Financial Market Report

2 • 2010

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Bank of Finland

Financial Markets and Statistics

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1 Financial intermediation

1.1 Subdued developments in bank financing of euro area non-financial corporations

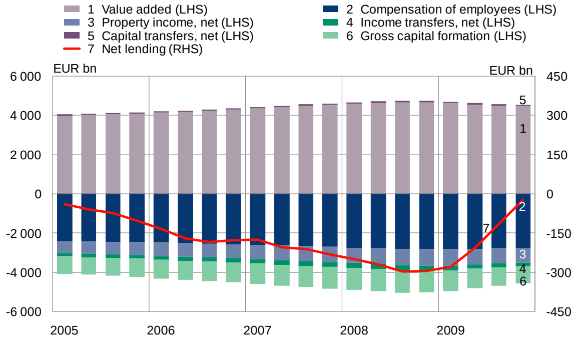
Pertti Pylkkönen and Eero Savolainen

The need for external corporate financing collapsed in the euro area in 2009, and the focus of financing sources shifted from loans to securities markets. The trend has continued in 2010.

The euro area corporate sector's income continued to increase rapidly, and net lending improved sharply in the second half of 2009 (Chart 1)[1]. The ratio of gross operating surplus to value added (describing profit margin) improved, and the sector also benefited from a decrease in interest expenses. Investments decreased further, and the sharp reversal in savings that started in summer continued.

[1] The non-financial corporate sector's financial position is usually monitored with timely banking and securities statistics. A more comprehensive picture is provided by the euro area accounts compiled by the European Central Bank (ECB). These consist of the financial accounts, economic accounts and financial balance sheets. In this article, both data sources are used. The statistics are available at the ECB's website (http://www.ecb.int/stats/html/index.en.html)

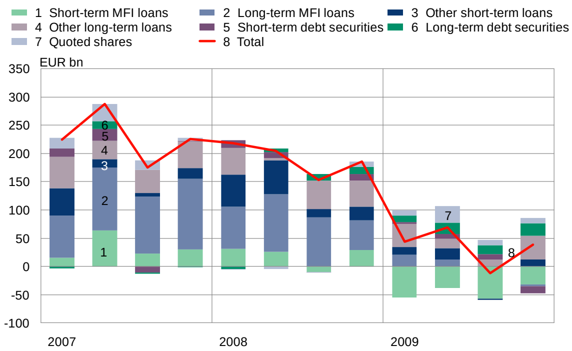
Chart 1. Euro area non-financial corporations' net lending, four-quarter moving total



Source: ECB.

Growth in the non-financial sector's external financing continued to slow down (Chart 2). Non-financial corporations' net flow of external financing has remained at ca EUR 800 for quite some time. In 2009, it started to decline swiftly, and in 2009, net financing totalled just EUR 139 billion. The structure of financing changed significantly, as the decline in loans from MFIs was compensated by financing from the securities markets. Financing by euro area MFIs, in particular, but also by other lenders (eg non-euro area banks and non-financial corporations), shrank notably.

Chart 2. Euro area non-financial corporations' external financing flows, four-quarter moving total



Source: ECB.

Market-based debt financing continued to grow rapidly

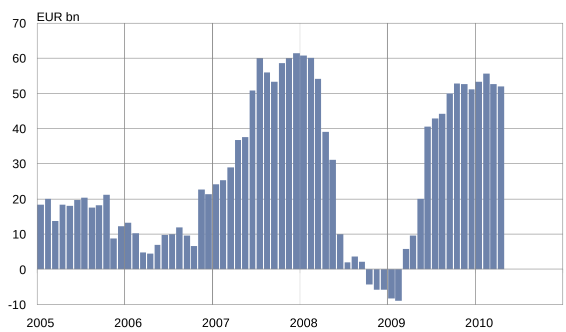
Basic statistics up to April show that developments in financing continued in early 2010 more or less unchanged compared to late 2009. Loans from MFIs remained unchanged: the seasonally-adjusted flow for the first quarter was EUR 1 billion.

Euro area non-financial corporations' market-based financing grew rapidly in 2009. Improvements in market conditions and the tightening up of bank financing were reflected in the rapid growth of debt securities issuance. Issuance remained active in January–March 2010, when governments' debt crisis was not yet reflected in issuance. The amount of market debt financing acquired by euro area non-financial corporations increased in the early months of the year by one-third compared to 2009.

As a result of positive stock market sentiment, share issues by euro area non-financial corporations increased in 2009 to EUR 52 billion, in net terms. Issuance continued at a brisk pace in January–April 2010 (Chart 3).

As a result of uncertainties in the financial markets, debt security and share issues slowed in May compared to the first quarter.

Chart 3. Net issues of quoted shares by euro area non-financial corporations, 12-month moving total



Source: ECB.

European capital investment markets were passive in 2009. In particular the *venture capital* markets have not seen much activity and financing of new companies has been subdued. Difficulties of new, innovative non-financial corporations in obtaining financing are contributing to the dampening of growth and employment in Europe.

Foreign financing of GIIPS[2] non-financial corporations

Spain's national financial accounts show that non-financial corporations' loan stock remained unchanged in 2009, but the structure of the loan stock changed notably as foreign lenders compensated for the decline in corporate lending by Spanish MFIs. Foreign financiers' importance as corporate lenders increased also in Italy, and particularly in Greece. In Italy, the strong growth in debt securities was noteworthy. The debt ratio of the Italian corporate sector is considerably higher than the European average. Moreover, short-term debt accounts for a considerable share of total debt. A more detailed country-specific examination is hampered by insufficient availability of financial accounts data.

As a result of the escalation of the GIIPS debt crisis and the considerable increase in market volatility, euro area non-financial corporations' debt security issuance has virtually come to a halt in recent weeks. The difficult situation in the debt securities markets has increased non-financial corporations' long-term financing costs and risk premia on government bonds have grown.

The planned tightening of financial market, and particularly banking, regulation will probably induce larger non-financial corporations to acquire an increasing share of their debt financing from the

[2] GIIPS = Greece, Ireland, Italy, Portugal, and Spain.

markets. The availability of financing may become tighter for small and medium sized enterprises if the regulatory changes are implemented as planned.

2 Banks

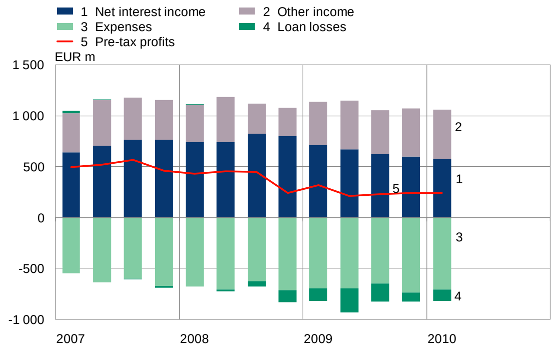
2.1 Banks' performance is solid – but far from peak years

Eero Savolainen

The profitability of Finnish banking has remained roughly unchanged since spring 2009. Net interest income has declined while other income has increased. In future, banks' profitability will depend largely on developments in market interest rates and loan losses.

