in January–March 2010 were 11.3% higher (and in the Helsinki metropolitan area as much as 15.7% higher) than in the first quarter of 2009.[5]

The rise in house prices would appear to largely due to a scarcity of supply. The economic crisis depressed housing construction, and hence supply. Construction is now recovering. It will, however, take some time for supply to return to normal. On the other hand, housing demand does not appear to be exceptionally high, based on the figures for new housing loans granted by the banks. The volume of new housing loans drawn down from Finnish MFIs since autumn 2008 has been much smaller than in the years preceding the crisis (Chart 4).

The threat for the housing market is of a self-reinforcing upward spiral in prices. Rapidly rising prices could encourage some households to

[5] Preliminary data from Statistics Finland (30 April 2010).

buy a home sooner than they had been planning to, in the fear that postponing their purchase could lead to even higher costs.

Housing demand is likely to grow over the next few months. According to Statistics Finland's consumer confidence indicators of recent months, consumers have felt this to be a very favourable time to borrow. The decline in market interest rates and the return of tighter competition between banks on the housing market have pushed the interest rates on new housing loans to a record low, which increases the attractiveness of taking out a loan. The possibility of increased housing demand together with the slow recovery in supply is generating upward pressure on prices.

Overheating on the housing market has been a feature of many economic and financial crises, the most recent example being the present crisis. Households considering a housing purchase at present should weigh the risks carefully, as the acceleration in the pace of rise in house prices is being driven largely by temporary supply-side factors. When approached for a housing loan, banks should require a sufficiently large down-payment and solid debt-servicing capacity relative to the size of the loan. When deciding on a loan, both households and banks should assess the household's ability to service the debt if interest rates were several percentage points higher than at present.

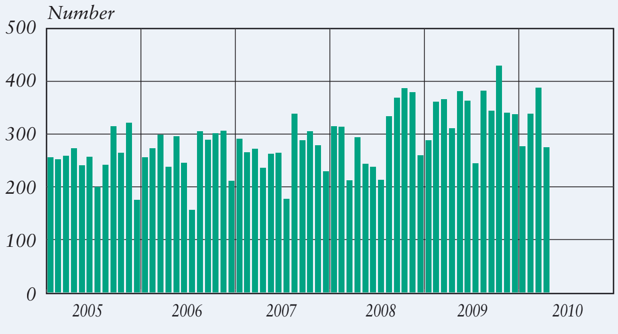
The recovery in both the global and the Finnish economy has improved the cyclical position and expectations of Finnish companies.[6] These have come out of the economic crisis with less damage than had been feared. For example, the number of companies filing for bankruptcy has been very moderate, considering the weak state of the economy (Chart 5). The number of cases lodged in January–April 2010 was actually smaller than in the same period a year earlier.

The biggest threat to Finnish companies would be if the sovereign debt crisis were to flare up again, with all the negative consequences this would have for world trade and non-financial corporations' access to funding. When the financial crisis came to a head in autumn 2008, it stemmed the flow of funding for large Finnish corporations from the securities markets and foreign funding

[6] Confederation of Finnish Industries (EK), Business Tendency Survey (May 2010).

Chart 5.

Filed bankruptcies



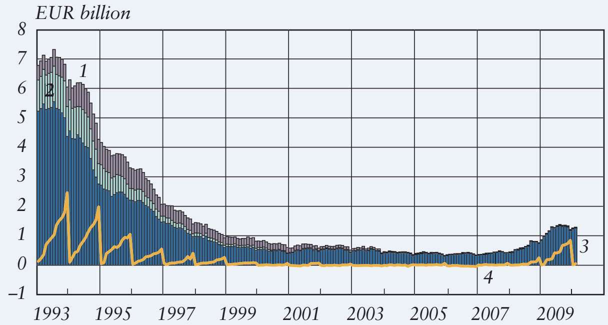
Source: Suomen Asiakastieto.

sources, whereupon the government had to step in with a range of measures to secure business funding.[7] A further deterioration in the sovereign debt crisis could lead to similar funding problems for companies as in autumn 2008.

[7] See Bank of Finland Bulletin (1/2009), 'Financial stability in Finland', p. 15–27.

Chart 6.

Banking groups' non-performing assets and impairment losses

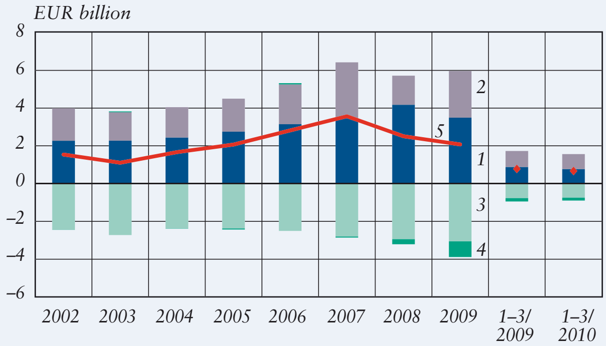


1. Zero-interest assets 2. Guarantee claims
3. Non-performing assets 4. Impairment losses, net

Source: Financial Supervisory Authority.

Chart 7.

Earnings development of banking activities in Finland*



1. Net interest income 2. Other income 3. Expenses
4. Loan losses 5. Pre-tax earnings

** Finnish deposit banks (parent companies incl. branch offices operating in Finland and abroad) and subsidiary banks and branch offices of foreign credit institutions conducting deposit banking activities in Finland.*
Sources: Financial Supervisory Authority and Bank of Finland.

Stronger liquidity buffers will protect companies from a liquidity shock like the one experienced in autumn 2008. Moreover, the lending capacity of Finnish banks has been improved by their stronger capital positions. Even so, a serious liquidity crisis would tax the ability of the Finnish financial system to channel sufficient funding to the Finnish corporate sector. The authorities must therefore maintain their readiness to support financial intermediation.

The Finnish financial system has been relatively untouched by the crisis, and, on average, Finnish banks' capital adequacy is strong.[8] There have been only minor loan losses (Chart 6). The position of borrowers has been eased by the low level of interest rates. The crisis has been most difficult for small and medium-sized enterprises, particularly sub-contractors in the export industries. The endurance of these businesses has been tested, and some are struggling to cope amid weak demand. The interest rate margins on corporate loans have continued to grow, most strongly in small loans.

The decline in the stock of corporate bank loans has come to a halt, and month-on-month the loan stock has begun to grow. There has been a particular increase in large corporate loans. The housing loan

[8] See Financial Supervisory Authority press releases 7/2010 (1 June 2010) 'Finnish financial sector continues on stable footing' and 8/2010 (15 June 2010) 'Capital adequacy of the financial sector able to withstand even serious weakening of operating environment'.

stock has continued to grow moderately. Growth in household consumer and other loans has, in contrast, come to a halt. Interest rate margins on new housing loans began to decline following a peak in early 2009, and they have continued to decline in the early part of 2010.

Net interest income in Finland's banking sector declined by a fifth in 2009 (Chart 7). The downward trend has continued in the early part of 2010. Banking profitability is being eroded both by low interest rates and by swollen deposit-interest-rate offers and narrow interest rate margins on loans caused by tight competition. Deposit interest competition has been fed by banks' difficulties in finding long-term funding, preparations for planned changes in liquidity regulations and possibly also the arrival of new players in the deposit markets. In the present uncertain operating environment, banks should secure their profitability and concentrate on strengthening their liquidity and capital buffers, in order to secure their lending capacity in the event of a worse economic situation than that currently being experienced. It would be extraordinary if the deposit rates offered by banks were to remain higher than market rates for an extended period.

