Financial Market Report

1 • 2012

- Substantial amounts of European banks’ and governments’ long-term debt to mature
- Euro area banks tighten credit standards on both corporate and household loans—demand for credit declines
- A working group in Finland to consider the mitigation of systemic risks
- SEPA credit transfer has replaced the domestic credit transfer in Finland

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1 Financial intermediation

1.1 Venture capital's macroeconomic importance

Anni Salo

As creators, introducers and distributors of innovations and new technologies, the importance of start-up companies for economic growth is indisputable. Venture capitalists that finance these companies specialise in finding and developing the most innovative and promising business ideas.

Venture capital accounts for only a minor portion of the financial markets. Even in the United States, the home of venture capital, the GDP ratio of venture capital investments is only ca 0.2%. The relative economic impact of venture capital finance is however larger. Venture capital investments boost the growth of innovations and employment, generate higher incomes and accelerate economic growth more than other investments. European governments and the European Union have considered the development of venture capital markets as a way of catching up on the technological and economic advances in the US.

Venture capitalists

Venture capitalists seek to turn commercially interesting business ideas into high-growth companies by providing start-up companies economic and human capital. Successful venture capitalists provide the investee companies commercial experience and in-depth expertise of the sector in question. The investee companies are early-stage companies, with a negative cash flow, uncertain future, and expected breakthrough years away. The higher risks involved in venture capital investments are mitigated by carefully choosing the investee companies and by risk diversification, ie by establishing venture capital funds based on the investee companies. The majority of the funds' assets are accounted for by institutional investors.

A successful exit is a prerequisite for a successful venture capital investment. An IPO is the most profitable and thus most sought-after way of exiting, but only few investee companies achieve a level of success that leads to an IPO. Selling an investee company to another investor or large company is the most common way of exiting, and bankruptcies are not unusual either. Venture capital funds are dependent on the profits of a few successful investments. Venture capitalists' ability to choose the most promising business ideas, and an investment strategy based on active participation and careful diversification make venture capital a particularly suitable for funding start-up companies.

Venture capital markets

An active stock market is crucial for the development of the venture capital market, and the possibility of exiting the best investments through an IPO is considered essential. A dynamic corporate environment and positive attitude towards entrepreneurship, as well as appropriate incentives for innovation are also prerequisites for the functioning of the venture capital market.
In the United States, the importance of venture capital has been recognised and the venture capital market developed. Due to differences the institutional environment in the financial markets and the corporate sector, it has proven difficult to repeat the same development in other countries. The financial markets in the US and the UK are stock market orientated, whereas in Continental Europe and the Nordic countries, the financial markets are based on the banking sector. The GDP ratio of venture capital investments differs considerably in the United States and Europe (Chart 1). As a result of economic uncertainty, European investors' risk appetite started to decrease already in 2007, and the volume of venture capital investments in Europe has remained low.

Chart 1. GDP ratio of venture capital investments in the United States and Europe

The Nordic countries form the biggest venture capital markets in Europe measured by the GDP of venture capital investments. In the Nordic countries, venture capital activities appear to have recovered more rapidly from the 2009 recession than in the other parts of Europe, and in the Nordic countries, the venture capital investments-to-GDP ratio was in 2009 and 2010 clearly higher than in the other European countries (Chart 2).

Chart 2. GDP ratio of venture capital investments in the Nordic countries and Europe

The most advanced venture capital market is that of Sweden where the GDP ratio of venture capital investments is considerably higher than in Finland (Chart 3). This may be explained by stock market activity: in Sweden, the number of listings is already close to pre-financial crisis levels, whereas in Finland, the latest IPO took place in 2007.

Chart 3. GDP ratio of venture capital investments in Sweden and Finland

Impact of venture capital

Venture capital generates positive externalities for the society. In terms of long-term economic growth and competitiveness, the correlation between venture capital and innovativeness is particularly interesting. Both in the United States and in Europe, there is evidence of a positive correlation between venture capital investments and granted patents and R&D investments.
Evidence suggests that venture capital boosts the dynamism of the economy by introducing to the markets new business ideas and by promoting entrepreneurship: the portion of new companies in R&D-intensive sectors is higher in countries with a high GDP ratio of venture capital. There is also evidence that an increase in venture capital investments promotes employment via the growing size of companies. The downward impact on unemployment is however small, as venture capital investments focus on young companies in emerging sectors, and the jobs that are created are most probably for university-level graduates that are entering the job market.

The suitability of venture capital for financing young growth companies, in itself, makes venture capital important for economic growth. In addition, empirical evidence shows that venture capital has a larger positive impact on the amount of innovations and start-up companies and employment developments than traditional funding. However, due to the small relative size of the venture capital market, venture capital is not a miracle cure for countries suffering from a slowdown in economic growth.

The role of government

Increasing the volume of venture capital has been considered a way for government to promote innovativeness and entrepreneurship. Factors that affect the functioning of venture capital markets and that are under government control include taxation of capital income and interest income, and legislation on investment, particularly on institutional investors. Differences between the US and European venture capital markets and cross-country differences in Europe are largely due to regulatory changes in pension fund investment activities. In the United States, pension funds were allowed already in 1979 to channel funds also to higher-risk investments on account of diversification. As a result of the regulatory changes, pension funds became the largest investors in venture capital funds, which led to a rapid expansion of the venture capital market. In Europe regulations on institutional investors differed across countries. Only in 2003 and 2003 the EU adopted directives¹ that obliged member states to abolish restrictions on the investment activities of institutional investors and to allow investments in eg venture capital funds. Some member states however abolished the restrictions as late as in 2006.