The pre-tax profits of banking for January–March 2010 were nearly one-fifth lower than in the corresponding period last year (Chart 4 and Table 1). Recently, however, financial results have developed favourably, with steady improvements in three consecutive quarters. But results are still significantly weaker than in 2007–2008, due to an increase in loan losses and a decrease in net interest income. Growth in other income has maintained the level of total income.

Chart 4. Key items of Finnish banks' results



Source: Interim reports.

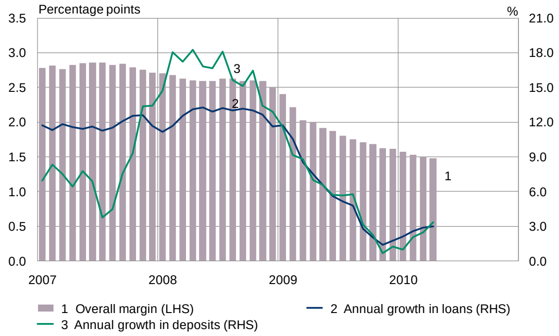
Narrower interest rate margins and subdued growth in deposits and lending erode net interest income

Banks' net interest income continued to decline. The deposit margin has shrunk to nearly nil, due to exceptionally low market interest rates and competition for deposits. For example, the interest rate margin of Nordea's banking in Finland turned slightly negative in the first quarter[3]. Lending margins are also under pressure, as the margin for housing loans has started to narrow and growth in the margin for corporate loans has come to a halt. Banks' total margin[4] was in April 1.5%, compared with 2.0% a year earlier (Chart 5). The considerably slower growth in loans and deposits compared to previous years is also weighing on net interest income.

[3] Nordea's First Quarter Report 2010.

[4] Difference between average rates on MFIs lending and deposit stocks.

Chart 5. MFI overall margin and annual growth rate of the loan and deposit stocks



Source: Bank of Finland.

Net fee income was boosted by increased activity and growth in the amount of capital managed, both fuelled by rising share prices. Developments in net fee income from trading and investment activities were also favourable. A significant proportion of net income is not recorded as income from banking but elsewhere in the income statement, and thus net income has a major impact on banks' group-level results. By contrast, expenses have risen moderately. Cost awareness is high, and banks aim to systematically identify possible cost savings.

Lending quality good and capital adequacy strong

The peak phase of growth in banking groups' nonperforming assets came to a halt in autumn 2009, after which the amount of nonperforming assets has shown little change. At the end of April, banking groups' nonperforming assets totalled EUR 1,250 million, up by 3% on year-end. Nonperforming assets amounted to only ca 0.7% of the lending stock – a small proportion by historical and international standards, considering the weak macroeconomic developments.

Capital adequacy of the Finnish banking sector remained high: banks have sufficient regulatory capital, and the quality is good. At the end of March 2010, the capital adequacy ratio of the sector was 14.5%, and the Tier 1 capital ratio was 13.7%. Banks total capital buffers, ie the amount of regulatory capital exceeding the minimum capital adequacy requirement, totalled EUR 9.5 billion. Stress tests carried out in spring 2010 indicate that the capital buffers are sufficient to withstand an unlikely, but possible, serious weakening of the operating environment.

Table 1. Key items from income statements, 1 January – 31 March 2010

	Net interest income		Other income, net		Total expenses		Loan losses, net		Profit before tax	
	EUR m	Change	EUR m	Change	EUR m	Change	EUR m	Change	EUR m	Change
Nordea Group	1 235	-9 %	1 068	16 %	1 164	7 %	261	..	878	5 %
Nordic banking	930	-8 %	594	20 %	874	13 %	209	..	441	0 %
Banking in Finland	186	-13 %	174	26 %	213	7 %	55	..	92	-11 %
Danske Bank Group	807	-17 %	817	-39 %	863	-7 %	574	..	187	-40 %
Banking	793	-17 %	361	8 %	730	-3 %	587	..	-163	..
Banking in Finland	77	-38 %	52	8 %	110	-7 %	17	..	2	..
OP-Pohjola Group	224	-22 %	298	34 %	356	0 %	38	..	128	3 %
Banking and investment services	208	-23 %	192	5 %	269	-2 %	38	..	93	-42 %
Savings banks	35.0	-9 %	20.6	43 %	35.0	7 %	-0.2	..	20.7	4 %
Aktia Group	38.9	20 %	22.0	44 %	38.9	2 %	4.6	..	17.5	113 %
Banking	38.0	23 %	9.0	70 %	25.1	3 %	4.4	..	17.4	74 %
Local cooperative banks	20.8	-11 %	11.1	22 %	20.3	5 %	-0.1	..	12.0	-8 %
Bank of Åland Group	9.7	7 %	13.8	21 %	21.3	54 %	0.1	..	2.2	-65 %
Evli Bank Group	0.3	-82 %	15.7	76 %	13.8	28 %	0.0	..	2.1	-22 %
1. Finnish banking	574	-19 %	488	17 %	707	2 %	114	..	241	-23 %
2. Financial groups operating in Finland	2 371	-13 %	2 266	-11 %	2 512	1 %	878	..	1 247	-5 %

Other income includes eg net fee income, capital gains/losses from sales 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 banking, local cooperative banks, Bank of Åland Group, Evli Bank 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 (excl. Nordea Bank Finland and Sampo Bank.

Sources: Banks' interim reports and Bank of Finland.

2.2 International banks' results improve

Eeva Alho

International banks' financial results continue to improve, boosted by income from trading. The loss of confidence again in the money market has increased banks' funding costs. Governments' future financial needs and the risks of close interdependencies in the banking system weigh heavily in any assessment of banks' near-term prospects.

The profitability of large euro area banks has improved but has not returned to pre-financial crisis levels. Results differ considerably. European banks' net interest income increased in 2009 compared to 2008, due to eg favourable developments in funding costs. Net interest income continued to improve in the first quarter. In early 2010, non-interest income, particularly income from trading, has further improved large banks' performance. For the banking system however, the protracted problems of the less profitable banks are crucial.

Write-downs on loans continued to decrease in early 2010. The European Central Bank (ECB) however estimates that euro area banks will need to make additional loan-loss provisions of EUR 195 billion in 2010 and 2011.[5] A considerable portion of the problem loans are linked to property markets, which in many countries are frozen as a result of the collapse of the market. Refinancing property investments is a challenge in the near term because, during the overheated phase of property markets, projects were financed with high loan-to-value ratios, and the availability of financing has been hampered.