Financial market infrastructure

Payment and settlement systems have continued to operate reliably without serious disruptions under fluctuating market conditions. The Bank of Finland's judgement is that Finland's financial market infrastructure does not at present exhibit significant problems. A Eurosystem assessment in 2009 judged that systemically important payment systems in the euro area[9] met the business continuity oversight expectations set for them.[10]

Finland is progressing rapidly with transition to the Single Euro Payment Area (SEPA). As an example, the transition period for domestic credit transfers comes to an end at the end of 2010. IBAN account numbers and bank BIC codes will already be compulsory in invoices and credit transfer forms from 1 July 2010. Those companies that have not yet begun preparing for SEPA should contact their banks and software providers immediately in order to make the necessary changes in time.

There are no currently known factors hampering the pace of SEPA implementation in Finland. In order to derive full advantage from the benefits of SEPA, it is to be hoped it can be implemented as quickly as possible in other countries as well. The uncertain economic situation cannot be allowed to delay the transition, as simultaneous maintenance of both national and

The Payment Services Act, which entered into force on 1 May 2010, will both speed up the transmission of payments within the EU and enhance the rights and protection enjoyed by users of payment services.

[9] The domestic payment systems evaluated were the systems for interbank retail payments and for bank drafts and express transfers (PMJ and POPS). The Bank of Finland also participated in an evaluation of the central banks' gross payments system (TARGET2) carried out under the direction of the European Central Bank.

[10] The business continuity oversight expectations (BCOE) can be accessed on the European Central Bank website at http://www.ecb.int/pub/pdf/other/businesscontinuitysips2006en.pdf.

The Bank of Finland is currently investigating the social costs of payments.

pan-European services will increase the overall cost of payments.

The EU Payment Services Directive was transposed into Finnish law by the Payment Services Act and the Payment Institutions Act, which entered into force on 1 May 2010. As a result, payment services throughout the whole area of the EU now operate in accordance with uniform legislation. The Payment Institutions Act makes it easier for new providers of payment services to enter the market, which will increase competition and market efficiency. Meanwhile, besides speeding up the transmission of payments within the EU, the Payment Services Act also enhances the rights and protection enjoyed by users of payment services.[11]

As a result of the Payment Services Act, the recipient of a payment (payee) may, if he so chooses, give the payer a discount or charge a fee for use of a debit or credit card. This will facilitate transparency in respect of payment costs and represents an attempt to increase competition and foster use of more efficient payment methods. Any fee charged must be appropriate and based on actual costs. Many central banks in the euro area – including the Bank of Finland – are currently investigating the social costs of payments.

The transition from national payment systems towards pan-European payment methods and systems will foster efficiency, but it will also be important to recognise the mutual interdependencies between systems and to ensure operational continuity. Existing structures will have to be challenged and means sought both to ensure national actors can exert influence and to secure their access to adequate information. The Bank of Finland will perform an oversight function in pursuit of these objectives in cooperation with both domestic and external stakeholders.

The securities market infrastructure is currently the focus of important domestic and European development projects.[12] In addition, both Finnish and EU legislation is being vigorously developed, for example to create level playing fields and enhance the stability of financial markets.[13] Finnish actors should continue to actively seek to influence these development projects in order to achieve the full benefits.

Central counterparty clearing was adopted on the Helsinki stock exchange in November 2009. The service is provided by the Dutch clearing house European Multilateral

[11] For example, it increases the amount of information both the payer and the payee receive on payment transactions and defines the customer's maximum level of responsibility in the event of misuse of a payment card.

[12] These include the central banks' TARGET2-Securities and Collateral Central Bank Management (CCBM2) development projects and the merger of the Finnish Central Securities Depository with the Euroclear group.

[13] A comprehensive reform of securities market legislation, the European Markets Infrastructure Legislation and Securities Law Directive projects and amendment of the Markets in Financial Instruments Directive.

Clearing Facility NV (EMCF). Service provision in Finland by two other central counterparties (European Central Counterparty Limited (EuroCCP) and SIX X-clear) has been postponed, partly because the supervisory authorities have been concerned about risks relating to cooperation between separate central counterparties. The central counterparties concerned are currently negotiating with the authorities to find a solution. The Bank of Finland will participate in coordinated oversight of central counterparties in accordance with the supervisory protocols.

The use of central counterparty clearing makes it easier to manage counterparty risk and generates netting benefits. It should also improve the percentage of trades settled, as the central counterparty becomes the counterparty for all transactions, thus, in theory, guaranteeing settlement. The percentage of trades settled on the Finnish market has, however, declined substantially. Previously an investor could rely almost 100% on his transaction being settled within three days of the trade. Nowadays, under central counterparty clearing, this certainty has declined to under 90% (measured by the value of trades). Market participants should as a matter of urgency seek ways to fix this unsatisfactory state of affairs.

Moreover, ultimate investors should benefit from the cost savings generated by central counterparty clearing. In particular, the decline in the number of distinct transactions must not lead to higher prices being levied on domestic investors.

Lessons of the debt crisis

Recent experiences with the international sovereign debt crisis reinforce many of the lessons learned during the economic and financial crisis that began in 2007.

In the first place, the negative externalities associated with overindebtedness have increased as a consequence of financial market integration. The overindebtedness of an individual economic sector, industry or government can more easily than before threaten the stability of the entire international financial system. The Greek sovereign debt crisis is only the most recent example. Prior to this, the overindebtedness of US households on the subprime housing loans market and the growth in short-term debt financing by financial institutions, and the resulting liquidity crisis, plunged the global economy into a deep recession.

The overindebtedness of an individual economic sector, industry or government can threaten the stability of the entire international financial system.

In future, dangerous debt trends will have to be dealt with more vigorously and at an earlier stage than has been the case now. Within the EU there are currently plans for a tightening of the rules governing government budget deficits and debt, with tougher sanctions for those countries that break the rules.

Overindebtedness in the financial sector is harder to discern

In order to moderate risk-taking by financial institutions and guarantee a level competitive playing field, no financial institution can be allowed to become too big to fail.

than government overindebtedness. For example, before the present crisis banks granted generous credit limits to lightly capitalised special purpose vehicles, known as shadow banks, which financed their activities with very short-term market funding. In this way, the banks' real indebtedness grew, although it was not fully reflected on their balance sheets. Effective monitoring of financial sector indebtedness requires the assembling and analysis of data gathered from different countries and different types of financial enterprise. An important role in this will be played in future by new bodies responsible for macroprudential supervision, such as the European Systemic Risk Board (ESRB), which must be given strong powers and tools to intervene in the case of threats to macroeconomic stability such as overindebtedness.[14]

Another lesson underlined by the debt crisis is that distortions in the pricing of risk have a tendency to increase overindebtedness. The pricing of risk typically becomes distorted during an economic upswing, when the general propensity to take risks grows and the creditworthiness of loan applicants ostensibly improves. The recklessness and lowered risk-awareness that occurs during strong economic upswings should be combated by means designed to moderate the cyclicality of lending, such as countercyclical capital buffer requirements for banks and changes to the rules for recognition of loan losses.[15]

The price of risk has, however, also been distorted by certain structural and institutional factors. In the years preceding the crisis, all countries within EMU received debt financing from the markets on almost identical terms, despite substantial differences in their budget discipline and levels of debt. For years, investors viewed the debt of euro area countries as almost risk-free. This was presumably based on a belief that no country within the EMU could end up in a debt crisis.