Due to the positive impact on the economy, the development of venture capital markets is considered to be also in the interest of governments. On the other hand, poorly designed public measures can hamper the development of the venture capital markets. A natural role for government is to create an operating environment and prerequisites for the smooth operation of venture capital markets. Particularly government measures are appropriate for increasing the incentives for venture capitalists to actively develop the investee companies.

Outlook for venture capital

The impact of the AIFM Directive on venture capital is still unclear – the directive has to be transposed into national law by 2013. The directive will focus particularly on hedge fund managers, but also venture capitalists fall within the scope of the definition of alternative investment fund managers. The private equity investment sector has considered the directive problematic as there are significant differences between hedge funds and private equity funds.

¹ Directives 2002/13/EC and 2002/83/EC relate to investment activities of insurance corporations and directive 2003/41/EC to investment activities of pension funds.
The venture capital sector is sensitive to economic fluctuations, and the slowdown due to the economic uncertainty in recent years must not be seen as an indication of drying up of venture capital activities. In the most active areas, venture capital has already started to recover from the 2008 financial crisis and the ensuing recession, and it has continued to grow in China and India, the new, continuously growing giants of the global economy.
2 Banks and insurance corporations

2.1 How has the debt crisis affected euro area banks’ lending to SMEs?

Katja Taipalus and Mervi Toivanen

The debt crisis has raised concerns about a contraction of bank lending. Lending to SMEs has indeed decreased, but there are cross-country differences. Surveys on the demand for and supply of credit provide a similar picture.

The losses incurred by banks due to the economic downturn and the euro area debt crisis, and the tighter capital requirements for banks have raised concerns about a possible strong contraction in the supply of credit by banks, ie a credit crunch. Bank lending and its smooth transmission are key factors promoting economic growth particularly in Europe, where banks are a significant source of financing. According to estimates, bank credit accounts for ca 55% of the debt of the largest European companies and for as much as 74% of the debt of SMEs, whereas the figures in the US are 34% and 42%, respectively.

Tighter credit standards

SMEs are more dependent on bank loans than other companies, and thus the credit tightening is reflected most critically in the situation of these companies. According to the ECB’s Bank Lending Survey, banks’ lending standards tightened significantly in the second half of 2011, also on loans to non-financial corporations (Chart 4).

Chart 4. Changes in credit standards in the euro area

Banks in the euro area are tightening their credit standards more than UK and US banks. This tightening is reflected as higher margins on loans, shorter maturities and smaller loan sizes. The tightening of lending was due to not only banks’ own funding difficulties but also to the weakening economic outlook. Banks own funding difficulties are concentrated on countries that are suffering from the sovereign debt crisis.

In addition to the supply of credit, the credit market is affected by the demand for corporate loans. The weaker economic outlook is reflected as a lower demand for corporate loans in Europe; the financing needs of firms for their investments are declining. In a

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2 If banks fail to raise equity capital, their only way to bolster capital adequacy is to decrease the amount of risk-weighted assets (incl. loans to non-MFI). In the worst case, the significant tightening of financing has a negative impact on economic growth, which in turn is reflected as higher credit risks in the banking sector.

3 In the Euro Area Bank Lending Survey (BLS), banks are asked about their views on factors contributing to lending. See http://www.ecb.int/stats/money/surveys/lend/html/index.en.html.
survey on euro area SMEs\(^4\), the respondents stated access to finance as being among their two most pressing problems. Compared with the 2009 recession, access to finance was nevertheless perceived as a smaller problem. In general, SMEs continued to decrease their leverage. The portion of small firms that had applied for loans was the smallest in the history of the survey.

**Significant cross-country differences in lending**

The total effect of supply and demand is reflected particularly in new bank loans to SMEs. As SMEs can be assumed to take relatively small loans, the assessment of their situation is based on new bank loans of less than EUR 1 million. Growth of new loans to euro area SMEs has declined since end-2008, despite the easing of the downward trend in 2011 (Chart 5).

Cross-country differences are however significant. The amount of new bank loans of less than EUR 1 million has decreased in Spain, France and Germany, as well as in Ireland and Portugal, ie the countries that have suffered from the crisis. The amount of new bank loans has increased in Finland, Italy and the Netherlands, despite the deceleration of the growth rate of new bank loans in the Netherlands and Finland.\(^5\)

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\(^4\) Survey on the access to finance of SMEs in the euro area. See http://www.ecb.int/stats/money/surveys/sme/html/index.en.html.

\(^5\) For more details on banks’ corporate lending in Finland, see Financial Statistics – Annual Review 2011 by the Bank of Finland, and Banks’ economic outlook indicator IV/2011 by the Federation of Finnish Financial Services.
expectations for the future are not that positive, instead they expect a further deterioration of access to finance. The uncertainty in the real economy is also reflected in the fact that in Portugal, Greece and Spain, small companies’ expectations for future profits are considerably weaker than in the crisis year 2009. On the other hand, the ECB’s refinancing operations have eased financial market tensions and safeguarded banks’ liquidity.
2.2 Interest rates on housing loans in Finland lowest in the euro area and housing loan growth above average

Hanna Putkuri

Lending for house purchase has remained more buoyant in Finland than in the euro area on average. In Finland, the average interest rate on new housing loans has been the lowest in the euro area and consumer confidence in the economy has also remained above the euro area average. Nevertheless, housing prices in Finland fell slightly in the fourth quarter of 2011.