Escalation of the government debt crisis and a further loss of confidence in the banking system has weakened banks' liquidity position and increased funding costs. The short-term interbank money market is a significant funding source for euro area banks. To reduce their dependency on the volatile wholesale market, banks are increasingly competing for deposits. This has further exacerbated the situation for the weakest banks.

Governments now have fewer resources to support the banking sector. Banks have been forced to restructure their funding and look for ways to reduce dependencies.

[5] ECB, Financial Stability Review, June 2010.

Table 2. Large US and European financial groups' results in January–March 2010, EUR m

	Pre-tax results			Net interest income			Other income			Expenses			Impairment losses		
	1-3/2010	1-3/2009	Change, %	1-3/2010	1-3/2009	Change, %	1-3/2010	1-3/2009	Change, %	1-3/2010	1-3/2009	Change, %	1-3/2010	1-3/2009	Change, %
Bank of America	3 174	4 126	-23	9 942	9 592	4	13 610	17 854	-24	13 288	13 050	2	7 090	10 270	-31
Citigroup	3 822	1 941	97	10 529	9 921	6	7 853	8 900	-12	8 513	9 280	-8	6 050	7 610	-21
Goldman Sachs	3 731	2 018	85	1 025	1 464	-30	8 212	5 770	42	5 507	5 216	6	0	0	0
JPMorgan Chase	3 281	2 346	40	9 914	10 260	-3	10 095	8 948	13	11 659	10 264	14	5 069	6 598	-23
Morgan Stanley	1 819	-484	..	276	-49	..	6 289	2 273	177	4 745	2 707	75	0	0	0
Wells Fargo	2 893	3 562	-19	8 061	8 732	-8	7 449	7 796	-4	8 762	9 467	-7	3 854	3 498	10
BBVA	1 863	1 834	2	3 411	3 313	3	1 832	1 572	17	3 210	2 135	50	170	916	-81
BNP Paribas	3 840	2 290	68	4 934	4 129	19	6 771	5 351	27	6 596	5 348	23	1 337	1 826	-27
Credit Agricole	1 691	913	85	8 335	7 195	16	..	..	..	5 030	4 776	5	1 541	1 559	-1
Credit Suisse	2 033	1 046	94	1 331	1 361	-2	4 800	4 042	19	4 131	4 234	-2	-34	122	..
Commerzbank	771	-884	..	1 888	1 692	12	1 800	692	160	2 209	2 081	6	644	844	-24
Deutsche Bank	2 793	1 815	54	3 671	3 843	-4	5 156	4 004	29	5 772	5 506	5	262	526	-50
Dexia	325	398	-18	994	1 607	-38	480	96	400	884	896	-1	265	409	-35
ING	1 549	-281	..	3 217	3 018	7	10 832	11 711	-8	11 831	14 024	-16	497	682	-27
Lloyds															
Royal Bank of Scotland															
Santander	3 173	2 831	12	7 169	6 321	13	3 088	3 144	-2	4 648	4 400	6	2 436	2 234	9
Societe Generale	1 500	-231	..	6 581	4 913	34	..	..	..	4 001	3 777	6	1 132	1 354	-16
UBS	1 920	-1 041	..	1 242	1 268	-2	5 459	3 614	51	4 861	5 165	-6	-79	758	..
Unicredit	1 044	922	13	3 977	4 704	-15	2 828	1 858	52	3 970	3 990	-1	1 791	1 650	9
Danske Bank	187	313	-40	1 280	1 722	-26	481	707	-32	1 010	1 055	-4	574	1 071	-46
DnB NOR	494	505	-2	686	630	9	489	532	-8	574	579	-1	117	179	-35
Jyske Bank	24	-9	..	156	137	14	97	85	14	149	142	5	80	89	-10
Nordea	878	833	5	1 235	1 356	-9	1 241	1 100	13	1 362	1 276	7	261	356	-27
SEB	108	165	-34	485	643	-25	574	510	13	757	770	-2	194	218	-11
Svenska Handelsbanken	381	348	10	548	494	11	286	300	-4	398	364	9	55	82	-32
Swedbank	102	-307	..	404	530	-24	440	401	10	531	621	-14	222	626	-64

Sources: Interim reports and Bloomberg.

3 Securities markets

3.1 'Flash Crash' in US stock market

Ilkka Kaukoranta

US stock indices tumbled in a few minutes, and then recovered just as quickly. Preliminary investigations failed to provide a full explanation of the disruption. Authorities and stock exchanges have taken action to prevent further market disruptions.

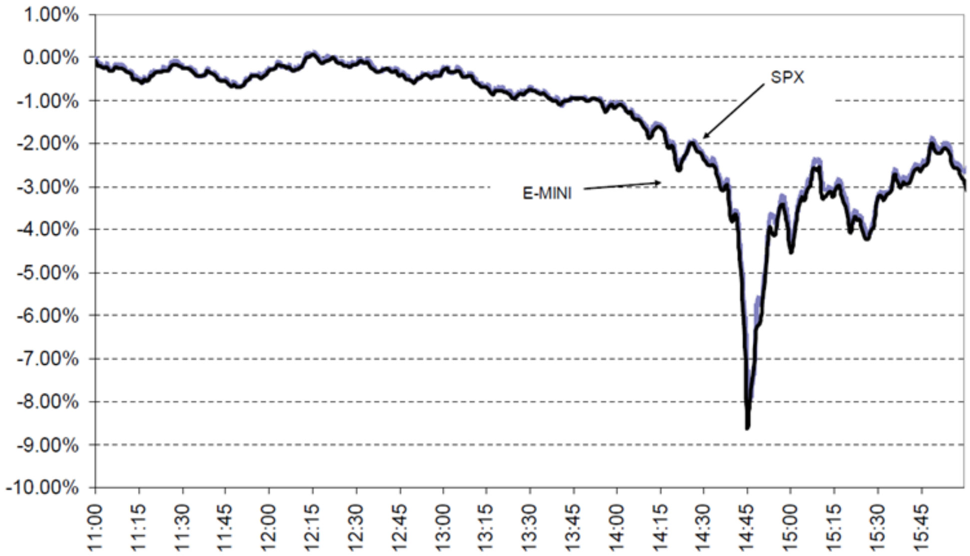
Course of events

The start of the trading day Thursday, 6 May 2010 in the United States was overshadowed by continuing concerns about Greece and uncertainties related to the UK elections. In response to the situation, share prices declined notably but not dramatically. But in the afternoon the pace of decline picked up sharply.

Stock and futures markets plunged in a few minutes by ca 5%, after which they recovered as dramatically. These rapid and extensive price gyrations were unprecedented.

