



# Financial Market Report

## 2 • 2009

- Households' financial assets shrank while indebtedness continued to rise in 2008
- Banks' financial performance improved in the first quarter
- European markets for covered bonds on the road to recovery
- Electronic invoicing – breakthrough still to come



Bank of Finland

Financial Markets and Statistics

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## Contents

1	Financial intermediation	3
1.1	Financial assets decreased in 2008 as a result of the declining values of shares and funds	3
2	Banks	5
2.1	Worsening operating environment weakens international banks' results	5
2.2	Impairment losses eroded Nordic banks' results	8
2.3	Net interest income from banking turned down in Finland	10
2.4	Stress testing of banks as part of financial supervision	12
3	Securities markets	14
3.1	Covered bonds	14
4	Infrastructure	16
4.1	Payments Forum sheds light on electronic payments in Finland	16
4.2	New rules of conduct for electronic identification	18
5	Key regulatory and supervisory initiatives	19
5.1	Reform of EU financial supervision	19
5.2	Restricted long-term saving at a turning point?	22
6	Key corporate arrangements and events in the financial sector	24

### List of charts

Chart 1.	Households' financial assets	3
Chart 2.	Non-financial corporations' self-financing ratio	4
Chart 3.	Quarterly operating profit of large Nordic financial groups	8
Chart 4.	Income and profits of Finnish banking, quarterly data	10
Chart 5.	Finnish MFIs' interest rates and 3-month Euribor	10
Chart 6.	Issuance of covered bonds in the EU	15

### List of tables

Table 1.	Large US and European financial groups' results in January–March 2009, EUR m	7
Table 2.	Groups' impairment losses and nonperforming assets, % of lending stock	8
Table 3.	Key items from income statements of financial groups operating in Finland, January–March 2009, and changes on year-earlier period	11

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# 1 Financial intermediation

## 1.1 Financial assets decreased in 2008 as a result of the declining values of shares and funds

Eero Savolainen

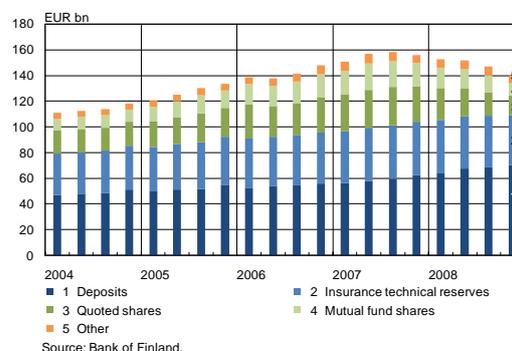
**Financial assets of the sectors of the national economy decreased overall in 2008, due to the exceptionally weak developments in share prices. Households' financial assets declined and institutional investors' portfolios shrank. For example, financial assets of employment pension funds were down by nearly one-fifth.**

After a long period of increases, households' financial assets started to decrease at the end of 2007. In September 2007, households' financial assets totalled EUR 158.5 billion, compared to just EUR 140.4 billion at the end of 2008. Developments in household financial positions have been even weaker in terms of net financial assets (financial assets minus liabilities). Household debt continued to grow at a rapid pace in 2008, and at the end of 2008, households' net financial assets totalled EUR 47.1 billion, the lowest level since autumn 1999.

In 2008, households' financial assets decreased by EUR 15.5 billion, despite the fact that households' net investments in financial assets totalled EUR 3.2 billion. The decrease was due to a holding loss of as

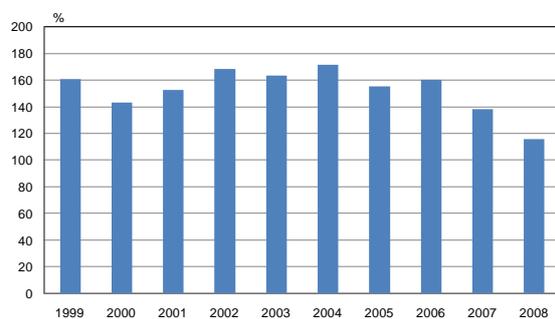
much as EUR 18.7 billion, ie 12% of the stock of financial assets at the end of 2007. Developments in financial assets were mixed. This was due to the rapid increase in the popularity of deposits, which served as a safe haven for investors. By contrast, the assets of mutual funds decreased, reflecting the weakness of share prices. It should be noted that the value of money market funds declined – these funds had formerly been considered a secure means of investing capital. The decline led to redemptions of fund units and growth in deposits. The popularity of deposits was boosted by the tight interest rate competition between banks, and the increase in market interest rates throughout most of the year.

Chart 1. Households' financial assets



The financing of non-financial corporations was characterised by a decrease in the stock of debt securities, particularly commercial paper, in the second half of 2008, which was compensated by debt financing. Corporate lending by banks grew rapidly, and in the fourth quarter, lending by employment pension funds turned sharply upward. Non-financial corporations also acquired a considerable amount of debt financing from abroad, both intra-group and from external financiers.

Chart 2. Non-financial corporations' self-financing ratio



Source: Statistics Finland.

The corporate sector's need for external financing can be assessed using the self-financing ratio, derived from national accounts data. The ratio shows the proportion of investments non-financial corporations are able to cover via income financing<sup>1</sup>. The ratio was still 116% in 2008, despite declining for the second consecutive year. In other words, the corporate sector could have financed all its investments internally, and there would still have been capital left to invest in financial assets. It should however be noted that this is an aggregate figure, and differences between non-financial corporations can be large.

Employment pension funds have in recent years increased their equity risk via direct equity investments and fund investments. This risk was realised in 2008 as equity prices fell. In net terms, employment pension funds' 'new' investments in financial assets totalled EUR 5.7 billion, which amounted to 6% of the stock of financial assets at the end of 2007. On the other hand, holding losses amounted to 23%, which means that the stock of financial assets decreased in 2008 by a total of 18%, to EUR 81.8 billion.

The realisation of investment risk also affected insurance corporations' financial assets. Their holding

loss (13%) was nevertheless smaller than that of employment pension funds, but on the other hand, their net investments were virtually nil.

Year 2008 was the gloomiest year in history for mutual funds registered in Finland. Over one-third of fund capital was eroded, due to the fall in share prices and net redemptions. Investors withdrew capital from all types of funds. The largest proportion of capital was withdrawn from fixed-income funds, and the smallest from equity funds. Money market funds' net redemptions of fund units in 2008 amounted to nearly one-third of the stock of fund units at the end of 2007.

