BANK OF FINLAND BANK OF FINLAND

2 • 2006



Monetary policy and economic outlook
Financial stability in Finland
Oversight of financial market infrastructure
faces new challenges
Towards the Single Euro Payments Area

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Bank of Finland Bulletin 2 • 2006

Vol. 80

The Bank of Finland Bulletin is a quarterly publication.

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Edited

by the Bank of Finland Publication and Language Services

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Printed

by Edita Prima Oy, Helsinki 2006

The contents of the Bulletin may be freely quoted, but due acknowledgement is requested.

ISSN 0784-6509 (print) ISSN 1456-5870 (online)

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Monetary policy and economic outlook

1 June 2006

The world economy has continued to grow strongly, particularly in the emerging economies, which has in turn meant a continuation of brisk world trade. The growth differential between the United States and the euro area is expected to gradually narrow as US domestic demand evens out and domestic demand in the euro area strengthens. Japan appears to be escaping from deflation, and its economic growth has gathered pace. Strong demand has been reflected in the world market prices of many commodities. At the same time the risk of faster inflation has increased, which has affected eg stock market developments.

World economic growth gathered pace during the second half of 2005 following a brief setback in the spring (Chart 1). Output in both industrial and emerging economies has continued to grow briskly during the first half of 2006. Domestic demand

in the emerging economies and oilproducing countries has been one of the factors that have supported economic activity in the world economy. It has also helped sustain growth in world trade. Oil-producers' import growth has admittedly lagged behind the trend in their export receipts. Industrial order books have remained healthy in many of the industrial economies. In similar vein, household and business confidence indicators suggest the present brisk pace of growth in the industrial economies will continue in the near future (Chart 2).

The price of crude oil looks likely to remain much higher than expected a couple of years ago. The prices of several other commodities, particularly base metals, have also risen strongly in the first part of 2006 due to increased demand. The increase in raw material costs has not significantly accelerated consumer price inflation in the industrial

Chart 1.

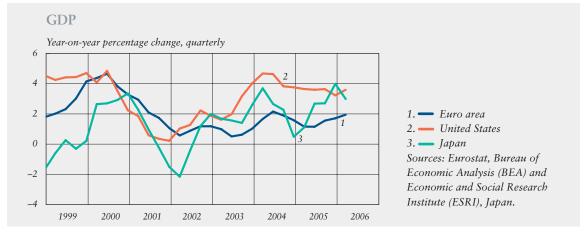


Chart 2.

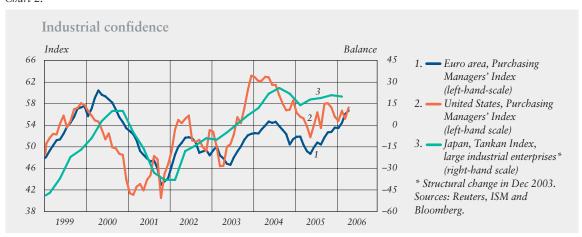


Chart 3.

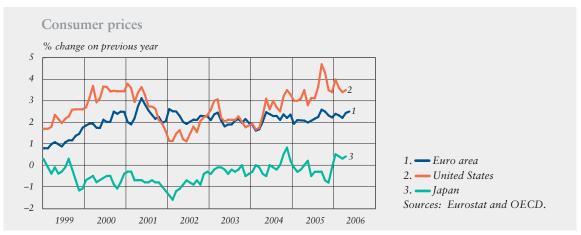
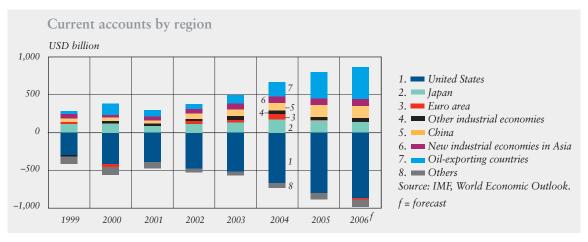


Chart 4.



countries (Chart 3). The risks of an acceleration in the inflation rate have, however, grown. In tune with this, inflation expectations on the financial markets have mounted during the course of the spring. The markets expect the central banks to continue to raise their policy rates during 2006 in many countries.

The risks to world growth have not significantly changed recently. The current account deficits of some industrial economies have remained large, and there is particular concern over the continued increase in indebtedness of the United States (Chart 4). This is balanced by the growing surpluses in Asia and, increasingly in recent years, the oil-producing countries. Possible disruptions to oil supplies also continue to pose a threat to the stable development of the world economy. So far, however, there have been no serious problems in financing the US current account deficit. Moreover, the world economy appears to be fairly resistant to even large increases in the price of oil. One reason for this is that the industrial economies have reduced their dependency on oil. In recent years the impact of rising oil prices has also been cushioned by the fact that the higher prices have been largely due to higher demand caused by the rapid pace of economic growth.

Economic growth in the euro area began to accelerate in autumn 2005. In the early part of 2006 it has been around 2%. Growth has been

largely dependent on exports, although there has also been some recovery in capital investment. Growth in export receipts has not yet funnelled through into domestic demand to the extent often seen before. This could reflect companies' caution in the deployment of their larger cash reserves.

Growth in the Finnish economy has recently been stable at around 3%, and this positive growth picture is expected to continue in the near future. The recovery in investment in the world economy has been reflected in Finland, particularly in the mechanical engineering industry, where the export outlook has brightened considerably since the turn of the year. In contrast, the difficulties in the forest industries look set to continue. On the employment front, despite some highly publicised redundancies in recent months, the number of employed in Finland has continued to rise during the spring in response to strong domestic demand.

Capacity shortage on the commodity markets

The prices of commodities other than oil have also risen in response to the strong growth in the world economy. The prices of industrial metals such as copper, nickel and aluminium have risen very sharply in the early months of 2006. For example, the dollar price for copper has almost doubled since the beginning of the year, and trebled since January 2005.

Markets expect many central banks to raise their key interest rates in 2006.

Reawakened interest in nuclear power has meanwhile pushed up the price of uranium and increased exploration. In contrast, there is at present adequate steelmaking capacity in the world economy, with the modernisation of steelworks in eastern Europe and the construction of new plants in China and elsewhere.

The rise in commodity prices is a consequence of strong investment and consumption demand, especially in emerging economies. If the supply of commodities responds to higher prices as it has in the past, the rise in metal prices could be short-lived. In contrast, it is considerably harder to open up new sources of oil, which means the price of oil could remain high for a sustained period. The adequacy of oil supply continues to be a major concern, with, for example, continuing unrest in Nigeria and the continued absence of a solution to the dispute surrounding the Iranian nuclear programme.

The dramatic price rises in precious metals is a new feature on the commodity markets (Chart 5). It is not a question of gold alone, since the prices of other precious metals such as silver, platinum and palladium have risen almost as much. As some of these metals have industrial uses, the price rises could reflect increased demand caused by the rapid growth in the economy. Part of the reason could also be that some market participants have invested in precious metals to guard against the possibility of accelerating inflation.

Stock markets turbulent following sustained rise

Higher corporate earnings due to economic growth have combined with low interest rates in recent years to fuel a bull market on the stock exchanges both in industrial countries and, especially, in the emerging economies. In both the euro area and the emerging economies share prices

Chart5.



in 2005 rose faster than in the United States (Chart 6). Corporate earnings development in the industrial economies in the first quarter of 2006 was good on the whole, and share prices continued to rise.

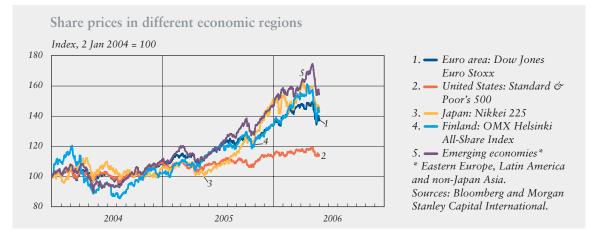
Rising commodity prices have increased interest in expanding production capacity in many producer countries. In similar vein, increased interest in investment on the part of emerging economies, and more recently also oil producers, has boosted demand for capital goods. The full order books in the capital goods industry have also been reflected on the stock market, where the share prices of capital goods manufacturers have risen much higher than would have been expected purely on the basis of their recorded earnings performance. Indeed, the valuation of capital goods manufacturers in the industrial countries based on their P/E ratios has in recent months been well above average.

In mid-May, there was a marked drop in share prices around the world. In just a few days the shares of many companies lost all the gains of recent months. The downward trajectory began in the United States, where there was apparently a change in the markets' view of the risks surrounding the future trend of inflation. There seemed to be a fear that accelerating inflation would force the Fed to tighten its monetary policy more than previously expected. This change in the risk assessment was clearly discernible, for example on the stock markets of the emerging economies.

Growth and inflation expectations have pushed up long-term interest rates

The central banks of many countries raised their monetary policy interest rates in the latter part of 2005 and the early months of 2006. The US Federal Reserve has already raised its key rate by 4 percentage points since the





middle of 2004 (Chart 7). Short-term market rates have risen accordingly. The expectation in the markets is that the rate rises could continue. The European Central Bank has raised its key policy rate twice already, in December and March, by 0.25 percentage points each time. In addition, in spring 2006, the Bank of Japan announced its intention to begin normalising its monetary policy in response to growing signs of an end to deflation. It has already begun the transition from a policy of quantitative easing based on targeting liquidity to steering based on targeting interest rates. This change is already reflected in market rates, which have gradually risen.

The real interest rate estimated on the basis of index-linked bonds has risen both in the United States and in the euro area by around half a percentage point in the early part of 2006. This can be interpreted as reflecting more optimistic growth

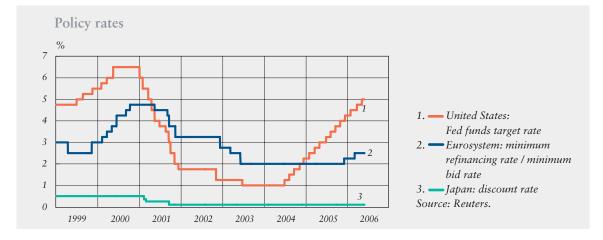
expectations on the markets. In addition, higher inflation expectations have also contributed to the slightly higher long-term rates in both the United States and the euro area.

Dollar down

Towards the end of the spring the dollar weakened rapidly against the euro. At the same time there were growing signs of a narrowing of the growth differential between the euro area and the United States. Between the beginning of 2006 and the end of May the dollar fell around 8% against the euro. The last time the euro and the dollar were at their present levels relative to each other was in spring 2005. The dollar has also weakened significantly against the Japanese yen.

Despite the recent movement in exchange rates, the major currencies have been relatively stable since the end of 2003, as measured by the trade-weighted currency index, compared to the period either side of





the millennium (Chart 8). Based on the real exchange rate index, the major currencies have been fairly close to their long-term average values.

US housing market cooling down

The US economy continued to grow strongly in January-March 2006 following a brief dip in the last quarter of 2005. GDP was up by over 5% on the previous quarter (at seasonally adjusted annual rate). Compared to the first quarter of 2005, the increase

was almost 31/2%. The capacity utilisation rate was also up. Output growth has been sustained especially by private consumption, which has in turn been bolstered by brisk growth in aggregate wages. There has also been an increase in investment in capital goods. Indicators suggest output growth has continued in the second quarter, if more slowly than earlier in the year.

The housing market has in recent years made a substantial con-

Chart 8.

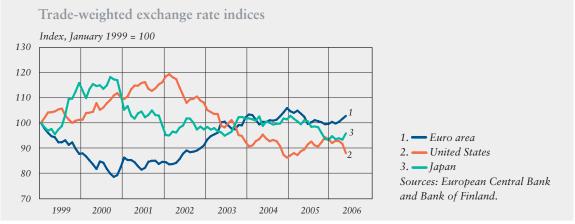
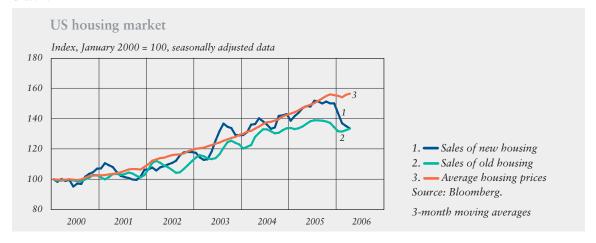


Chart 9.