The majority of securities prices followed general market developments, but some prices experienced much more violent fluctuations. For example, Accenture's share price plunged by 99.97%, and fully recovered within twenty seconds. Many exchange-traded funds (ETF), in particular, fluctuated sharply, in several cases plunging to practically nil, whereas some securities prices increased momentarily by several hundred percent.

Chart 6. Developments in S&P 500 and E-Mini futures S&P contract; 6 May 2010, 11.00 am onwards



Source: Bloomberg via SEC.

Possible causes of the market disruption

The Securities and Exchange Commission (SEC), which supervises the US securities markets, and for the futures market, the Commodity Futures Trading Commission (CFTC), have started an investigation of the market disruption. Due to the complexity and volume of data[6], the investigation will take a long time. The SEC and CFTC have however already issued their preliminary findings.

The direct cause of the market disruption appears to have been a temporary disappearance of liquidity. Thus far it is unclear what triggered the chain of events, but high frequency trading (HFT) and stop-loss market orders, in particular, are suspected. Links between developments in individual share prices, exchange-traded funds that track share prices, and futures prices, as well as trading restrictions posed by various trading facilities are also being investigated.

High frequency trading has increased significantly in recent years. This trading method is characterised by extremely high-speed algorithmic decision-making facilitated by computers being located close to the stock exchange's computers, and extremely short position-holding periods that are unwound by the end of the trading day. This type of high-frequency computerised trading is estimated to account for over 50% of US stock exchange trades. As a result, market liquidity nowadays depends largely on high-frequency trading. The disappearance of liquidity may have been partly due to a temporary withdrawal from the market of some high-frequency traders.

A stop-loss order is a sell order that is triggered when the price of a security falls below a pre-specified level. Its purpose is to preserve a past price rise or to minimise possible losses by selling the security before its price falls too far. But in illiquid markets, a security may be sold at a very unfavourable price. Stop-loss market orders can trigger a downward slide in the security. If the downward slide triggers a large amount of sell orders, this will amplify the decline in prices, which in turn will trigger new stop-loss market orders.

Links between individual share prices, exchange-traded funds and futures prices are also being investigated. The majority of high frequency trading is based on arbitrage, ie exploiting price differences between various instruments. A change in an individual share price, for example, is quickly reflected in the prices of futures and exchange-traded funds that track the share price. Rapid and complex interactions between various markets makes it difficult to identify the source of a stock market crash.

The temporarily extremely low or high prices of some securities were probably due to the fact that, when liquidity disappears in certain markets, the only liquidity providers are market makers, who are always obligated to give two-sided quotes[7]. In some markets, this condition can be fulfilled by giving a very high or low quote ('stub quote') that in normal market conditions would not result in a trade. When liquidity disappeared, sometimes these were be the only bids, in which case a sell order triggered by a stop-loss market order for a normally high-priced stock could be realized at a price of one cent.

Trading facilities have various mechanisms for calming trading during a market disturbance. The uniform rule in case of fluctuations in the overall index was however not triggered. Instead some trading facility-specific restrictions entered into force, but their impact on liquidity in the tightly-linked markets is still unclear.

[6] The method of compiling trade data varies between the many US trading facilities. Due to the speed of trading, the volume of data is extremely large, over five terabytes, according to SEC estimates.

[7] The market maker must disclose the buy and sell price.

Actions by authorities

When the markets had closed the stock exchanges agreed to break clearly erroneous trades. Trades were broken if the price diverged by over 60% from the price preceding the market disruption. This percentage is somewhat arbitrary and does not treat all parties equally. Breaking a trade is a zero-sum game in which parties that sold below or purchased above current price benefit, whereas the other parties loose.

Uncertainties concerning the breaking of trades tends to drive out high frequency traders, in particular because, as the result of cancelled trades, they could end up with significant share holdings at the end of the trading day, contrary to their strategy. To increase the transparency and predictability of the standards for breaking trades, SEC has proposed that this should be based on a pre-specified mechanical rule.

The key aim is to establish practices that prevent market disruptions. A significant reform is the uniform rule approved by SEC on pausing trading on a stock-by stock basis in the event of a market disruption. Under the rules, trading in a stock would pause across US equity markets if the price moves by 10 percent or more in a five-minute period.

Authorities are also assessing the impacts of other practices, such as stop-loss market orders and market makers' obligation to provide two-sided quotes.

3.2 Short selling of securities under attack

Jukka Vauhkonen

Many European countries, as result of experiences from the financial crisis, have restricted or are planning to restrict the short selling of securities. There is however hardly any empirical evidence of benefits from direct restrictions on short selling.

The Federal Financial Supervisory Authority (BaFin) of Germany has since 19 May prohibited naked short sales of debt securities of euro area countries and of the shares of ten companies from the financial sector. It also temporarily prohibited naked credit default swaps (CDS)[8] in which the reference liability is a euro area country. Germany's unilateral decision has irritated authorities and politicians in many countries.

Short selling is the selling of securities that the (short) seller does not own. By selling short, the seller hopes to profit from a decline in the price of the asset or hedge against a decline in the asset price.

Covered short selling is the most common form of short selling. Covered short selling consists of three stages. In the first stage, the short seller, eg a hedge fund, borrows against compensation securities from another market participant, eg an investment bank or pension fund. In the second stage, the short seller sells the securities borrowed. In the third stage, the short seller buys the same number of securities from the securities market and returns them to the securities lender. If the price of the securities declines between the second and third stages, the short seller makes a profit, ie benefits from the decline in the price of the securities borrowed.

Naked short selling refers to the selling of securities the short seller has not even borrowed at the time of the sale. Naked short selling is possible because the delay between sale and settlement can be as much as several days. The delay allows the short seller to sell the security at a point in time but purchase and deliver the security to the buyer later.

The benefits and disadvantages of short selling have been examined extensively over the years.[9] The dominant view is that short selling is in normal conditions a useful form of trading. Allowing short selling increases the number of possible sellers in the market and thus enhances market liquidity, boosts trading volumes and lowers transaction costs of trading. Short selling is also widely believed to render securities market prices more informative because investors´ negative information is more strongly reflected in securities prices than without the possibility of short selling. Short selling is also a cost-effective way for a long-term investor, eg an insurance corporation or pension fund, to hedge against a decline in securities prices. Securities market makers use short selling, if necessary, to fulfil customers' purchase orders.

The biggest disadvantage of short selling is that in a severe financial market disruption it may steepen a fall in securities prices. This may cause undue problems for companies – particularly financial institutions – that are subject to short selling. These problems may spread to the entire financial system.