The general decline in share prices also affected insurance-related saving. Households' stock of savings in life and pension insurance decreased in 2008 by 7%. Developments in endowment insurance were mixed: savings in guaranteed-return insurance remained virtually unchanged (-1%), whereas savings in unit-linked life insurance decreased by one-fourth, due mainly to the fall in share prices.

<sup>1</sup> In terms of the national accounts: self-financing ratio = (savings + consumption of fixed capital) / gross fixed capital formation.

## 2 Banks

### 2.1 Worsening operating environment weakens international banks' results

**Mervi Toivanen**

**The financial crisis and slower economic growth are reflected in international banks' results, particularly as a sharp rise in impairment losses in January–March 2009. Of income items, income from trading and investment activities posted large increases.**

**In the United States**, the four largest banks posted an aggregate profit of EUR 11.9 billion in the first quarter of 2009 (Table 1). Profit comparison with 2008 is hampered by mergers that took place in 2008 and changes in accounting regulations. The mergers boosted the results of retail banking, particularly for the largest banks, and changes in accounting regulations reduced the need to record impairment losses. Income from core business and investment banking activities developed favourably in the first quarter. Results were nevertheless weakened by merger-related costs and growing impairment losses.

The results of large US financial groups were better than expected, particularly due to the high income from investment banking. Income grew as the bond market picked up and bond issuance increased. Lower competition has improved credit spreads and customer fees in investment banking. Banks posted

profits from equity, foreign exchange and interest rate trading. Impairment losses on mortgages and credit card loans grew however rapidly, which slowed the improvement of operating profits.

According to the Federal Deposit Insurance Corporation (FDIC<sup>2</sup>), US banks' pre-tax results in January–March 2009 were significantly worse than in the first quarter of 2008. The situation of the largest banks seemed slightly better than that of the smallest commercial and savings banks. Over one-fifth of the reporting banks posted a loss, and for ca 60% of the banks, the results were lower than in January–March 2008. It is however noteworthy that banks' results for January–March 2009 improved on the fourth quarter of 2008.

Net interest income increased, due to the widening of the interest rate margin for the largest banks. Over half of the banks however reported a narrowing of the interest rate margin. Profits on trading activities and gains on securities trading boosted the income of only the largest banks included in the statistics.

Impairment losses rose significantly. The ratio of impairment losses to lending stock was 1.94%, the highest in the 25 years during which data has been compiled. The growth in impairment losses was highest in corporate lending, credit cards, loans to construction companies, and loans for house purchase. The proportion of nonperforming assets in the lending stock was 3.76%.

<sup>2</sup> Federal Deposit Insurance Corporation supervises the operations of ca 8,300 commercial and savings banks in the USA and manages the closure of problem banks. See the FDIC Quarterly Banking Profile, first quarter 2009.

The number of banks supervised by the FDIC continued to decrease. In the first quarter of 2009, 50 banks were involved in mergers and 21 banks went bankrupt. The number of problem banks rose from 252 to 305. At the end of the quarter, their combined balance sheet was USD 220 billion.

The majority of **European** financial groups posted weaker results in January–March 2009, compared to the first quarter of 2008 (Table 1). Exceptions were Credit Suisse and Deutsche Bank, which managed to turn their results positive. In addition, UBS recorded a significantly smaller loss.<sup>3</sup>

Net interest income continued to increase, reflecting the growing lending stock and widening interest rate margins. The rising cost of market-based financing forced banks to compete for deposits, which boosted deposit interest rates and eroded banks' net interest income.

Developments in other income were mixed. Income from asset management and investment activities decreased. The decline in share prices and decreasing customer activity lowered net fee income from asset management. Investments in mutual funds, insurance products and shares decreased. By contrast, profits on banks' own trading activities and the sales of corporate services increased. Banks gained income particularly from fixed-income securities, the issuance of bonds, and from the equity, foreign exchange, interest rate and commodity markets. Banks improved their results also by reallocating their investment portfolios and by terminating unprofitable operations. As only a few European banks have major investment banking activities, the majority of European banks posted a decline in other income.

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<sup>3</sup> As a result of mergers and restructuring, the Q1 results of the following banks are not fully comparable: Barclays, Commerzbank, Dexia, Royal Bank of Scotland, and Santander.

Impairment losses on loans and securities grew significantly. The downturn in the real estate market lowered the value of real estate-backed securities and thus increased banks' losses. The decline in monoline insurers' credit ratings was reflected in the lower value of securities issued by insurance corporations and higher impairment losses of banks. Impairment losses on loans to households and non-financial corporations also rose because households' loan-servicing problems increased, as a result of the weaker economy.

## FINANCIAL MARKET REPORT

Table 1. Large US and European financial groups' results in January–March 2009, EUR m

	Pre-tax results		Net interest income		Other income		Expenses		Impairment losses	
	1-3/2009	Change, %	1-3/2009	Change, %	1-3/2009	Change, %	1-3/2009	Change, %	1-3/2009	Change, %
Bank of America	4 126	199	9 592	25	17 853	229	13 049	84	10 269	323
Citigroup	1 838	..	9 899	-1	9 127	..	9 277	-23	7 911	76
JPMorgan Chase	2 346	-14	10 259	75	8 948	26	10 264	50	6 598	94
Wells Fargo	3 562	50	8 731	98	7 400	101	9 071	117	3 498	125
FDIC banks*	9 282	-57	76 068	5	-19 834	..	..	..	46 752	64
Barclays	1 510	-4	8 968	19	..	..	4 909	14	2 541	49
BBVA	1 834	-34	3 272	20	1 653	-42	2 174	-2	916	64
BNP Paribas	2 290	-14	9 477	28	-13	..	5 348	16	1 826	234
Credit Agricole	913	-54	7 195	-1	53	-89	4 776	-6	1 559	136
Credit Suisse	1 046	..	1 361	4	4 052	621	4 244	26	122	30
Commerzbank	-880	..	1 692	66	642	-30	2 370	76	844	382
Deutsche Bank	1 815	..	3 843	44	3 362	73	4 864	2	526	361
Dexia	398	47	1 607	18	96	-29	896	-5	409	43
ING	-281	..	3 036	20	11 871	-23	14 399	-9	790	605
Royal Bank of Scotland	-48	..	3 783	-20	6 893	25	7 579	-13	3 145	263
Santander	2 832	-7	6 234	22	2 937	-3	4 080	8	2 259	73
Societe Generale	-231	..	4 913	-13	-13	..	3 777	-3	1 354	126
UBS	-1 033	..	1 268	21	2 816	-185	4 359	-11	758	290

\* Combined data on banks supervised by US supervisor FDIC.

.. = Data not available or change not meaningful.