The stock of housing loans to Finnish households has expanded steadily since the recession of 2009, approximately 6–7% a year. Growth in lending for house purchase has been higher in Finland than in the euro area where the total stock of housing loans contracted during the recession and the annual growth rate of the stock has decreased again starting from autumn 2011 (Chart 6).

At the end of 2011, housing loan stocks contracted from a year earlier in countries experiencing economic problems, ie Greece, Spain, Estonia, Ireland and Portugal. Growth in housing loans was most robust in small countries, ie Slovakia, Luxembourg and Malta.\(^6\)

According to the January 2012 Bank Lending Survey, the subdued growth in housing loans in the euro area has been attributable to both demand- and supply-related factors.\(^7\) Demand for housing loans has declined particularly on account of weaker housing market prospects and consumer confidence (Chart 7).

At the same time, banks have tightened credit standards on loans and widened loan margins due to higher cost of funding and balance sheet constraints as well as deterioration in the general economic and housing market outlook. According to the survey, overall credit standards on housing loans are expected to remain unchanged or tighten further in the first

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\(^6\) See also the section on housing loans in the Bank of Finland publication Financial statistics – Annual review 2011.

\(^7\) ECB (January 2012) Euro Area Bank Lending Survey.
Bank managers in Finland, too, assess that the demand for house purchase-related credit will decline in the first quarter of 2012. However, the willingness to take out credit for renovation and refurbishment purposes is expected to remain unchanged. Amortisation-free periods and other loan flexibility measures are expected to become more popular, so that slower-than-planned loan repayment may also have an impact on loan stock developments. On the other hand, the low level of interest rates may also enable faster-than-planned loan repayment.

Following the brief dip in 2008, housing prices have risen faster in Finland than in the euro area on average (Chart 8). However, due to subdued economic growth and increased uncertainty, the rise in housing prices came to a halt in autumn 2011. In the fourth quarter of 2011 housing prices in Finland were on average 1.4% lower than in the previous quarter.

The average interest rate on new housing loans is clearly below the euro area average in Finland (Chart 9). During the period of low Euribor rates in 2009–2011, interest rates on housing loans in Finland were the lowest in the euro area.

Country-specific differences in interest rates on new housing loans are attributable to both structural and cyclical factors. A key structural factor is the relative share of loans with a floating rate and a rate fixation period of up to one year in all new housing loans. Typically, the greater the share of loans tied to short-term interest rates, the lower the average interest rate on new housing loans (Chart 10). This has however not held totally true during the debt crisis, as interest rates on new housing loans have increased particularly in countries with economic and debt problems.
3  Securities markets

3.1  Euro area banks and governments faced with substantial refinancing needs

Pertti Pylkkönen and Eero Savolainen

European banks and governments have a substantial amount of long-term debt funding maturing in 2012. The ECB’s liquidity injection provided a financing opportunity for banks in January.

European banks’ refinancing is subject to exceptionally high risks due to the debt crisis. Increased funding costs reduce bank profitability, which puts pressure on banks’ capital adequacy. In addition, the drying up of funding in the wholesale markets may force banks to reduce their balance sheets, which weakens their ability to provide lending to customers.

Banks are faced with substantial refinancing needs in the coming years. Estimates of the amount of bank funding due to mature differ slightly, but the general picture is the same. The ECB estimates that euro area banks have slightly over EUR 550 billion worth of long-term debt securities maturing in 2012 (Chart 11). Refinancing needs will be highest in the early part of the year, particularly in the first quarter, with over EUR 200 billion in debt securities falling due. In addition to covered bonds and senior loans, a considerable amount of government-guaranteed bonds are also maturing at the same time.

Chart 11. Euro area banks’ maturing long-term debt funding

The Bank of England estimates that euro area banks need to refinance over EUR 600 billion of term debt in 2012, with the majority maturing in the first half of the year. The estimated refinancing needs are 35% higher than in the previous year. Approximately 75% of funding due for payment is unsecured.

Looking at country level, the Italian banking sector has by far the greatest refinancing needs in the euro area (Chart 12). Italy is followed by French, Spanish and German banks.

Covered loans are usually bonds backed by mortgages, which take priority over other loans in the event of the issuer’s insolvency. Senior loans are unsecured bonds that take priority over shares and debentures.
Market sentiment improved with the ECB’s long-term refinancing operation

Euro area bank’s unsecured long-term funding dried up in summer 2011. Covered bond markets have been functional, but covered bond spreads have widened particularly for banks operating in euro area debt problem countries.

The ECB increased liquidity in the banking sector by EUR 210 billion on net through a three-year longer-term refinancing operation (LTRO) conducted in December 2011. The operation is considered to have improved market sentiment and eased uncertainties about the abilities of peripheral European banks in particular to refinance their maturing market-based funding. The majority of Reuters market survey respondents consider that the ECB’s three-year LTRO has eased banks’ access to unsecured market funding. Average maturities of available funding have lengthened.

Banks globally issued a substantial amount of covered bonds at the beginning of 2012. Totalling USD 43 billion, issuance in the first three weeks of the year was the highest since 2000. In addition, for the first time, European banks raised more funding in the covered bond markets than in the senior unsecured bond markets where issuance had practically dried up in the latter half of 2011. Senior unsecured bonds have traditionally been the main source of market-based funding for banks, but recently they have become less important. Nevertheless, banks with good reputation also issued senior unsecured bonds in January, but the spreads on these bonds have remained high.

The positive market sentiment was also reflected in the secondary markets. The yield\(^10\) of 3.5% obtained by investors on bonds of European financial institutions in January 2012 was the highest since July 2009.