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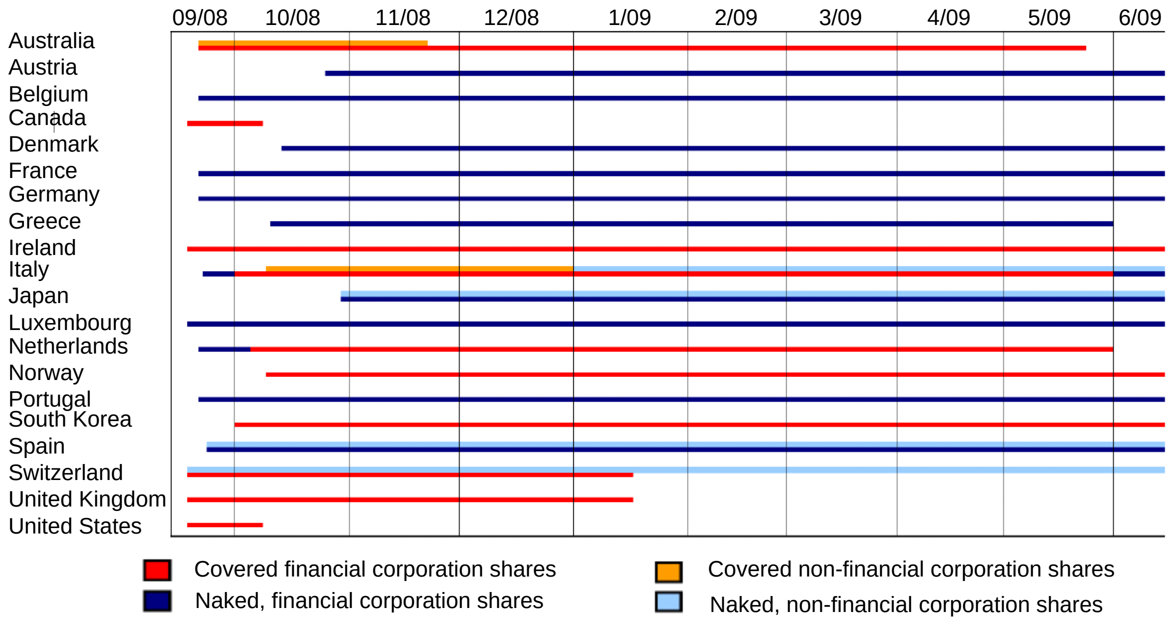
[8] Credit risk derivatives' features, purpose of use and markets are examined in more detail in an article by Jyrki Haajanen and Pertti Pylkkönen *CDS markets criticised*, Financial Market Report 1/2010.

[9] For summaries of literature, see eg Financial Supervision Authority (2009) *Short selling*, Discussion Paper 1/2009; and Beber and Pagano (2010) *Short-selling restrictions around the world: evidence from the 2007–2009 crisis*, CEPR Discussion Paper, No. 7557.

Due to these risks, a number of countries restricted the short selling of shares in the most severe phase of the global financial crisis in autumn 2008 (see Chart).

Chart 7. Short selling prohibitions in selected countries, September 2008 – June 2009



Source: Beber and Pagano (2010).

There seems to be fairly little empirical evidence of the benefits of the restrictions.[10] Nonetheless, Germany and many other European countries are introducing new restrictions on short selling or tightening the disclosure requirements for short selling.[11] The latest example of the ongoing discussion is the joint letter[12] of 8 June by German Chancellor Angela Merkel and French President Nicolas Sarkozy addressed to José Manuel Barroso, President of the European Commission, demanding eg the speedy tightening of EU-wide regulations on short selling.

[10] See eg. Beber and Pagano (2010); and Marsh and Niemer (2008) *The impact of short sales restrictions*, Report commissioned by the International Securities Lending Association (ISLA), the Alternative Investment Management Association (AIMA) and London Investment Banking Association (LIBA).

[11] See Committee of European Securities Regulators (CESR) *Measures adopted by CESR members on short selling*, 9 June 2010, www.cesr-eu.org.

[12] http://www.elysee.fr/president/les-actualites/communiques-de-presse/2010/juin/lettre-commune-adressee-par-m-le-president-de-la.9084.html

4 Infrastructure

4.1 More efficient financial administration

Heli Snellman

The retirement of baby-boomers poses a challenge for economic growth in Finland. In future, labour force must be shifted out of routine work and into more productive tasks. Here's were automation comes to the rescue – eg financial administration can be enhanced and profitability improved as a result.

In future, there will not be a sufficient labour force for paper shuffling. In financial administration, eg printing, mailing, filing and storing invoices takes up a lot of time. A lot of this – and many other stages – can be handled automatically in electronic form. The needs and possibilities to automate financial administration was one of the topics discussed at the Bank of Finland's Payments Forum[13].

In Finland, electronic invoicing has not yet caught on, but the number of companies sending electronic invoices and the number of private and corporate customers receiving electronic invoices is increasing gradually. Statistics from the Federation of Finnish Financial Services show that the number of receiving-infomessages sent by consumers had more than doubled by the end of 2009, compared to 2008. The number of e-invoices transferred via banks (Finvoice messages) grew considerably, but their number was low compared to eg the total number of reference transfers.[14] The same statistics also show that the automation rate of payments is high, 98%, ie nearly all invoices are paid electronically.

Implementation of the Single Euro Payments Area (SEPA) means that companies must update their software. At the same time, it would be natural to consider whether the entire financial administration process should be examined critically and enhanced. Are current practices suitable in the new operating environment or are there more efficient ways to operate?

The benefits of automation were discussed in a conference on e-invoicing, arranged by the EU Commission in April. According to the EC Expert Group of e-Invoicing, as much as half of companies' administrative costs could be eliminated[15]. In the conference, results of an Italian study[16] of over 3,000 companies were presented. These results show that automation saves companies from a couple of euro up to over EUR 60 per cycle. The higher the level of automation of the trade process (order, delivery, invoice, payment), the higher the savings.

The automatisation of the payment chain requires common standards. Finland is a small country, and banks have already years ago agreed on domestic payment practices. European banks have also agreed on standards concerning SEPA. Globalisation requires

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13 http://www.suomenpankki.fi/fi/suomen_pankki/ajankohtaista/muut_uutiset/2010/uutinen_100518.htm (in Finnish only)

14 Statistical data on banks' payment systems in Finland in 2000–2009 is available at www.fkl.fi

15 http://ec.europa.eu/enterprise/sectors/ict/files/23_bo_en.pdf

16 http://ec.europa.eu/enterprise/sectors/ict/files/23_perego_en.pdf

global standards that efficiently serve both domestic and cross-border invoicing and payment transfer.