Source: Banks' interim reports and FDIC's report "Quarterly Banking Profile, first quarter 2009".

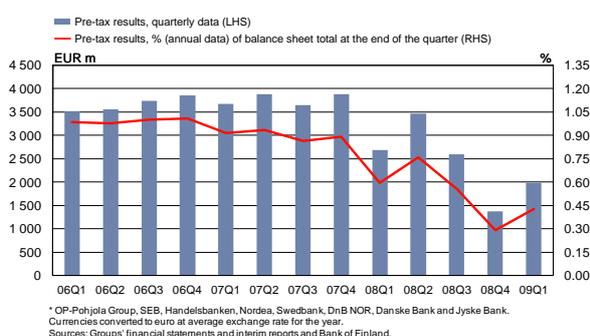
## 2.2 Impairment losses eroded Nordic banks' results

Mervi Toivanen

**Large Nordic financial groups' total operating profits for January–March 2009 decreased by ca 26% on the first quarter of 2008. Operating profits were eroded particularly by the rapid growth in impairment losses.**

Nordic banks' combined operating profit decreased in January–March 2009 to ca EUR 1,970 million (Chart 3). Impairment losses rose significantly, from EUR 231 million to EUR 2,769 million. Combined net income increased by one-fourth, boosted by the growth in income from investment and trading activities. On the back of this growth in income, results for the first quarter 2009 improved on the last quarter of 2008.

**Chart 3. Quarterly operating profit of large Nordic financial groups\***



Although the groups' euro-denominated impairment losses have increased manifold in the past year, impairment losses are still small relative to the lending stock (Table 2). Banks recorded impairment losses on lending in the Baltic countries, Denmark and Ireland, as well as write-downs on securities. The majority of

impairment losses were recorded on large and medium-sized loans, rather than large individual loans.

The highest ratios were reported by Swedbank and Danske Bank. In addition to impairment losses, Swedbank made a significant one-off write-down, due to the weakening economic situation in the Baltic countries and the rapid growth in nonperforming assets. Danske Bank recorded impairment losses on mortgage lending in Denmark and Ireland, and on securities trading.

**Table 2. Groups' impairment losses and nonperforming assets, % of lending stock**

	Impairment losses, % of lending stock		Nonperforming assets, % of lending stock	
	1Q08	1Q09	1Q08	1Q09
OP-Pohjola-ryhmä	0.10	0.21	0.40	0.50
SEB	0.13	0.70	0.26	0.46
Handelsbanken	0.03	0.23	0.17	0.24
Nordea	0.03	0.54	0.31	0.68
Swedbank	0.10	2.16	0.16	0.98
DnB NOR	0.08	0.55	0.43	1.18
Danske Bank	0.10	1.56	0.52	2.12
Jyske Bank	0.04	0.50	na	na

Sources: Groups' interim reports and background material.  
na= not available

The proportion of nonperforming assets is an indication of banks' possible future losses because banks first enter loans as nonperforming assets and only later record them as loan losses. The proportion of nonperforming assets in the total lending stock has risen, which points to future growth in impairment losses.

Nordic financial groups' combined income grew in the first quarter of 2009, boosted by the rapid increase in net income from trading and investment activities. Income rose to EUR 2,183, from EUR 344 in the first quarter of 2008. Banks posted good results on investment activities, particularly on the interest rate and foreign exchange markets, as increased volatility in the market and the widening spread between sales and purchase prices created opportunities to boost profits.

Nordic banks were also able to increase their market shares and customer margins and fees because

many international investment banks have withdrawn from the Nordic market. In addition, the amount of losses recorded on banks' securities holdings was lower in the first quarter of 2009 than in January–March 2008. Some of the securities formerly entered at market value can now be entered at cost, under certain conditions. As a result, changes in market prices now have a smaller impact on the balance sheet value of securities.

Banks' net interest income improved, reflecting the continuous growth in lending stock. Banks also widened their interest rate margins on loans, which

boosted their income per customer. Banks have benefited from the growth in the stock of deposits because deposits are a cheaper source of funding than market-based funding. In contrast, net fee income has declined, due eg to the fact that the financial crisis has dampened investors' interest in investing in mutual funds.

Nordic banks' expenses increased by 2.7%, to EUR 4,459 million. This was mainly due to higher salaries and increased reorganisations of branch offices.

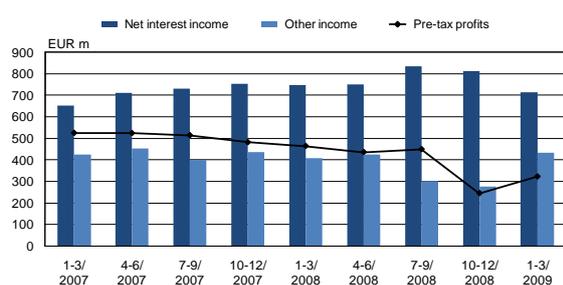
## 2.3 Net interest income from banking turned down in Finland

Hanna Putkuri

**The decrease in net interest income and growth of impairment losses on loans weakened the profitability of Finnish banking in the first quarter of 2009. The rest of the year is expected to be characterised by similar developments.**

Pre-tax profits of Finnish banking declined significantly in the first quarter of 2009 compared to the year-earlier period (Table 3). Results nevertheless improved considerably on the previous quarter (Chart 4). The weakening of results from a year earlier was mainly due to the growth in impairment losses recorded on loans. Total income and expenses remained virtually unchanged on the first quarter of 2008.

**Chart 4. Income and profits of Finnish banking, quarterly data\***



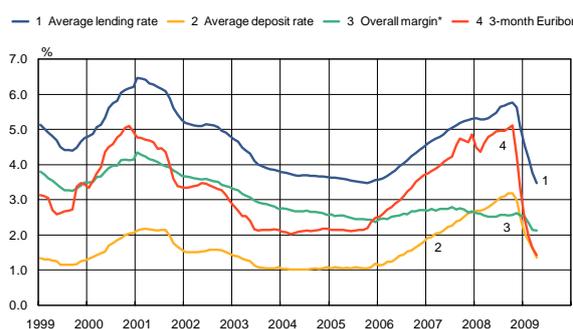
\* Nordea's banking operations in Finland, Danske Bank's banking operations in Finland, OP-Pohjola Group's banking and investment services, Aktia's banking business, savings banks, local cooperative banks, Bank of Åland, Evli Bank, and eQ.  
Sources: Banks' interim reports and financial statements, and Bank of Finland.