About EUR 1,400 billion of euro area government debt and interest due to mature in 2012

Banks’ access to long-term funding may also be hampered by competition with general government instruments. The 17 euro area countries have approximately EUR 1,200 billion worth of short- and long-term bonds (treasury bills and government bonds) maturing in 2012, with interest to be paid reaching over EUR 200 billion\(^11\) (Chart 13).

National parliaments approve budgets for the forthcoming year at the end of the preceding year, which means that the majority of government borrowing concentrates on the beginning of the year, either on the first or the second quarter (Chart 14).

\(^{10}\) Yield includes price fluctuations and the coupon rate.

\(^{11}\) Bloomberg.
Italy, attempting to raise over EUR 330 billion of refinancing this year, has the largest amount of debt due for payment. Maturing loans total over one fifth of the country’s GDP. Over 30% of Italy’s debt matures in the first quarter of 2012. The ECB’s liquidity injection in the banking system in December has calmed the financial markets, supporting government bond issuance in January also in the debt strained Italy. Italian banks have taken out considerable funding volumes from the Eurosystem, and this has also improved their ability to purchase government bonds. At the same time, domestic investors’ role as financiers of Italian government debt issuance has strengthened.

Chart 14. Euro area government debt and interest maturing in January-March 2012

France is another country with large refinancing needs, with about EUR 260 billion of loans maturing in 2012 and EUR 157 billion falling due in the first half of the year. From other large euro area countries, Germany has slightly under EUR 190 billion of debt maturing in 2012. Redemptions concentrate on the third quarter of the year when 32% of these loans are due for payment.

As regards the problem countries, Spain has EUR 145 billion worth of debt maturing this year. Maturing loans are relatively evenly distributed across the four quarters.

Greek debt maturing this year totals over EUR 48 billion, which is more than 10% of the country’s outstanding debt of approximately EUR 350 billion.

EUR 17.4 billion falls due in March, of which short-term debt accounts for about EUR 3 billion. More than EUR 16 billion is still due to mature in the second quarter of the year. Greek borrowing is more heavily concentrated on the first half of the year than borrowing by other countries. Of loans maturing in 2012, 75% falls due in January-June.

Of the smaller euro area countries, Finland for example has EUR 15 billion of short- and long-term debt maturing in 2012. According to the 2012 budget approved by the parliament at the end of 2011, Finland will borrow further EUR 7.4 billion on net this year. Finland’s gross debt issuance will amount to at least EUR 23 billion in 2012.

Average maturities of euro area government debt range between 5 and 6 years. Of the crisis countries, maturities of Irish and Greek debt have lengthened on account of the loan packages granted to these countries. For example, of Ireland’s total outstanding debt of EUR 115 billion, only slightly under EUR 6 billion matures this year, representing 5.2% of the country’s total debt.

As a result of rating downgrades of euro area states some euro area countries have been removed from global government bond indices, as the countries no longer meet the criteria for inclusion. This has made sales of bonds issued by countries removed from the indices more difficult. In their fixed-income investments, many institutional investors follow weighting structures of a fixed-income index, and therefore the demand for government bonds of countries removed from the index usually weakens.

For example the Citigroup’s Non-Japan WGBI index included 10 euro area countries (EMU-10) at

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13 World Government Bond Index.
the beginning of 2012. Portugal is expected to be cut from the index in the next review, as the country no longer meets the eligibility criteria. At the beginning of January the market value of the Non-Japan WGBI was USD 13,220 billion. The EMU-10 countries’ weight in the index is just under 41%, slightly smaller than that of the United States. Finland’s weight in the index was 0.6% at the beginning of January.

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\[14\] The Netherlands, Belgium, Spain, Italy, Austria, Ireland, Portugal, France, Germany and Finland.
4 Infrastructure

4.1 The most important phase in SEPA migration completed in Finland

Marianne Palva

The most important phase in migration to the Single Euro Payments Area (SEPA) has been completed in Finland. The SEPA credit transfer has replaced the domestic credit transfer. National and cross-border euro payments within the EU are now subject to uniform standards and conditions in Finland.

From the beginning of 2012, SEPA credit transfers must be credited to payees by the next banking day following the payment date, regardless of whether the transfer is a domestic or a cross-border transfer within the EU. Prior to this the cross-border processing time was up to three banking days.

Preparedness of banks operating in Finland for accepting customers’ SEPA payments in electronic form has diverged in terms of timetables. The changeover from the national credit transfer to the SEPA credit transfer is reflected in the sharp reduction of payment transfers processed by some banks in the Finnish interbank retail payment systems (PMJ) starting from the end of 2010. Some banks and their customers migrated to the SEPA credit transfer at the beginning of 2011, few not before the end of the year (Chart 15).

SEPA take-up differs considerably by country. The sharp increase in SEPA credit transfers in Finland, which started at the end of 2010, continued in the early part of 2011 and accelerated in October, as the transition period drew on. No noteworthy changes in developments have been observed in other euro area countries. Rather, SEPA credit transfers have increased steadily throughout the review period. Towards the end of 2011 SEPA credit transfers already accounted for over 20% of all credit transfers in the euro area (Chart 16).

Chart 15. Volume of PMJ credit transfers by bank (estimate, excl. direct debits)

Chart 16. Share of SEPA credit transfers to all credit transfers

The political pressure to finalise SEPA has increased in the recent years. Nevertheless, migration at the EU level has been very slow. As it became evident that
Households can choose between e-invoice and direct payment. Transition to the new service does not require any measures from consumers.