Why then is the automatisation and improvement of financial administration so problematic? Companies' differ considerably in size and business line. One company may operate only domestically and send just a small number of invoices, whereas another company may be a large multinational player with completely different magnitudes of invoicing volumes, needs concerning the data transmitted in an invoice, and financial administration challenges. Of the consumers, some adopt new payment habits quickly, whereas some have never used a computer. Tailored, flexible solutions should be available to different types of players, which would keep the required level of new investments reasonable.

Use of the e-invoice can be boosted in many ways. For example, some companies and government agencies and institutions have announced that they will no longer accept paper invoices. As for private customers, pricing has traditionally been the most efficient way to steer behaviour. When banks wanted to get rid of cheques, they started to charge a fee on cheque payments and offered customers a free-of-charge debit card as a replacement. Cheques quickly disappeared from retail trade. If a company sets the price of a paper invoice higher than that of an electronic invoice, it will raise consumers' interest in receiving e-invoices. The increased efficiency of operations and lower costs should also be reflected in lower prices for consumers.

4.2 Uniform legislation on provision of payment services in the EU

Timo Iivarinen and Erja Pullinen

The new Payment Services Act – faster payments in the EU and customers get more detailed information on payments and less liability for unauthorized use of payment instruments.

In Finland, the Payment Services Directive of the EU was transposed into national legislation with the Payment Services Act and the Payment Institutions Act[17][18] which took effect on 1 May 2010. Even though the implementation of the directive was delayed, it did not cause any particular problems in payment transfers.

The Payment Services Act, which replaces the Act on Credit Transfers, covers eg credit transfers, payments into accounts, withdrawals from accounts, direct debits, and card payments. The Act applies to mobile payments if the telecommunications operator providing the service acts solely as an intermediary. The Act does not cover cash payments.

The Payment Services Act significantly enlarges service providers' disclosure obligations before and after execution of a payment transaction. The information that must be disclosed includes execution time, charges levied, exchange rate applied, service provider, and relevant supervisory authorities. Telecommunications operators providing payment services must, as of 1 September 2010, disclose in an invoice the information required in mobile payments. It is still uncertain how the new requirements will affect provision of current mobile payment products and the introduction of new products.

The entry into force of the Act speeds up cross-border payments in the EU and EEA. From now on, the amount of a payment transaction must be credited to the payee within three business days, and as of 1 January 2012, by the end of the next business day.

The payee must be credited with the full amount of the payment transaction. The payer and payee each pay the service charges of his own service provider. The new Act also changes the value dating of payments: the credit value date for the payee's payment account must be the same date on which the amount of the payment transaction is credited to the payee's payment service provider's account. This change will have some effect on eg salary and pension payment schedules in Finland. In normal circumstances, the change is not expected to significantly affect an individual payee, but during disruptions payments may be delayed compared to what payees are accustomed to.

Under the Payment Services Act, the payer does not bear any losses relating to unauthorised use of payment instruments, exceeding EUR 150. The Act however requires that the holder of the payment instrument take all reasonable steps to keep secure the payment instrument and its identifiers. If these steps have not been taken, the customer's liability may not be limited. Typical identifiers include payment card PIN code and online banking password. The holder of a payment instrument must keep the identifiers as safe as cash. Ordinary payment instruments are meant to be used for daily payments and therefore holders must be able to carry them. Under the Act, the service provider

[17] Act 290-296/2010 – Government bill:169/2009: Act on payment services and the act on amending certain related acts

[18] Act 297-304/2010 – Government bill:172/2009: Payment Institutions Act and related acts

is required to provide a 24-hour deactivation service in case of loss of payment instrument.

The Act also allows for the pricing of the use of a payment instrument. A retailer can charge the customer or give a discount for the use of a certain payment instrument. Thus the price eg of a credit card payment may differ from that of a cash payment. According to the Act, pricing must be based on actual costs of payment. The new Act however does not mention the fact that product prices currently already include the costs of various payment instruments. It is still unclear whether retailers are willing to charge differently for the use of different payment instruments.

The practice of supplying account statements will change so that the payee must receive a written statement of executed payment transactions. The payee must receive at least monthly a paper-based statement, or the information must be available to the payee eg in an online bank for at least 12 months.

In case of unauthorised or incorrectly executed payment transactions, the payment service provider is obligated to reimburse the payer. The payer must notify the payment service provider of the unauthorised or incorrectly executed payment transactions no later than 13 months after the debit date, and the payer must be refunded immediately after the notification. The payer is however not entitled to a refund if he has given an incorrect unique identifier, eg entered the account number incorrectly. The payment service provider is not required to check that the account number matches the payee's name. However the payer's payment service provider must make reasonable efforts to recover the funds involved in the payment transaction even though the payment service provider is not liable for the defective execution.

The customer is entitled to request a refund of a direct debit and card payment from his payment service provider within eight weeks of the date the funds were debited. The payer is entitled to a refund if the amount of the payment transaction is not clearly defined in the consent given by the payer or the amount debited is larger than the payer could reasonably have expected.

Monitoring compliance with the Payment Services Act is the responsibility of the Financial Supervisory Authority (FIN-FSA) and the Consumer Ombudsman. FIN-FSA monitors such compliance in respect of the entities it supervises (eg banks and payment institutions). The Consumer Ombudsman is responsible for legality control when the users of the payment services are consumers. These authorities cooperate with the Finnish Communications Regulatory Authority. The Act requires that the supervisory authorities engage in appropriate cooperation.

5 Key regulatory and supervisory initiatives

5.1 Bank levy progresses, but slowly

Jyrki Haajanen

The financial crisis has increased demands that the banking sector contribute more to the costs of crises. The EU Commission has proposed the establishment of national resolution funds that would be funded by a levy on banks and used for the resolution of future financial crises. Initiatives for a global bank tax are however progressing slowly, as G20 finance ministers were unable to agree on a common approach to a bank levy.

The high costs of the financial crisis have increased demands that the banking sector contribute more to the costs of future financial crises. As a solution, a levy on banks has been proposed, to compensate for the fact that governments and taxpayers usually have to bear the costs of banking crises.

The idea of a stability fee is not new, and many types of taxes or tax-like levies on the financial sector have already been proposed. Several of the proposed levies have been transaction taxes, like the Tobin tax[19] levied on trades executed. The proposals have however not gained wide support, and therefore transaction taxes have not been widely adopted.

The focus of recent debate has thus shifted from transaction taxes to levies based on banks' balance sheet items. The global community has pushed hard for a greater participation by the financial sector in covering the costs of financial crises. A tax-like stability fee levied on banks is one option. In terms of a level playing field, it is important that parties reach a global agreement on the tax so that the same requirements would apply to all financial institutions. The results of the meeting of G20 finance ministers in Korea (5 June 2010) were meagre; the countries only reached a general agreement, and failed to define a clear common approach to a bank levy.