Compared to the fourth quarter of 2008, the biggest changes occurred in the structure of income from banking. Net interest income decreased significantly whereas other income, particularly net income from

trading activities, grew strongly from the low level in the last quarter of 2008.

The decline in net interest income was due to the shrinking of the interest rate spread between loans and deposits, ie the overall margin (Chart 5).<sup>4</sup> The strong downward turn in short-term market rates since October 2008 has been passed on gradually to lending and deposit rates, more rapidly and strongly in the case of lending rates. The majority of loans granted by Finnish banks are tied to Euribor or prime rates (88% at the end of April), whereas ca half (51%) of deposits are tied to these rates. In April, the overall margin was over 0.4 percentage points lower than in 2008 on average.

**Chart 5. Finnish MFIs' interest rates and 3-month Euribor**



\* Average interest rate on the lending stock minus average interest rate on the stock of deposits.  
Source: Bank of Finland.

Favourable developments in other income in the first quarter were due eg to the strong demand for risk management products and lower losses in investment activities compared to the previous year. In contrast, net fee income decreased on the year-earlier period.

Banking groups' nonperforming assets have increased in the first months of 2009. But the amount of these assets is still small compared to the early

<sup>4</sup> Some banks' net interest income however improved as interest income was boosted by volume growth and the increase in interest rate margins, and because the positive price difference on reclassified notes and bonds was booked as income.

1990s and relative to the current stock of lending. At the end of April, nonperforming assets totalled ca EUR 1,171 million, which is ca 0.7% of MFIs' euro-denominated loans to residents.

**Table 3. Key items from income statements of financial groups operating in Finland, January–March 2009, and changes on year-earlier period**

	Net interest income		Other income, net		Total expenses		Loan losses, net		Profit before taxes	
	EUR m	Change	EUR m	Change	EUR m	Change	EUR m	Change	EUR m	Change
Nordea Group	1 356	15 %	923	18 %	1 090	3 %	356	..	833	-6 %
Nordic Banking	1 005	2 %	502	-7 %	760	-2 %	286	..	461	-37 %
Banking in Finland	212	-23 %	141	-4 %	201	4 %	50	..	102	-55 %
Danske Bank Group	970	16 %	1 339	147 %	925	9 %	1 071	..	313	-32 %
Banking	959	15 %	335	-11 %	752	4 %	842	..	-301	..
Banking in Finland	124	17 %	48	-20 %	118	-16 %	52	..	2	-93 %
OP-Pohjola Group	287	6 %	223	9 %	357	3 %	29	..	124	-1 %
Banking and investment services	274	3 %	183	24 %	274	10 %	20	..	164	3 %
*Pohjola Bank	52	49 %	127	34 %	122	5 %	21	..	36	112 %
Savings banks	38.5	-4 %	14.4	66 %	32.7	6 %	0.1	..	20.0	9 %
Aktia Group	32.5	36 %	17.5	-15 %	38.0	25 %	1.6	..	10.3	-27 %
Banking	30.8	38 %	8.4	-12 %	25.3	10 %	1.6	..	12.2	42 %
Local cooperative banks	23.3	-13 %	9.1	57 %	19.3	5 %	0.2	..	13.1	-10 %
Bank of Åland plc (Group)	9.1	-10 %	11.4	41 %	13.8	10 %	0.4	..	6.3	11 %
Evli Bank Group	1.7	..	8.9	-47 %	10.8	-26 %	0.0	..	-0.1	..
eQ Group	0.9	-53 %	8.4	48 %	5.8	-29 %	0.4	..	3.0	..
1. Finnish banking	714	-5 %	433	6 %	701	1 %	125	..	323	-31 %
2. Financial groups operating in Finland	2 719	14 %	2 555	60 %	2 493	5 %	1 459	..	1 322	-13 %

Other income includes eg net fee income, capital gains/losses from sale of tangible and intangible assets, capital gains from sales of wound-up operations, and shares in profit/losses of associated companies. Expenses include depreciations and write-downs on tangible and intangible assets, refunds to shareholders and profit distributions to staff.

.. = change not meaningful.

1. Savings banks, Aktia Group's retail banking, local cooperative banks, Bank of Åland Group, Evli Bank Group, eQ Group, OP-Pohjola Group's banking and investment services, Nordea Group's banking operations in Finland, and Danske Bank Group's banking operations in Finland.
2. Nordea Group, Danske Bank Group and the Finnish banking groups listed in this table.

Sources: Banks' interim reports and Bank of Finland.

## 2.4 Stress testing of banks as part of financial supervision

**Kauko Karlo**

**Stress tests are used for assessing banks' risk-bearing capacity in assumed economic scenarios. Stress testing has become increasingly popular in recent years. Banks and authorities regularly do stress test calculations. Stress tests conducted in the United States have recently been widely discussed.**

Stress tests are calculations for assessing the ability to overcome an assumed difficult economic situation. The assumed situation should be extreme but still possible. Banks have been the most commonly tested entities. Stress-test calculations can be done for an individual bank or for the entire credit institution sector.

Banks typically assess their risk-bearing capacity using a variety of calculations. Nowadays financial supervisors use stress testing in assessing supervised entities' capital needs. In connection with the Financial Sector Assessment Program (FSAP) introduced by the International Monetary Fund and World Bank, stress testing by authorities has become increasingly widespread. In these programs international organizations, along with national authorities, assess the soundness and characteristics of a country's financial system.

A typical stress test prepared by authorities is initially based on the assumption that the national economy is hit by several external shocks. The authorities then calculate the impacts of these shocks

on key economic variables, employing a macroeconomic model.<sup>5</sup>

Loan losses are a typical object of a stress-test calculation. The impact of the macroeconomic situation on loan losses is usually calculated using existing statistical relations between economic variables and payment defaults.

In formulating stress tests, authorities usually have more detailed information at their disposal than would be available from public sources. For the purpose of stress-test calculations, financial supervisors can get detailed information from the supervised entities, eg on the composition of a securities portfolio or the distribution of lending stock. In many cases, the authorities require that banks do part of the calculation.

Not only loan losses and market risks but also all the other items in a bank's income statement can be subject to stress-test calculations. For many of the items it is however more difficult and hence rare to use statistical models.

Stress tests are usually used to assess a bank's capital adequacy in an assumed scenario. In a bad scenario, banks incur losses that would reduce their capital. According to the current Basel II framework, an increase in loan-loss risks may result in higher capital requirements.

Stress testing can also be used to assess a bank's financial, ie liquidity, risks. Even a financially sound bank may have difficulties in meeting its payment obligations if its funding sources are disrupted. Liquidity stress testing is however more difficult and more rare than the stress testing of capital adequacy.