Meanwhile, large financial institutions viewed as being systemically important have also received debt financing more cheaply than other financial corporations. Investors have interpreted these large institutions as being 'too big to fail' and have therefore viewed their investments in these banks as low-risk. Cheap debt financing has encouraged these large financial institutions to overinflate their balance sheets and risk-taking.

In order to moderate risk-taking by financial institutions and guarantee a level competitive playing field, no financial institution can be

[14] See Tuomas Saarenheimo's article 'Towards a European macroprudential policy', p. 28–36 (below).

[15] Current and planned initiatives for financial regulation reform are examined more closely in the Bank of Finland Bulletin special issue Financial stability (2009) and in Esa Jokivuolle and Jukka Vauhkonen's article 'Paineita pankkien vakavaraisuussääntelyn muuttamiseen', Euro & talous 1/2010 (in Finnish only).

allowed to become too big to fail. Regulations are currently being drafted that will make it possible for the operations of large, multinational banking groups to be suspended or restructured in such a way that their creditors would bear a greater share than at present of the costs should they fail.

If a credible resolution mechanism for large banking groups proves impossible to construct within Europe, systemically important banks should be required to bear a cost to compensate for being able to raise funding on exceptionally favourable terms due to the indirect subsidy they receive from the public purse. Such a payment could, for example, be a tax set according to a bank's systemic importance, or an additional capital requirement.[16]

The third lesson underlined by the debt crisis is that the prevention of cross-border financial crises requires worldwide, or, at the least, regional, measures. Financial regulatory reform based primarily on national perspectives would lead to a patchwork regulatory environment that would encourage financial corporations to locate their activities in the most lightly regulated countries. Such regulatory arbitrage would eventually increase political pressures to relax regulations in the more tightly regulated countries and lead to a gradual disintegration of regulatory controls. In order to prevent this scenario, national authorities should avoid going their own way in their regulatory reforms and be prepared to make compromises to improve the security of the global financial system.

Keywords: financial system, stability, banking sector, securities markets, payment and settlement systems

[16] A bank tax could also make the banking sector cover a larger share of the costs of the financial crisis than at present.

Box.

Chronology of the sovereign debt crisis

The euro area's sovereign debt crisis stems from large budget deficits and increased levels of government debt, both further inflated by reflationary measures in the wake of the financial crisis. Greece, in particular, has had chronic problems with balancing its budget that were hidden from view with the help of faulty statistics.

October 2009	With the change of government in Greece in October 2009 it emerges that the Greek budget deficit in 2009 would be twice as large as previously thought. In response to this, the ratings agency Fitch lowers Greece's credit rating to A–.
November 2009	The Greek government promises to reduce the budget deficit by 4 percentage points, but the markets do not consider the promise to be credible, and interest rates on Greek government bonds begin to rise.
December 2009	The interest rate differential between Greek and German 10-year government bonds grows to over 2 percentage points, and Fitch lowers Greece's credit rating to BBB+. Ireland announces its third public finance stabilisation package within the space of two years, including large cuts in civil servants' pay (9 December 2009). The Greek government promises expenditure cuts and tax rises, but abstains from reducing civil servants' pay. The belt-tightening measures are not seen as an adequate response to Greece's problems, and as a consequence Standard & Poor's and Moody's lower their credit ratings for Greece to BBB+ and A2.
January 2010	Greece announces a more extensive stabilisation programme (14 January 2010) aimed at reducing the budget deficit to 2.8% of GDP by 2012. The programme includes cuts in defence expenditure and overtime compensation for civil servants plus a freeze on the pay of civil servants earning over EUR 2000 per month. The markets are not convinced: the interest rate differential between Greece and Germany grows to over 3 percentage points. Standard & Poor's lowers its credit ratings for Spain and Portugal to AA+ and A+, arousing fears that the problems of Greece could spread to other countries in the euro area.
February 2010	The Greek government promises to also freeze the salaries of civil servants earning under EUR 2000, but EU and IMF experts appointed to analyse the sustainability of the country's public finances judge the government's proposed savings package as not going far enough.
March 2010	Greece announces (3 March 2010) and approves (5 March 2010) a stability programme including new tax increases and cuts to civil service bonuses. Euro area finance ministers agree on a mechanism for supporting Greece, should this prove necessary, but details of the arrangement are not announced (15 March 2010). It is later made clear that it will be a loan arrangement, in which the IMF will also participate. The size of the package is not announced (25 March 2010). The markets are not convinced, and the interest rate differential between Greece and Germany remains over 3 percentage points. Fitch lowers Portugal's credit rating to AA–.

April 2010	The interest rate differential between Greece and Germany grows to over 4 percentage points and Fitch lowers Greece's credit rating two notches to BBB–. The size of the Greek package prepared by euro area finance ministers is announced as EUR 30 billion, in addition to which the IMF is expected to grant Greece EUR 15 billion (11 April 2010). Following publication of the loan package, the interest rate differential between Greece and Germany contracts temporarily to under 4 percentage points. Eurostat announces the Greek budget deficit for 2009 was 13.6%, one percentage point larger than previously thought, and warns that the figure may still need to be further revised upwards (22 April 2010). At the time, Moody's lowers Greece's credit rating to A3. The interest rate differential between Greece and Germany grows to over 5 percentage points. Greece requests activation of the EU/IMF aid package (23 April 2010), whereupon the interest rate differential between Greece and Germany grows to over 6 percentage points, and for a day it touches over 8 percentage points. Standard & Poor's lowers Greece's credit rating three notches to BB+. Standard & Poor's also lowers Portugal's and Spain's ratings to A– and AA. Portugal's and Ireland's government debt interest rate differentials with Germany start to grow and exceed 2 percentage points by the end of the month.
May 2010	Greece, the IMF and the EU agree on a much larger, EUR 110 billion loan package, which is conditional upon drastic budget cuts of EUR 30 billion (2 May 2010). At the same time, the ECB indicates it will continue to accept Greek government debt securities as collateral, irrespective of their credit rating. The immediate market reaction is positive, but by the end of the week interest rate differentials with Germany in respect of 10-year government bonds hit new records. The differential between Greece and Germany grows to over 10 percentage points, Portugal's to over 4 percentage points and Ireland's to over 3 percentage points. Spain's and Italy's interest rate differentials with Germany also grow, by over half a percentage point. Before the markets open the following week (10 May 2010), the EU publishes an agreement for the establishment of a EUR 500 billion stabilisation mechanism. With involvement from the IMF, the total value of the package rises to EUR 750 billion. The Governing Council of the ECB announces that euro area central banks will begin to purchase both government and corporate bonds and that it will be implementing another dollar-euro swap agreement with the Fed and a fixed-rate tender procedure with full allotment in its 3-month and 6-month refinancing operations. The initial market reaction is positive. The interest rate differential between Greece and Germany contracts to around 5 percentage points, Portugal's and Ireland's to below 2 percentage points, and Spain's and Italy's back to around 1 percentage point. Spain (12 May 2010) and Portugal (13 May 2010) publish public finance stabilisation packages.