The United States has proposed a tax-like fee on banks.[20] The aim is to have banks reimburse the costs of the current financial market crisis. Europe has also achieved considerable progress in creating a stability fee framework; but contrary to the US, the aim is to raise money for future crises. In its communication of 26 May 2010, the European Commission proposes the establishment of independent national resolution funds that would charge a stability fee ex ante, to pay for future resolution measures. A resolution fund could be used to fund crisis management measures (outlined by the Commission already earlier), eg financing a bridge bank or a total or partial transfer of assets and/or liabilities to eg a bad bank. The funds would not be used to rescue banks, but only to facilitate an orderly wind-up, without destabilising the financial system.

[19] Currency transaction tax.

[20] The Financial Crises Responsibility Fee would, in 10 years, raise USD 90 bn from the banking and insurance sectors.

The Commission believes that the most advantageous way to use bank levies is to establish an EU network of pre-funded funds with restricted competencies. The setting up of resolution funds would improve the banking sector's resilience to crises and would minimise future reliance on taxpayer money in problem situations. The Commission acknowledges that setting up a system of bank levies may increase moral hazard in the financial sector. This is a valid concern, particularly if banks assume that the resolution funds will protect them from bankruptcy. Authorities address the problem by making it clear and unambiguous that resolution funds do not provide failure insurance. Shareholders and unsecured creditors must be the first to face the consequences of a bank failure.

Many EU countries have introduced or are planning to introduce levies on banks. Before levies are introduced on a wider scale, countries should agree on harmonised rules, to avoid competition distortions between national banking markets and to ensure that cooperation in cross-border crises is not hampered. The issues to be jointly agreed include the amounts and uses of the levies collected. Contributions from banks could be allocated either to a fund or the general budget.

The aim is to design the contributions from banks so that they incentivise the appropriate behaviour and reduce the risk of bank failure. The levies should be fair and should apply mainly to systemically important institutions. The Commission has not yet presented detailed plans on the operations and size of bank resolution funds. The Commission recognises that, in the first stage, it is more important to carefully assess the cumulative impacts of the levies and to ensure that the levies and other regulatory reforms being prepared do not cause unwanted combined effects. The fees must be calibrated in such a way as to avoid stifling the economic recovery and increasing the cost of credit to the real economy.

In October 2010, the Commission will present its broader and detailed plans for the development of a new crisis management framework and a more detailed assessment of the roadmap for legislative proposals.

5.2 Securities markets regulatory initiatives in Europe and Finland

Marko Myller and Pertti Pylkkönen

As a result of the financial crisis, many regulatory initiatives have been launched in the European securities markets. Some of the initiatives implement new regulations and others revise existing regulations.

Several regulatory initiatives are underway in the European securities markets. In addition, in Finland for example the Securities Markets Act is undergoing a total revision.

The Directive on Alternative Investment Fund Managers is currently being discussed by the European Parliament. The Directive applies to all funds that do not fall within the scope of the UCITS Directive. These funds include hedge funds, private equity funds, real estate funds, commodity funds and infrastructure funds and other types of institutional funds.

The Market Abuse Directive is under review. The Commission's proposal for revision of the Directive should be published by the end of 2010. As part of the review, the scope of the Directive will be specified. Matters to be reviewed include authorities' access to information, and the disclosure and definition of inside information. Derivatives trading and multilateral trading facilities are also to be examined.

During the summer, the European Commission will publish a legislative proposal to improve the operation of derivatives markets. The new regulations would cover market infrastructure and would enhance the standardisation of derivatives contracts, and central counterparty clearing. The Commission's proposal will probably also cover authorities' access to information on derivative contracts through trade repositories.

The draft Directive on legal certainty of securities holding and transactions (Securities Law Directive, SLD) covers the rights and obligations concerning securities and the holding of securities, in both multi-tiered and direct holding systems. Work on the preparation of the draft Directive continues.

During the financial crisis, the Committee of European Securities Regulators (CESR) issued guidelines to supervisory authorities on restricting short selling. The guidance was followed with different interpretations. The European Commission has begun preparing a legislative proposal on restrictions on short selling, with the aim of establishing a harmonized EU regime on short selling. The aim is to prevent harmful market practices involving securities, derivatives and other financial instruments, to reduce systemic risk in the financial markets and the risk of securities settlement failure, and to prevent speculation on credit derivatives.

The Commission is also launching a review of the Directive on Markets in Financial Instruments (MiFID), which entered into force a couple of years ago.

In Finland, the key regulatory initiative is the total reform of the Securities Markets Act. The aim is to review and update financial market legislation so that it meets with the market developments, promotes the competitiveness of the Finnish securities markets, enables efficient cross-border operations and ensures the efficiency of supervision. One of the key concerns is to enable multi-tiered holding for Finnish share investors, in addition to direct holding. Changes concerning securities settlement took effect in February 2010.

The Government bill on the new Act on Mortgage Banking is being discussed by Parliament. The new Act would include provisions on eg the issuing of covered bonds. Under the proposal, covered bonds could be issued also by deposit banks and credit societies, in addition to mortgage banks.

Investment fund legislation will be reformed so that in future, fund shares held by non-resident entities can be entered in the fund share register. The manager of the fund shares is entered into the register, instead of the owner. The manager of the fund shares holds them on behalf of the owner, by assignment.

The Mutual Funds Act will be amended as a result of the implementation of the UCITS IV Directive. The Directive includes eg new provisions on the right of a management company to manage a UCITS collective investment fund in a Member State other than the home Member State, and on cross-border mergers between UCITS funds. The Directive also specifies the disclosure of key information to investors. The purpose of the changes to the UCITS Directive is to upgrade operation of the UCITS market. The changes must be transposed into national legislation by 30 June 2011.

6 Key corporate arrangements and events in the financial sector

Date	*Event and description*
November 2009	*Ministry of Justice working group proposes reform of regulations on the provision of consumer credit. The objective is to implement the new EU directive on consumer credit and to amend national legislation in line with the development of markets.*
	Standard & Poor's affirms the sovereign credit ratings for the Republic of Finland. Short-term A-1+ and long-term AAA. Rating outlook remains stable.
	Moody's confirms Metso Corporation's long-term rating Baa2. Rating outlook remains negative.
	Metso Corporation and Tamfelt Corporation sign a combination agreement.
	Moody's lowers Iceland's foreign and local currency bond ratings from Baa1 to Baa3. Rating outlook stable.
	Estonian bank BIGBANK opens a branch in Helsinki.
	Finnish State Treasury accepts Eurex Bonds as trading platform for Finnish government bonds.
	Cooperative banks Koillis-Savon Osuuspankki and Nilsiän Osuuspankki announce plans to merge in autumn 2010.
December 2009	*EU finance ministers reach an agreement at the Ecofin Council meeting to create new financial supervisory authorities (for securities markets, banking and insurance) by the end of 2010. The three authorities will cooperate with the European Systemic Risk Board to be established under the auspices of the European Central Bank.*
	Société Générale takes full control of Credit Du Nord by paying EUR 676 million for Dexia's 20% stake in Credit Du Nord.
	Austrian government nationalises Hypo Group Alpe Adria.
	eQ Bank, a subsidiary of Nordnet Bank, announces it will sell its asset and fund management business to the current managers of the business and Fennogens Investments S.A.