Many forecasters were surprised by the rapid growth in Japan in the past couple of years.

tribution to the US economy. There has been a strong expansion in new construction, housing prices have risen and households have used the opportunity provided by rising housing asset values to take on extra debt. Since the second half of 2005, however, there have been clear signs of cooling in the market. The pace of new construction has eased, and the sales market has become a bit sticky. The upward price trend would also appear to have come to an end (Chart 9). The cooling of the housing market could be an indicator of a gradual slowdown in private consumption and GDP growth in the United States.

The dramatic rise in the price of oil has pushed US inflation above 3%. Underlying inflation (excluding food and energy prices) has, in contrast, remained at slightly over 2%. The risks of accelerating inflation have, however, increased. One sign of this is the high capacity utilisation rate in manufacturing industry.

The US budget deficit has not been bridged despite strong growth. The general government deficit looks set to remain at around 3–4% of GDP, equal to around half the current account deficit.

Japan and other Asian economies growing strongly

Japan's rapid growth in the past couple of years has been a surprise to many forecasters. GDP growth in 2005 was 2.7%, in contrast to an average of just over 1% in the period

1995–2004. Growth in the last quarter of 2005 was over 4% on the previous quarter (at seasonally adjusted annual rate). Although growth eased in the first quarter of the present year, it was still around 2%.

Indicators suggest the Japanese economy will continue to grow relatively fast in the near future. The difficulty of escaping deflation is, however, indicated by the fact that annual growth in basic wages has recently fluctuated around zero, on occasion dipping below. On the other hand, the clear improvement in the employment situation and the falling unemployment rate have compensated households for the sluggish development of wages.

The Chinese economy has continued to grow this year at around 10%. Investment has remained brisk, and strong exports have seen the trade surplus continue to grow. In response to the rapid pace of growth, the People's Bank of China raised its key policy rate to just under 6% in April. It has also allowed the yuan to slowly strengthen against the dollar. China has additionally begun to open its capital markets to foreign investors and permit Chinese investors to invest abroad. These are both important changes for the Chinese economy.

Euro area growth recovers

Euro area growth in 2005 was sluggish. GDP growth for the year as a whole was just 1.3%, only around half the average rate of growth for

the industrial economies as a whole. There were large differences in the pace of growth between different countries within the area. The economic performance of Italy was particularly weak, with GDP remaining at the level of 2004. German growth was also rather weak, despite strong exports. In Germany and some other countries, growth in export receipts has not been reflected in domestic demand to the same extent as often in the past. Corporate investment in particular has been sluggish in many areas.

Euro area growth showed the first signs of recovery in autumn 2005. Following a fairly sluggish end to the year, growth has picked up again in 2006. Preliminary data indicates first quarter growth of around 2% compared to the first quarter of 2005. Business confidence in euro area countries has continued to strengthen in the second quarter, and, for example, German business confidence (IFO index) in April-May was at its highest since 1991. The present strong business confidence is based particularly on the strength of exports, which has benefited industry in, for example, Germany.

Euro area growth has for long been held back by the weakness of household consumer demand. Here, too, the trend looks brighter, despite the continued high price of oil. The unemployment rate has continued its gradual fall, and household confidence has been rising since the second half of last year.

Euro area inflation still over 2%

Euro area inflation (as measured by the Harmonised Index of Consumer Prices (HICP)) has remained over 2% in the early months of 2006 (Chart 3). Almost half the rise in consumer prices is due to energy prices. As well as fuel prices, the price of natural gas, which follows crude oil prices, has also risen (see Box on page 12). Futures prices indicate there is unlikely to be any respite from high oil prices in the next few months.

Industrial goods prices have risen slightly faster in the euro area in recent months. Besides rising transport costs, this may also reflect higher prices for industrial raw materials. Looking to the future, it is also possible that the dampening effect on inflation of cheap consumer goods from China and other low-cost economies could weaken. This could happen if the price trend in these countries were to accelerate or their share of the market were to stop growing.

Pay settlements in the euro area last year remained moderate, although there were substantial differences between the larger member countries in the pace at which wages rose. According to an estimate by the Commission, labour costs per employee remained more or less at the level of the previous year in Germany, whereas in France they rose by more than 3%. In the euro area as a whole, labour costs rose by an average of 2%.

Euro area inflation has remained over 2% in the early months of 2006.

The Finnish economy has continued to grow on a relatively stable trajectory.

Growth in the euro area's broad monetary aggregate M3 has accelerated again in 2006, as has growth in the volume of lending to the private sector. The volume of housing loans continues to grow at a brisk pace: in March-April there were 12% more loans than a year earlier. Demand for corporate loans has also been lively, which supports assessments of a recovery in investment activity in the euro area. Data on money and credit trends suggest that monetary conditions in the euro area remain relaxed despite the rising trend in market rates that began in the second half of last year.

In view of the increased risks to price stability in the euro area, the ECB Governing Council decided in December 2005 to raise its key policy rate by 0.25 percentage points. This was followed by another rise of the same magnitude in March. The purpose of these rate rises was to keep inflation expectations in line with the objective of maintaining price stability. The key rate now stands at 2.5%. There is a general expectation in the markets that the ECB will raise interest rates further during the course of 2006.

Exports and consumption driving the Finnish economy

The Finnish economy has continued to grow on a relatively stable trajectory. Advance data from Statistics Finland suggests GDP growth of almost 3% in the first

quarter of 2006 compared with the same period last year. Growth from the last quarter of 2005 was 0.4%. In manufacturing industry, growth from the end of last year was almost 1% despite a lack of growth in forest industry output in the first quarter.

Besides electronics, the early months of 2006 have seen increased output particularly in other parts of the metal industry. The near future also looks bright, as order books in, for example, the mechanical engineering industry have grown considerably. It would appear that the Finnish engineering industry is now benefiting from world growth. In contrast, there has not been any significant increase in domestic orders. This suggests there will be no notable upswing in capital goods investment in the near future.

According to the volume index of industrial output, forest industry output in the early part of 2006 has been approximately the same as during the corresponding period last year. The prices of many grades of paper remain low, although there has been a slight upward trend in recent months. The improved growth outlook in Europe may have contributed to price rises.

The number of employed has continued to grow in the early months of the year against a background of brisk domestic demand. At the same time, employers have experienced increased difficulties in recruitment. Survey data indicate that the construction industry in particular is suffering

from a lack of skilled labour, but health care and care services for the elderly are also in some areas finding it difficult to recruit competent staff. This sort of situation could easily lead to wage drift. The resulting faster rise in wages could cause new expenditure pressures for the public sector, with local authorities being forced to compete with the private sector in recruitment.

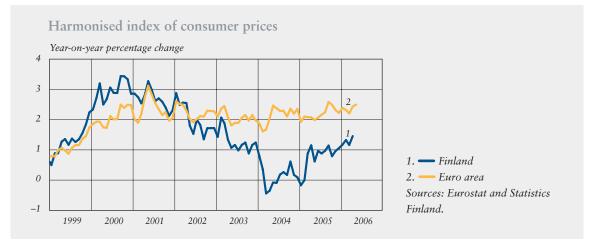
Some statistics on the Finnish economy have been updated in 2006 both methodologically and, in part, also in terms of their basic source data. As a result, the structural picture of the Finnish economy has changed, in some aspects considerably. More precise data on services exports for the years 1999-2004 increases the value of Finnish GDP by an average EUR 3.2 billion per annum, while services' share of total exports has risen from 12% to 17%. At the same time, the current account

surplus is now considerably larger for these years. The current account surplus for 2004 is now approximately 71/2% of GDP, whereas the previous estimate was 4%.

Finnish inflation still the lowest in the euro area

Consumer prices in Finland have risen over the past year more slowly than in other countries in the euro area. Between April 2005 and April 2006, the average 12-month rise in the HICP for Finland was only 1%.1 Euro area inflation in this period averaged 2.3%. Finnish inflation has been lower than the euro area average for almost the past four years, which has increased real household purchasing power and brought Finnish prices closer to the euro area average (Chart 10).

Chart 10.



¹ At the beginning of 2006, Statistics Finland updated the content of both national and harmonised consumer price indices.

Finnish inflation has recently been subdued by the continued decline in the prices of many industrial goods. Stiffer competition has both reduced sales margins and caused retailers to transfer their goods purchases to countries with lower costs. Foreign retail chains have also provided consumers new alternatives by challenging the companies who have previously dominated the Finnish market. In contrast, there has been no further

slowing of inflation in services prices in recent months. This is partly an indirect consequence of rising energy prices. There are also signs that in some sectors, above all telecommunications, the period of stiffest competition is now over. As a result, some providers of telecommunications services have begun to raise their prices.

Keywords: inflation, monetary policy, economic situation

Box.

The significance of the natural gas markets

Natural gas is a non-renewable source of energy that derives partly from the same sources as crude oil. Generally speaking, it is the second most important source of primary energy after crude oil: in the United States and European Union, for example, natural gas satisfies about 25% of energy needs.

Measured by the time until exhaustion, the verified global natural gas reserves are slightly larger than crude oil reserves, and they are also somewhat differently distributed geographically. For this reason, a dominant cartel such as OPEC has not emerged in the natural gas market. Russia has by far the largest natural gas reserves and in recent years has also been the world's largest producer of natural gas. The United States

has produced significant quantities in recent years, although its reserves are not quite among the world's largest.

Geographically speaking, the EU countries are clearly the area most dependent on natural gas imports (Chart A). This dependency has increased in the past couple of years, despite the fact that the area also produces significant quantities of natural gas itself, particularly in the Netherlands and the United Kingdom. In contrast, the United States is at least for the time being largely self-sufficient with respect to natural gas. The countries of the former Soviet Union are the most significant group of natural gas exporters, but in recent years there has been a substantial increase in exports from Africa, particularly Algeria.

The EU imports slightly over half its natural gas requirement, and imports are highly dependent on three countries: Russia, Norway and Algeria. The vulnerability of EU natural gas imports became evident at the beginning of 2006 with the escalation of the natural gas dispute between Russia and Ukraine. At that time there were disruptions in the supply of Russian natural gas through Ukraine to Europe. The dispute was quickly settled by a compromise between the parties, but the incident aroused a lot of discussion over how the EU could diversify its natural gas imports.

Natural gas is delivered from producers to consumers primarily through pipelines. This is the main reason why the natural gas market is far more

fragmented than the crude oil market. Producers are not able to respond to regional fluctuations in demand as flexibly as oil producers, and, unlike crude oil, there are no generally accepted benchmark prices available for natural gas.

A less-used alternative for transporting natural gas is to turn it into liquefied natural gas (LNG), but this is technologically demanding and hence

expensive for ports of departure and arrival, and for the tankers used in transportation. LNG harbours are also a security risk due to the danger of explosion, which has limited their construction in the United States at least.

Natural gas and crude oil are in many cases substitutes for each other, so there should not be any significant long-term difference in their price. In practice, natural gas buyers agree the

price with their supplier for several years ahead, and only a small proportion of trading is conducted on the spot markets. Natural gas prices are also generally indexed against crude oil (futures) prices, so the price of natural gas tends to follow the price of crude oil. This is shown in Chart B. However, natural gas prices show more seasonal fluctuation and occasional jumps than oil prices.

Chart A.