Online banking customers are offered a service based on e-invoice and the related automated payment. Instead of automated payment, the customer can also receive an email or a text message from the bank informing that the e-invoice has been delivered to the bank. The customer then separately accepts payment of the invoice by email or on the online bank. Customers can, if they so wish, already start using this service, irrespective of whether they are currently using the direct debiting service or not. Customers can also add optional services to the e-invoice, for example invoicer-specific upper limits on automated payments. They can also change e.g. the due date or payment sum on the online bank before accepting the payment.

The other service replacing the direct debit is the direct payment service offered to customers who do not use online banking services. The invoicing company sends the invoice to the customer in advance, and at the due date the payment is automatically debited from the payer’s account, unless the customer has filed a complaint at the bank. The use of the direct payment service by a customer requires that the invoicer uses the service.

Migration to SEPA credit transfers not only signifies uniform standards but also uniform settlement dates within the EU. This has increased the efficiency of payment transmission. Once migration to SEPA has been concluded in the entire area, competition between service providers is expected to increase, which should enhance services.

Migration to the use of the third SEPA payment instrument – the cards – is also roughly completed in Finland. Almost 100% of cards are already chip-equipped EMV cards, and already 90% of points-of-

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sale terminals comply with the latest requirements. To assess various stakeholders’ views eg on card payments the European Commission published a so-called Green Paper in January 2012. The publication is discussed in more detail in section 4.2.
4.2 European Commission surveys the future of European retail payments

Kari Kemppainen

In January 2012, the European Commission published the Green Paper16, which outlines the current landscape of European card, Internet and mobile payments. On top of which it aims to identify key barriers en route to a single integrated European market. The Green Paper poses 32 questions, the answers to which will be used by the Commission when pondering how market integration can be accelerated.

Secure, efficient, competitive and innovative payment methods are crucial to consumers, retailers and companies in order that they may fully enjoy the benefits of an integrated European market. The development of new payment methods and technologies create challenges and opportunities alike for the EU's retail payments integration development. These are the issues outlined in the Commission's January Green Paper on card, Internet and mobile payments.

The Commission's objective is to increase competition, choice and transparency for consumers, innovation, payment security and customer trust for all the electronic retail payment methods mentioned above. The Commission is looking into five key concerns: 1) Market access and entry for existing and new service providers 2) Payment security and data protection 3) Transparent and efficient pricing of payment services 4) Technical standardisation and 5) Inter-operability between service providers.

Card payments are the most common form of retail payment in Europe: Within the EU area there were approximately 726 million payment cards in use in 2009, representing 1.45 cards per capita. According to the Commission, integration of the European card market is far from complete and tangible results are still limited. Several of the questions posed in the Green Paper handle current card payment practices in Europe. They highlight such issues as the pricing of card payment services and questions related to standardisation.

Internet payments have increased in line with the growth of Internet shopping (e-commerce). The growth potential of e-commerce is foreseen as being substantial as its value represents only 3.4% of all European retail trade. The Commission proposes that e-commerce could be accelerated by such measures as reducing the cost of Internet payments and improving Internet payment security features.

Mobile payments are believed to be one of the fastest growing forms of payment methods, as smart mobile phones continue to be more commonly available. According to the Commission, it would be necessary to create a European framework that includes common technical standards and payment security requirements among other points. Through such a framework, the grounds would be laid for an integrated mobile payment market in Europe.

According to Internal Market and Services Commissioner Michel Barnier, the consultation process put in motion by the Green Paper will offer the basis for the Commission's measures aimed at ensuring efficient and secure retail payments within an

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integrated market. Market stakeholders are expected to submit their views to the questions posed in the Green Paper by 11 April 2012. The Commission is due to announce the next steps to be taken, before summer 2012.
5 Key regulatory and supervisory initiatives

5.1 A working group in Finland to consider systemic risk mitigation

Jukka Vauhkonen

The Ministry of Finance has set up a working group to consider how systemic risks threatening the stability of the financial system and the economy as a whole could be identified and prevented. The work is guided, for example, by the principles adopted in the Government programme and the recommendations issued by the European Systemic Risk Board on national macroprudential arrangements.

Among the major shortcomings of the regulation and supervision of financial institutions and markets have been an unclear allocation of authorities' responsibilities in the prevention of risks threatening the financial system as a whole – ie systemic risks17 – and inadequate tools to identify and mitigate these risks. In recent years, determined efforts have been made to remedy such shortcomings.

The European Systemic Risk Board (ESRB) commenced operations at the beginning of 2011. The ESRB is responsible for identifying and analysing risks to the stability of the EU-wide financial system and, if necessary, issuing recommendations or warnings for the Union as a whole, the supervisory authorities overseeing the EU financial system or individual member states or their supervisory authorities.

However, national authorities are responsible for implementing ESRB recommendations and taking measures to prevent systemic risks at national level. The Ministry of Finance has set up a working group to consider how Finnish authorities could better identify systemic risks and, if needed, mitigate them with appropriate regulatory tools or ‘macroprudential instruments’.18 19 The working group is also tasked with assessing the roles of different authorities in the conduct of this macroprudential supervision (or macroprudential policy) and submitting the necessary legislative proposals. The term of the working group expires on 31 December 2012. According to the recommendations issued by the ESRB, national

17 Systemic risks arise, for example, from excessive growth in borrowing and lending, excessive risk-taking by financial institutions or unsuccessful financial innovations. The materialisation of systemic risks is one of the key reasons underlying the present financial and economic crisis.