On 12 May 2009, the Committee of European Banking Supervisors (CEBS) issued a statement on an

<sup>5</sup> A Foglia: Stress Testing credit risk: a survey of authorities' approaches; Banca d'Italia occasional paper 37, 2008.

EU-wide stress-testing exercise. CEBS will develop common scenarios and guidelines for the calculations. The majority of calculations are done by national authorities. Stress testing is not aimed at assessing banks' recapitalisation needs. The results will be available in autumn 2009.

Finnish authorities have already for several years carried out joint stress testing. The results of the latest stress tests are presented in the Bank of Finland Bulletin 1/2009.

### Stress tests in the United States

In the United States, detailed calculations were done in February–April 2009 on the recapitalisation needs of the largest banking groups. The majority of calculations were done by the banks themselves. The subjects of the testing were 19 banking groups, each with a total balance sheet exceeding USD 100 billion. The focus of the calculations was capital adequacy.

The calculation examined the recapitalisation needs of banks in two possible scenarios. The baseline scenario assumed that the macroeconomy would develop as expected on average in the forecasts

available in February. In a more adverse scenario, slightly weaker economic developments were assumed. For example, real GDP was assumed to decline by 3.3% in 2009 and housing prices were assumed to fall by 22%. This more adverse scenario is thus not really extreme.

The capital adequacy of a bank was assessed based on the adequacy of Tier-1 capital. Tier-1 capital, measured in two different ways, was compared to risk-weighted assets in the worst case scenario.

In the testing, the authorities used indicative loan loss ratios for 12 types of loan products, in each case the expectation of the percentage of claims related to that loan type that would have to be recorded as a loan loss within the next two years. For example, the indicative loss ratio for subprime mortgages was 21–28%. Each of the banks was given the opportunity to explain why the ratio would not apply to their claims.

The results were published by each bank. The calculations show that 10 of the 19 banks will need to raise more capital, a total of USD 185 billion. Several of the banks have already taken measures to strengthen their capital buffers.

## 3 Securities markets

### 3.1 Covered bonds

**Pertti Pykkönen**

**The markets for covered bonds – used for financing housing, other real estate and the public sector – have recovered as the financial crisis has eased.**

The Governing Council of the European Central Bank announced at the start of May that the Eurosystem will commence the purchasing of covered bonds. The aim is to temporarily ease borrowing and credit terms in the markets based on long-term covered bonds. The principles of the purchase programme were announced at the beginning of June.

The ECB will start purchasing covered euro-denominated bonds in July 2009, and continue until the credit market returns to normal. The purchases will total up to EUR 60 billion and will be conducted in both the primary and secondary markets. The bond-issue volume will be at least EUR 100 million. The bonds must be rated AA or Aa2 by at least one of the rating agencies (Fitch, Moody's, S&P or DBRS) and have underlying assets that include exposure to private and/or public entities.<sup>6</sup>

The announcement on the purchase programme for covered bonds re-activated the issuance of covered bonds in Europe, after a long period of subdued activity. The re-start of issuance was also boosted by improved sentiment in the fixed-income market and because investors became more willing to take risks

beyond the government bond market. The increase in covered bond issuance has facilitated banks' non-state-guaranteed long-term funding.

#### Key characteristics of covered bonds

Covered bonds are collateralised bonds with fixed or variable interest rate. The majority of covered bonds are listed. Dwellings or other property or loans to the public sector or a mix of these can be used as collateral for covered bonds. In some countries, eg Germany and Denmark, ships can also be used as collateral.

Covered bonds are issued by banks and mortgage banks. In Finland, covered bonds can be issued only by mortgage banks. Thus far, they have all been mortgage-backed.

The most important difference between covered bonds and securitised loans is that covered bonds remain on the issuer's balance sheet.

In case of bankruptcy or insolvency of a covered-bond issuer, the investor's claims are protected in Finland by priority, ie are covered by bankruptcy assets ahead of other debts. The other EU countries have similar regulations.

Financial supervisors keep a register of covered bond issues and their collateral. The issuer is obligated to maintain a sufficient pool of collateral, which can be supplemented if necessary.

The creditworthiness of a covered bond depends on the creditworthiness of the collateral pool and the issuer. The credit ratings of these bonds are always high due to the stringent collateral requirements. In many countries, legislation specifies a margin of over-collateralisation for covered bonds. In Finland,

<sup>6</sup> [www.ecb.int/press/pr/date/2009/html/pr090604\\_1.en.html](http://www.ecb.int/press/pr/date/2009/html/pr090604_1.en.html)

overcollateralisation is not required, but issuers usually do over-collateralise.

Covered bonds issued in EU countries are heterogeneous in terms of characteristics and credit risks. For example, the collateral value of dwellings or property used as collateral for mortgage-backed bonds varies by country. In Finland, the collateral value of dwellings and property is 60% of the purchase price. In many EU countries, the collateral value of dwellings is 80% and that of commercial and other property is 60% of the purchase price. In addition, the possibilities for a second mortgage differ across countries.

In accordance with the Capital Requirements Directive on EU credit institutions, the 10% risk-weight is applied to covered bonds in the calculation of capital requirements for credit institutions. Article 22(4) of the Directive on undertakings for collective investment in transferable securities (UCITS) also applies to covered bonds. But contractual covered bonds are not subject to these regulations.

### Markets

Covered bonds issued in the EU total over EUR 2,100 billion<sup>7</sup>. Of this, over 50% is in mortgage-backed bonds and ca 40% in bonds issued to the public sector.

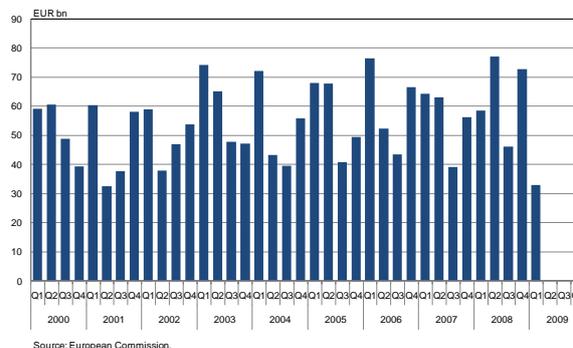
Germany accounts for nearly EUR 900 billion of the EU markets in covered bonds. Approximately three-fourths of this amount is in bonds issued to the public sector. Several issuances of covered bonds have also taken place in Spain and France. Of the non-euro area countries, in Sweden and France, covered bonds are widely used as a source of finance for housing and property.