Difference of natural gas consumption and production in different regions

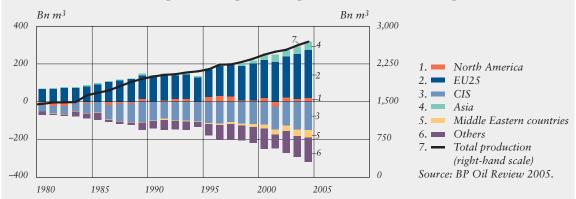
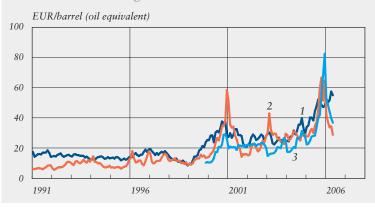
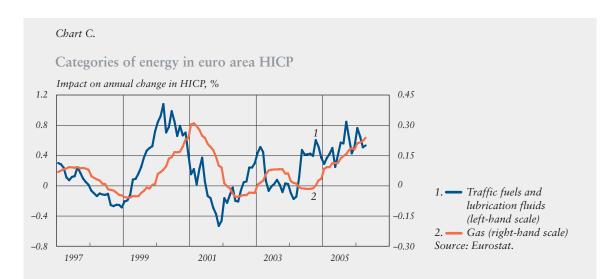


Chart B.

Prices of natural gas and crude oil



• Oil (Brent) US Henry Hub gas European Zeebrugge gas Natural gas prices have been calculated as oil equivalents, ie corresponding to the amount of energy in one barrel of oil. The price for Zeebrugge gas is the price for deliveries in the following quarter. Source: Bloomberg.



Price of natural gas jumped in Europe

Towards the end of last year there was a very steep increase in the price of natural gas in Europe, and it has also remained exceptionally high this year. The rise was particularly steep in the United Kingdom, where the cold early winter and low gas reserves were contributory factors. At the same time, the inflexibility of the natural gas market was exposed, since the pipeline between continental Europe and the United Kingdom was not used at full capacity even though the price differential between the areas was substantial.

The rising trend in natural gas prices that has been apparent for some time is, however, more likely to reflect the gradual influence of rising crude oil prices than temporary disruptions in supply. This is also suggested by an assessment of the categories of the euro area HICP (Chart C).

Changes in the consumer prices of natural gas follow changes in fuel prices, and this correlation is at its strongest with a delay of 7–9 months. Although the weighting of natural gas in the HICP is significantly lower than that of fuels, its impact on euro area inflation has been relatively significant in recent months, at about 0.2 percentage points.

Financial stability in Finland

2 June 2006

Strong growth both in the world economy and domestically provides a solid base for stability in the Finnish financial system. The recent worldwide fluctuations in asset prices should not have any significant impact on financial stability, particularly as the prospects for the real economy continue to be bright. The increasingly close interconnectedness of the Finnish banking and insurance sectors is altering the risk profile of financial groups and poses a challenge to cooperation between banking and insurance supervisors. Successfully implemented, the Single Euro Payments Area (SEPA) will offer considerable efficiency benefits for banks, system users and final customers. However, it appears unlikely the benefits will be felt immediately in the next few years.

The international operating environment for financial corporations

The world economy has continued to grow at a brisk pace, with composite GDP growth in 2005 running at around 4.5%. Growth at present is more broadly based than in recent years. US and Chinese growth has continued to be brisk, and European and Japanese growth has also picked up. Forecasts by international organisations estimate continued robust growth in 2006-2008.

Risks to the financial markets from the real economy relate particularly to the further increased imbalances in the world economy, oil price trends and the threat of a pandemic.

The US current account deficit is continuing to grow. In 2005 it stood at over 6% of GDP. Uncontrolled reduction of the deficit would impact in a number of ways on the global financial markets, particularly through higher and less stable interest rates and depreciation of the US dollar.

The world economy has so far stood up well to the rising price of oil. There is, however, considerable uncertainty surrounding the future trend in oil prices. An increase in oil and other energy prices well in excess of the forecast increase would impact on the prospects for financial corporations by slowing the pace of world growth and increasing the credit risks particularly of companies in energy-dependent sectors.

A worldwide pandemic - or a major terrorist strike - would impact negatively on the world economy and the stability of international financial markets. Staff absences caused by a pandemic would pose a challenge to the financial system infrastructure and financial corporations' backup systems.

A mid-to-long-term danger is the potential strengthening of protectionism due, for instance, to failure in the WTO's world trade talks. An increase in protectionism would hamper growth in world trade and the world economy and slow the process of financial market internationalisation.

Threats to the global financial markets relate particularly to the pricing of the highest-risk financial instruments. There continues to be considerable liquidity on the world economy, and yields from low-risk investments, such as government debt securities, remain historically low. In the present environment of low interest rates, investors looking for high yields have invested considerable sums in high-risk investments. It is possible the prices charged for highrisk financial instruments do not fully reflect the related risks.

In May, there was a worldwide decline in the prices of many assets, particularly shares (Chart 1). There were clearly a number of reasons for the decline in share prices. In the United States, in particular, investors' fears of the risks attendant on future inflation trends have been growing recently. An acceleration in the pace of inflation could lead to a rise in long-term interest rates. This, in turn, would impact negatively on share prices through an increase in the discount rates applied to companies' future cash flows and improving yields for the alternative to investment in shares - debt securities. Another factor behind the decline in prices seems to have been uncertainty among investors over the sustainable valuation levels underlying different asset prices. Several indicators suggest that asset prices have become rather expensive, which led some investors to cash in their profits.

Even if the recent decline in share prices turns out to be short-term, the correction could prefigure a normalisation of the securities markets. Many indicators of securities market volatility have in recent years revealed exceptionally low levels of fluctuation on the markets. At the same time, the indicators that describe investors' willingness to take on risk have been exceptionally high. In addition, the rising trend in share prices has already

Chart 1.



continued for a fairly long time. Against this background, the recent market fluctuations could well be an indication that the securities price trend, volatility and investors' willingness to take on risk are returning towards their long-term average levels.

The expansion of the credit derivatives market and the increased role of hedge funds, among other factors, have made it easier for financial corporations to protect themselves against risk and spread their risks. However, the capacity of these new markets to function in the event of serious disruptions has vet to be seen. It is difficult to assess how problems in these markets and their participants during a disruption to the financial markets would be passed on to the banks and other financial intermediaries.

Financial systems' capacity to bear risks is significantly affected by banks' profitability and capital adequacy and customers' ability to service their debts. From the perspective of the riskbearing capacity of the international financial system, it is positive that the profitability and capital adequacy of banks and insurance companies in the major economic regions are good on average. The development of banks' risk-management procedures and the risk transfer markets referred to above also support the stability of the financial markets.

In many countries, households are currently carrying a fairly heavy level of debt. Rising interest rates and a possibly related fall in house prices could cause financial difficulties for some indebted households. On the whole, however, banks' credit risks related to household lending would appear to be under control.

Companies worldwide have reduced their indebtedness as a result of the strong profitability of recent years. The latest data suggests a recent increase in debt financing, for example in Europe. It is evident that banks' risks and losses in Europe from corporate credit, currently small, will grow in the future.

The domestic operating environment for financial corporations

The bright growth outlook for the Finnish economy provides a solid base for stability in the Finnish financial system. The Bank of Finland forecasts average growth of 3% per annum for Finland's GDP during the years 2006-2008,1 with growth based more than before on an increase in fixed nonresidential investment. Increased investment could boost demand for banks' corporate lending, which would be a positive development from the perspective of the balanced growth of bank lending. In recent years bank lending growth has been based primarily on housing loans.

The average profitability of the Finnish corporate sector at present is

The operating capacity of the new risk transfer markets has yet to be tested in situations of serious disruption.

¹ Bank of Finland Bulletin 1/2006.

fairly good. The combined profits of Finnish listed companies in 2005 were at a record high. Survey data indicate that profit expectations for the present year are also good. As this would suggest, banks' risks from corporate lending are small at present.

Households' housing loans and indebtedness (Chart 2) are continuing to grow at a rapid pace. The average interest rate on banks' new housing

loans has risen by over half a percentage point since summer 2005. The increase in interest rates has not, however, significantly slowed the pace of growth in banks' housing loans, which has remained at around 16% for the past couple of years (Chart 3).

For several years now there has been lively debate in Finland over the risks relating to the growing volume of

Chart 2.

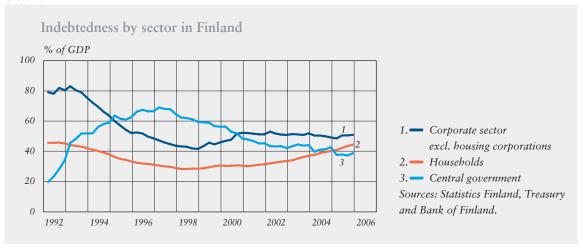
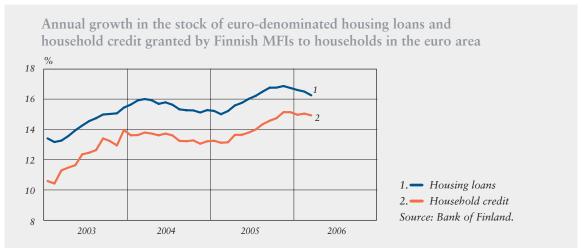


Chart 3.



household credit and debt. Household indebtedness has typically been analysed using sectoral credit and interest statistics. However, these indicators give only a partial picture of the risks involved, because analysis of aggregate figures cannot take adequate account of factors relating to the indebtedness and debt-servicing capacity of individual households. At the Bank of Finland we have analysed the indebtedness of Finnish households in more detail in light of Statistics Finland's service data on income distribution.² This source provides data on the socioeconomic status, income and debts of approximately 25,000-30,000 persons annually.

The data available to the Bank of Finland covers the period 1989-2003. As household indebtedness has greatly increased since 2003, the picture provided by our data is not entirely up to date. The analysis revealed four key trends in household indebtedness: growth in the average level of debt; a growing concentration of debt on the middle-aged, families with children and higher-income groups; a decline in the proportion of income devoted to servicing debt; and a reduction in overindebtedness (since 1998).

From the perspective of households' risk-bearing capacity it is positive that the proportion of disposable income devoted to servicing debt remains at a reasonable level.

On the other hand, the strong growth in indebtedness among families with children whose parents are in early middle-age (35-44-year-olds) gives cause for concern. Overall, the growth rate of household sector indebtedness is currently high. The long-term debt-servicing capacity of the household sector is in danger of deteriorating unless the pace of indebtedness slows down considerably. The risk to banks of significant loan losses from housing credit is rather small in the short term. The only scenario that could realistically lead to serious loan losses is if a strong rise in international interest rates were to be accompanied by a steep fall in housing prices and a dramatic reduction in households' debt-servicing capacity due, for example, to a rise in unemployment. Present forecasts do not foresee this sort of development in the short term.

Present situation and risks in the Finnish banking and insurance sectors

The average profitability of banks in 2005 was fairly good in all the main economic regions with the exception of China. The operating environment for banks in the world generally has been favourable. The low level of interest rates has boosted demand for credit, and housing loans in particular. In addition, banking income has grown briskly, for example from securities trading and sales of mutual fund units and other savings

The growth rate of household indebtedness is unsustainable in the long term.

² See Risto Herrala's article 'Household indebtedness', Bank of Finland Bulletin 1/2006, p. 91-99.