Towards a European macroprudential policy

24 May 2010

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A key legacy of the financial crisis has been a universal recognition of the importance of systemic risk. As such, systemic risk is not a novel concept, but until the near-catastrophe of late 2008 few understood the scale of destruction that systemic propagation of instability and herd behaviour could wreak in the modern financial system. However, while there is now clarity on the importance of systemic risk, there is much less clarity on how to control it.

Systemic risk and macroprudential policy

Policies to control systemic risk can be loosely classified under the heading 'macroprudential policies'. This is a loose classification, since, although the term 'macroprudential' goes back some three decades, the search for its precise definition is still ongoing. From the late 1990s onwards, most central banks have performed some macroprudential function, and typically their most visible macroprudential effort has been publication of a financial stability review. Although such reviews typically contain useful macroprudential information and analysis, they do not of themselves constitute a macroprudential policy. Presently, there exists no clear concept of what does constitute a macroprudential policy or how one should be developed.

There is now much more widespread recognition that, in future, central banks cannot avoid taking more direct responsibility for financial stability.

One obvious starting point is to strengthen the systemic orientation of traditional (micro)prudential supervision. Work on this is under way. We may see more widespread use of tools such as 'systemic surcharges' and countercyclical provisions, which should go some way towards limiting the procyclical tendency of the financial system. But we need to be realistic about what can be achieved with normal supervisory tools. Capital regulation cannot anticipate all the various ways in which systemic risks can build up, while supervisory discretion applied by various independent national supervisors is unlikely to add up to an effective countercyclical policy at the European or global level.

Monetary policy has been suggested as another potential tool for controlling systemic risks. Indeed, there has been something of a paradigm shift under way in central bankers' attitudes towards the role of financial stability as an objective of monetary policy. It would be an exaggeration to say that 'leaning against the wind' is the new dogma, but there is now much more widespread recognition that, in future, central banks cannot avoid taking more direct responsibility for financial stability.

At the same time, within the central banking community, the prospect of adopting another objective is met with a distinct lack of enthusiasm. There are widespread concerns about the effectiveness of monetary policy in controlling systemic risks, about the possible economic and political consequences of attempting to do so, and eventually about the possible institutional risks on central bank independence of failing in the attempt.

A third approach to controlling systemic risk would be to create a new policy instrument – analogous to but separate from monetary policy – that would have the sole task of leaning against the wind, to dampen the financial accelerator. Such active, discretionary macroprudential policy is what the Bank of England was referring to when it wrote in a recent discussion paper that: '[m]acroprudential policy is a missing ingredient from the current policy framework'.[1]

There are considerable technical and political hurdles to be negotiated in creating an effective, active macroprudential policy framework. Several candidates for potential instruments have been suggested, but little clarity exists on which, if any, of them might be effective. The political hurdles include deciding on the appropriate institutional setup at the national and, above all, the international level.

The Bank of England discussion paper referred to above offers a good discussion on the technical issues, including the choice of instruments. In short, the debate on the choice of macroprudential policy instruments is still in its infancy. The level of capital requirements has been mentioned as a possible instrument. A closely related idea is to adjust the parameters of provisioning rules in a countercyclical manner. A further possibility is to adjust the risk weights in capital requirements to reflect fluctuations in the macrofinancial environment. Research will over time shed new light on the instrument(s) of choice.

While debate on the instruments is ongoing, it is important to ensure that, once the technical issues are settled, political consensus exists on an institutional framework that allows effective use of the chosen instruments. The present article seeks to contribute to this institutional debate. The particular focus is on how to build a functioning framework for active European macroprudential policies.

The debate on the choice of macroprudential policy instruments is still in its infancy.

We make a specific proposal on how to improve the capacity of the European Systemic Risk Board to implement effective macroprudential policies. The proposal is ambitious and is to be seen as a medium-term goal rather than a short-term imperative. In the near term, the first priority is to find a consensus on the initial setup of the ESRB, thereby allowing the institution to start its work in early 2011, as planned.

Cross-border externalities

In globalised financial markets, macroprudential policies cannot be effective if they are limited by national borders. Some kind of cross-border cooperation is essential.

[1] Bank of England (2009).

The reason for this is rather obvious: macroprudential actions entail externalities. These relate partly to the international and interconnected nature of financial markets and institutions: reduction of financial risks in one country benefits financial stability globally. They also relate partly to the fact that the provision of financial services is a mobile industry and can be easily relocated: a country tightening macroprudential policies in isolation might find its corporations accessing financing from abroad, and it could even face an increased emigration of financial services providers to other financial centres. Such externalities could have sufficient weight as to render nationally based macroprudential policies timid and ineffective.

Trends in financial market behaviour are often global, or at least widely shared. When asset prices grow fast, leverage increases and pricing of risk declines in one country, the same is likely to be true for another country, provided that each country has a reasonably liberalised capital account. We might argue that, due to the high cross-country correlation of financial trends, macroprudential policies should in any case exhibit a high level of correlation across countries. Hence, the competitive situation across countries should remain relatively stable and the need for cross-border cooperation would be less urgent.

The ESRB is an important step towards more effective macroprudential policies in Europe.

But such an assessment would underestimate the challenge posed by the externalities described above and the political pressure exerted by national interests, even when macroprudential conditions are similar across countries. Each country assessing the situation from its own perspective would internalise only a part of the stability benefits of macroprudential tightening while alone bearing the costs in terms of reduced competitiveness of the financial services industry. It is highly likely that this would lead to a first-mover problem, where no country is willing to take the lead to tighten its macroprudential policy unless it knows that others are committed to doing the same. As a result, global macroprudential policies could become stuck in an overly expansionary stance.

European Systemic Risk Board

At the centre of the European answer to such cross-border externalities lies the European Systemic Risk Board (ESRB). This body, outlined in the de Larosière report and still in the process of being fine-tuned in the European decision-making structures, represents an important step towards more coherent and effective macroprudential policies at the European level. The mere fact there exists a European body with the explicit task of monitoring and analysing systemic risks will constitute an important improvement.

Yet it remains unclear to what extent the ESRB will be able to translate its observations on systemic risk into effective macroprudential action. This is not due so much to the ESRB lacking effective tools. In fact, its power to make recommendations to individual supervisors, the requirement for the supervisors to 'act or explain', and the threat of public naming and shaming in case of inaction (and the prospect of leaks at any point of the process) together constitute, in principle, a fairly strong set of tools.

The main risk to effective European macroprudential policies is probably more subtle. The ESRB's toolbox, by and large, consists of different ways to intervene in matters that are under the direct responsibility of national supervisors. This entails a high risk of institutional conflicts that is likely to hamper the ESRB's ability to contribute to effective macroprudential policies.

The potential for conflict is easy to see. Suppose a national supervisor receives a recommendation from the ESRB to adjust some supervisory parameters. What message does such a recommendation carry? Essentially, it communicates that the national supervisor has failed to do its job properly and that risks in the financial system under its supervision are higher than the supervisor has indicated. Besides being difficult to accept from the viewpoint of institutional prestige, such a message could be potentially destabilising for the recipient country's financial system. In practice, the response of any national supervisor would very likely be defensive rather than constructive.

Such institutional conflicts would be highly embarrassing for all parties, and hence practices would evolve to avoid taking matters that far. Formal recommendations would be preceded by informal contacts and negotiations, and what would eventually find its way into the formal recommendation would be a compromise between the ESRB and the recipient supervisor. This would not necessarily render the recommendations useless, but they would scarcely be strong enough to form the basis of timely and strong European macroprudential policies. There is a tangible risk that the recommendations would be watered-down, politically steered compromises.