18 The Ministry of Finance press release ‘Finanssimarkkinoiden makrovakauden valvontaa vahvistetaan’ (Strengthening the macroprudential supervision of financial markets; in Finnish only) 30 January 2012. See http://www.vm.fi/vm/fi/03_tiedotteet_ja_puheet/01_tiedotteet/20120130Finans/name.jsp.

19 Examples of macroprudential instruments are countercyclical capital buffers required from banks, maximum loan-to-value (LTV) requirements limiting the size of housing loans or capital surcharges imposed on large, systemically important financial institutions.
macroprudential arrangements should be in place as from July 2013 at the latest.

The work of the national working group is based on the Government Programme principles under which ‘Macroprudential policy can be built on existing institutions. It is necessary to ensure that the Financial Supervision Authority has the requisite powers to deploy macro-prudential policy instruments among other things to prevent excessive corporate and household debt accumulation.’

European Systemic Risk Board issued recommendations on macroprudential policy

In performing its work, the national working group also needs to take account of the recent recommendations of the European Systemic Risk Board on the macroprudential mandate of national authorities.\(^{20}\) The recommendation addressed to the EU member states is by nature a ‘comply or explain’ recommendation: the addressees are in principle expected to comply with the recommendation. Failure to comply with the recommendation needs to be justified to the ESRB.

The recommendations issued by the ESRB concern five subject areas of macroprudential policy: (i) legislative objectives, (ii) institutional arrangements, (iii) tasks, powers and instruments, (iv) transparency and accountability and (v) independence.

Systemic risks typically increase in an economic upswing (eg excessive lending) and only materialise in a downturn (loan losses, GDP contraction). Mitigating systemic risks in an upswing may provoke strong criticism, as ‘the punch bowl is taken away just as the party gets going’. For this reason, both the ESRB and many other international organisations recommend that the objectives for macroprudential policy should be specified in law with adequate precision. This reinforces incentives for authorities to take even highly unpopular measures, if necessary.

As regards institutional arrangements, the ESRB recommends that each member state should designate either a single institution or a board, composed of authorities responsible for financial stability, to assume responsibility for macroprudential policy. Authorities safeguarding financial stability typically include in particular central banks, ministries of finance and financial supervisors. The ESRB recommends that central banks should play a leading role in macroprudential policy.

A further ESRB recommendation is that national macroprudential authorities should be entrusted with adequate instruments for carrying out their tasks. It must be possible to enlarge the toolkit if need be. Worldwide, there is still very little experience or scientific knowledge available of the use or effectiveness of potential macroprudential instruments. Many countries envisage to keep the toolkit compact, at least at the initial stage, in order to improve policy predictability, facilitate communication related to the application of the instruments and reduce such combined effects as may unexpectedly arise from the use of a broad range of tools.

The macroprudential authority should also be entrusted with the power to designate, together with national microprudential and securities market supervisors, systemically relevant national financial institutions and infrastructures. In the future, these market participants can be regulated and supervised more strictly than others within the limits of forthcoming EU legislation.

According to the recommendations of the ESRB, macroprudential policy decisions should be made public, unless there are risks to financial stability in

doing so. The macroprudential authority should ultimately be accountable for its actions to the national parliament. Moreover, the ESRB recommends that member states should ensure the macroprudential authority's operational independence with respect to political bodies and the financial industry. The necessary financial arrangements should be designed so as not to jeopardise the conduct of macroprudential policy.
5.2 Countercyclical capital buffers as national macroprudential tools

Karlo Kauko

Capital adequacy requirements imposed on banks may amplify cyclical fluctuations by forcing banks to cut lending in a downturn. One solution would be to tighten capital requirements in an upswing and to ease them in a downswing. A countercyclical capital buffer regime will be introduced in, for instance, the EU as part of the new Capital Requirements Directive. It is difficult to put forward a simple principle according to which additional capital requirements should be imposed. The proposal that has gained the most attention may perhaps not be suitable for an economy like Finland that is sensitive to economic fluctuations.

Capital adequacy requirements imposed on banks compare banks’ capital or ‘own funds’ and calculated credit and other risks. Own funds, which include share capital and some other items on certain criteria, must account for at least 8% of calculated credit and other risks. In an economic upswing, profits boost capital and balance-sheet risks appear limited. Thus, the capital adequacy ratio in general improves in an upswing, although the bank would not raise additional capital or reduce its lending or investments. Banks’ stronger capital adequacy helps expand credit supply and reinforce the upswing, which further improves banks’ capital positions. In a downswing, the direction of the chain reaction is reversed: banks’ capital adequacy weakens, which contributes to deteriorating the availability of finance, deepening the downturn and causing loan losses, which, in turn, erode bank capital. A variety of policy tools, including countercyclical capital buffers, have been proposed to solve this problem.

Countercyclical capital buffers to smooth credit cycles

The basic idea of countercyclical capital buffers is simple: higher capital requirements are applied in an upswing. Such an additional capital requirement could be useful for two reasons. Firstly, it would reduce banks’ chances of providing credit amid signs of economic overheating, curbing asset price rises, reducing the risk of inflation and slowing the process of unnoticed accumulation of banks’ credit risks. Secondly, it could induce banks to raise more capital in an upswing, when new share capital would be relatively easily available. These additional capital resources would strengthen the banking system’s loss-absorbing and lending capacity in the next downturn.