Table 1. Key data and profit and loss account items on selected banking groups January-March 2006

, ,						00	. 0	*	
	Net interest income, EUR million			Other income, EUR million			Total expenses, EUR million		
	1-3/ 2006	1-3/ 2005	Change, %	1-3/ 2006	1-3/ 2005	Change, %	1-3/ 2006	1-3/ 2005	Change, %
Nordea Group	927	897	3.3	833	687	21.3	933	902	3.4
Retail banking	772	739	4.5	457	373	22.5	652	644	1.2
Retail banking in Finland	210	196	7.1	119	89	33.7	161	154	4.5
Sampo Group	72	73	-1.4	1,553	1,314	18.2	1,287	1,161	10.9
Banking and investment									
services	86	82	4.9	118	84	40.5	112	104	7.7
Life and non-life insurance									
services	-	-	-	-	-	-	-	-	-
OP Group ¹⁾	199	198	0.5	303	149	103.4	292	200	46.0
OKO Group	23	38	-39.5	149	39	282.1	104	39	166.7
Savings banks (excl. Aktia), total	30	28	5.6	13	10	34.7	27	26	4.6
Aktia Savíngs Bank plc (Group)	21	19	7.3	12	11	12.3	20	19	4.7
Local cooperative banks, total	21	19	9.5	8	5	52.8	18	17	2.3
Bank of Åland plc (Group)	8	8	5.2	7	6	30.4	9	9	6.9
Evli Group	0	0	0.0	14	15	-9.3	13	13	0.8
eQ Online Group	1	1	35.7	11	8	40.8	7	7	5.0
1. Finnish banking and financial									
groups (excl. Nordea)	366	355	2.9	486	287	69.3	498	395	26.2
2. Finnish banking activities	576	551	4.4	605	376	60.9	659	549	20.1
3. Financial conglomerates									
operating in Finland	1,279	1,243	2.9	2,754	2,204	24.9	2,606	2,354	10.7

	Operating profit, EUR million			nses, ncome	Capital adequacy 31 March 2005		
	1-3/ 2006	1-3/ 2005	Change, %	1-3/ 2006	1-3/ 2005	Primary-Own funds, %	Total capital adequacy, %
Nordea Group	858	688	24.7	53	57	6.8	9.4
Retail banking	621	459	35.3	53	58	_	_
Retail banking in Finland	177	132	34.1	49	54	_	_
Sampo Group	339	230	47.4	_	_	_	_
Banking and investment							
services	91	62	46.8	55	65	7.3	10.1
Life and non-life insurance							
services	261	179	45.8	_	-	_	-
OP Group ¹⁾	211	145	45.5	55	54	12.8	13.9
OKO Group	69	39	76.9	40	49	8.8	11.7
Savings banks (excl. Aktia), total	16	12	30.0	63	67	16.2	18.4
Aktia Savings Bank plc (Group)	13	11	19.6	63	66	9.7	14.6
Local cooperative banks, total	11	7	63.8	63	73	19.8	19.8
Bank of Åland plc (Group)	6	5	33.3	59	64	6.9	11.0
Evli Group	1	3	-51.9	91	83	17.2	17.1
eQ Online Group	5	2	196.5	60	80	17.3	17.4
1. Finnish banking and financial							
groups (excl. Nordea)	354	246	44.1				
2. Finnish banking activities	531	383	38.6				
3. Financial conglomerates							
operating in Finland	1,460	1,102	32.5				

^{1.} Includes Finnish banking and financial groups, Sampo's banking and investment services.
2. Includes Finnish banking and financial groups, Sampo's banking and investment services and Nordea's retail banking activities in Finland.
3. Includes Finnish banking and financial groups, Sampo Group and Nordea Group.

Other income includes net fee income, capital gains and losses from the sale of tangible and intangible assets, and shares in profits/losses of associated companies.

companies.

Expenses include depreciation and write-downs on tangible and intangible assets.

The various items do not equal operating profit, as some profit and loss account items have not been included.

1) The OP Group (and OKO Group) profit and loss account includes the result for Pohjola Group plc for January–March 2006. Pohjola's figures are not included in the comparative data on 2005. In addition, the substantial change in the structure of OKO Group as a consequence of the Pohjola deal has weakened the comparability of OP Group and OKO Group figures for 2006 and 2005. Source: Banks' interim reports.

products. The strong growth of the world economy has reinforced the debt-servicing capacity of banks' key borrowing sectors, while cost cutting has in many countries further boosted banks' profitability.

The profits of banking groups operating in Finland have improved considerably due to growth in net interest income and net fee income, strict control of costs and continued negligible loan impairment losses (Table 1). Their capital adequacy has also remained strong. Banking profitability should continue to improve over the short term, because rising interest rates affect banks' lending rates more than their borrowing rates. Moreover, the moderate rise in interest rates will in the short term have only a modest impact on customers' debt-servicing capacity.

Overall the Finnish banking sector is thus profitable and capitally adequate, and its prospects are bright. Finland's stable economic growth supports borrowers' creditworthiness. International disturbances would have to be fairly strong to significantly weaken the present position of Finnish banks.

Profitability and capital adequacy are also good on average in the Finnish insurance sector. Rising asset prices, growing income from premiums and increased efficiency have all contributed to profitability in the sector. The combined capital adequacy of insurance companies improved considerably in 2005, and

this positive trend has continued in the early months of 2006.3

The challenge for financial groups operating in Finland is to maintain their healthy profitability over the long term and adapt to the considerable restructuring currently underway in the financial sector.

There is at present stiff competition in Finland between banks in lending. According to a review conducted by the Financial Supervision Authority in 20054 the margins on housing loans are in some cases so narrow that they do not cover the customer's long-term risks to the bank. Banks have also in practice relaxed their loan-to-value requirements for housing loans. The interest margins on housing loans should cover the costs of lending, a housing loan risk premium and the bank's profit margin. Recent housing loans granted by Finnish banks probably do not in all respects meet these requirements.⁵ Due to the lengthening of average loan periods, however, the impact on banks' profitability from any mispricing of housing loans will only be apparent in the years ahead.

Banks' recent positive profitability development has been based primarily on growth in the stock of income. The pace of growth in the

The challenges facing financial groups are the ongoing restructuring of the financial sector and the maintenance of good profitability.

³ Insurance Supervision Authority press release 3/2006

⁴ FSA Newsline 2/2006 (online publication).

⁵ Bank of Finland Governor Erkki Liikanen's speech to a meeting at Juva cooperative bank (Juvan Osuuspankki) on 15 May 2006 (www.bof.fi/Fin/1_suomen_pankki/1.9_viestinta/ [in Finnish only]).

stock of lending will inevitably ease in the future, as growth in the stock of housing loans cannot be permanently faster than the pace of growth in households' disposable income. Similarly, the pace of growth in net interest income will slow as a consequence of the rising cost of bank funding. With the stock of lending growing faster than the stock of deposits, banks have been forced to finance their operations more than previously through market funding, which is more expensive than deposit funding. The use of market funding to cover the deposit deficit is posing ever growing challenges to banks' liquidity management. Growth in the stock of deposits in transaction

accounts, which are profitable to the banks, could slow in the future as households increasingly invest their assets in mutual funds and other investments with a higher yield than deposit accounts.

The importance of fees and other income in banks' overall income structure is likely to grow in the years ahead. The business challenge facing banks is how to find new sources of income as the relative importance of net interest income declines. Fees and other income are typically more sensitive to cyclical fluctuations than net interest income. Fluctuations in banking earnings will be further increased by the adoption of the new International Financial Reporting

Table 2. Distribution of operating profit according to business area at Nordea Group, Sampo Group and OP Group January-March 2006

	Operating profit 1–3/2006	Share of total operating profit, %
Nordea Group	858	
Retail banking	621	72.4
Corporate and institutional banking	156	18.2
Asset management	50	5.8
Life insurance	31	3.6
Group treasury	49	5.7
Group functions and eliminations	-49	-5.7
Sampo Group	339	
Banking and investment services	91	26.8
Life insurance	128	37.8
Property and casualty insurance	133	39.2
Other	-13	-3.8
OP Group	211	
Retail banking	128	60.7
Asset management	24	11.4
of which, life and pension insurance	19	9.0
Corporate banking	23	10.9
Non-life insurance	25	11.8
Group treasury	23	10.9
Other, incl. eliminations	-12	-5.7

Standards (IFRS) at the beginning of 2005.

The restructuring of Finland's banking and insurance sectors continued with the OKO Group's (part of the OP Group) acquisition of the insurance company Pohjola. As a result, Finland now has two large domestic financial conglomerates (OP Group and Sampo) in which both banking and insurance make a significant contribution to group activities (Table 2). A specifically Finnish feature of this restructuring is the inclusion of non-life insurance in financial conglomerates. Elsewhere in Europe the trend has been the opposite: synergy benefits between banking and non-life insurance have been considered insignificant, and diversification and conglomeration has been predominantly between banks and life insurance companies.

The merging of banks and insurance companies is altering the earnings and risk profiles of financial groups, with insurance activities assuming a more important role in group business operations. Insurance company earnings are fundamentally influenced by the profitability of their investment activities, and stock and bond market trends will in future play an increasingly important role in the earnings of financial groups. Operational risks could also increase, particularly in the short term, with the integration of systems and processes of companies from two different sectors. The ever closer

interconnectedness of Finland's banking and insurance sectors is also creating pressures for closer cooperation between banking and insurance supervisors.

In addition to diversification and conglomeration, cross-border activities have been more common among Nordic financial corporations than in many other countries. The integration of European financial markets poses questions as to the functionality of Europe's decentralised supervisory structure. There are, however, no plans for any changes in the key principles or structures of supervision in the EU, at least not in the immediate years ahead (see Box on page 28).

Financial system infrastructure

Payment and settlement systems have performed reliably, without any serious lengthy disturbances. There have been a few small disturbances, but these have had no impact on financial stability.

The TARGET system maintained by the central banks forms the foundation of the financial system at EU level, and it has been very reliable in its performance. There have been very few significant disturbances lasting more than two hours. The Finnish component of TARGET, the BoF-RTGS system, has also continued to perform reliably, even if its availability has not reached the same level as in the previous review period, primarily due to disturbances in the telecommunications system. The

The close interconnectedness of banking and non-life insurance is a feature specific to Finland.

SEPA is an opportunity for the banks, but to succeed they will have to take advantage of innovative solutions.

system has attracted new participants, and will continue to do so, primarily from Sweden, as the Riksbank has indicated its intention to terminate its own euro-denominated RTGS system.

There has been some degree of disturbance in the operation of PMJ, a domestic interbank retail payments system run by the banks in Finland. Some participants have been unable to supply their clearing calculations for funds transfer in time, and contingency arrangements have therefore had to be brought into play in several cases. The operations and systems of new participants have yet not become firmly established.

Despite some small disturbances, securities clearing and settlement systems have on the whole performed without major problems during the period under review. Part of the reason for the higher incidence of disturbances that have occurred could be the marked rise in stock exchange trading, which has a direct impact on the number of clearing and settlement transactions and book entries. Share turnover on the Helsinki Exchanges was up 24% in 2005, and the upward trend has continued since the turn of the year.

The operating environment of the financial markets is changing rapidly, and potential threats currently relate to how well the infrastructure can adapt to this change. The process of change is being driven by financial market integration; in relation to

infrastructure this means that system users should be able to operate across the EU in the same way as at present in their home country. Banks have sought to meet this challenge in their preparations for the Single Euro Payments Area (SEPA),6 while the Eurosystem is pursuing more efficient payments through TARGET 2.

Successfully implemented, SEPA will bring considerable efficiency benefits to all parties, both system users and final customers. Banks will also benefit from significant efficiency benefits when a single standard procedure can reach all recipients of euro payments throughout the EU. New opportunities will open up for Finnish banks, who will be able to compete on an equal footing with banks in other EU countries in, for example, the provision of payment services to major corporations. Some banks could take a purely short-term view and seek merely to update their old systems, and would in this case not be in a position to reap efficiency benefits.

On 4 May 2006, the European Commission and the European Central Bank published a joint statement on the Single Euro Payments Area7 in which these two authorities present their common vision on SEPA. According to this, SEPA will be a reality only when

⁶ For more detail, see Marianne Palva's article below (p. 34-39).

Http://www.ecb.int/press/pr/date/2006/html/ pr060504_1.en.html.

consumers, companies etc can make payments throughout the euro area from a single payment account as easily, efficiently and safely as they can at present domestically. The Commission and the ECB express their support for the work in furtherance of SEPA by the European Payments Council (EPC), a cooperative body set up by the banks. The EPC's achievement provides a good basis for further work, although its standard definitions should be speedily updated to correspond to the best domestic services. If this is not done, there is a danger final customers will not accept SEPA payment instruments, and their use would then be limited to foreign payments. Banks might then also offer present domestic-standard services as additional services requiring an additional payment. Neither of these options would be desirable or indeed acceptable, as they would undermine faith in the Single Market and some of the potential benefits of SEPA would not be achieved.