Date	*Event and description*
December2009	*Fitch downgrades Greece's short-term foreign currency and local currency Issuer Default Ratings (IDR) from F1 to F2 and the long-term rating from A- to 'BBB+. Rating outlooks negative.* *Standard & Poor's downgrades Greece's long-term credit rating from A- to BBB+. Rating outlooks negative. Short-term credit rating is A-3, rating outlook negative.* *Moody's downgrades Greece's government bond ratings from A1 to A2. Rating outlook remains negative.* *Standard & Poor's revises the outlook for the Kingdom of Spain from stable to negative, and affirms Spain's sovereign credit rating: short-term A1+ and long-term AA+.* *Standard & Poor's downgrades Danske Bank's long-term rating from A+* to *A. Sampo Bank's long-term rating was also lowered. Rating outlooks negative.* *Fitch lowers Nokia's credit rating: short-term from F1 to F2 and long-term from A* to *A-. Rating outlooks stable.* *Citibank sells its consumer credit business in Finland to S-Bank. The ca EUR 200 million lending stock will be transferred to S-Bank in February.* *Finnish Parliament adopts act on government capital investments in deposit banks. Capital loans may be subscribed until 30 April 2010. Parliament also decides to extend to the end of 2010 the temporary guarantee for deposit banks and mortgage banks issued in December 2008; provided the Council of State, by 30 June 2010, establishes a need to grant new guarantees.*
January 2010	*Moody's confirms Aktia Bank's ratings: short P-1 and long A1.* *Standard &Poor's affirms M-Real's credit ratings C and CCC+. Rating outlook stable.* *SAV-Rahoitus Oyj announces it will apply for authorisation as a credit institution.*
February 2010	*Standard &Poor's downgrades UPM-Kymmene's long-term rating from BB+ to BB.* *Fitch affirms UPM-Kymmene's ratings B and BB-. Rating outlook stable.* *Algoengineering Europe Limited commences trading in CCP cleared securities at NASDAQ OMX Helsinki. Algoengineering Europe Limited trades from London.*
March 2010	*Eufex announces that it will apply for a banking licence.*

Date	*Event and description*
March 2010	*Tikkurila Oyj's share is listed on the NASDAQ OMX Helsinki stock exchange and the shares of Julius Tallberg Real Estate Corporation are delisted from NASDAQ OMX Helsinki.* *Parex Banka ends its membership in NASDAQ OMX Helsinki.* *Financial Supervisory Authority (FIN-FSA) revokes Sofia Bank's authorisation. The bank's own funds fell below the minimum level for a credit institution.* *Standard & Poor's affirms the United Kingdom's long-term sovereign credit rating AAA, but the outlook is negative.* *Fitch downgrades Portugal's long-term foreign and local currency issuer default ratings from AA to AA-. Rating outlook negative. Short-term foreign currency rating is affirmed at F1+* *S&P affirms Portugal's ratings A-1 and A+, outlook negative.* *Moody's revises Iceland's ratings outlook from negative to stable.*
April 2010	*Marketing of long-term pension savings accounts commences.* *Fitch downgrades Greece's Short-term foreign currency Issuer Default Rating from F1 to F2, and the Long-term foreign and local currency IDR from BBB+ to BBB-.* *Moody's lowers Greece's ratings from P-1 to P-2 and from A2 to A3. Outlook negative.* *S&P lowers Portugal's short-term local and foreign currency sovereign issuer credit ratings from A-1 to A-2 and the long-term rating from A+ to A-. Outlook negative.* *S&P lowers Greece's sovereign ratings from A-2 to B and from BBB+ to BB+.* *S&P lowers the long-term rating on the Kingdom of Spain from AA+ to AA.* *Moody's changes Stora Enso Oyj's ratings outlook from negative to stable. The company's ratings are NP / Ba2.* *LCM Sweden AB commences trading in CCP cleared securities at NASDAQ OMX Helsinki. LCM Sweden trades from Stockholm.* *Straumur-Burdaras Investment Bank hf ends its membership in NASDAQ OMX Helsinki.*

Date	***Event and description***
April 2010	*NASDAQ OMX Helsinki exchange starts calculating the new OMX Helsinki 15 Index. The OMX Helsinki 15 Index has a base value of 500 at the base date 18 December 2009. The index consists of the 15 most traded shares on the NASDAQ OMX Helsinki exchange.*
May 2010	*Fitch downgrades Spain's Long-term foreign and local currency Issuer Default Ratings from AAA to AA+'. Rating outlooks stable.* *Burgundy applies for authorization to operate a regulated market as an exchange for listing and trading warrants, certificates, exchange traded funds (ETFs) and structured products.* *Germany bans naked short selling of shares of 10 financial institutions and credit default swaps on Eurozone government debt.* *Spain's central bank takes over savings bank CajaSur.* *Finlandia Fund Management Company Ltd is granted authorisation.*
June 2010	*S&P raises Estonia's short-term foreign and local currency sovereign credit ratings from A-2 to A- and the long-term rating from A-to A. Rating outlooks stable.* *The period of validity of the temporary act on investment activities and solvency provisions of private sector pension insurers was extended until the end of 2012. The provisions were amended at the end of 2008, and initially they were to remain in force until the end of 2010. The extended period of validity of the temporary act took effect on 1 June 2010.* *Sampo Life Insurance Baltic changes name to Mandatum Life Insurance Baltic.* *Spanish savings banks Caja Madrid and Bancaja plan a merger. They are also planning to link up with five smaller savings banks. The liquidity and capital adequacy of the alliance would be assessed as an entity.* *Moody's downgrades Greece's government bond ratings: short-term from P-1 to NP and long-term from A3 to Ba1. Outlook stable.* *Larox Corporation delisted from NASDAQ OMX Helsinki.* *Fitch upgrades UPM-Kymmene Oyj's long-term IDR from BB- to BB. Outlook stable.* *Fitch revises Stora Enso's rating outlook from negative to stable. Long-term IDR affirmed at BB.*

Date	***Event and description***
June 2010	*S&P revises its outlook for Nokia from stable to negative. Ratings: A-1 and A.*