The ESRB's toolbox consists of different ways to intervene in matters that are under the direct responsibility of national supervisors.

Even within its presently envisaged toolbox, the ESRB may have ways to alleviate this risk. Instead of triggering institutional conflict by singling out individual supervisors as the recipient of its recommendations, it could seek to focus its attention on genuinely European systemic risks and limit its recommendations to measures taken at European level. This could be done either by addressing an identical recommendation to each individual national supervisor, or through a recommendation addressed to the EU as a whole through the Council of Ministers. Either way, the recommendation would not question the competence of an individual national actor, and the risk of institutional conflict would therefore be smaller.

Still, such an arrangement would not necessarily ensure timely implementation of ESRB recommendations. Although collective recommendations would largely remove the stigma related to individually targeted recommendations, the first-mover problem described above would remain. Creating sufficient political momentum in support of a coordinated implementation of the ESRB's recommendation could prove challenging and cause delays in implementation. This would be particularly true if the recommendation were seen to be unpopular, such as a tightening move amidst an economic boom.

European macroprudential framework – how can we combine effectiveness and political feasibility?

The particular institutional design of the ESRB was not reached by accident. It was developed as a carefully crafted compromise between European and national interests. Yet, as a compromise, it falls short of optimal: giving several policy bodies authority over the same instrument is a recipe for institutional conflict and stalemate.

Realism dictates that possible adjustments to the ESRB's mandate must respect the ultimate authority of national supervisors over the financial system under their supervision. This political imperative will remain at least as long as the fiscal cost of financial crises falls on national governments – a situation which is likely to persist in the foreseeable future. But even within this political constraint there may still be room for improving the institutional setup so as to give the ESRB a better chance to succeed.

Overlapping competencies breed institutional conflict and ineffectiveness. So the key is to reduce such overlap. A simple way to achieve this would be as follows. Whatever the macroprudential instrument (or instruments) of choice eventually decided upon, the system would be divided into two components: a European component and a national component. The ESRB would be granted *direct authority to adjust the European component of the macroprudential instrument(s)*. Correspondingly, *national supervisors would retain full authority to adjust the national component*. The ESRB would not issue recommendations on any national component, although conceivably it could express opinions if it considers the matter important for European financial stability. Hence, the ESRB's authority would not interfere with the competence of national authorities, instead being parallel to and independent of it.

Chart illustrates this idea. The left side of the chart presents the situation as currently envisaged: the ESRB instructs national supervisors, while the latter have the formal legal authority and take the actual decisions.

The right side presents the alternative approach described above. The ESRB has direct authority to adjust a European macroprudential instrument. On the basis of its macroprudential analysis, it takes a decision on the appropriate stance for European macroprudential policy, and the decision takes effect in all European countries without any further actions required at national level.

National supervisors still retain undiminished authority to adjust supervisory parameters within their respective jurisdictions. There would, in principle, be nothing to prevent a national supervisor from adjusting the national component so as to completely offset any changes made by the ESRB to the European component.

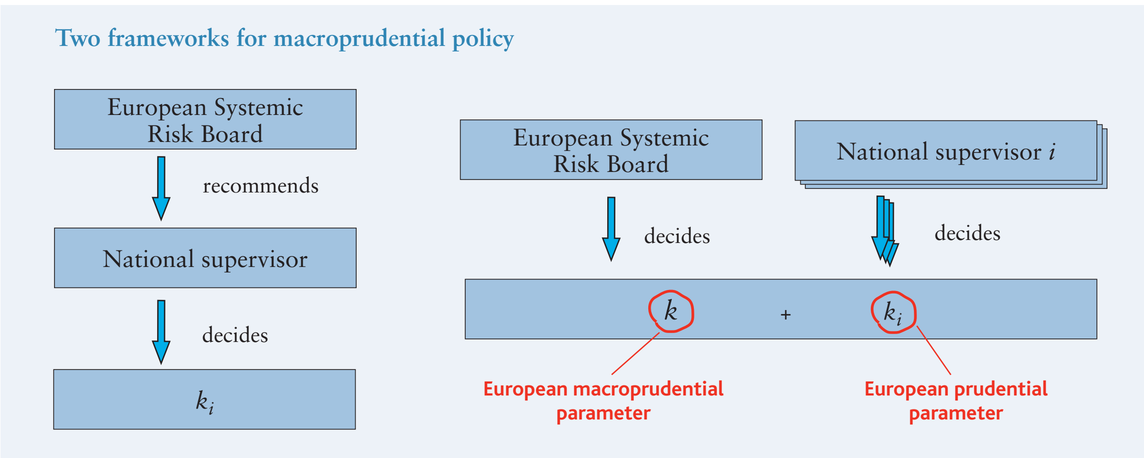
Why would the latter model be more conducive to effective macroprudential policies? There are several reasons.

Firstly, a clear separation of European and national competences would avoid the risk of stigma and institutional conflict. A decision by the ESRB to adjust European supervisory parameters would not constitute criticism of the performance of an individual national supervisor. Instead, it would reflect the ESRB's assessment of broad developments in systemic risk in the European and global financial markets. Hence, national supervisors would be less likely to feel honour-bound or duty-bound to dispute the ESRB's analysis.

A clean separation of European and national competences would avoid the risk of institutional conflict.

Secondly, it would alleviate the problem of regulatory capture. Under the currently envisaged system, the ESRB provides advice, but it is the national supervisor that will have to take the final macroprudential decision. Hence, it is the national

Chart.



supervisor that will have to explain and justify the decision to the financial institutions under its supervision, and those institutions may hold a very different view on the needs of the situation. To the extent the national supervisor is captive to the interest of the institutions under its supervision, this will contribute to making the supervisor less likely to act timely and effectively.

If, in contrast, the ESRB is granted direct authority to adjust European macroprudential parameters, its decisions will take force without any explicit action by the national supervisor. It will be the ESRB's responsibility to explain and justify macroprudential actions. The national supervisor can sit on the sidelines and has a better chance to deflect any criticism. Undoubtedly, a seriously captive supervisor could still come under pressure to take, at the national level, measures to offset the ESRB's action. Nevertheless, the power of the status quo would make the national supervisor less prone to yield to pressure.

Thirdly, and just as importantly, the model of parallel authority would remove the first-mover problem and thereby provide a better chance for peer pressure to work at European level. To be sure, peer pressure would still be needed in various European fora (supervisors, the EFC, Ecofin) to ensure that no national supervisor take actions that would undermine the effectiveness of the ESRB's policy.

Why would peer pressure work better in such a model? Because peer pressure by its very nature is a tool for enforcing conformity and is therefore far more effective in *maintaining the status quo* than in effecting change. Effective peer pressure requires that there exist a sufficient number of peers occupying the moral or political high ground (conforming position) from which to apply pressure. When no player has yet implemented an intended policy action, there is nobody to exert credible peer pressure on a potential first mover. The power of conformity works against change rather than for it.

The model proposed here turns this logic around. The ESRB's power arises from *its ability to redefine the status quo*. By its own macroprudential policy action, without any need to persuade or pressure other parties, the ESRB can move the whole system to the new desired equilibrium. Once in the new equilibrium, peer pressure can concentrate on what it is better equipped to do – maintaining the status quo (conformity) rather than changing it.