In Finland, total issuance of covered bonds is over EUR 6 billion. Active issuers include Aktia Mortgage

Bank and the OP Bank Group Mortgage Bank. Each has issued covered bonds worth a total of ca EUR 2 billion. Sampo Mortgage Bank has also issued mortgage-backed covered bonds, totalling ca EUR 2 billion.

As a result of the financial market crisis and slower growth in housing and real estate credit, issuance of covered bonds slowed in summer 2008 and in early 2009 (Chart 6). Issues increased in May 2009, after the ECB announced its programme for purchasing covered bonds. The value of covered bonds issued in May totalled over EUR 16 billion.

Chart 6. Issuance of covered bonds in the EU



<sup>7</sup> European Covered Bond Fact Book 2008.

## 4 Infrastructure

### 4.1 Payments Forum sheds light on electronic payments in Finland

**Timo Iivarinen**

**Electronic invoicing and electronic identification were discussed at the Bank of Finland's Payment Forum. The development of electronic invoicing is hampered by a lack of common standards.**

The annual forum organised by the Bank of Finland brings together representatives of banks, companies and general government to discuss payment issues. The aim is to promote the smooth introduction of modern practices and procedures. This year, the topics were migration to electronic invoicing and the development of electronic identification. The participants were also given the opportunity to try out electronic voting. The experiences of electronic voting helped to find ways to enable the smoothest possible introduction of electronic invoicing.

In Finland, already ca 4.7 million online banking contracts have been drawn up between banks and consumers. The easily most common payment method (75%) is to use banks' online banking applications. Against this background, it would be logical to provide customers with invoices that are already in electronic form. This would benefit both the consumer, via easier paying (fast and correct payment), and the invoicer (significant cost-savings). Similar benefits can be achieved also in business-to-business invoicing.

Experiences presented at the Forum show that migration to electronic invoicing has however not been easy. The biggest problems have been the disappearance of invoicing information and the difficulty of sending attachments. For these reasons, it is best to use an operator that can operate under different standards. The problems have been mainly due to differences in electronic invoicing standards and incompatibility in situations in which standards have to be used in parallel. The second drawback has been the software companies' slow responses to updates required by electronic invoicing. Updates have to be made to the financial administration programmes of all the companies that are parties to electronic invoicing.

To overcome these difficulties, only one international standard should be used. This would also enable cross-border electronic invoicing and thus provide the biggest possible benefits to users. This type of standard is already available, and some players in the field are already developing services based on it. Most importantly, a common standard would create a level playing field for the players, and thus promote efficiency.

Secondly, relevant parties should seek to influence software houses so that the required software updates are available simultaneously and at a low cost, irrespective of which financial administration programme a company uses. The most inexpensive solution would be to update the software by making the changes required by just one standard. The existence of several parallel standards may have been

one of the reasons why software houses have been slow to update their products.

These views are supported by the results of the electronic voting at the Forum. The participants considered inadequate standardisation and the expensiveness of software updates the biggest obstacles to introducing electronic invoicing. The small number of users was also considered a problem. The participants were also of the opinion that the best way for authorities to promote the introduction of electronic invoicing would be to introduce electronic invoicing in public services and by actively fostering electronic invoicing standards as well as practices and procedures.

Experiences presented by foreign participants on electronic identification also favour the introduction of a single standard. For example, nearly all Estonians

have an electronic identification card (chip card) that can be used for all forms of electronic identification. The smooth functioning of identification is reflected by the fact that voters were able to vote electronically in the 2007 parliamentary elections.

In Norway, cooperation between banks has also had good results. Banks offer citizens a uniform method of identification (BankID). The card can be used eg for identification in all the online banking applications. This form of identification is also offered to other service providers. The system has ca 2 million users.

An encouraging sign for the future was the view of the Payment Forum participants on when over half of Finnish invoices will be electronic. Over 66% of the participants were of the opinion that this goal will be achieved in 2010–2014.

## 4.2 New rules of conduct for electronic identification

**Timo Iivarinen**

**As the rules of conduct are clarified, the hope is for new service providers entering the market and reasonable costs of electronic identification.**

The need for electronic identification increases in parallel with the use of the Internet. Thus far, strong electronic identification<sup>8</sup> has been the bottleneck of electronic commerce. Estimates made at the turn of the century on the development of electronic services have turned out to be inaccurate. The increased need for identification is also due to the development and increased use of electronic services that require identification.

Electronic identification services have been provided mainly by banks. Customers have been able to use online banking access codes distributed by banks also for the services of other service providers. Approximately 99% of the identifications are made using online banking access codes. Banks have distributed over 4 million online banking access codes to customers. In contrast, the citizen certificate granted by the Population Register Centre has not attracted so many users (only 200,000). Now there is hope for increased competition, as a law on strong electronic identification and electronic signature is in the drafting stage.<sup>9</sup>

<sup>8</sup> Strong electronic identification is based on at least two of the following: password, chip card and fingerprint or another tool that identifies the holder. Weak identification is based on username and password.

<sup>9</sup> Government Bill 36/2009 issued to Parliament on 27 March 2009. The Transport and Communications Committee has taken a break in

Electronic identification is now virtually unregulated.

The purpose of the law is to provide an efficient framework for the provision of reliable identification services in Finland. The hope is that a couple of new service providers will enter the market and that the costs of electronic identification become reasonable. The law applies to natural persons and service providers. Various closed loop systems are not covered by the law.

Under the new law, a mandatory public register will be established for identification services providers. The register will be maintained by the Finnish Communications Regulatory Authority.

Identification tools can be used for performing various types of legal acts. Legal acts can also be restricted. The new law includes provisions on preventing the use of identification tools. The use of these tools can be blocked by contracts between the provider of identification services, the service provider using the identification services, and the holder of the identification tool.

Initial authentication is of key importance for the reliability of the entire system. Initial authentication requires a passport or identification card issued by an authority in the EEA. The authentication must be personal, except if the service providers have a mutual contract on accepting the initial authentication by the other party or have an established customer relationship.

processing the Bill and so it may take time before the law takes effect, and amendments to the law are likely.

## 5 Key regulatory and supervisory initiatives

### 5.1 Reform of EU financial supervision

**Jukka Topi**

**The European Commission is proposing changes to financial supervision in the EU to improve the prevention of risks to the entire financial system and to enhance the supervision of individual institutions. The Commission proposes the establishment of the European Systemic Risk Council and the European System of Financial Supervisors.**

The European Commission at the end of May issued a communication which includes proposals for developing the financial supervision framework of the EU. The Commission's proposals are based on a report issued by the de Larosière Group in February<sup>10</sup>. The Commission hopes that the legislative changes required by the reform could be implemented in autumn 2009 and that the revised supervisory framework would be in place in 2010.