Financial market participants should develop their payment services, the financial market infrastructure and payment instruments to make them as advanced and efficient as possible. This development should be secured by exploiting innovative solutions and the best practices in the sector, and the actual services offered must not be allowed to deteriorate as a result. The opportunities provided by new technical solutions should be put to use as extensively as possible.

The European Commission has indicated it will promote development where necessary by legislation.

The new legislative framework for payment services is nearing completion. The Commission published its proposal for a Directive on payment services in the Single Market on 1 December 2005. There is, however, some degree of conflict between the Commission's proposal and the banks' SEPA objectives. For example, the proposal defines the time for payment transmission as one banking day, whereas the banks' plans envisage three days. The proposal's plans for allowing new payment organisations other than banks to operate have stimulated a great deal of debate. From the perspectives of competition, efficiency and, perhaps, the encouragement of innovations, the proposal in its current form has a number of good points.

The Commission has been active in other ways, too. It has published a consultative paper on SEPA incentives, which analyses the current status of the SEPA project and identifies areas or issues that require further action if the full economic potential of SEPA is to be realised in practice.8 In addition, the Commission published in April its Interim Report on Payment Cards and Payment Systems, on which it invites comments from interested parties.9

Stock exchanges and central securities depositories are seeking efficiency benefits through mergers.

⁸ Http://ec.europa.eu/internal_market/payments/ sepa/index_en.htm.

⁹ Http://ec.europa.eu/comm/competition/antitrust/ others/sector_inquiries/financial_services/.

The Commission's goal is to find ways to increase competition in card payments.

The operating environment of European securities clearing and settlement systems is changing as stock exchanges and central securities depositories seek efficiency benefits through mergers. This trend is supported by the increasing activity on the share markets. In addition, more companies are taking up the option of stock market listing, a trend reflected in the readiness of stock exchanges themselves to become listed.¹⁰ The merger of NYSE and Euronext announced at the beginning of June is an example of the globalisation of stock markets. As a result of this merger, issues of regulation, taxation and cultural differences will have to be analysed in a new light. As this development presumably means that this market segment will, like the foreign exchange markets, now operate round the clock, the organisation of post-trading activities will also have to be reassessed.

The emergence of large operators in this segment of the financial market infrastructure will impose significant pressures for greater efficiency on medium-sized operators. The latter include the Nordic stock exchange operator OMX and the Nordic Central Securities Depository (a consolidation of VPC and APK). OMX is seeking to

streamline its share market activities through a common Nordic stock exchange list, but it will have to work with its members to find a solution to the clearing and settlement problems caused by having to work with several different currencies.

In March 2006, APK and VPC launched consultation for a project aimed at developing a common platform. Preliminary results were published in May.¹¹ The construction plan proper will probably be published during the course of the summer. The project still has a lot of unresolved issues relating to the scope of central bank responsibility, or to issues over which the central banks share authority or responsibility with other authorities. The impact on financial stability of a system linking the central securities depositories technically cannot be assessed at this stage. The Bank of Finland is, however, prepared to draft together with APK and our Swedish colleagues provisional assessments with the help of system simulations based on actual clearing and settlement transactions. A final assessment of the risks will not be possible until a detailed plan has been drawn up and the system's legal framework precisely defined.

In order to coordinate cooperation between Nordic supervisors, the Bank of Finland and the Riksbank agreed in January 2006 a cooperation

Consolidation of

securities clearing and settlement

systems boses

challenges for

authorities.

¹⁰ For more details see: http://www.nyse.com/ about/newsevents/1149243292355.html.

¹¹The results have been published on the NCSD website at: http://www.ncsdgroup.com/572.html, Document 2006-05-18.

protocol on joint supervision of the NCSD. A similar protocol between the respective supervisors is presently awaiting approval by the Swedish authorities.

The consolidation of securities clearing and settlement systems poses challenges for the authorities responsible for supervising the sector. It is obvious the emergence of international operators will have consequences for regulation. There is a need for international discussion on new principles for the regulation of clearing and settlement systems. Discussion has in fact already taken place between the Eurosystem and the Committee of European Securities Regulators (CESR). It is already apparent there will be a growing need for cooperation between supervisors. Regulatory arrangements should also be reviewed at global level in order to ensure a level competitive playing field for all market participants. Both fragmented and centralised market structures can have features that significantly restrict competition.¹²

The Directive on Markets in Financial Instruments is currently in the process of national transposition in Finland. It extends regulation to marketplaces other than stock exchanges, creating a more level competitive playing field for all market participants and supporting the development of the domestic market. It will also force marketplaces to compete with each other, thereby encouraging them to seek out efficient electronic solutions. We can also expect a reduction in the level of stock exchange brokerage fees. Corresponding regulation has also come into force in the United States.¹³ The European Commission is expected to express its opinion on the need for a Directive on securities clearing and settlement early in the Finnish Presidency.

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

¹² European Commission consultation document: 'Competition in EU securities trading and posttrading', Issues Paper 24 May 2006 (http://ec. europa.eu/comm/competition/antitrust/others/ securities_trading.pdf).

¹³ The regulation to modernize the National Market System (NMS), discussed in eg 'Reg NMS Tops The CIO Agenda', www.wallstreetandtech.com/ showArticle.jhtml?articleID=59301176.

EU financial services strategy 2005–2010

During the period 1999–2005 a large number of extensive primarily legislative - projects were implemented in the EU to increase the integration of the European financial system. The projects were based on the European Commission's Financial Services Action Plan (FSAP), which originally contained 42 proposals for action.1 In December 2005, the Commission published a white paper (Financial Services Policy 2005– 2010) outlining the EU's financial services strategy for the next five years, the aim being to promote the integration of financial services (banking, insurance, securities markets and asset

management), generate benefits for consumers and the sector, and foster growth.

The key focus of European financial market regulation over the period 2005-2010 will be on completing the national transposition of existing EU legislation. The legislative projects implemented during 1999-2005 were so extensive that new projects will be launched over the next few years only where there are good reasons for doing so under the principles of better regulation. These emphasise, for example, the importance of more consultation at the project planning stage, and careful ex-ante and ex-post assessment of project impacts. Among the most important projects currently under way are the reform of capital requirements regulation

and supervision for the insurance sector and three large projects relating to retail banking: a project on the integration of mortgage markets and Directives on consumer credit and payment services with their respective implementation at national level.

During the next five years, financial supervision will be based on the present supervisory structures and division of labour between supervisory authorities. Steps will be taken to increase efficiency by, for instance, promoting convergence of national supervisory procedures and reporting requirements, and creating a pan-European supervisory culture, for instance via training and staff exchange programmes.

¹ For more on the FSAP see eg Heikki Koskenkylä (ed.) Financial integration (Chapter 7). Bank of Finland Studies,

Oversight of financial market infrastructure faces new challenges

12 May 2006

The financial markets are currently being reshaped by a number of factors as Europe's financial markets seek solutions for the future and competitive advantages in the global environment. In the face of these challenges, oversight of financial market infrastructure will also have to change. To guide this process, the Board of the Bank of Finland approved in spring 2006 a revised framework for oversight.

A basic component in any exchange of goods and services is payment. Whether this takes place over the counter, through online banking or on the money and securities markets, it requires a properly functioning infrastructure. Reliable and efficient payment and settlement systems are a fundamental requirement of all economic activity. It is thus in the interest of society as a whole to ensure their proper functioning. The job of oversight is normally assigned to the central banks. The oversight tools available to central banks include the monitoring of system performance, research and analysis, assessment of systems against established core principles, assessment of trends and developments, and the defining of policy objectives. The purpose of the present article is to provide an account of the policies and principles applied by the Bank of Finland in carrying out its

oversight responsibilities, and in this way to increase the transparency of oversight.

The 'hard core' of oversight is the assessment of systemically important systems against jointly agreed core principles that define system structures, governance, the rights and responsibilities of parties, management of risks, and operational reliability and efficiency. The objective is to ensure the stable and reliable functioning of payment and settlement systems vital to the smooth operation of the financial markets, and that any problems experienced by parties to the system do not spread to others. Oversight is used to ensure the efficiency of monetary policy transmission channels and support the effectiveness of risk management by the central banks. Thus, oversight is directed towards crisis prevention, while at the same time being prepared for the management of any crises that may nevertheless arise. The core principles also require payment systems to be efficient from the perspective of society. The importance of this aspect of oversight is underlined by the fact that the legislation or central bank strategies of many countries specifically include the task of assessing and promoting efficiency. Both the Act on the Bank of Finland and the Bank of Finland's own strategy highlight promoting efficiency as an important function of oversight.

Oversight's impact on the financial markets is indirect: by raising the general level of risk-



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What is meant by oversight of financial market infrastructure?

The concept 'financial market infrastructure' refers to systems, processes and rules by means of which the clearing and settlement of payments and securities transactions are conducted. These are collectively referred to as 'payment and settlement systems', and their function is to ensure that the rights and obligations of parties to payment or securities transactions are fulfilled, and that payment is both legal and final.

Oversight of payment and settlement systems is a central bank responsibility, the aim of which is to ensure the efficiency and reliability of both existing and future systems. Oversight is conducted by monitoring and assessing systems' operation and risks, and where necessary requiring that changes be made. Oversight is part of the broader central bank responsibility of ensuring financial market stability and crisis management.

In Finland, as in all Eurosystem countries, oversight is a statutory function of the central bank. It is also provided in the Statute of the European System of Central Banks and of the European Central Bank and in the Treaty establishing the European Community. The Act on the Bank of Finland provides that the Bank of Finland shall 'participate in maintaining the reliability and efficiency of the payment system and overall financial system and participate in their development'.

Oversight is a relatively new function. The first clear definition of central bank oversight was provided in the Lamfalussy report¹ in 1990. At that time interest focused above all on limiting systemic risk² in netting systems. Oversight has been developed essentially within the G10 countries, with other countries' central banks adopting, either directly or in adapted form, the principles agreed by the G10. These include the document 'Core Principles for Systemically Important

Payment Systems', based on which the Eurosystem has drawn up guidelines for application to both large-value and retail payment systems. The ESCB and European securities regulators have also cooperated in drawing up general operating principles for securities clearing and settlement systems, with application guidelines currently under preparation. Work is also under way on the extension of the scope of oversight to cover payment methods of particular importance to the general public, such as payment cards. As part of the Eurosystem, the Bank of Finland applies in its own oversight the policies and requirements agreed within the Eurosystem.

¹ Report of the Committee on Interbank Netting Schemes of the central banks of the Group of Ten Countries (BIS 1990).

² A risk is systemic if there is a 'risk that the failure of one participant in a transfer system, or in financial markets generally, to meet its required obligations will cause other participants or financial institutions to be unable to meet their obligations (including settlement obligations in a transfer system) when due. Such a failure may cause significant liquidity or credit problems and, as a result, might threaten the stability of financial markets,' ECB Glossary (http://www.ecb.int/home/glossary/ html/glosss.en.html).

awareness and publishing assessments of system reliability, risks, efficiency and structural changes, central banks help both market participants and other authorities to improve their own operations and regulations (if any), and manage their risks. Riskmanagement processes are conducted regularly, and their assessment is based on comprehensive and generally approved criteria.

The relationship between oversight and supervision

The aims of central bank oversight and banking and securities market supervision are largely congruent. Both foster the stability and reliability of the financial markets, if in different ways and from different perspectives. While supervision focuses on supervising the systems of individual market participants on the basis of statutory requirements, oversight focuses on systems as a whole based on more generally construed objectives of reliability and efficiency. Oversight thus provides an important complement to the supervision of individual institutions. Oversight also embraces the perspective of system development, which communicates to the markets the key aims of central bank operations: stability in the financial system as a whole, promotion of the single market and integration, and the fostering of efficiency. The coordinating role of the European Central Bank (ECB) also provides oversight with a solid

foundation in respect of cross-border systems. The fact that the ECB is empowered to issue regulations and also enjoys the right of comment on proposed financial markets legislation at national level increases the effective weight of oversight.