The model described above does not deprive the national supervisors of any fundamental powers they currently hold. Each national supervisor would still maintain full authority to define, within the confines of EU law, all regulatory parameters faced by financial institutions under its supervision. Yet, by rearranging the decision-making structure to avoid obvious points of conflict and to provide a better chance for peer pressure mechanisms to work, the model would offer a stronger basis for effective European macroprudential policies.

Conclusion

The recent financial crisis raised expectations regarding macroprudential policies. The extent to which regulators and policymakers will be able to meet these expectations remains to be seen. Work on macroprudential policies is currently proceeding on several parallel tracks. On one track, work is ongoing to reduce the pro-cyclical elements of capital regulation. On another track, efforts are being made to improve the availability of information on systemic interconnections.

The discussion above concentrates on a third track, one that may be the most ambitious of all, namely, the creation of a framework for active, discretionary macroprudential policies that adjust some prudential parameters to counteract excesses in financial developments. It remains to be seen whether such a new policy framework will ultimately come into existence. The development of macroprudential instruments is still at an early stage and a consensus on which instruments might be effective is not likely to emerge any time soon.

The model proposed here is agnostic about the choice of macroprudential instrument and focuses on the institutional aspects of European macroeconomic policies. This is an important part of the development effort, since even if consensus can be found on the appropriate instrument(s), there remain considerable challenges in using it (them) in an effective manner.

It is instructive to contrast active macroprudential policies with, say, monetary policy. Measurement of the extent of systemic risk will always be more complicated than measurement of the price level, and hence macroprudential policies are likely to be more controversial, and backed by less convincing evidence, than is the case with monetary policy. Yet it is important to set ambitions at a realistic level and push forward with the effort. Even an imperfect macroprudential policy is likely to be superior to no macroprudential policy at all. Active macroprudential policies will not eliminate the procyclical nature of financial intermediation, but they can be a useful addition to the set of policy tools that include monetary policy, microprudential supervision and better regulation with a clearer systemic orientation.

In terms of European macroprudential institutions, the ESRB constitutes a substantial step forward. Yet it is not clear that the way the ESRB is presently envisaged to interact with national authorities will enable it to operate effectively enough to meet the raised expectations. In particular, the fact that the ESRB has no direct authority and that implementation relies on cooperation by national supervisors may well become an obstacle to effective policy. Institutional pride, national interests, regulatory captivity and coordination problems may easily interfere.

With the recent crisis fresh in our memories, there may still be a window of opportunity to provide the ESRB with more effective instruments. Although political reality dictates that national supervisors must retain the final authority over supervisory parameters within their jurisdiction, a simple rearrangement – a separation – of national competencies and European competencies might provide tangible benefits.

Keywords: macroprudential supervision, monetary policy, European Systemic Risk Board

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The role of the central bank in the cash cycle

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Maintaining the supply of cash in the economy is one of the Bank of Finland's core tasks. Cash (banknotes and coins) has maintained its position as a means of payment for centuries, although the spread of electronic payment means has progressed rapidly in recent decades. Together with the other stakeholders involved in the cash supply cycle, the Bank of Finland is responsible for ensuring the authenticity, quality and availability of cash throughout Finland. The central bank's focus is concentrated on wholesale cash distribution. This article describes how the Bank of Finland sets its service level in cash supply. We also assess the position of cash relative to card payments.

What is cash supply?

Consumers rarely stop to consider how the cash they have in their possession circulates in society or what sort of systems are used to produce the services that facilitate the frictionless use of cash. Most people are aware that central banks enjoy a monopoly on the issuing of cash, but the management of cash – also referred to as maintenance of cash supply – at national level is a much less familiar issue.

Maintenance of cash supply remains one of the basic functions of a central bank. This means responsibility for ensuring that enough authentic, good quality cash is circulating in society to meet demand. According to current practices, the distribution of labour in cash supply in Finland is that the Bank of Finland provides primarily wholesale services, with retail services being provided by private operators: banks, cash-in-transit companies, ATM companies and retail traders. In relation to cash supply, the Bank of Finland has no private retail customers or personal accounts.

Another way of looking at this is that the Bank of Finland has defined its role as the procurement, issuing and recycling of cash, the destruction of damaged or discoloured banknotes and the direction, coordination and supervision of private operators in the cash supply system. With regard to the recycling of banknotes currently in use, however, the focus is shifting more and more towards the private sector, which is at present responsible for around half of the banknotes to be returned into circulation after sorting. The Bank of Finland will accept as cash cycle companies only wholesale customers that meet specific criteria set by the Bank and sign a cash client agreement with it.

Originally, the Bank of Finland carried out all cash supply tasks itself. To this end, it had 12 branch offices in different parts of the country. Nowadays, in addition to the main cash centre in Vantaa, there remain only three regional offices (in Tampere, Kuopio and Oulu), which means there has been a corresponding increase in the role of the private sector in cash supply and a clear division into wholesale and retail activities. Together with Finnish accession to the euro area, this trend has reduced the Bank of Finland's share in practical day-to-day activities and increased its role in oversight.

The changing role of the Bank of Finland highlights the importance of cooperation between the various parties in the cash business. It is important that all the parties involved in the cash cycle share a common perception of how this can be managed in Finland in accordance with the rules of the euro area in a manner most conducive to the welfare of the Finnish economy as a whole. Below, we seek to address this issue from a central bank perspective by taking as our framework the cash cycle services offered to its customers by the Bank of Finland. How are the services produced? Who produces them? How are the societal costs of the services divided up?

Bank of Finland's cash services

The cash cycle is divided into central bank, wholesale and retail activities

When defining the Bank of Finland's role in the cash cycle, we can begin our analysis by dividing the supply of cash into three operational components: central bank tasks, wholesale activities and retail distribution (Charts 1 and 2).

There are certain basic aspects of the cash cycle that can be unambiguously classified as central bank tasks. In practice, the Bank of Finland cannot transfer these tasks to private operators. These include the issuing of coins and banknotes, the destruction of banknotes and, as the monetary authority, overall responsibility for cash supply. Participation in Eurosystem cooperation is another important part of the Bank of Finland's tasks as a central bank.

Wholesale activities, meanwhile, are carried out in cooperation between the central bank and private operators. The Bank of Finland's role in wholesaling has declined considerably in recent decades. At present, the Bank has four regional offices, which it uses in managing its wholesale cash logistics. Wholesaling nowadays emphasises the responsibility of professional, privately owned cash-handling companies. At present, these companies operate 21 private cash centres catering to the provision of cash at local level. The Bank of Finland's regional offices form the core of the wholesale network around which the private cash centres operate throughout Finland.