The European Council of the heads of state and government of the EU countries discussed the Commission's proposal for reforming the supervisory

<sup>10</sup> For more information on proposals made by the de Larosière Group (named after Chairman Jacques de Larosière, the former Governor of the central bank of France) see eg Financial Market Report 1 / 2009.

framework at its summit in June. The ECOFIN Council of the Ministers of Finance had already commented on the proposal at the beginning of June. The European Council, in many respects, supported the Commission's key proposals but it also gave some further guidance on specific details.

The Commission's proposal is composed of two pillars on which financial supervision in Europe would be developed in the next few years. One aim is to develop the monitoring and prevention of systemic risks to financial stability, ie macroprudential supervision. The other is to reform the supervision of individual financial institutions, ie microprudential supervision.

Firstly, the Commission proposes that a European Systemic Risk Council (ESRC)<sup>11</sup> be established for the monitoring and prevention of systemic risks. According to the Commission's proposal, the ESRC would be composed of the President and Vice-President of the European Central Bank (ECB), the governors of the central banks of the EU member states, the chairmen of the European Supervisory Authorities – to be established for microprudential supervision – and a member of the European Commission. Representatives of the Economic and Financial Committee and national supervisors would attend the ESRC meetings as observers.

The task of the ESRC would be to regularly monitor and assess potential threats to EU financial

<sup>11</sup>In the conclusions of the European Council and the ECOFIN Council, the body is called the European Systemic Risk Board.

stability both from macroeconomic developments and from within the financial system. The ESRC should also assess the importance of the risks it identifies and issue warnings of significant risks to financial stability and, where necessary, issue recommendations for action to deal with these risks. The ESRC should also liaise with the IMF<sup>12</sup> and FSB<sup>13</sup> and third-country counterparts.

Warnings and recommendations issued by ESRC would be channelled through the ECOFIN Council or the new European Supervisory Authorities. The warnings and recommendations could be of a general nature or could concern individual member states. Warnings and recommendations by the ESRC would not be legally binding, but the ESRC would monitor the compliance. Authorities subject to recommendations should explain if their decisions are not in line with the views of the ESRC. The ESRC could decide to publish its recommendations.

The second pillar of the proposal for reforming financial supervision is the establishment of a decentralised European System of Financial Supervisors (ESFS) to enhance the supervision of individual financial institutions. The system would consist of a network of national financial supervisors and three new European Supervisory Authorities. The new authorities would supervise banks (European Banking Authority), insurance corporations (European Insurance and Occupational Pensions Authority) and markets (European Securities Authority). The Commission proposes that these European Supervisory Authorities would replace the current Committees of Supervisors.

Day-to-day supervision of individual financial institutions would still be handled by national

authorities. The Commission proposes several new tasks for the new European Authorities, in addition to the responsibilities of the current Committees of Supervisors. The new European Supervisory Authorities should eg promote the harmonisation of a single set of rules for EU financial institutions and the consistent application of these rules (incl. resolution of disputes between supervisors). The European Supervisory Authorities should also be given responsibility for authorising and supervising specific pan-European entities. The European Supervisory Authorities should also coordinate supervisors' actions in crisis situations, collect microprudential data, ensure a common supervisory culture and consistent supervisory practices, and handle certain tasks concerning communication with international organizations and third-country authorities.

According to the Commission's proposal, the operations of the three European Supervisory Authorities would be coordinated by a steering committee of representatives of the European Supervisory Authorities and the Commission. Each new Authority would have a Board of Supervisors comprised of the highest-level representatives from the appropriate national supervisory authorities and chaired by a full-time independent professional. European Supervisory Authorities would be independent in their decision making vis-à-vis national authorities other than supervisors and vis-à-vis the European Institutions. They would however be fully accountable to the Council, the European Parliament and the Commission.

A key aim of the reform of the supervisory framework outlined by the Commission is the smooth cooperation between the ESRC responsible for macroprudential supervision in the EU and the ESFS responsible for the supervision of institutions. The

<sup>12</sup> International Monetary Fund.

<sup>13</sup> Financial Stability Board.

Commission considers it important that the ESRC receive micro-level data that are important for analysing of financial stability, and national

authorities, in supervising institutions, would benefit from the ESRC's views on the stability of the entire financial system.

## 5.2 Restricted long-term saving at a turning point?

**Pertti Pyökkönen**

### **The aim is to extend the range of restricted long-term saving products.**

The Ministry of Finance has drafted proposals for amending the framework legislation on restricted long-term saving and the related provisions of the Income Tax Act. The proposals have been circulated for comment. The Government bills on amending legislation are scheduled to be debated by Parliament during its autumn session and the amendments are expected to take effect at the beginning of 2010.

The core aim of the new legislation is to foster competition in long-term saving and improve the diversity, comparability and transparency of savings products.

The proposed new Act on restricted long-term saving is a framework law which would contain provisions on the right to provide long-term savings contracts as referred to in the Act. The Act includes provisions on the contents of contracts, the rights and responsibilities of the customer and service provider while the contract is being drawn up and during its term of validity, as well as on investment and legal status of the assets.

The proposed new Act would not cover insurance saving. Insurance saving would still be covered by the Insurance Companies Act and the Insurance Contracts Act. Under the new framework Act, the entities authorised to provide long-term savings services would include not only life insurance corporations but also banks, investment firms and mutual fund companies.

In long-term saving, the funds should be deposited in a separate bank account in the service provider's name. The account, designated as a savings account, would be a customer funds account as referred to in the Securities Markets Act. The service provider would invest the funds in a permitted investment instrument in its own name but on behalf of the saver, and the saver would be the owner of the funds in the account. Such a savings account would not be covered by a deposit guarantee but would be afforded investor compensation protection.

Privileged tax treatment would require that payments linked to such savings contract be transferred via the savings account. The saver could not withdraw funds from the account before the general age of retirement (currently 63 years) without tax repercussions or without other special reasons stated in the Act. The same terms and conditions apply also to pension insurance products.

Under the proposal, funds held in the savings account could be invested in an account provided by a deposit bank, in shares admitted to public or multilateral trading, in securities issued and guaranteed by a public sector entity, or in mutual fund units.

The saver owns the funds in the savings account but the service provider would have the sole right to use the funds prior to the retirement of the account holder.

According to the proposed amendments to the Income Tax Act, the saver would have the right to deduct from his taxes annually EUR 5,000 in payments related to a long-term saving contract or pension insurance contract. Such tax relief is calculated based on the capital gains tax. The condition for the deduction is the prospective payment of pension or other benefits for life or for at least ten

years. Repayments of the savings would be treated as capital income for the saver.