The pattern of change in the financial sector

The financial sector is currently undergoing a period of major structural change. Technology is facilitating new forms of activity and new channels of service. Cross-border activities are becoming increasingly common, and financial diversification and conglomeration are bringing new companies into the sector. Efficiency is demanded of all parts of the system - including infrastructure - and the pressures to increase efficiency are enormous. Integration of financial markets within the EU is in the interests of both the private sector and public authorities. The trend is leading inevitably to the development of large, multinational organisations and new ways of working. New operating methods and market structures are, in turn, changing the nature of risks. In oversight, as in crisis management, international cooperation and coordination are becoming increasingly important.

Structural changes and internationalisation have made it necessary to harmonise the legislation and codes of practice regulating the financial markets. Several extensive regulatory

It is part of the role of oversight to contribute to infrastructure development.

It is vital to secure the stability and reliability of national infrastructure.

and development projects for the financial sector have just been completed, or are nearing completion, with important implications for the sector. These include the creation of the Single Euro Payments Area (SEPA)¹, a proposed Directive on payment services in the internal market, a new Directive on markets in financial instruments to update the regulation of securities trading, possible new regulation of securities clearing and settlement, and issues raised by EU competition authorities. The above initiatives will change the operating environment for companies in the sector, and national oversight will have to be developed to keep pace.

The new framework for oversight

The changes in the operating environment have also made it necessary for the Bank of Finland to update its oversight practices. In carrying this out, it was encouraging to note that the oversight policy approved in 1999 has proved functional and cooperation between authorities has worked well.² The aim of the new framework is twofold: to integrate into oversight the new requirements posed by the changes described above, and to update oversight to bring it into line with issues emphasised in the Bank of Finland's new strategy.

Deepening integration and the growing importance of international cooperation are increasing the ECB's role in oversight. The scope and depth of oversight is the focus of lively debate within the Eurosystem. ECB oversight covers international payment systems. Other systems, such as national payment systems, payment methods and securities clearing and settlement systems, are the responsibility of the national central banks, with the ECB's role being to ensure that assessments are commensurate. Deepening integration raises the question of when the ECB should assume responsibility for oversight of a system, and this is something that will need to be decided on a case-by-case basis. The challenge for national central banks is how to retain influence both over the conduct of oversight and in defining the content of oversight and the standards applied. Through its oversight activities, the Bank of Finland seeks to foster European integration and at the same time be an active member of the Eurosystem in such a way as to secure the operating requirements of a market area like Finland as financial systems are progressively centralised. As internationalisation advances, it is vital to ensure that national authorities remain able to secure the stability and reliability of the country's infrastructure and the capability for crisis management. The Bank of Finland also considers it necessary to broaden

¹ See Marianne Palva's article 'Towards the Single Euro Payments Area', p. 34-39 below.

An article setting out the previous oversight policy was published in the Bank of Finland Bulletin 3/1999.

the scope of oversight over the most important payment instruments.

The Bank of Finland's recently updated strategy emphasises the importance of exploiting new technology, introducing digital solutions and fostering efficiency in the financial sector. Oversight, for its part, seeks to promote the adoption of modern practices and procedures across Europe as a whole and to foster the use of information technology to enhance the efficiency of the financial system. The Bank seeks to spread awareness of the benefits and features of Finland's highly efficient systems in a variety of international forums.

The development of crisis management capabilities is one of the priorities in both the Bank of Finland's strategy and the Eurosystem. In practical terms, this means a strong focus on analysis of developments in financial and payment systems. In line with the Bank's strategy, oversight processes are also subject to review and improvement, and this requires continuous assessment of performance. In order to maintain efficiency and keep processes up to date, it is essential to further develop cooperation with the Financial Supervision Authority, the Ministry of Finance and other European authorities.

The simulator developed at the Bank of Finland for analysing payment and settlement systems is a highly effective tool for assessing both the efficiency of systems and the risks threatening them. It is already in use in over 30 countries. Both the simulator itself and its various operational applications are still being actively developed. This development work contributes to the stability of financial markets and the further development of their infrastructure worldwide.

Keywords: Oversight, supervision, financial markets, payment system, securities clearing and settlement

Towards the Single Euro Payments Area

9 May 2006



Marianne Palva Adviser Financial Markets and Statistics

The primary objective of the Lisbon Strategy adopted by the European Council in March 2000 is to make the European Union by 2010 'the most competitive and dynamic knowledge-based economy in the world, capable of sustaining growth with more and better jobs and greater social cohesion'. The Single Euro Payments Area is one of the prerequisites for achieving this objective. The European Commission estimates that its establishment could bring the EU savings of EUR 50-100 billion every year.

Efforts to create the Single Euro Payments Area have been considerably stepped up over the past year. The first steps towards a more efficient system of payments in the EU were, however, already taken shortly after work began on creating the Single Market¹. The European Commission discussed payments harmonisation and increasing competition in several publications, and in 1997 it issued a Directive on cross-border credit transfers², the aim of which was to

harmonise certain aspects of payments transmission within the EU and improve cross-border credit transfer services for both private individuals and small and medium-sized enterprises.

The first concrete step towards an EU-wide single payments area was the commencement of the third phase of European Economic and Monetary Union at the beginning of 1999. The euro was introduced as an accounting currency at this time. Also introduced at this time was the EU central banks' TARGET system, which enabled the real-time transmission of eurodenominated payments throughout the EU. The private EURO 1 payments system³ also began operating at this time. However, TARGET and EURO 1 handle mainly large-value payments, and their introduction therefore did nothing to improve payment services for small customers.

Despite growing pressure from the European Central Bank and the Commission, no significant progress was made in the transmission of small-value payments until December 2001, when the Commission issued a regulation under which banks were to levy the same charges for small-value credit transfers and card transactions to and from other EU countries as for similar transactions within their domestic market. This led the banks to begin practical work on creating a

The Single European Act came into force on 1 July 1987. Therein, the Single Market is defined as an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured in accordance with the provisions of this Treaty [= Treaty establishing the European Community]'. The Single Market was to be in operation by 1 January 1993.

² European Parliament and Council Directive 97/5/ EC of 27 January 1997 on cross-border credit transfers.

For more information on EURO 1 see the Euro Banking Association website at: http://www.abe.org/.

Single Euro Payments Area (SEPA), leading in 2002 to the establishment of the European Payments Council (EPC)⁴. This is a cooperative body with representation from European bankers' associations and large banks operating in the EU.

The introduction of euro cash at the beginning of 2002 removed in practice the obstacles to cash payments within the euro area, but differences still remained in payment transmission. Only for cross-border small-value payments and the use of payment cards in foreign ATMs did charges come down to the same level as domestic charges as a result of the regulation. A great deal of effort is still required before the transmission of payments throughout the euro area is as efficient as, for example, domestic payments are at present in Finland. The Commission has now increased the pressure for harmonisation by publishing a proposal for a Directive on payment services in the Single Market⁵ and a consultation document6.

In taking this action, the Commission seeks to promote the creation of an advanced and efficient euro payments area as part of the implementation of the Lisbon Strategy. It also wants to improve consumer protection, strengthen consumer confidence in all means of payment and ensure a level competitive playing field. The Directive on payment services is currently being worked on and should be ready during the coming Finnish EU Presidency. The ECB and national central banks are also seeking to foster the emergence of a Single Euro Payments Area and have been involved in close cooperation with the banking sector to this end. In February, the ECB published its fourth progress report⁷ on the topic, and, in May, the ECB and the Commission released a joint statement to the press to promote realisation of SEPA8.

The Single Euro Payments Area: timetable and means of payment

Working through the EPC, the European banking sector has drawn up a timetable for introduction of the Single Euro Payments Area and specified the common means of payment for inclusion within it. In addition to cash, these are credit transfer, direct debit and card payment. The terms 'SEPA credit

Besides cash. the common means of payment within the Single Euro Payments Area will be credit transfer, direct debit and card payment.

Further information on the European Payments Council is available at: http://www.europeanpaymentscouncil.org/.

⁵ Proposal for a Directive of the European Parliament and of the Council on payment services in the internal market and amending Directives 97/7/EC, 2000/12/EC and 2002/65/EC. Presented by the Commission on 1 December 2005.

⁶ European Commission: Consultative paper on SEPA Incentives, 13 February 2006, available at: http://europa.eu.int/comm/internal_market/payments/docs/sepa/sepa-2006_02_13.pdf.

ECB publication: Towards a Single Euro Payments Area - Objectives and deadlines (Fourth progress report), 17 February 2006, available at: http://www.ecb.int/pub/pub/paym/html/index.en.

Statement available at: http://www.ecb.int/press/ pr/date/2006/html/pr060504_1.en.html.

The aim for the end of 2010 is for the various SEPA means of payment to be adopted throughout the Single Euro Payments Area.

transfer', 'SEPA direct debit' and 'SEPA card' are used for means of payment that comply with the EPC specifications.

The Single Euro Payments Area covers the EU and EEA countries plus Switzerland. SEPA services apply only to payments in euro. The EPC timetable envisages the common means of payment in euro being introduced alongside the present national means of payment at the beginning of 2008. The aim is to dispense almost entirely with national means of payment by the end of 2010, with the Single Euro Payments Area adopting the various SEPA means of payment instead. If they so choose, banks will be free to offer additional supplementary services as well.

With the introduction of SEPA, all banks operating within the euro area will be expected to provide their customers with SEPA means of payment and also be equipped to receive payments made with them. It will be left for each bank to decide for itself how to arrange its transmission of SEPA payments. At the time of writing, these decisions have for the most part still to be taken. At present, there is one EU-wide clearing house for small-value payments (STEP 2) through which eurodenominated credit transfers can be made to all banks in the EU. STEP 2 is also developing the capability for handling common direct debits. At present, some national payment

centres (eg Interpay9 and VOCA10) have stated their intention to provide banks with SEPA payment services. To date, there are no confirmed plans for new, competing payment centres covering the whole of the EU. For the sake of competition it would be good if there were more service providers on the market.

There are already international payment cards that can be used not just in the euro area, but worldwide, while every country also has national card systems for use solely on the domestic market. These will have to be withdrawn unless they are developed to comply with the SEPA Cards Framework (SCF). All SEPA cards must comply with the SCF standards. The use of common standards will enable all SEPA cards to be used in the same payment terminals. The SCF also defines the standards for communication between merchants and the acquirers of payment transactions.

The reason for common standards is to enable merchants to freely choose an acquirer for their payment transactions from all the service providers operating within the euro payments area. At present, choice is generally restricted to, at best, service providers within a merchant's own country. This is because different countries observe

Further information on Interpay is available at: http://www.interpay.nl/eng/Publications/SEPA_ services_at_Interpay.asp.

¹⁰ Further information on VOCA is available at: http://www.voca.co.uk/home/index.php.

different standards between the point of sale and the bank or other service provider acting as acquirer of a payment transaction. Some countries do not have any sort of common standards in use. At the time of writing we are not aware of any concrete plans for the launch of new cards aimed specifically at the euro payments area, but the Berlin Group¹¹ is exploring the possibility of linking together the present national card systems.

Finland's SEPA implementation and migration plan

The ECB requires each country involved in SEPA to prepare by the end of June 2006 a national plan setting out the transition to common means of payment in euro. In March, the Finnish Bankers' Association and the Bank of Finland published Finland's national SEPA implementation and migration plan¹². The Finnish Bankers' Association held primary responsibility for preparing the plan, with the Bank of Finland contributing in its role as oversight authority and a developer of payment systems. The plan has been approved by the Payment Systems Steering Group (MJO), an umbrella organisation for cooperation on payment issues between the Bank of Finland.

the Finnish Bankers' Association and banks offering payment services in Finland. The MJO will monitor implementation of the plan and adjust it as required.