Retail cash distribution is the responsibility of deposit banks, cash-handling companies, cash transporters and retail traders. They decide the details of retail distribution, such as the number and location of ATMs and the pricing of the various retail cash supply services. In practice, the

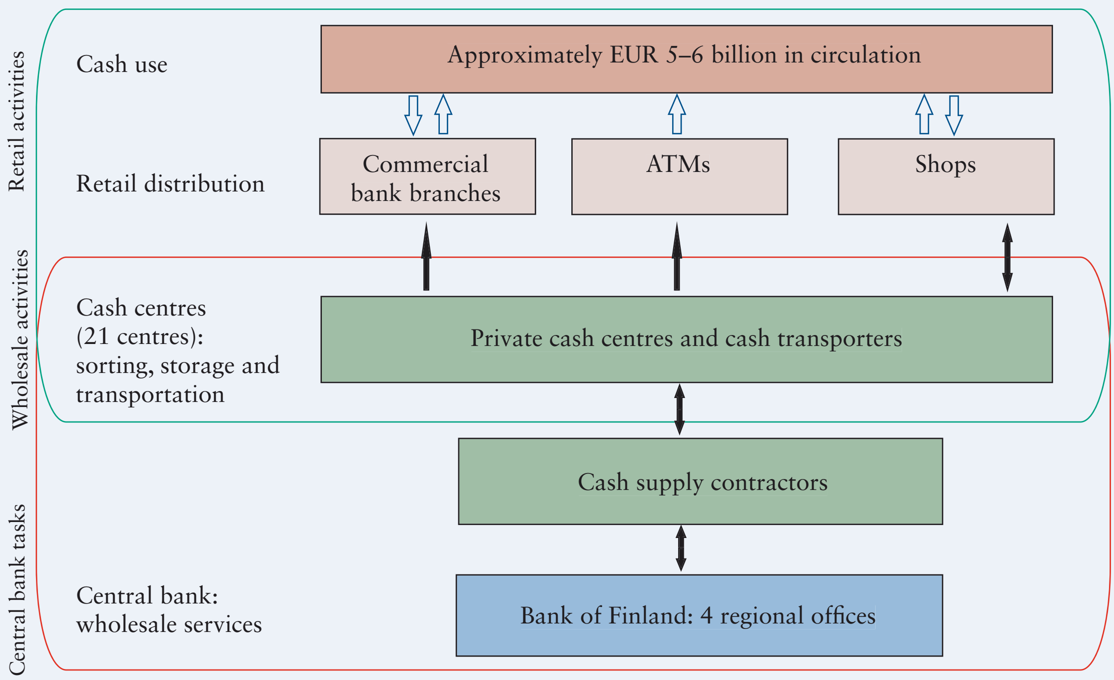
Chart 1.

Functional breakdown of the cash supply system

Source: Bank of Finland.

Chart 2.

Finland's currency supply system



Source: Bank of Finland.

end customers of the entire cash cycle – members of the public and businesses – purchase their desired retail services as part of their general banking services or directly from cash-handling companies.

In Finland, the present distribution of labour in professional cash handling has with time become well established and efficient. Although central banks in some euro area countries still also offer retail cash services, the predominant trend appears to be moving in the direction of central banks further limiting their role primarily to wholesale activities. Central banks do not want to compete with private operators in the provision of retail services – nor are they necessarily equipped to do so. Moreover, the development of improved, cheaper cash-processing machines has facilitated the increased importance of private cash centres in both wholesale and retail cash-handling services.

It has been decided within the Eurosystem that central banks must offer specific commonly defined minimum cash supply services. As a member of the Eurosystem, this requirement of course applies to the Bank of Finland. Each central bank within the Eurosystem must have at least one office that offers basic cash supply services free of charge to parties involved in cash supply. This requirement constitutes the absolute minimum level at which the Bank of Finland will in future continue to be involved in wholesale activities.

Distribution of labour and distribution of interest determine service level of central bank

As monetary authorities, central banks must always be involved in organising the maintenance of cash supply. The key question is the scope of the cash cycle services they offer. This question is particularly relevant when examining how the overall costs of cash supply are distributed between the central banks and other parties to the system.

The level of cash cycle services provided by a central bank can be summed up in two variables: the distribution of labour in respect of wholesale activities between the central bank and private operators, and the precise positioning of the distribution of interest, which determines the extent to which the central bank bears the interest costs arising from the storage of cash.

The distribution of labour is directly based on the central bank's network of regional offices. The more extensive the regional office network is, the more the central bank will be involved in organising wholesale activities. Correspondingly, a limited network of regional offices means a greater degree of responsibility for wholesale activities is transferred to private partners, and at the same time these will bear a larger proportion of the costs.

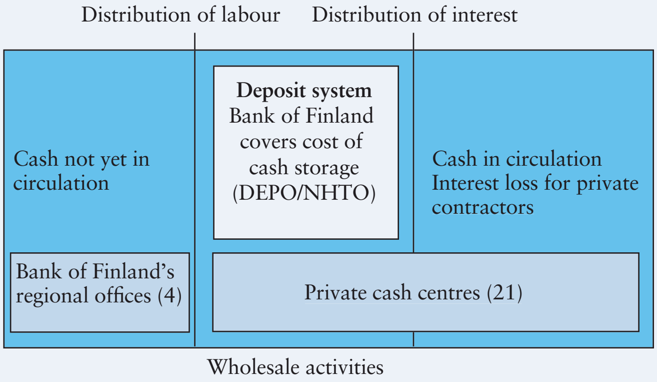
The counterpart of the distribution of labour is the distribution of interest (Chart 3). This means the point up until which the central bank will cover the interest burden to private professional parties from cash storage. Holding cash causes an interest loss to the holder. For example, a private cash centre sustains an interest loss on overnight storage of cash. If the cash centre returns banknotes to the central bank in the evening, the latter credits an equivalent sum to the cash centre's bank account, which it can then invest as assets and earn interest on its investment. For an individual member of the public, the interest loss on holding cash is insignificant, but on the scale of a cash centre it is an important consideration. The interest burden from holding cash is a significant cost item in the overall costs of private wholesale operators in the cash supply system.

Through the cash deposit system the central bank can help cover the costs of cash supply

Central banks can help to cover the interest burden by setting the distribution of interest in such a way that cash does not have to be physically returned to the central bank. Such an arrangement is known as a cash deposit system. Deposit systems are nowadays a key component of the cash supply services provided by central banks in the euro area. The Bank of Finland offers participation in its cash deposit system to all wholesalers that have signed a cash client contract.

Chart 3.

Distribution of labour and interest



Source: Bank of Finland.

There are many types of cash deposit system. Like the other Nordic countries, Finland operates a DEPO scheme based on interest compensation, under which the Bank of Finland compensates private partners for a portion of their interest loss.[1] By thus expanding the cash deposit system, the central bank participates more in covering interest loss and the broader costs of cash supply.

Some countries in the euro area operate a Notes-Held-to-Order (NHTO) cash deposit scheme. Under such an arrangement, instead of paying direct interest compensation, the central bank credits the signatory to the cash client contract with the entire sum of cash it is holding, without this cash being returned to the central bank. The cash is then owned by the central bank overnight. This

[1] The interest rate applied is the 1-month Euribor.

arrangement resembles the situation where the cash is actually returned to the central bank. In an NHTO scheme, part of the cash centre's vaults can effectively be considered to be the central bank's vaults.

In addition to the distribution of labour and interest, the central bank can also adjust its cash service level by altering the conditions it imposes on operators in the wholesale cash market. These include the minimum size of the wholesale packages for cash returns to the central bank and the cash-sorting requirements for cash being returned. Although at first glance these may appear to be trivial issues, they do in fact enable the central bank to exert considerable influence over cash supply operations, even if the distribution of labour and interest remain unchanged.

Service level review will improve efficiency of the cash cycle

The Bank of Finland is seeking to further improve Finland's already efficient cash supply system.