A proposal to this effect is under discussion internationally. The Basel Committee on Banking Supervision, which has initiated many regulatory reforms, published a consultative document on the subject in summer 2010 and guidance for national authorities operating the countercyclical buffer in December 2010. The framework is very likely to be introduced in, for instance, the EU countries, as the Committee recommendations are to be included in the new EU directive and regulation (CRD/CRR IV) concerning the capital adequacy of credit institutions, for which the European Commission published its

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21 Countercyclical capital buffer proposal – consultative document.
22 Guidance for national authorities operating the countercyclical capital buffer.
proposals in July 2011. National authorities should be able to introduce the countercyclical capital buffer requirements gradually in 2016–2018. According to the draft directive, the countercyclical capital buffer could be imposed by national decision in an economic upswing, and from 2019 onwards it could account for a maximum of 2.5% of each bank’s risk-weighted assets. The requirement would thus apply to all banks granting credit in a particular country, irrespective of credit growth at an individual bank. If a bank conducts lending business in several countries, the requirement is determined by the geographical distribution of its loan portfolio, on the basis of the debtor’s home country.

**Trend deviation of relative outstanding credit as an indicator of excess credit growth**

The draft directive requires that national authorities should impose an additional capital requirement if credit growth is excessive. The concept of ‘excess credit growth’ may appear obvious, but it has no established definition suitable for all circumstances. Economic overheating is often identified only afterwards, when it is too late to take action. Therefore, an indicator needs to be chosen and its value monitored in order to enable an early judgement of the necessity to impose capital buffer requirements.

Under the Basel Committee recommendations, the imposition of the countercyclical capital buffer requirement should be primarily based on the deviation of the outstanding credit to nominal GDP ratio from its trend, i.e. its gradually changing natural level. The trend value would be calculated using the Hodrick-Prescott filter. The mere outstanding credit to nominal GDP ratio would hardly be a good indicator as a basis for decision, considering that outstanding credit tends to increase more rapidly than nominal GDP over the long term, a phenomenon already observed for decades. Drehman et al recommended the imposition of the capital buffer requirement on the basis of this trend deviation, as it appeared more reliable than some other options explored.

Trend deviation calculated in a simple manner is no trouble-free variable especially in the context of a severe economic downturn. If nominal GDP used as denominator contracts, the increase in the ratio may be wrongly interpreted as excess credit growth. In Finland, for example, the ratio would have signalled credit market overheating in 1991 and 2009, when GDP declined sharply.

**GDP moving average and change in relative outstanding credit as a basis for an alternative indicator**

Distortion caused by sharp GDP reduction in the proposed ratio is possible only in an environment of severe recession. A natural alternative would be to use, instead of the latest GDP figure, the moving average of five previous years, for example. In that case, temporary GDP contraction would not affect the ratio very strongly.

A good indicator has a natural equilibrium level towards which it moves. In the absence of such an equilibrium, no observed indicator value is a sign of

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24 A precise description of this statistical method is included in, for instance, the article Kydland – Prescott (spring 1990) Business cycles, real facts and monetary myth. Federal Reserve Bank of Minneapolis Quarterly Review.

imbalances, the unravelling of which is only a matter of time. The outstanding credit to GDP ratio does not appear to have any constant equilibrium level in the light of statistical analyses, whereas the rate of growth of this ratio appears to have such a level. Although short- and medium-term fluctuations in the outstanding credit to GDP ratio are considerable, the ADF unit root test provides strong evidence in support of arguments about the stationarity of the growth rate of the bank credit to nominal GDP ratio. Stationarity means, among other things, a tendency to remain broadly constant over the long term, despite short-term, potentially steep fluctuations. The capital buffer requirement could be imposed, for example, if the most recent statistical data showed that outstanding credit growth sufficiently clearly exceeds a few previous years’ nominal GDP growth.

According to this basic idea, a simple indicator calculated on the basis of mere bank credit would have given alarming signals of all banking crises experienced during Finland’s independence, of which the first occurred at the beginning of the 1920s, the second at the beginning of the 1930s and the third at the beginning of the 1990s. At the same time, the indicator would also have given two wrong signals, of which the first would have been under highly exceptional circumstances in the middle of the 1940s and the second could be interpreted as having warned of the global crisis in recent years. The impact of this crisis on the profitability and capital adequacy of domestic banks has, however, remained limited (Chart 17).

Other signs of overheating

The imposition of the capital buffer requirement need not necessarily be based on the evolution of GDP and outstanding credit, and therefore it is worthwhile for authorities to pay attention to other factors, as well. According to the draft directive, the ultimate discretionary power concerning the imposition of additional capital requirements rests with national authorities, and signals given by a single parameter need not be followed with absolute rigour.

Since the 1980s, economic journals have published a fairly broad selection of articles examining the predictive power of a number of macroeconomic variables with regard to future financial crises. Studies show, for example, that a surge in housing prices and a current account deficit increase the likelihood of a forthcoming crisis.

A current account deficit is a rather obvious indication of over-indebtedness. In fact, the deficit reveals that, in net terms, the economy continues to borrow and accumulate investments from abroad. Interests on the growing credit stock do not constitute a source of income for any domestic sector, as lenders are foreigners.

Rising property prices may make secured lending appear safe, although debtors’ repayment capacity

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would be inadequate relative to future interests and amortisations. After the burst of the asset price bubble, risks surface and efforts to realise collateral in a downturn send markets into turmoil.
5.3 Significant structural reform to be made in the UK banking sector

Hanna Westman

Up until now, reform of the financial markets has concentrated on measures aimed at improving the ability of the banking sector to withstand crises, facilitating the orderly rundown of banks, which are no longer viable, and restraining risk-taking by adjusting the incentives that currently dominate the market. However, last year the authorities made determined moves to tackle the "too big to fail" problem and proposed stricter requirements on systemically important banks than on other banks. In some countries these measures have been considered inadequate and structural reform of the banking sector has also been proposed.