According to the plan, the customer of a bank offering payment services in Finland will be able to make and receive payments by SEPA credit transfer throughout the entire euro payment area. The identifier information in such transactions will be the International Bank Account Number (IBAN) and Bank Identifier Code (BIC) already in use in crossborder payments. In this respect there will be no real change from the present situation. However, the new standard in respect of SEPA credit transfers that will come into force at the beginning of 2008 differs from the national standard currently in force in Finland, and its introduction will therefore involve changes in both banks' and customers' systems. Moreover, SEPA credit transfers do not include all the information required by the services currently provided in Finland, which means that some aspects of existing services will not be extended to cover the entire euro payments area. For example, the reference number standard and the transmission procedures for payment of wages and pensions are not included in their present form within the SEPA credit transfer framework. However, Finnish banks are keen to maintain their present level of service and help

Finnish banks are keen to maintain their present level of service.

¹¹ Further information on the Berlin Group is available at: http://www.berlin-group.org/.

¹² Further information on Finland's SEPA implementation and migration plan is available at: http:// www.pankkiyhdistys.fi/english/index.html.

in the formation of a European reference number standard.

SEPA direct debits differ considerably from the system currently in use in Finland, which is based on payment authorisation given by the payer to his bank. In a SEPA direct debit, the payer will directly authorise the invoicer to debit his account without a control check by their banks. Authorisation can cover either regularly repeated or one-off debits. As proposed, however, the debit will not be final, as it is in the existing Finnish system; the payer will be able to cancel the debit for a period of six weeks from the date of debit. Finnish banks are doubtful there will be much interest in SEPA direct debits in Finland, but will seek to offer this service from the beginning of 2008 and supplement it with additional services to maintain their present level of service and safeguard the management of risk. The banks believe the present Finnish direct debit will give way over time to more advanced forms of payment such as, for example, e-invoicing. The framework does not preclude the use of systems more advanced than the SEPA objectives.

All international payment cards issued by Finnish banks (Visa and MasterCard) already fulfil the requirements for SEPA cards. They can already be used to withdraw cash and make payments both throughout the euro payments area and worldwide. In addition, before the

launch of SEPA, general payment cards must already be equipped with the EMV chip payment capability required of SEPA cards.

In contrast, existing Finnish bank cards issued for use domestically are not SEPA-compliant. Under the SEPA implementation and migration plan, the issuing of new bank cards will cease at the latest by the end of 2007, and already issued cards will be usable at the latest until the end of 2010. At the time of writing we are unaware of any plans for the introduction of new, SEPAcompliant cards in addition to the existing international cards. The usability in Finland of SEPA cards based on EMV chip payment technology will depend on the speed with which merchants introduce machines capable of accepting such cards. The aim is for comprehensive coverage in the Finnish market by the end of 2010.

SEPA challenges in the long term

Implementation of SEPA to the extent and in the form agreed to date in the EPC will not bring any significant added value to payments from a Finnish perspective, nor will it improve the efficiency of payments transmission in Finland. The Payment Services Directive will, however, increase the transparency of payment services pricing. This could lead to higher prices for some services, but will on the other hand reduce hidden cross-subsidies, making it easier to

The Payment Services Directive will increase the transparency of payment services pricing.

compare prices between different service providers.

Finnish banks and the Bank of Finland have in different contexts emphasised the need for completely automated payment processing (STP)¹³ through the entire payment chain, or at least from the payer to the payer's bank, from there to the payee's bank, and finally to the payee. In a more developed STP chain, the process begins with the payee electronically sending the payer an e-invoice. Completely automated processing requires the use of standardised reference data, but also standardised communication between banks and their customers. The latter is also essential in order to improve customer choice and increase competition between banks.

In the joint statement referred to at the beginning of this article, the ECB and the Commission point out that SEPA must be a forward-looking process involving the continuous development of payment services by exploiting the opportunities provided by new technology. They point to the example of e-invoicing, which raises the degree of automation and the efficiency of payments.

Estimates vary as to how much can be saved by automation of the entire payment process and increased efficiency, but over the euro payments area as a whole the final figure will be considerable. We mentioned above

the Commission's savings estimate of EUR 50-100 billion per annum. Still larger sums have been quoted in reference to automation of the invoicing process as a whole.

The objectives that have now been agreed for 2008 and 2010 will establish the Single Euro Payments Area. There will nevertheless still be many challenges ahead before the Lisbon Strategy in respect of SEPA is fully implemented and efficiency achieved across the payment process as a whole so that the full benefits can accrue to consumers, businesses and the public sector.

Keywords: Single Euro Payment Area, SEPA, European Payments Council, SEPA implementation and migration plan, payment services

¹³ STP = straight-through processing.

Recent Bank of Finland research publications

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

The Bank of Finland's publication operations are becoming largely electronic, in terms of both publication and distribution. In future, research papers and other studies, such as discussion papers and the Bank's A and E series studies, will be published only online. An email alert system is due to be introduced, to alert listed readers to the release of new publications.

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

Discussion Papers

ISSN 0785-3572 (print) ISSN 1456-6184 (online)

The role of comparing in financial markets with hidden information

Juha-Pekka Niinimäki – Tuomas Takalo – Klaus Kultti 1/2006 ISBN 952-462-256-4, print ISBN 952-462-257-2, online

Key words: asymmetric information, banking, corporate finance, financial intermediation, ranking, venture capital

This paper studies how comparing can be used to provide information in financial markets in the presence of a hidden characteristics problem. Although an investor cannot precisely estimate the future returns of an entrepreneur's projects, the investor can mitigate the asymmetric information problem by ranking different entrepreneurs and financing only the very best ones. Information asymmetry can be eliminated with certainty if the number of compared projects is sufficiently large. Because comparing favours centralised information gathering, it creates a novel rationale for the establishment of a financial intermediary.

Policy words and policy deeds: the ECB and the euro Bank of Finland Research

Pierre Siklos - Martin Bohl ISBN 952-462-258-0, print ISBN 952-462-259-9, online

Key words: communication policy, exchange rates, interest rates, volatility

This paper examines the role of the ECB communication activities on daily Eurodollar exchange rate and interest rates. We estimate the relationship between monetary policy and the exchange rate using a technique that explicitly recognises the joint determination of both the levels and volatilities of these variables. We also consider more traditional estimation strategies as a test of the robustness of our main results. We introduce a new indicator of ECB communications policies that focuses on what the ECB says about the future economic outlook for the euro area along five different economic dimensions. The impact of ECB communications policies is more apparent in the time series framework than in the heteroskedasticity estimator approach. Previous studies that conclude that news effects are significant at the daily frequency may have reached such a conclusion because the measurement of news was too highly aggregated. The endogeneity of the exchange rate - interest rate relationship is more apparent when the proxy for monetary policy is the euro area - US differential than when any other proxy for monetary policy is employed. Finally, interest rate changes generally have a much larger impact on exchange rate movements, and their volatility, than do ECB verbal pronouncements.

Pricing risky bank loans in the new Basel II environment

Iftekhar Hasan - Cristiano Zazzara 3/2006 ISBN 952-462-260-2, print ISBN 952-462-261-0, online

Key words: Basel II, rating, pricing, exposure at default, EVA

Recently, banking literature has had a quest for appropriate pricing of bank loans under the new Basel II rules and has been in pursuit of possible outcomes for undertaking such credit risk. In this paper, we propose a simplified formula to price bank's corporate loans, aiming at making bank

managers aware of the creation/destruction of shareholder value. We show that the mathematical treatability of the proposed formula and its easy feeding with internal and market inputs allow simple implementation by the final user.

Robustness in monetary policymaking: a case for the Friedman rule

Juha Kilponen – Kai Leitemo 4/2006 ISBN 952-462-262-9, print ISBN 952-462-263-7, online

Key words: policy robustness, money growth targeting, inflation targeting, Friedman rule

Inflation targeting involves using all available information in stabilizing inflation around some target rate (Svensson, 2003). Inflation is typically at the very end of the transmission mechanism and hence its determination is subject to much model uncertainty which the central bank will want to guard against using robust policies. Such robustness comes however with the cost of increased social loss under the most likely description of the economy. We show that with a sufficiently high degree of model uncertainty, adherence to the Friedman rule of increasing the money stock by k percent will be superior as the price paid for robustness is smaller.

Labour and product market competition in a small open economy – Simulation results using a DGE model of the Finnish economy

Juha Kilponen – Antti Ripatti 5/2006 ISBN 952-462-264-5, print ISBN 952-462-265-3, online

Key words: competition, dynamic general equilibrium, public finance

Using the DGE model of the Finnish Economy (the 'Aino' model), we study the response of the economy to reforms in both labour and product markets. The reforms are two-fold. We assume that the wage mark-up, ie the monopoly power of wage-setters is gradually reduced by 5 percentage points. At the same time, the degree of competition is increased, ie price margins are exogenously reduced by 2 percentage points. These reforms imply a very favourable outcome of the economy. Both consumption and employment increases permanently and the reforms are welfare enhancing. Public balances improve giving room for 1.5 percentage point cut in income taxes. Our simulation exercises clearly demonstrate that such reforms may help in financing the future fiscal burden of an ageing population.

BOFIT Discussion Papers

ISSN 1456-4564 (print) ISSN 1456-5889 (online)

Lobbying at the local level: Social assets in Russian firms

Tuuli Juurikkala – Olga Lazareva 1/2006 ISBN 952-462-810-4, print ISBN 952-462-811-2, online

Key words: Housing divestment, lobbying, firms, municipalities, Russia

In Russia's planned economy firms were made responsible for providing their workers with social services, such as housing, day care and medical care. In the transforming Russia of the 1990s, social assets were to be transferred from industrial enterprises to the public sector. The law on divestment provided little more than general principles. Thus, for a period of several years, property rights concerning a major part of social assets, most notably housing, were not properly defined, as transfer decisions were largely left to the local-level players. Strikingly, the time when assets were divested varied considerably across firms. In this paper we utilize recent survey data from 404 medium and large industrial enterprises in 40 Russian regions and apply survival data analysis to explore the determinants of divestiture timing. Our results show that in municipalities with higher shares of own revenues in their budget and thus weaker fiscal incentives, firms used their social assets as leverage to extract budget assistance and other forms of preferential treatment from local authorities. We also find evidence that less competitive firms were using social assets to cushion themselves from product market competition. At the same time, we do not find any role for local labour market conditions in the divestment process.

Coping with missing public infrastructure: An analysis of Russian industrial enterprises

Laura Solanko 2/2006 ISBN 952-462-812-0, print ISBN 952-462-813-9, online

Key words: Russia, infrastructure, firm performance

During the Soviet period industrial firms not only formed the backbone of the economy but also directly provided a wide range of benefits to their municipalities. Firms were in charge of supplying a great variety of social services, such as housing, medical care and day care. The need to divest at least some of these functions was generally accepted already in the early 1990s. Industrial firms' engagement in the provision of infrastructure services, such as heating, electricity and road upkeep has to date received much less attention. Using a unique dataset of 404 large and medium-sized industrial enterprises in 40 regions of Russia, this paper examines public infrastructure provision by Russian industrial enterprises. We find that, first, to a large degree engagement in infrastructure provision – as proxied by district heating production – is a Soviet legacy. Second, firms providing district heating to users outside their plant area are more likely to have close relations with the local public sector along many other dimensions.