The Bank of Finland is currently reviewing the cash cycle throughout Finland. The objective is to ensure the availability of cash throughout the country and also to steer cash supply in a more secure and cost-effective direction from the perspective of society as a whole. A recent internal analysis of the service level identified three key development challenges: improving the recycling of cash at regional level, reducing double sorting of banknotes and ensuring an adequate level of competition in wholesale activities. In response to these challenges the Bank has decided on the following solutions.

In the first place, it will seek to improve regional cash recycling in economic regions where it does not have a regional office. In an optimal situation, the cash cycle in the key economic regions of the country operates fairly independently: regional demand for cash corresponds to the supply of cash within the region. In order to improve the regional cash cycle, the Bank of Finland will increase the scale of the deposit system in challenging regions and also take account of the necessary cooperation in its contracts. Efficient local recycling of cash may in practice require cooperation between private contracting parties in order to balance out structural surpluses and deficits.

Secondly, the Bank of Finland currently counts and sorts all banknotes arriving at the Bank, although these have normally been handled once already in the private cash centres. This means double sorting, with almost exactly the same work being done twice. For society as a whole it would be more efficient if the cash were sorted only once. To solve this problem, the Bank of Finland will henceforth place additional requirements on the cash to be deposited with it. This will mean moving towards an arrangement whereby banknotes in good condition will be recycled more locally, with primarily just damaged or poor quality notes being returned to the central bank. The expansion of the deposit system will afford a means to compensate cash centres for the extra work involved.

Thirdly, the Bank of Finland believes an adequate level of competition on the wholesale cash market will ensure the efficiency of wholesale activities. The Bank will therefore ensure that its services are open and equal for all present and possible future professional wholesale customers. Even the threat of competition may foster market efficiency.

The planned changes will mean a slight increase in the role of professional cash supply operators in Finland's cash supply system. At the same time, the Bank of Finland's service level will remain more or less unchanged as a result of the expanded role of the deposit system. Although this will involve costs for the central bank, the overall effect of the changes will be beneficial for society as a whole. Viewed internationally, Finland already has an efficient cash supply system, and the planned changes will make it more efficient still.

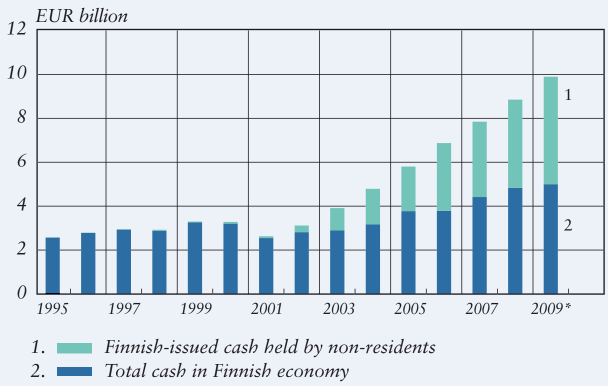
Cash remains a popular means of payment

If we examine the trends in cash use in Finland, we see that cash is still a key means of payment, although the popularity of card payments has continued to grow strongly in recent years.

Compared with the era of the markka, the sustained strong growth in the issue of euro banknotes in Finland has been a surprise. The value of banknotes issued has tripled since the introduction of the euro, although the amount of cash in active use in Finland is not estimated to have grown so much (Chart 4). This is mainly due to the phenomenon of banknote migration: the movement of banknotes out of the country. There are many reasons for this, including tourism, retail purchase of cars abroad for import into Finland, other large purchases in euro area countries, wage payments to foreign workers and, possibly, the timber trade. In principle, some cash may also end up in cash reserves, although there is no direct empirical evidence, eg from consumer surveys, of a growth in cash savings in Finland.

Chart 4.

Finnish-issued cash in circulation in Finland and elsewhere



* Advance estimate
Sources: Statistics Finland and Bank of Finland.

The oldest age groups prefer cash, while the young use payment cards.

Cash still remains popular as a means of payment because it has certain important properties that electronic means of payment cannot displace. It does not require an electronic payment terminal, and it allows easy transfer of purchasing power from one place to another without external costs. Cash allows easy payment or transfer of funds from one person to another without the need for tools or equipment, which is not possible using electronic means of payment. Moreover, for small sums, cash is generally the fastest means of payment. Another difference relative to cards is anonymity. Cash can also serve of itself as the most liquid possible means of saving, and one that is not vulnerable to eg banking crises or deposit guarantee restrictions.

Card payments and cash complement each other

The dominant forms of retail payment are cash and card payments. In terms of their properties these represent very different forms of payment and payment services. Card payments have expanded their role as the most common form of consumer payment in Finland and currently account for 2/3 of retail payment transactions, while the share of cash payments has declined to around 1/3.

Cash has only lost its position as the dominant form of retail payment in Finland in the past few years. In many euro area countries the situation is moving in the same direction, but with a slight time lag, although eg Germany and Austria are still very markedly cash payment countries. Consumer surveys indicate the use of cash is also a generational issue: the oldest age groups are still persistent users of cash, while young people already predominantly use cards. Admittedly, to some extent the difference can be explained by different motives for using cash.

Card payments are markedly a product of the private banking system, although cards can also be issued by a credit company or retail chain. Growth in the number of outlets accepting cards, faster payment confirmation and improved payment security have in the past five years made card payments the form of retail payment most commonly used by consumers in Finland.

Cash and cards have their own typical areas of use.[2] Cash is the most common form of payment for small sums, and in most payment situations cash is still a credible alternative to payment by card. The average card payment is worth around EUR 35, and the average cash payment just over EUR 10. The use of cash normally requires the seller to keep a store of change. In contrast, card payments can be freely set at the precise sum due, which often

[2] See also Takala and Viren (2008) Efficiency and costs of payments: some new evidence from Finland. Bank of Finland Research Discussion Papers 11/2008.

simplifies and speeds up the payment process, as no time is needed for handling the change. At present, it would appear that the use of cash in payment transactions is still declining somewhat in face of the increase in payment by card. However, the popularity of these two forms of payment is presumably approaching some sort of equilibrium, whereby one or other method is used in different payment situations depending on the properties of each method and the person making the payment.

As an additional factor, changes in card payment tariffs, eg the card commission rates applied in shops, could lead to changes in traders' attitudes to the different means of payment. For the above reasons, the future of cash supply cannot be forecast independently of changes in card payments.

Finland's cash supply stands up well to comparison

International comparisons reveal that Finland has an efficient, high-quality system of cash supply. One example of this is the centralised countrywide network of ATMs, which none of the large euro area countries have managed to construct. Although the Bank of Finland's operative tasks in cash supply have been steadily declining, Finland's cash supply nevertheless remains in competent hands, as the activities of cash transporters, cash centres and other private operators in the cash supply system are highly reliable and professional.

Retail traders also play a considerable role in the cash cycle. After all, banknotes withdrawn from ATMs mainly end up on the shop counter. Nor can we rule out the possibility that retailers will in future play a more significant role in the entire cash supply cycle. This is worth taking into account in designing the overall system of cash supply and setting the level of service provided by the central bank.

The Bank of Finland endeavours to treat different means of payment equally. It is essential that the central bank set its participation in cash supply in such a way that the costs of using cash remain reasonable without the need for special subsidies. It is also important that central bank services in wholesale cash supply activities are available to all on the same terms. In the final analysis, competition (or its threat) already ensures an efficient national cash supply cycle.

Keywords: cash, cash supply, cash cycle, deposit system, service level

Organisation of the Bank of Finland

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