In summer 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act (commonly referred to as the Dodd-Frank Act) was ratified in the United States. The Act includes Section 619, named after the former Chairman of the Federal Reserve, Paul Volker, which limits the activities of banks covered by deposit guarantee schemes in two ways. First the Volcker Rule prohibits banking entities from proprietary trading in securities. However, the trading of US convertible bonds as well as issuance, market making operations and certain aspects of risk management related to trading have been left out outside the coverage of the technical requirements. Secondly the Volcker rule also limits banks' investments in hedge funds and private equity funds; they may invest a maximum 3% of the bank's Tier 1 capital and the banking entity's ownership may not exceed 3% of the fund.

Implementation of the Volcker Rule has reached the point where the Federal Reserve, the Securities Exchange Commission (SEC) which supervises the US securities markets, the Federal Deposit Insurance Corporation and the Office of the Comptroller of the Currency responsible for supervising national banks, presented a 300-page legislative proposal in October 2011. The proposal is currently going through the hearing procedure and the law is expected to come into force in July 2012.

In June 2010, the United Kingdom's Independent Commission on Banking (ICB), led by Sir John Vickers, was created by the Chancellor of the Exchequer to identify the reforms required to promote a stable and competitive banking sector in Britain. From the stability point of view, the final report, published in September 2011, contains two key and inter-related requirements: 1) the establishment of a "ring-fence", ie isolating retail banking activities from other banking activities and 2) tightening of the capital adequacy requirements of ring-fenced banks' activities. The purpose of the ring-fence is to limit risk-taking opportunities, protect the financial services that are essential to the British economy from international market disruptions and ease the recovery and resolution of banks facing serious trouble and minimise the expenses arising from these activities on the public sector and the taxpayer. The purpose of the reform is to ensure that, in the future, no bank is too big to fail.

The ICB has established principles by which the location and height of the ring-fence be defined. The

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27 Independent Commission on Banking, Final Report, September 2011 (http://bankingcommission.independent.gov.uk/).
activities that are mandated to be within the ring-fence are activities which would lead to significant economic costs even after the shortest of breaks in the activity and in which the customers’ position is weak in the case the bank to get into trouble. Current accounts and small enterprises’ deposits as well as payment services fall into this category. Securities trading, market making and securitisation-related activities as well as investment bank activities are prohibited within the ring-fence as they are seen as disrupting the dissolution process, as increasing the exposure risk of activities with the ring-fence to international market disturbances and as enabling risk-taking not material to financial intermediation. In addition, all activities outside the EEA would be excluded from the ring-fenced entity. Lending to retail customers and small enterprises, services directed at private banking customers in addition to deposits and loans relating to large non-financial corporations may fall within the ring-fence, as long as there is no contagion to activities within that ring-fence to market and counterparty risk.

The ICB proposes that activities within the ring-fence should be kept legally, economically and operatively separate from other banking activities. In reality, this means the incorporation of activities, meeting capital adequacy and liquidity requirements at corporate level as well as ensuring the independence of support functions. Restrictions on ownership structures should also be established, as ring-fenced banks may not own banking corporations that fall outside the ring-fence. On top of which, banks within the ring-fence should have their own, independent board.

The ring-fence allows for capital adequacy requirements to take both international standards and domestic conditions into account. The ICB proposes that the requirement on equity capital and leverage ratio should be higher for those banks within the ring-fence than for those falling outside the ring-fence, who are often operating on international markets. For the bigger ring-fenced banks, the common Tier 1 capital ratio should be at least 10% of risk weighted assets (RWA), in other words 3 percentage points of RWA in excess of the Basel III baseline (Chart 18). The requirement on middle-sized banks is to grow linearly from 7% to 10%. The leverage ratio would be tightened accordingly and would hence be 4.06% for the larger ring-fenced banks.

Under ICB proposal, all UK banks should have more primary loss absorbing capital, which would add to the liabilities of others beyond shareholders. The bank should fill a significant part of the 17% capital adequacy requirement with contingent convertible capital, preferably bail-in capital.

By the end of 2012, every big bank should have a working recovery and resolution plan. If the supervisors perceive these plans as not being adequate they could raise the primary loss absorbing capital requirement by a further 3 percentage points, at most.

Putting the ICB recommendations into force is moving at a brisk pace; the British parliament accepted the proposal in almost entirely in December 2011. In spring 2012 the government will arrange a public consultation on how the recommendations could be implemented and present them to Parliament by the

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28 A bank is classified as a big (medium-sized) bank if the risk weighted assets of the ring-fenced bank exceed 3% of UK GDP (%–3% RWA to UK GDP) or if the Basel Banking Supervisory Committee has listed the bank as being globally systemically important (G-SIB) subject to an additional capital requirements of 2.5 % (< 2.5 %).

29 The ICB proposes that investors’ liability be extended by providing insured deposits preference in banks whose assets are under liquidation.

end of the year. The objective is to complete the preparatory stage of the legislative process before the general elections due to be held at the end of May 2015.

The question of the structural aspects of the banking sector has also appeared on the EU agenda. On 22 February, EU Commissioner Michel Barnier appointed a High-level Expert Group, whose mandate is to evaluate whether reforms to the structure of the EU banking sector would strengthen financial market stability and whether they would improve the conditions for the banks to undertake their role in favour of citizens, European growth and the Single Market. Erkki Liikanen, Governor of the Bank of Finland, has been appointed chairman of the Expert Group.

Chart 18. Capital requirements for large banks under Basel III reforms and in accordance with ICB recommendations