Assessing a feasible degree of product market integration (A pilot analysis)

Konstantin Gluschenko - Darya Kulighina 3/2006 ISBN 952-462-814-7, print ISBN 952-462-815-5, online

Key words: market integration, price dispersion, law of one price, United States, Russia

Perfect integration eludes the real world, so we suggest a realistic benchmark standard for judging the extent of market integration in various economies. We estimate the degree of integration in the US product market, widely acknowledged to be the most integrated among geographically large economies, so as to provide a reference for measuring Russian market integration. Prices for 27 grocery items across 29 cities of the United States in the first quarter of 2000 are used as empirical data. The estimated degree of integration turns out to be very close to values obtained for Russia for 2000. Apparently, market integration in Russia has in recent years moved toward conditions found in advanced market economies. The roles of other factors that could potentially cause segmentation of the US market are also analyzed.

Non-wage benefits, costs of turnover, and labour attachment: **Evidence from Russian firms**

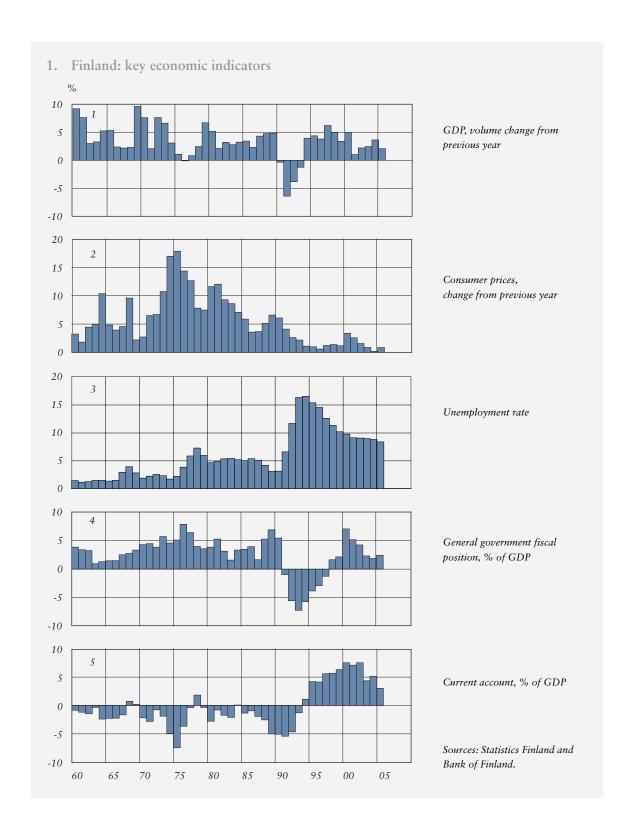
Tuuli Juurikkala – Olga Lazareva 4/2006 ISBN 952-462-816-3, print ISBN 952-462-817-1, online

Key words: Non-wage benefits, labour turnover, labour attachment, Russia

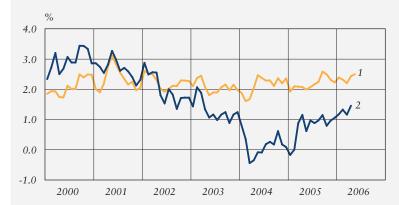
Just as in established market economies, many Russian firms provide non-wage benefits such as housing, medical care or day care to their employees. Interpreting this as a strategic choice of firms in an imperfect labour market, this paper examines unique survey data for 404 large and medium-size industrial establishments from 40 Russian regions. We find strong evidence that Russian industrial firms use social services to reduce the costs of labour turnover in the face of tight labour markets. The strongest effect is observed for blue-collar workers. We also find that the share of non-monetary compensation decreases with improved access to local social services.

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- 24. Selected asset prices in Finland



2. Price stability in the euro area and Finland

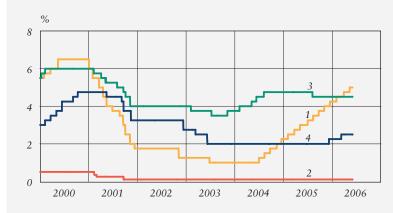


Harmonised index of consumer prices, 12-month change, %

- 1. Euro area
- 2. Finland

Sources: Eurostat and Statistics Finland.

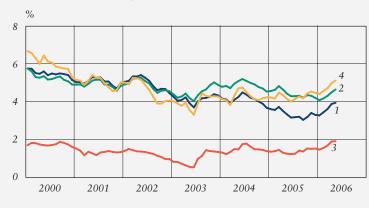
3. Official interest rates



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

Source: Bloomberg.

4. International long-term interest rates

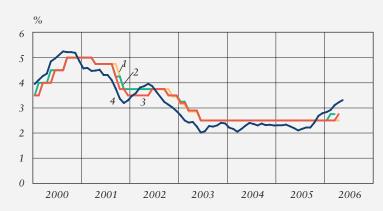


Yields on ten-year government bonds

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

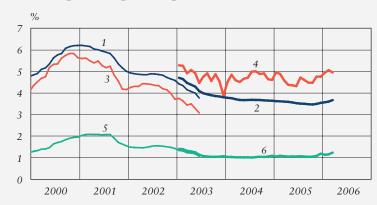
Source: Reuters.

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



- 1. Nordea prime at the end of the month
- 2. Sampo prime at the end of the month
- 3. OKOBANK group prime at the end of the month
- 4. 12-month Euribor Sources: Banks and ECB.

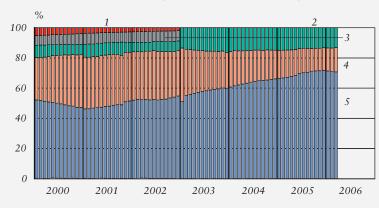
6. Average lending and deposit rates



- 1. Banks' stock of loans
- 2. MFIs' stock of loans
- 3. Banks' new loans
- 4. MFIs' new loans
- 5. Banks' stock of deposits
- 6. MFIs' stock of deposits Source: Bank of Finland.

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

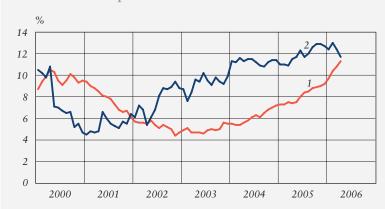
7. Stock of bank lending by interest rate linkage



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

Data collection changed as of 1 January 2003.

MFI loans to private sector



12-month change, %

- 1. Loans by euro area MFIs to euro area residents
- 2. Loans by Finnish MFIs to euro area residents

Sources: European Central Bank and Bank of Finland.

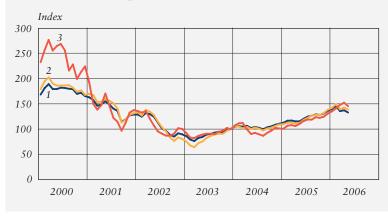
Competitiveness indicators for Finland



1999 Q1 = 100 Based on trade-weighted exchange rates. An upward movement of the index represents a weakening in Finnish competitiveness.

- 1. Narrow competitiveness indicator including euro area countries
- 2. Narrow competitiveness indicator Source: Bank of Finland.

10. Selected stock price indices in the euro area



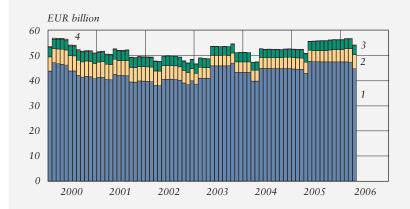
- 31 December 2003 = 100
- 1. Total euro area: Dow Jones Euro Stoxx index
- 2. Germany: DAX index
- 3. Finland: OMX all-share index Sources: Bloomberg and Helsinki Stock Exchange.

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



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

12. Bonds issued in Finland

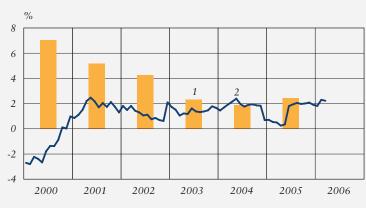


End-month stock

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

Source: Statistics Finland.

13. Public sector balances in Finland



% of GDP

- 1. General government fiscal position
- 2. Central government revenue surplus, 12-month moving total Sources: State Treasury, Statistics Finland and Bank of Finland.

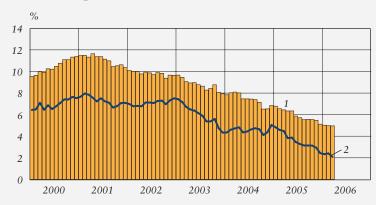
14. Public debt in Finland



% of GDP

- 1. General government debt
- 2. Central government debt, 12-month moving total Sources: State Treasury, Statistics Finland and Bank of Finland.

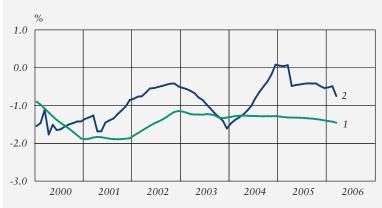
15. Finland: goods account and current account



12-month moving totals, % of GDP

- 1. Goods account, fob
- 2. Current account Source: Bank of Finland.

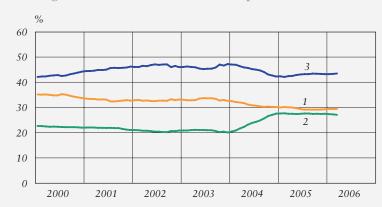
16. Finland: services account and income account



12-month moving totals, % of GDP

- 1. Services account $(trade\ in\ goods,\ fob)$
- 2. Income account Source: Bank of Finland.

17. Regional distribution of Finnish exports

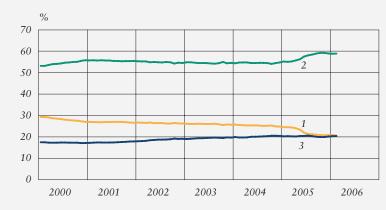


12-month moving totals, percentage of total exports

- 1. Euro area
- 2. Other EU member states
- 3. Rest of world

Sources: National Board of Customs and Statistics Finland.

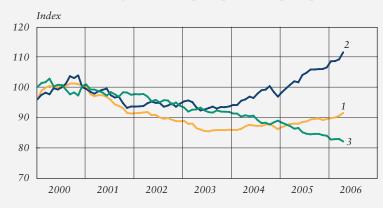
18. Finnish exports by industry



12-month moving totals, percentage of total exports

- 1. Forest industries
- 2. Metal and engineering industries (incl. electronics)
- 3. Other industry Source: National Board of Customs.

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



2000 = 100

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

Source: Statistics Finland.

20. Finland's net international investment position



% of GDP

- 1. Net international investment position excluding equity items
- 2. Net outward direct investment Sources: Bank of Finland and Statistics Finland.

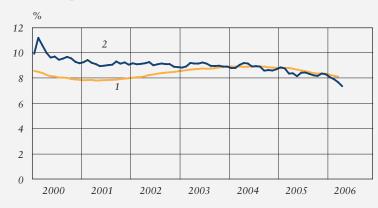
21. Finland: GDP and industrial production



Percentage change from previous year

- 1. Industrial production
- 2. Gross domestic product Source: Statistics Finland.

22. Unemployment rate in the euro area and Finland

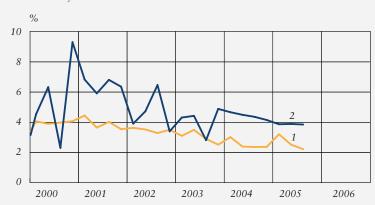


- 1. Euro area
- 2. Finland

Sources: Eurostat, Statistics Finland and Bank of Finland.

 $Data\ seasonally\ adjusted.$

23. Hourly labour costs in the euro area and Finland



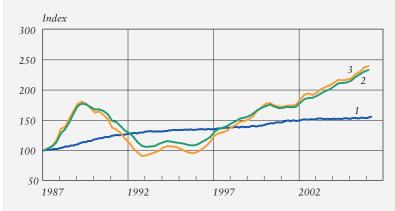
Whole economy excl. agriculture, $public\ administration,\ education,$ health and unclassified services.

Percentage change from previous year

- 1. Euro area
- 2. Finland

Sources: Eurostat and Statistics Finland.

24. Selected asset prices in Finland



1987 Q1 = 100

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

Source: Statistics Finland.

Organisation of the Bank of Finland

17 May 2006

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