A long-time saver would have the right to change service providers without tax repercussions.

To improve the transparency of long-term saving, the service provider must inform the saver eg as to the key contents of the contract and possible restrictions.

The saver must also be informed as to any costs

charged to the customer and how they are calculated.

The costs should be stated in euro and as percentages for the period defined in the investment plan, without yield assumptions. The customer should also be provided information eg on his right to transfer the funds to another service provider and on the costs of such transfers.

## 6 Key corporate arrangements and events in the financial sector

<i>Date</i>	<i>Event and description</i>
<b>January 2009</b>	<p><i>Aktia Plc and Veritas Non-Life Insurance Company merge on 1 January 2009.</i></p> <p><i>The operations of Kaupthing Bank hf., Finnish Branch are terminated at the end of January. The Branch repaid the loan, arranged by Finnish banks, which enabled the Branch to redeem its customer deposits.</i></p> <p><i>S&amp;P revises Nokia's rating (A-1/A) outlook from positive to stable.</i></p> <p><i>Santander Consumer Finance Oyj, owned by the Spanish financial group Grupo Santander, expanded its operations in Finland by acquiring the entire share capital of GE Money Oy.</i></p>
<b>February 2009</b>	<p><i>The Council of State takes a decision, with the approval of Parliament, that the Finnish State can under certain conditions and without collateral grant state guarantees to Finnish deposit banks. The total state guarantee cannot exceed EU 50 million.</i></p> <p><i>Finnish central securities depository (APK) joins the Euroclear Group as Euroclear Finland Oy.</i></p> <p><i>Moody's and S&amp;P lower Danske Bank's ratings as follows: Moody's lowers the long-term rating from Aa1 to Aa3, outlook stable; and S&amp;P lowers the short-term rating from A-1+ to A-1 and the long-term rating from AA- to A+, outlook negative.</i></p> <p><i>S&amp;P lowers Skandinaviska Enskilda Banken's long-term rating from A+ to A, outlook negative.</i></p> <p><i>Moody's lowers Swedbank's long-term rating from Aa2 to A1, outlook negative.</i></p> <p><i>S&amp;P lowers Jyske Bank's long-term rating from A+ to A, outlook negative.</i></p>

<i>Date</i>	<i>Event and description</i>
<b>February 2009</b>	<p><i>S&amp;P lowers Metso Corporation's short-term rating from A-2 to A-3, outlook negative. Long-term rating remains unchanged (BBB). Moody's had revised the company's rating outlook to negative in January.</i></p> <p><i>French banks Caisse d'Epargne and Banque Populaire announce plans to merge.</i></p> <p><i>S&amp;P lowers forest industry ratings globally. The ratings of Finnish companies were lowered as follows: UPM-Kymmene ( A-3/BBB-), placed on watch for possible downgrading, Stora Enso's ratings were confirmed, outlook revised to negative; M-Real's short-term rating lowered from B to C and long-term from B- to CCC+.</i></p> <p><i>The Swedish National Debt Office sells its shares in Carnegie Investment Bank AB and Max Matthiessen Holding AB to Altor Fund III and Bure Equity AB.</i></p> <p><i>Moody's lowers Stora Enso's long-term rating from Ba1 to Ba2, outlook negative; UPM-Kymmene's long-term rating from Baa3 to Ba1, outlook stable; M-Real's long-term rating from B3 to Caa1, outlook negative.</i></p>
<b>March 2009</b>	<p><i>Straumur-Burdaras Investment Bank, the last major Icelandic bank, is taken over by the authorities.</i></p> <p><i>Reykjavik Savings Bank (SPRON) and Sparisjodabanki (former Icebank) are taken over by Icelandic authorities.</i></p> <p><i>NASDAQ OMX Europe announces that it will launch Neuro Dark, a new trading platform for institutional investors, in April.</i></p> <p><i>Moody's announces it will keep the Swedish banking sector's rating outlook negative. It still considers the Swedish banking sector stable, due to the strength of domestic retail banking and a good capital base.</i></p> <p><i>Bank of Åland acquires Kaupthing Sverige AB for SEK 388 million.</i></p> <p><i>Aktia plc announces plans to go public in September 2009.</i></p>
<b>April 2009</b>	<p><i>Moody's confirms Nokia's ratings P-1 and A1, changes the rating outlook on long-term senior debt from stable to negative.</i></p> <p><i>Moody's confirms Metso Corporation's ratings A-3 and BBB, outlook negative.</i></p> <p><i>Paikallisosuuspankkiliitto becomes a cooperative society, Paikallisosuuspankkiliitto osk.</i></p>

<i>Date</i>	<i>Event and description</i>
<b>April 2009</b>	<p><i>Moody's confirms Aktia Bank plc's ratings P-1, A1 and C, outlook stable.</i></p> <p><i>S&amp;P confirms Metso Corporation's ratings A-3 and BBB, outlook negative.</i></p> <p><i>Moody's confirms Nokia's ratings P-1 and A1, changes outlook from stable to negative.</i></p> <p><i>Moody's confirms Stora Enso's long-term rating Ba2, outlook negative.</i></p> <p><i>S&amp;P confirms Stora Enso's ratings B and BB+, outlook negative.</i></p> <p><i>Fitch confirms Fingrid Oyj's ratings F1+ ja AA-, changes outlook from stable to negative. Fingrid's long-term senior unsecured debt rating is AA.</i></p> <p><i>Moody's changes the outlook on Pohjola Bank's long-term rating (Aa1) from stable to negative. The outlook on short-term rating (P-1) remains stable.</i></p>
<b>May 2009</b>	<p><i>Dresdner Bank merged into Commerzbank.</i></p> <p><i>Talvivaara Mining Company Plc's shares listed on the Helsinki Stock Exchange.</i></p> <p><i>Nordnet Bank AB announces it will purchase eQ Bank from Straumur Burdaras Investment Bank for ca EUR 37 million.</i></p> <p><i>S&amp;P lowers Stora Enso's long-term rating from BB+ to BB. Short-term rating (B) remains unchanged.</i></p> <p><i>Moody's downgrades Aktia Real Estate Mortgage Bank plc's long-term covered bonds from Aaa to Aa1.</i></p> <p><i>Trading in shares of six Finnish companies commences at the Swedish multilateral trading facility Burgundy, launched in April.</i></p> <p><i>The Japan Securities Clearing Corporation plans to establish a clearing house for interest rate swaps and credit default swaps.</i></p>